



# Review of capability at a district and local level Townsville disaster district

Report 2: 2017-18





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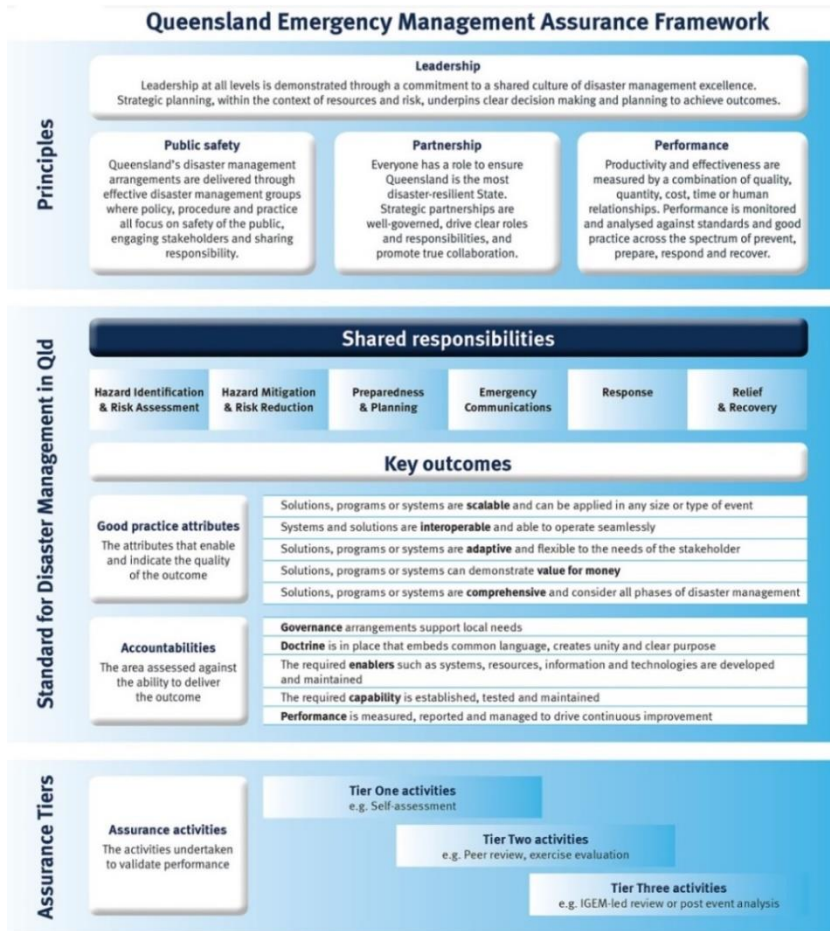
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All papers and reports produced by the Office of the Inspector-General Emergency Management (IGEM) provide independent assurance and advice about the effectiveness of emergency management arrangements in Queensland. The Office of the IGEM bases all publications on the Emergency Management Assurance Framework, which encompasses the Standard for Disaster Management in Queensland.

### Briefing paper

A briefing paper provides the decision-maker with a summary of facts about an issue, or an overview of a situation or arrangements. The briefing paper may address opportunities for improvement or highlight exemplary practice. The briefing paper provides the decision-maker next steps for consideration, which may include advice to entities.

### Discussion paper

A discussion paper provides greater analysis of an issue, situation or arrangements than a briefing paper, considering trends, other sector or jurisdiction approaches or current best practice research. The discussion paper may address opportunities for improvement or highlight exemplary practice. The IGEM may suggest improvements to entities through advice, or more formally through Professional Practice Considerations.

### Review report

A review report provides a comprehensive analysis of the effectiveness of a particular disaster management issue, situation or set of arrangements. The review report is based on evidence, and may include discussion of underlying themes, contributing factors and root causes of issues. The review report includes findings, and bases recommendations for improvement on lessons identified, research and good practice.

### Research paper

A research paper may be produced as a result of a review report, or initiated by the IGEM. A research paper explores an issue, generates discussion and seeks best practice solutions.

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## Executive Summary

### Introduction

This District and local capability review forms a part of the Assurance and Excellence Development Program conducted by the Office of the Inspector-General Emergency Management (IGEM). The review is a Tier 3 Assurance Activity conducted under the [Emergency Management Assurance Framework](#) (the Framework), and represents an independent enquiry to provide a greater level of assurance about disaster management.

The purpose of this review is to:

- assess district and local level capability to deliver legislated disaster management outcomes against the Standard
- develop an integrated capability strategy for the Townsville Disaster District.

For this review, we engaged with the Townsville District Disaster Management Group (Townsville District Group), and the local governments and Local Disaster Management Groups (Local Groups) of Townsville, Burdekin, Hinchinbrook, Palm Island, Charters Towers, Flinders and Richmond, to assess their capability to meet legislated obligations against the outcomes of the [Standard for Disaster Management in Queensland](#) (the Standard). The review was undertaken in consultation with relevant stakeholders across the Townsville Disaster District and key government agencies. The review report is provided to the Minister for Fire and Emergency Services. It incorporates a capability strategy for the Townsville Disaster District.

### Overview of findings

Overall, the Townsville disaster district's capability is assessed by us as highly effective, with many examples of good practice found that would benefit Queensland's disaster management sector. The achievements of this district reflect the leadership, disaster management expertise and commitment of the local and district disaster management groups. The groups across the district have demonstrated that they meet the requirements of the Standard.

The Townsville Disaster District is sophisticated, capitalising on the expertise and local knowledge held across the seven local disaster management groups and the district group. Disaster management capability across this district is underpinned by an established culture of experienced leadership, commitment by all members and visible, collaborative partnerships. While the district has not been tested operationally to its fullest capability for a number of years, we found many examples of excellent practice that can be shared. Groups were keen to commence work where opportunities for improvement were identified during the review process. We understand a number of improvement strategies have already begun. In addition, learnings from the *Cyclone Debbie Review* are being actioned by groups across the district. Most importantly to maximise capability, there is a demonstrated willingness to work across local government boundaries and across state government agencies, to ensure disaster management arrangements will result in good community outcomes.

This disaster district volunteered to participate in the review. All groups considered were keen to be transparent and were ready to have robust discussions about their capability. We heard from numerous representatives that this was an opportunity to identify potential gaps and proactively focus on continuous improvement as a valued process.

The leadership provided by the Chairpersons, the District Executive Officer, Disaster Management Officers (DMO), Emergency Management Coordinators (EMC) and other disaster management practitioners has engendered a mature and capable community of disaster management professionals. It was evident that where one group may have had a deficit in skill, they could draw knowledge and expertise from the others. All groups demonstrate a high awareness of their capability and their limitations. The areas that require additional support from the District Group are clearly understood, shared and their triggers and communications are clear. The connectedness across the district network was evident. We saw how trusted relationships were valued and the importance and commitment placed on face-to-face engagement and exercising, even when drawn against a backdrop of significant travel, time and cost. This shared approach facilitates capability and a higher likelihood of achieving the Standard's Key Outcomes.

All groups across this district drive good practice blended with a common-sense approach to disaster management. Arrangements are contextualised and commensurate with the hazards faced and community needs. Realistic and practical disaster management arrangements are integrated into council business practices, ensuring value for money services. Capability has been maximised, especially for the smaller councils within the district.

All groups demonstrated a thorough understanding of their community. As part of the review process, we surveyed a sample of community members from each local government area. Outcomes from the survey suggest that all groups and councils are effectively engaging with their community, contextualising messaging and public education, to ensure a high level of awareness of risk.





As an outcome of this review, Chairpersons from all groups have committed to actioning a strategy to enhance current capability. This strategy will focus on:

1. greater disaster management workforce capability
2. the setting of long-term priorities for disaster management
3. the greater use of data and intelligence sharing
4. well-developed relief and recovery capability and community resilience.

The anticipated outcome of the strategy is continued leadership and demonstrated excellence in disaster management.







### Evaluation Classification

We use the following classifications to assess a group’s performance and capability against the Shared Responsibilities and Components of the Standard.

-  **Strong** – outstanding capability supported by evidence of good practice and capacity to sustain.
-  **Well placed** – capability gaps are identified and practical improvements are planned or underway, with capacity to achieve outcomes.
-  **Development area** – more action is required to close current capability gaps and deliver improvements over the medium term. Capacity to deliver is not assured.
-  **Limited** – not well placed to address weaknesses in the short to medium term and needs additional capacity and support to secure effective delivery.







The Shared Responsibilities represent the key areas that were considered by the Office as part of an effective disaster management program.

### Burdekin local disaster management group (Burdekin Group)







| Shared Responsibility                     | Standard Component  | IGEM Rating |   |
|---|---|-------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Strong      |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Well Placed |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Well placed |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Well placed |  |









**Charters Towers local disaster management group (Charters Towers Group)**

| Shared Responsibility                     | Standard Component  | IGEM Rating      |   |
|---|---|------------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Well placed      |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Strong           |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Well placed      |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed      |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed      |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Development area |  |







**Flinders Shire local disaster management group (Flinders Group)**

| Shared Responsibility                     | Standard Component  | IGEM Rating |   |
|---|---|-------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Well placed |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Well placed |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Well placed |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Well placed |  |







**Hinchinbrook Shire local disaster management group (Hinchinbrook Group)**

| Shared Responsibility                     | Standard Component  | IGEM Rating |   |
|---|---|-------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Well placed |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Well placed |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Well placed |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Well placed |  |







**The Palm Island Local Disaster Management Group (Palm Island Group)**

| Shared Responsibility                     | Standard Component  | IGEM Rating      |   |
|---|---|------------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Development area |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Well placed      |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Development area |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed      |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Development area |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Limited          |  |







**The Richmond Shire Local Disaster Management Group (Richmond Group)**

| Shared Responsibility                     | Standard Component  | IGEM Rating      |   |
|---|---|------------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Well placed      |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Well placed      |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Well placed      |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed      |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Development area |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Development area |  |

**The Townsville Local Disaster Management Group (Townsville Group)**

| Shared Responsibility                     | Standard Component  | IGEM Rating |   |
|---|---|-------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Well placed |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Strong      |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Strong      |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Strong      |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Well placed |  |

**Townsville Disaster District Group (Townsville district group)**

| Shared Responsibility                                | Standard Component  | IGEM Rating |   |
|--|---|-------------|---|
| <b>1 Hazard identification &amp; risk assessment</b> | Hazard identification & risk assessment   | Well Placed |  |
| <b>2 Hazard mitigation &amp; risk reduction</b>      | Hazard mitigation & risk reduction  | Well Placed |  |
| <b>3 Preparedness &amp; planning</b>                 | Capability integration<br>Planning  | Strong      |  |
| <b>4 Emergency communications</b>                    | Public engagement<br>Communication systems<br>Warnings  | Well placed |  |
| <b>5 Response</b>                                    | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed |  |
| <b>6 Relief &amp; Recovery</b>                       | Relief<br>Recovery  | Well placed |  |



# Townsville Disaster District capability strategy - a catalyst for excellence

This strategy is a shared responsibility across the Townsville Disaster District. The strategy is based on the *Standard for Disaster Management in Queensland* (the Standard). When implemented through a **district action plan**, the strategy will drive capability and foster a culture of excellence in emergency management.

The Standard defines the Good Practice Attributes of effective disaster management and this strategy builds from these attributes.

## PRINCIPLES

|                      |  |
|----------------------|--|
| <b>Leadership</b>    | Strategic, risk-based planning and clear decision-making to achieve disaster management outcomes |
| <b>Public Safety</b> | Commitment to public safety drives continuous improvement and stakeholder engagement             |
| <b>Partnership</b>   | Everyone plays a role in building disaster resilience  |
| <b>Performance</b>   | Productivity, effectiveness and embedding good practice  |

## GOAL

Lead disaster management excellence in diverse contexts.

## ACTION

### To deliver a Townsville Disaster District action plan based on the Good Practice Attributes

1. an **Implementation group – Chair (TBC) District Executive Officer, EMC, representation from each group**
2. action plan drafted
3. action plan endorsed by all Chairpersons and supported by identified state agencies
4. action plan monitored and adapted based on learnings
5. IGEM Health Check 2019

## OUTCOMES

1. enhanced workforce capability
2. long-term priorities set for disaster management
3. greater use of data and intelligence
4. leading in disaster management
5. well-developed relief and recovery capability and longer term resilience

## IMPLEMENTATION

| Deliverables                    |                 |   |
|---------------------------------|-----------------|---|
| <b>Good practice attributes</b> | Scalable        | <b>Enhanced workforce capability to support disaster management</b> <ul style="list-style-type: none"> <li>• formal volunteerism<sup>1</sup></li> <li>• community partnerships</li> </ul>   |
|                                 | Comprehensive   | <b>Long-term priorities for disaster management formulated and pursued</b> <ul style="list-style-type: none"> <li>• disaster management plans:                             <ul style="list-style-type: none"> <li>- contemporary planning that leverages the Queensland Emergency Management Risk Framework</li> <li>- human-caused hazards strengthened</li> <li>- evacuation and reception planning enhanced</li> <li>- business continuity considered</li> <li>- contemporary relief and recovery plans</li> </ul> </li> </ul> |
|                                 | Interoperable   | <b>Greater use of data and intelligence</b> <ul style="list-style-type: none"> <li>• innovative data management to improve disaster management intelligence</li> <li>• vulnerable populations profiled</li> </ul>   |
|                                 | Value for money | <b>Leading in disaster management</b> <ul style="list-style-type: none"> <li>• lessons management</li> <li>• sharing of good practice</li> </ul>  |

<sup>1</sup> The term volunteerism used in this strategy refers to formal volunteering groups such as the State Emergency Service and Rural Fire Service

|  |           |   |
|--|-----------|---|
|  | Adaptable | <p><b>Well-developed relief and recovery capability and longer term resilience</b></p> <ul style="list-style-type: none"> <li>models of relief and recovery and planning that are adaptable to the needs of the community</li> <li>integration of the Queensland Strategy for Disaster Resilience 2017</li> </ul> |
|--|-----------|---|

**Recommendation**

The chairpersons of disaster management groups within the Townsville Disaster District, supported by the Queensland Police Service, Queensland Fire and Emergency Services and the Queensland Reconstruction Authority:

- develop a district action plan based on the capability enhancement strategy.

| Accountability  | Acceptance |
|---|------------|
| <p><b>Lead:</b><br/>                     Chairperson, Townsville District Disaster Management Group<br/>                     Chairperson, Burdekin Local Disaster Management Group<br/>                     Chairperson, Charters Towers Local Disaster Management Group<br/>                     Chairperson, Flinders Local Disaster Management Group<br/>                     Chairperson, Hinchinbrook Local Disaster Management Group<br/>                     Chairperson, Palm Island Local Disaster Management Group<br/>                     Chairperson, Richmond Local Disaster Management Group<br/>                     Chairperson, Townsville Local Disaster Management Group</p> <p><b>Support:</b><br/>                     Queensland Police Service<br/>                     Queensland Fire and Emergency Services<br/>                     Queensland Reconstruction Authority</p> |            |

## Context

This district and local capability review forms a part of the Assurance and Excellence Development Program conducted by the Office of the Inspector-General Emergency Management (the Office). The review is a Tier 3 Assurance Activity conducted under the [Emergency Management Assurance Framework](#), and represents an independent enquiry to provide a greater level of assurance about disaster management.

For this review, the Office engaged with the Townsville District Disaster Management Group (DDMG), and the local governments and LDMGs of Townsville, Burdekin, Hinchinbrook, Palm Island, Charters Towers, Flinders and Richmond, to assess their capability to meet legislated obligations against the outcomes of the Standard. The review was undertaken in consultation with relevant stakeholders from the Townsville Disaster District and key government agencies. The review report is provided to the Minister for Fire and Emergency Services. It incorporates a capability strategy for the Townsville Disaster District. To ensure continuous improvement, the review methodology and products will be regularly evaluated as future reviews are undertaken.

## Purpose

The purpose of this review is to:

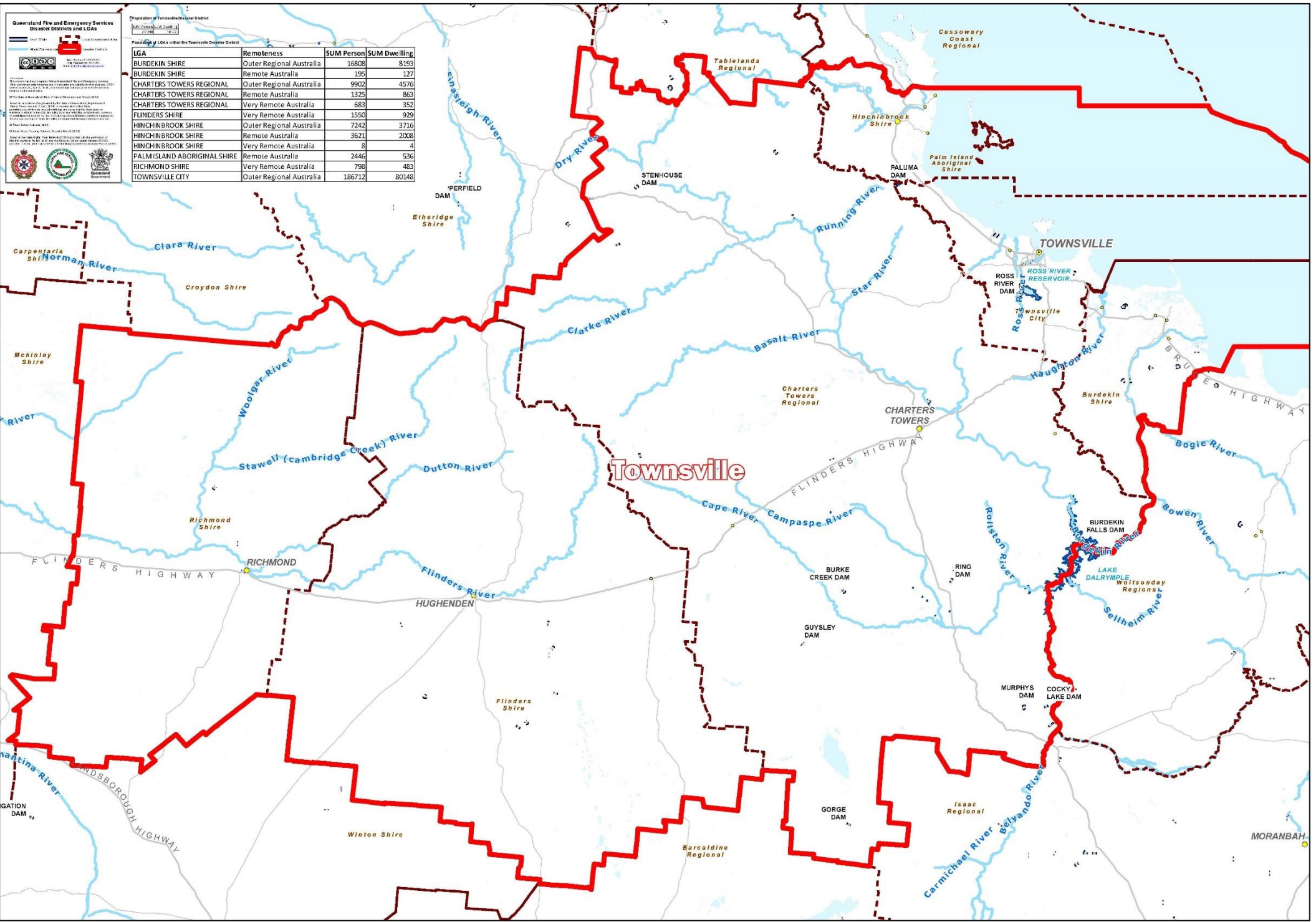
- assess district and local level capability to deliver legislated disaster management outcomes against the Standard
- develop an integrated capability strategy for the Townsville Disaster District.

## Authority

The Office has a legislated function under the Act, to work with entities performing emergency services, departments and the community to identify and improve disaster management capabilities.<sup>1</sup>

Functions relevant to this review include:

- regularly review and assess the effectiveness of disaster management by district and local groups - s.16C(b)
- regularly review and assess cooperation between entities, including compatibility and consistency of systems and procedures - s.16C(c)
- review, assess and report on performance by entities responsible for disaster management against the disaster management standards - s.16C(f)
- identify opportunities for cooperative partnerships to improve disaster management outcomes - s.16C(i).



**Queensland Fire and Emergency Services Districts and LGAs**

Map of Queensland  
 1:100,000 Scale  
 2018 Edition

Legend:  
 - District Boundary  
 - LGA Boundary  
 - Major Road  
 - Water

Scale: 1:100,000  
 1 cm = 1 km

© Queensland Fire and Emergency Services  
 Queensland Government

Preparation of Townsville District District  
 Date: 15/05/2018  
 Prepared by: LGAs within the Townsville District

| LGA                          | Remoteness               | SUM Person | SUM Dwelling |
|------------------------------|--------------------------|------------|--------------|
| BURDEKIN SHIRE               | Outer Regional Australia | 16808      | 8193         |
| BURDEKIN SHIRE               | Remote Australia         | 195        | 127          |
| CHARTERS TOWERS REGIONAL     | Outer Regional Australia | 9902       | 4576         |
| CHARTERS TOWERS REGIONAL     | Remote Australia         | 1325       | 863          |
| CHARTERS TOWERS REGIONAL     | Very Remote Australia    | 683        | 352          |
| FLINDERS SHIRE               | Very Remote Australia    | 1550       | 929          |
| HINCHINBROOK SHIRE           | Outer Regional Australia | 7242       | 3716         |
| HINCHINBROOK SHIRE           | Remote Australia         | 3621       | 2008         |
| HINCHINBROOK SHIRE           | Very Remote Australia    | 8          | 4            |
| PALM ISLAND ABORIGINAL SHIRE | Remote Australia         | 2446       | 536          |
| RICHMOND SHIRE               | Very Remote Australia    | 798        | 483          |
| TOWNSVILLE CITY              | Outer Regional Australia | 186712     | 80148        |



## Townsville Disaster District

The Townsville Disaster District's total land mass is approximately 147,347km<sup>2</sup> which equates to 10 per cent of Queensland's total land area<sup>2</sup>. The population is 231,290, with 186,712 (81 per cent) being residents of Townsville city<sup>3</sup>. The Townsville Disaster District consists of the major city of Townsville, numerous regional centres, and coastal and inland towns. Palm Island and Magnetic Island have permanent residential populations, and Orpheus Island has a mostly transient population of tourists and researchers. The average age of residents within Townsville Disaster District is over 40, older than the state average of 36. There is an influx of tourists during the dry season and transient workers visit for the agricultural picking season on the coast.

The District is geographically diverse with 350 km of coastline extending from the Burdekin River delta system through to the Cardwell Range on the Cassowary Coast and extends west over the Great Dividing Range into the Flinders and Richmond Shires. The District incorporates a vast geological make up with coastal plains, flood plains, lowlands, coastal ranges and escarpments, tropical and subtropical rainforests, dry tropical and eucalypt savannahs, downs country, timbered basalt and gorge country containing numerous national parks and red and black soil plains. Each of the local disaster areas contain significant river systems<sup>4</sup>. The district is in the 'dry tropics' and has two distinct seasons: hot and wet from November to April and dry from May to October<sup>5</sup>.

The major natural hazards of the District have been identified as severe thunderstorms, cyclones with related storm tide, and flooding. Identified human-caused hazards include major urban fire, hazardous material incidents on land or sea, or a major passenger transport accident<sup>6</sup>. The District and five of the seven local groups activated for Tropical Cyclone Debbie in March 2017.

### Scope

The Act outlines the functions of local and district disaster management groups to support public safety. The Standard establishes Key Outcomes for local and district disaster management groups and local governments to meet these obligations. The plans, arrangements, processes and systems of the Townsville District Group, and the related local governments and Local Groups were considered alongside the functions in the Act and the outcomes of the Standard.

### Out of scope

The disaster management arrangements of all other entities unless they directly affected the Townsville Disaster District.

## Methodology

The review was conducted between August 2017 and January 2018





### Review activities

#### Orientation meetings

An orientation meeting was held with representatives from the Townsville District Group and the local groups to outline the review process, identify key dates, deliverables and data collection activities.

### Data collection survey

Representatives from all the Groups completed a data collection survey (the Prioritisation Tool) based on the fourteen Components of the Standard. The survey required respondents to identify capability levels for these components. They did so by considering all Outcomes and Indicators of the Standard, and rating their Group's capability using a four-point scale:

-  **Strong** – outstanding capability supported by evidence of good practice and capacity to sustain (average score 4).
-  **Well placed** – capability gaps are identified and practical improvements are planned or underway, with capacity to achieve outcomes (average score 3).
-  **Development area** – more action is required to close current capability gaps and deliver improvements over the medium term. Capacity to deliver is not assured (average score 2).
-  **Limited** – not well placed to address weaknesses in the short to medium term and needs additional capacity and support to secure effective delivery (average score 1).

As part of this data collection, Group members were asked to provide evidence, such as plans, sub-plans, meeting minutes, public engagement materials, websites, maps and exercise records, to support the assessment.

### Desktop analysis

We assessed the survey results, analysing specific Components of the Standard using the evidence provided, and referring to legislation, state level plans and doctrine. The Office then conducted an internal validation of these assessments to ascertain initial levels of capability for each component. For each Local Group and the Townsville District Group, a series of observations, identifying good practice and areas for improvement, was developed.

### Direct Observations

We observed a range of activities undertaken by the Groups or their members that have informed our assessment. These activities included exercises, training, forums (aged care and recovery) and formal meetings. We were shown infrastructure that supports disaster management outcomes, such as operational centres, and mitigation projects aimed at reducing identified risk.

### Validation meetings

We met with representatives from each Group to discuss initial assessment, request clarification and gather further evidence where required. Each Group was provided the opportunity to invite relevant members to take part in these discussions and provide further evidence of capability to augment the Office's initial assessment. The meetings included representatives of the Councils, Queensland Fire and Emergency Services (QFES), Queensland Police Service (QPS) and members of the Groups. This was an opportunity to confirm and challenge initial assessment, informing the final assessment of capability and the improvement strategy.

### Community Feedback Surveys

The primary driver for the continuous improvement of disaster management is public safety, one of the four principles of the Framework. An external market research company (Market and

Communications Research) was engaged by us to conduct a telephone survey of 285 residents from across the district about community preparedness and planning.

The survey results have been used by us in two ways:

1. to validate the results assessment - do our results reflect the view of community?
2. to help inform the seven Councils of the effectiveness of their engagement and communication strategies.

The sample size means that the survey results must be read in context with other findings of the review. A specifically designed questionnaire was delivered using computer assisted telephone interviewing to survey respondents. Fieldwork was conducted between 16 and 24 October 2017.

The local groups of Burdekin, Charters Towers, Flinders and Townsville also provided the review team with their own community survey responses and feedback and this has been incorporated into our findings where relevant

The objective of the telephone surveys was to:

- assess community perceptions of the likelihood of disaster risks for their local area
- assess the risk reduction actions undertaken by community members
- understand why some community members have not taken action and identify factors that would encourage them to do so
- measure community knowledge and access to information about disaster management arrangements in their area
- uncover preferred information sources and warnings communications channels
- measure community confidence that the official local response to a disaster would be effective and coordinated
- collect community member suggestions for how disaster management in their area could be improved.

The participants were segmented based on their geographical location, age and gender profile. Other factors considered in the survey such as time living in the local area, experience with natural disasters were also included. The community survey reports were provided to the individual Groups.

### **Report and capability strategy**

Our observations and insights were used to inform the final report and the Townsville Disaster District capability strategy.

The capability strategy is based on sharing responsibilities across the Townsville Disaster District and driving excellence through the Good Practice Attributes of the Standard. It provides practical outcomes and deliverables from which the Townsville Disaster District can build action plans to further improve capability and effectiveness.

A draft of this report was provided to all review participants, Local Government Association of Queensland (LGAQ), QFES, QPS, the Queensland Reconstruction Authority (QRA), the Department of Communities, Disability Services and Seniors and the Disaster Management Inter-Departmental Working Group for comment.

### **Future Capability workshop**

As part of the capability strategy we will facilitate a district-wide workshop. This is an opportunity to focus on specific and contextualised actions for enhancing future capability. The focus will predominantly be on relief and recovery and this will be supported by QRA. In addition, QFES will facilitate workshops on the Queensland Emergency Risk Management Framework. We will assist in the scoping of the broader action plan.

### **Health check**

A health check will be conducted 12-18 months after this review to capture the progress of the groups in implementing the capability strategy.



## Townsville Disaster District Analysis

This section of the report builds on our observations from the eight disaster management group assessments, considers common themes, and proposes shared capability enhancements for the Townsville Disaster District. The analysis is based on what we expected to find (legislated functions and the capability required to achieve Key Outcomes of the Standard), and what was found (observations and findings).

The context of this geographically and economically diverse district is crucial to understanding and assessing capability. For example, council areas like Richmond and Flinders, with fewer risks and small, scattered populations possess disaster response capability<sup>7</sup> in a very different way than a city like Townsville. The Aboriginal council of Palm Island, with limited revenue streams and low capacity, ensures its disaster response capability through engaging the support, advice and expertise of a range of government and non-government entities.

### Hazard identification and risk assessment / Hazard mitigation and risk reduction

#### What we expected to find

We expected that hazard identification and risk assessment processes for human-caused and natural hazards form the basis for comprehensive disaster management planning. Risk assessments should follow an international standard or other industry recognised methodology that is agreed by stakeholders. Hazard mitigation and risk reduction plans and activities should emerge from risk assessments and reduce the likelihood and consequence of a hazard affecting communities. We hoped to see that risks were contextualised and adaptable; in line with the capacity and capability of each local group, well understood by the District Group and residual risk effectively managed at a District level.

Along with key disaster management practitioners, we expected to see the community considered as important stakeholders in risk management. We also anticipated seeing enabling systems that provide support to and enhancement of risk management practices. Finally, we considered that learnings from activations, either within the Disaster District or elsewhere, would continue to inform risk management.

#### What we found

The groups ranged from well placed to strong for these two Shared Responsibilities. Despite being geographically and economically diverse, local groups are focussed on understanding their context and prioritising the most likely hazards for risk assessment and mitigation activities.

We found most groups have commissioned professional consultants to compile their risk assessment according to international standards such as ISO 31000:2009 and AS/NZS 4360 and the [National Emergency Risk Management Assessment Guidelines](#) (NERAG). Some have also developed specific mitigation plans from their risk assessments to inform and prioritise treatment activities. Risk assessment is based on thorough understanding of the hazards faced. While risk assessments are generally reviewed annually, most groups have not undertaken a comprehensive risk assessment for almost ten years. Generally, this appears to be because the groups perceive their hazards are unchanged. For example, groups may not have updated their assessment of a human-caused hazard that may have emerged due to infrastructure development or changes to agriculture.

The Queensland Disaster Management Committee endorsed the [Queensland Emergency Risk Management Framework](#) (Risk Framework) in early 2017. QFES are supporting implementation of the Risk Framework by delivering a series of workshops and briefings to local and district groups. While some of the groups in the Disaster District are undertaking work to update their risk assessments in alignment with ISO, the Risk Framework implementation is an opportunity for all groups to revisit their risk assessments. Further, the Risk Framework will support processes to identify and plan for residual risk. This may also provide a chance to build stronger performance measures into risk management activities. For example, consideration of the effectiveness of mitigation strategies that have been undertaken.

Most risk assessments across the Disaster District focus predominantly on natural hazards. As disaster management plans include a range of natural and human-caused hazards, broader consideration of hazards in the risk assessment would be beneficial. We saw a significant commitment by state agencies to partner with local government through the District Group; it is worth exploring how to leverage expertise against state agencies' disaster management functions and risk assessments.

Defining and communicating residual risk is crucial to effective planning and resource management. We are confident the Disaster District has a comprehensive understanding of local risks. Assessment and provision of District residual risk to the State may inform strategic consideration of risks and improved event planning. We acknowledge that ongoing work across the state will better define processes to support escalation. However, while each individual group has a comprehensive view of localised risk and the District Group clearly understands these specific risks, there could be a strengthening of understanding collective risk and its implications.

Across the District we saw a commitment to training and exercising delivered in line with hazard and risk assessment. This continues to be an effective and proven mechanism to test legitimacy of identified risks and associated mitigation strategies. Prioritised mitigation projects and successful funding applications for betterment<sup>2</sup> projects will reduce impacts across the District. All councils have engaged their diverse communities in considering risk reduction activities. Continued focus on vulnerable people, aged care providers, business operators, agriculture and tourism will ensure these strategies continue to evolve and build resilient communities.

## Preparedness and planning

### What we expected to find

Capability integration considers how resources such as people, processes and equipment from different sources work cooperatively and in a unified manner. Knowing where the resources come from, and how they will be coordinated in all phases of a disaster, is a critical part of preparedness and planning.

We expected to see preparedness activities across this Disaster District specifically designed to meet the varying needs of communities. At its strongest, capability should reflect well-integrated disaster management arrangements, including disaster management plans. A high-level of skill and

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<sup>2</sup> The intent of betterment is to increase the resilience of Australian communities to natural disasters, while at the same time reducing future expenditure on asset restoration, reducing incidents, injuries and fatalities during and after natural disasters, and improving asset utility during and after natural disasters, from Queensland Reconstruction Authority, *2017 Framework for Betterment*, <http://qldreconstruction.org.au/u/lib/cms2/NDRRA/2017%20Framework%20for%20Betterment.pdf>, accessed 19 Dec, 2017.

expertise should also be found in disaster management practitioners. It is also anticipated that those accountable for key decisions are provided the opportunity for training and support.

Plans are the foundation to effective disaster management. They should provide clear direction to all entities, at both the local and district level. They establish how groups address priorities for disaster management before, during and after an event. Given the diversity of this Disaster District, we expected to see plans that were governed according to agreed disaster management doctrine, were risk based, integrated and contextualised, and provided value for money implementation. We do not encourage a 'template approach' to planning, instead promoting the development of plans that are integrated into core business, are flexible in approach and ensure positive community outcomes.

We expected that planning processes involve a range of stakeholders who inform the development and implementation of a plan. Plans should be developed by those who have been trained and have planning expertise, aligning plans with legislation and disaster management guidelines. We also expected that plans consider all phases of disaster management, identify priorities and are current. An effective plan that drives the coordination of disaster operations and activities is strengthened by clearly articulating critical partnerships. We expected to see roles and responsibilities fully explored with specific actions and accountabilities outlined in sub-plans. An effective plan also articulates capability limits and escalation points.

The Act requires all disaster management groups to regularly review and assess the effectiveness of their disaster management arrangements and plans<sup>8</sup>. Demonstrated effectiveness of plans and arrangements is expected. This is achieved through training and exercise programs that consider local risks and priorities and are coordinated across the Townsville Disaster District. Desktop plan assessments are also conducted annually through a structured state-wide process based on the Standard.

Participation in this review has enabled Townsville's groups to meet legislative obligations and negated the need to participate in the 2017 disaster management plan assessment process. Part of the intent of the legislation and the associated plan assessment methodology is for learnings within the sector to be reflected and shared so that plans continuously evolve. We expected to find plans that demonstrated development against exercise outcomes and lessons from operational activity.

Finally, we expected to see plans that are accessible and visible and are used as a tool to engage with and to educate the community. According to the [Queensland Strategy for Disaster Resilience 2017](#)<sup>9</sup>, experience shows that communities that are risk-informed and appropriately prepared have the capacity to adapt, and have healthy levels of community connectedness, trust and cooperation, are also more likely to be resilient.

### What we found

Strong leadership and trusted partnerships across the Townsville Disaster District are directly linked to capability. These partnerships are supported by a demonstrated commitment to ensure public safety. We found that Chairpersons, council executive staff and key disaster management practitioners possess disaster management and disaster operational experience. These practitioners are willing to share expertise and draw on professional knowledge to achieve Key Outcomes. The District Group is particularly invested in partnering with the Palm Island Group to ensure effective community outcomes. The District Group also ensures the other smaller capacity councils are supported in the development of capability. The Townsville Disaster District has also

demonstrated a positive culture that directly influences disaster management capability across all groups.

Throughout the Disaster District, there is a robust training and education program coordinated and delivered by QFES and supported by QPS. While more challenging for the lower capacity local groups, there is commitment to ensure that those undertaking disaster management responsibilities have the appropriate skills and expertise required for their role. Training is flexible and tailored to meet the specific needs of all groups. Data provided by the Emergency Management Training Command demonstrates that the QFES Northern Region, which includes the Townsville and Mt Isa Disaster Districts has among the highest participation rates across all training modules over the last three years. We also note that 14 disaster management practitioners from the Townsville Disaster District completed the Graduate Certificate in Disaster Management between 2014 and 2016.

In preparedness for Tropical Cyclone Debbie, pre-deployment of skilled staff from state agencies and critical infrastructure providers effectively supported capability across the District. This model is being actively explored by many of the District state agency representatives. QPS is working with the Hinchinbrook Group to implement a sustainable pre-deployment plan. We also observed innovative solutions to bolster capacity.

Capacity and capability has been enhanced across the Disaster District in innovative ways. The Local Area Warden Program of Hinchinbrook and Burdekin are examples of harnessing community involvement and volunteerism. Similarly, the Cyclone Testing Station and Centre for Disaster Studies at James Cook University provides additional capability to the Townsville Disaster District. Expertise offered and local research partnerships continue to inform good practice and performance. We encourage other rural, remote and lower capacity councils to consider similar approaches to increasing local capacity.

Collegiality and sharing across the Disaster District is formalised. We note that 10 coastal and near coast councils signed a cooperation Memorandum of Understanding (MOU) in 2014, agreeing to collaborate and cooperate in disaster events. The agreement is supported by a biannual meeting of signatory representatives. This presents the opportunity for more explicit mutual support for planning across all phases of disaster management. The MOU does not currently include the Richmond, Flinders and Palm Island Local Groups from the Townsville District. We would encourage the inclusion of these lower capacity councils in this arrangement.

We found that planning processes are comprehensive and group members demonstrate a commitment to the development of plans. All plans are based on risk profiles which inform priorities. There is variability in structure, format, sub plans and visibility. However, we are confident that all plans meet legislative requirements and support the Groups to deliver effective outcomes. The Charters Towers Group is to be especially commended for its proactive planning process, ensuring significant input from the Chairperson and membership. This process has given opportunity to extensively explore roles and responsibilities, and understand local capability. While the new plan is yet to be comprehensively tested for operational effectiveness, we recognise the innovative structure of the plan in its specific alignment with the Standard. We understand that the Townsville Local Group will explore this planning approach in its next full review of its plan. The Palm Island Group's plan has potential to build on community expertise and knowledge to inform their plan. The Townsville Disaster District has the scope to continue to be innovative in its approach to the planning process and the format of plans.



Across the District, plans are tested through a suite of exercises, either coordinated or supported by the District Group. The exercise program is based on identified risks and tailored to test the effectiveness of plans. Exercise evaluation reports feed into a range of lessons management processes. The higher capacity councils have demonstrated more traction in ensuring lessons that are identified result in tangible improvements. The District Group membership, broader than the District Executive Officer and EMC, could play a stronger role in supporting improvement actions and coordinating a lessons management program.

Local Groups and the District Disaster Group have been proactive in actioning lessons identified following Tropical Cyclone Debbie. The District aged care forum, facilitated by Townsville's Local Group, demonstrates the District's commitment to enhancing safety for vulnerable populations. One tangible outcome is the improved integration between local groups and facility operators. While it is early in the development of these partnerships, we anticipate they will also result in improved evacuation and business continuity planning. The engagement with and support of service providers and business operators in disaster management activities is highlighted as good practice and should be considered across the sector.

Charters Towers, Flinders and Richmond Groups all raised the topic of reception planning. All three LGAs have been impacted by people self-evacuating from coastal regions during cyclonic events. This identified gap is consistent with findings of the Office's *Review of evacuation management arrangements (2017)*, which states that planning for the reception of evacuees was not evident in evacuation plans but is considered good practice. Through Charters Towers Group's leadership, a district wide focus to develop and implement an evacuation and reception strategy has been suggested. We recommend that this is considered as part of the District capability strategy.

There is a strong commitment to volunteering by a small number of volunteers across the Disaster District. The reduction in numbers of formal volunteers continues to negatively impact on capability, including the provision of local knowledge. We encourage all Groups to actively work with QFES and seek solutions to enhance formal volunteering. We especially encourage QFES to partner with the Palm Island Group to consider implementing mechanisms to enhance participation of Aboriginal and Torres Strait Islander communities in volunteering. Such work may also better meet the needs of other Aboriginal or Torres Strait Islander councils. There are also opportunities to continue to partner with non-government organisations and leverage organisations such as Volunteering Queensland and the Australian Red Cross to improve volunteerism.

All Groups actively engage with their communities and use their Local Disaster Management Plans (Local Plans) as their foundation for this. For example, the Burdekin Group has tailored its plan so that it addresses community members, not just the sector. Amongst respondents to our community survey, 84 per cent of coastal residents were aware of their local disaster management plan and 67 per cent of country residents. Awareness of the Local Plan was higher amongst residents who had lived in the region for 15 or more years, with 98 per cent of the older demographic of Hinchinbrook having awareness of their Local Plan.

## **Emergency communications**

### **What we expected to find**

Emergency Communications is a Shared Responsibility that covers the components of Public Engagement, Communication Systems and Warnings. It is expected that there would be communication capability within and between the Local and District Groups and local governments

in the Townsville Disaster District<sup>10</sup> and between the groups, councils and the community. It would also be expected that local and district groups have ensured communities are aware of ways to mitigate, prepare for, respond to and recover from disasters or emergency situations.<sup>11</sup> We have looked for evidence that communities are empowered through timely public information and education initiatives, and outcomes have a positive effect on the action taken by the community across all phases of disaster management. We expect to see communication systems, technology and processes that are interoperable and regularly reviewed.

Public Engagement approaches that position the community as partners in disaster management and empower them to act. We expected to see warnings that are effective in reaching residents and are easily understood. We anticipated that communication systems, technology and processes to support emergency communications would be interoperable and that redundancies had been considered. To enable communication systems, we also expected training to be in place that supports systems effectiveness as well as mechanisms to monitor performance.

### What we found

The Local Groups utilise a range of public education strategies and warnings information to enhance community awareness. Multiple channels are used to distribute information. The application of the Wardens model provides a successful network for communication that includes property owners and communities in remote localities. This model has been tested during events and has been found to be extremely successful. The Townsville, Burdekin and Hinchinbrook Groups have advanced education and engagement programs that layer different strategies to improve impact. Townsville's Cyclone Sunday event is part of a highly successful campaign. The Charters Towers, Flinders and Richmond Groups have implemented activities that are based on a thorough understanding of their risks and community profiling. These Groups particularly address transient populations. *Get Ready* funding is well used with the Palm Island Group hosting a community education day with more than 100 locals attending the event in the main square. All Groups integrate their public engagement activities with Council's usual communications, strengthening capacity while providing value for money. The DDMG plays a critical role by supporting these activities, ensuring state agency messaging and engagement strategies are aligned, consistent and guided by planning documents.

All Groups spoke to us about the challenge to ensure public engagement activities effectively meet the needs of vulnerable populations. The focus on partnership with aged care service providers across the Disaster District should be replicated in other districts. While in early stages of implementation, there is significant opportunity to improve engagement activities with this demographic. More broadly, we found a range of measures to communicate with and inform those most vulnerable. However, we acknowledge that continued emphasis on vulnerability needs to occur. The [People with vulnerabilities in Disasters](#) framework and toolkit will assist in developing this capability. Undertaking broad community profiling would enhance not only Emergency Communications but also the Components of Resource Management, Relief and Recovery, through enabling better targeting of education, warnings, resource use and distribution. Improved links with local agencies who provide direct support to vulnerable groups would build opportunities for joint leadership and management of public education and resources, increase community resilience and drive community empowerment.

Communications systems are robust and operate well between the local groups predominantly using Guardian Control Centre and the District and the QPS using the Disaster Incident Event Management System (DIEMS). State agencies use a range of other platforms. Manual work-

around still occur to negate interoperability issues. Within this District, QPS have been proactive in training a significant number of people in the application of DIEMS to ensure readiness. Likewise, Local Groups using the Guardian system have also been training more staff. The Palm Island and Richmond Groups use their council's business information systems which appear to effectively meet their needs as small-capacity councils. Recently, in readiness for the 2017/18 storm season, an exercise coordinated by QPS enabled testing of the Request for Assistance (RFA) process at local, district and state levels of the disaster management system. The *Cyclone Debbie Review* found that improving interoperability between information systems remains a priority to improve disaster management holistically. We would encourage the Townsville Disaster District to be actively involved in informing future directions for improving systems interoperability.

We found that all Groups have redundancies in place to ensure that critical communication infrastructure is protected during disasters. Concerns about the impact of National Broadband Network (NBN) were raised by all Groups except Palm Island and Richmond. Appropriately, this has been escalated through the District Group. The relevant telecommunication providers actively contribute to the Townsville Disaster District Group. Where this is not the case in other Districts, it should be considered as a vital relationship and representation on DDMGs arranged. The Townsville Group's chairperson raised with us unresolved 'black spot' issues experienced within the District. We note that Palm Island and Charters Towers have similar concerns. This issue is viewed as a significant risk during operations. We also understand this risk has been transferred to the District Group.

Warnings are delivered to the community using different mediums. The application of new web-based emergency management dashboards will be considered the 'source of truth' for some Local Groups. Our community survey showed that a variety of information channels are utilised by communities in the Townsville District to source information about an impending event, with some variation between country and coastal areas. We encourage Groups to undertake supporting public education activities as these disaster dashboards go live, to ensure community members are aware of and utilise the information when they need it. Alternatively, we found Groups such as Flinders and Richmond use mechanisms such as community email networks and road side signs to deliver warnings. Examples such as these demonstrate each Group's deliberate consideration of varied community needs to inform the application of suitable methods of providing warnings, commensurate with the local context and identified hazards and risks.

Emergency Alert (EA) is utilised. However, there is some variation in the planning for and testing of EA. The *Cyclone Debbie Review* found that EA campaigns that had been prepared in advance by local groups were approved and issued much faster than campaigns that had to be built from scratch<sup>12</sup>. Community survey respondents from every area in the District have advised that their most preferred method of receiving a warning message is through a voice or text message to their phone. We strongly urge Groups to ensure they have a range of pre-formatted polygons that have been developed and tested with the State Disaster Coordination Centre.

The Office has found that planning for and the delivery of warnings has improved across the Disaster District because of learnings from recent events<sup>13</sup>. This emphasis on improvement should continue, with focus on people who are vulnerable.

## Response

### What we expected to find

Local government is primarily responsible for managing events in their local government area.<sup>14</sup> It is expected that there would be evidence of a disaster response capability in line with the local government functions under the Act.<sup>15</sup> It would also be expected that Local and District Groups, in supporting local government, would ensure effective disaster management, including plans that provide for successful operational activity.<sup>16</sup>

It would be expected that Local Groups have pre-identified, and could coordinate, local resources during disaster operations.<sup>17</sup> Where capability limits are reached, or shared responsibility is needed, it is expected that there is evidence of the local groups advising the Townsville District Group about any support services required to facilitate disaster operations and disaster management.<sup>18</sup>

The Townsville District Group is expected to have identified and planned for the allocation and coordination of Townsville Disaster District resources, and the provision of state resources to the local groups.<sup>19</sup> This should be based on identified risk and known capability limits. We also envisage a range of enabling mechanisms that provide effective support in managing disaster operations. Because of the exercise and training program, previous operational experiences of the coastal Groups and broader system-wide learnings, we expected to see lessons from these activities incorporated into local and district arrangements.

### What we found

We found across the Townsville Disaster District, command and control structures are well documented. Command decision making is generally captured and disseminated to relevant entities via meeting minutes and, for councils utilising the Guardian System, recorded in the operations log. Information sharing protocols differed across the Groups. Local Disaster Coordination Centre (LDCC) activation, Standard Operating Procedures (SOPs), agency roles and responsibility statements, Tropical Cyclone Debbie debrief documentation and personal relationships leveraged on mutual trust and shared experience, all feature as mediums to share command information in the Townsville Disaster District. Some groups may benefit from formalising ad-hoc processes in doctrine, thus ensuring business continuity in the event key staff are absent during activations. Furthermore, the implementation of a key decisions register that documents critical event decisions and member agency viewpoints would allow groups to track, with transparency, the complexity of command and decision-making and could be used for any after-action reviews.

Cooperation and coordination is well placed across the district. The coastal LGAs have formalised MOUs. We observed a culture of collegiality throughout the district. Leaders across the Local Groups have a good understanding of their individual community's risk profile, needs and requisite response capacity. We saw evidence of this knowledge being formally shared, particularly in relation to capability gaps, via the district residual risk register, coordinated by the District Executive Officer. Event planning is a further consideration of the District Group in relation to addressing capability gaps, as we saw evidenced in the Palm Island response strategy. We encourage the innovation demonstrated by the Charters Towers Group in their collaborative approach to revising their Local Plan to align with the Standard. The Group acknowledges that the plan is strategic in nature and yet to be tested for effectiveness by a significant event. In the short term, this group may need event planning assistance from the District Group. An opportunity exists across the District to implement further event planning for response. This would be a valuable business continuity planning activity, particularly in groups that have a higher turnover of staff.

There is a diverse approach to the management of operational information and intelligence across the groups which mirrors the geographic diversity and variance of capability and capacity across the Townsville Disaster District. Larger LGA's utilise the Guardian system and have an intelligence capability supported by detailed doctrine and an exercise regime. Local knowledge is recognised as a valuable commodity across the District and is used to supplement each Group's intelligence capability. More traditional forms of communication or council information management systems support operations in smaller LGAs. While a formalised intelligence cell may not exist in their LDCC planning documents, local knowledge is used to contextualise weather predictions and projections issued by the Bureau of Meteorology (the Bureau). Operational information and intelligence may be further enhanced through a District-wide strategy that identifies synergies, refines processes and provides for a more coordinated approach. There is also opportunity for the District and Local Groups to influence, at the state level, the selection and use of scientific data in support of disaster management activities. This has been the case with Townsville Group's application of probabilistic modelling for storm surge during Tropical Cyclone Debbie.

We found that all groups in the Townsville District have a clear understanding of available machinery and equipment which is supported by formalised MOU's, informal agreements and local knowledge, specific to location and need. It is acknowledged that a body of work was undertaken by the District Group, post Tropical Cyclone Debbie, to further develop relationships with commercial supermarket and fuel providers. This has ensured the District Disaster Coordinator (DDC) has a strong situational awareness of all available logistics to support response and subsequently relief and recovery efforts across the district. Financial management of resources is well documented across Local Group's plans and often reflect council business-as-usual procedures. Identified capability limits of Local Groups are considered in the district residual risk register and the review team were supplied with detailed spreadsheets of local machinery and equipment, aerial assets and commercial goods available to the DDMG and most LDMG's.

## Relief and recovery

### What we expected to find

It is expected that relief arrangements are targeted, coordinated and ensure the provision of basic services to communities in need. It is also expected that relief is delivered in a timely manner, supporting effective transition to recovery. Recovery planning should be based on the five functional areas of recovery: Human and Social, Economic, Environment, Building and Roads and Transport.

We expected to see a District-wide recovery strategy that outlines an effective recovery plan and operations, recognises potential constraints in local government areas, identifies lead and supporting agencies across all hazards, guides adaptive and scalable recovery operations, and identifies mechanisms for coordinating and managing offers of assistance and resources. Finally, we expected to find mechanisms to collect and manage recovery data and learnings from relief and recovery operations informing improvements to planning.

### What we found

Across the Townsville Disaster District, most groups were assessed as moving from a development area towards well placed. All groups could improve their arrangements by considering current models for relief and recovery. There needs to be a stronger focus on governance, and recovery plans should be developed based on the five functional areas. The clarity of information required to support relief and recovery is variable. Aligned data sets would better inform relief and recovery needs.



Each group has a nominated chairperson for recovery. However, not all groups consider recovery across the five functional areas. Where relief and recovery sub-plans have been developed, they vary across the district in terms of currency and the degree to which they reflect contemporary good practice. Most sub plans identify the phases of recovery and activation triggers. Working with QRA to develop sub plans that follow contemporary recovery models and planning could benefit the District. Community profiles can be better incorporated into recovery planning, and planning for vulnerable individuals and communities can be further developed with guidance from the Department of Communities, Disability Services and Seniors' vulnerability toolkit.<sup>20</sup>

Training across the Disaster District has focused on increasing the number of people who have undertaken recovery modules. Greater skills and expertise will enhance this capability, and planning for the new Natural Disaster Relief and Recovery Arrangements (NDRRA) arrangements will assist further.

Key elements of relief; the use of evacuation centres and cyclone shelters, funding arrangements, roles and responsibilities, emergency supply and resupply, need to be more explicitly planned for and understood. There is strong engagement with major retailers, fuel companies, telecommunications and energy suppliers which could be strengthened by clarity of roles and responsibilities and the development of formal agreements and contracts. As external groups may be utilised to undertake these tasks, it is important they are aware of their obligations, are appropriately skilled and qualified to deliver as required within the arrangements and can work collaboratively with each group. We saw little application of the [Queensland Policy for Offers of Assistance](#) and supporting [guidelines](#).

There is reliance on volunteering organisations, including Rural Fire Service (RFS) and the State Emergency Service (SES). Like many regional rural and remote areas, these services are experiencing challenges to membership and capability. We encourage collaboration with QFES to build volunteering capability across the District. We did see good examples of innovative partnership with community groups and networks to support disaster management, including the relief and recovery phase.





# Burdekin









## Local and district group analysis

This section of the report provides a detailed assessment of the capability of each group. It identifies areas of good practice and where each group could further develop and improve its capability.

### Burdekin Local Disaster Management Group

#### Capability assessment

This section provides an assessment of the capability of the Burdekin Local Disaster Management Group (Burdekin Group or LDMG) to deliver the Key Outcomes of the Standard and to fulfil its functions under the Act.

| Shared Responsibility                     | Standard Component  | IGEM Rating |   |
|---|---|-------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Strong      |    |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Well placed |    |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Well placed |    |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed |    |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed |   |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Well placed |  |

#### Context

Burdekin Shire Council is responsible for a population of 17,000 over a geographically diverse area of 5,067km<sup>2</sup> in a region known as the dry tropics of Northern Queensland. Ayr is the largest town, followed by Home Hill. The region is known as the sugar capital of Australia. Tourism, along with agriculture are the region's key economic considerations. The LGA, located between Townsville and Bowen, is bisected by the Burdekin River, an iconic physical feature in this part of North Queensland. This river represents both a crucial resource and a natural hazard when in flood. The other major natural hazard is cyclones. Human-made hazards include an exotic animal or plant disease outbreak and hazardous material incidents such as chemical spills. In recent years, the Burdekin Local Group has activated in response to cyclones Yasi (2011), Ita (2014) and Debbie in 2017.

#### Hazard identification and risk assessment / Hazard mitigation and risk reduction

The Office assessed Burdekin Group's Risk Management Shared Responsibilities as well placed to strong.

*Hazard identification and risk assessment*



The Burdekin Group has extensively assessed natural and human-caused hazards that may impact the LGA. These hazards and associated risks form the basis for its disaster management planning and programs.

The Burdekin Group reviews its risk register annually and, in addition to the identified hazard of prolonged drought, the Group rates the highest risks in the Shire as flooding, major agricultural fire and storm surge resulting from a category 4-5 tropical cyclone. The risk assessment was developed to ISO 31000:2009 Standard and considers both natural and human-caused hazards. The Group has considered mitigation strategies against all identified hazards. Disaster management and business continuity planning are integrated through the Burdekin Shire Council risk register. The same register is used by the Council and the LDMG. The Council considers risk to business continuity caused by significant disaster events impacting the Council's workforce and describes the staffing limitations, such as specialised skill sets and numbers for large disaster events, that have been identified as a residual risk and transferred to the District Group. While the Council and LDMG have integrated risk management, this could be further enhanced by the LDMG having a greater understanding of the risk assessments and continuity measures from each LDMG member agency.

Using capability and capacity limits identified from previous activations, the Burdekin Group has recognised key residual risks to be escalated to the District Group. Detailed explanations of the residual risks are included in their Local Disaster Management Plan (Local Plan) and have been shared with the District Group for inclusion on their residual risk register. Modification of critical infrastructure, such as roads and bridges, have been accepted by the Burdekin Group and Council as risks that require further mitigation work.

The Council annually reviews business continuity plans and places emphasis on key areas of environmental, operational health and safety and business risks. In 2016, the Group's risk management approach and risk register were reviewed by an external consultant and the Council's internal audit committee. The Group is utilising the Queensland Audit Office guidelines and Queensland Treasury risk management maturity model to further develop risk management. We were advised that the risk of terrorism will be included in the register during their next annual review.

### Integration of disaster management and business continuity planning

The Burdekin Shire Council risk register effectively integrates disaster management planning and business continuity planning.

It defines the risks posed by failure to provide continuity of services, the potential impacts from inability to attract skilled workers, the likely effects of increasingly severe events due to climate change, and the impacts of acts of terrorism.

The register includes the causes, and current and proposed controls of these risks. The Group also has a system in place to track expenditure for resources during activation overseen by the council contracts manager.

The Burdekin Group is one of several groups in the Townsville Disaster District to have established a specialist advisors group as an extension to the core LDMG. This enables representation from a wide variety of relevant stakeholders who can provide appropriate advice, the depth of understanding on specific risks and support to the LDMG. These include representatives from the Wilmar Sugar Mill, the Burdekin Centre for Rural Health, the Lower Burdekin Home for the Aged, and Energy Queensland.

The Burdekin group focusses strongly on the water resources in the Burdekin Delta, including the Burdekin River, the aquifer, the Burdekin Falls Dam and the irrigation channels. They have a good understanding of the behaviour of the Burdekin River, as well as the management and operation of the dam and irrigation channels by SunWater. The Local Disaster Coordinator (LDC) of the Burdekin Group reviews the Burdekin Dam Emergency Action Plan in collaboration with the Charters Towers and Whitsunday Groups, whose residents would be impacted by overflow or breach of the dam. This collaborative approach to understanding risk is a good practice example.

#### *Hazard mitigation and risk reduction*

The Burdekin Group has incorporated mitigation strategies into a range of infrastructure projects. These projects include; road repairs, drainage and water supply. Additional controls to reduce the impacts from disasters are listed in the Burdekin risk register, to be implemented by the Council. They include a three-tier approach to resourcing to increase depth of staff during disaster events; the appointment of a recovery group, following the finalisation of the recovery sub plan; and the inclusion of support agencies to the LDMG in disaster management exercises.

A Local Area Wardens (Warden) program has been employed to enhance capacity and connectivity with the community. The Burdekin Group has developed an information manual, with relevant background, governance and operational information, to support the induction of nominated Wardens. The wardens are provided with two-way UHF radios allowing them to maintain communication with their LDCC during power outages.

The Group has established a number of risk reduction strategies with a focus on community education. One of these is the development of a successful and comprehensive disaster management curriculum delivered in term three to year five students. The program covers various preparedness subjects such as “What is a Disaster?” and “Looking after your pet in an emergency”, as well as activities like preparing family emergency plans and designing board games to play during blackouts. The course materials have been appropriately designed for teachers to use, and teacher feedback has been incorporated to ensure the resources are tailored and practical. The curriculum has been run for over five years and has recently combined with the QFES “Little Larrikins” program.

The Group’s approach to mitigation could be strengthened through greater community involvement in risk reduction strategies. As we understand, an interactive mapping platform will soon be available to community members, assisting to enhance knowledge of and involvement in risk reduction activities.

Burdekin residents who responded to our community survey perceived cyclones and riverine flooding as more likely disasters to affect their region than storm surge. Nineteen per cent of Burdekin respondents had prepared a family or personal emergency plan. While still low, this result was more than double the average for respondents across the Townsville District LGAs (8 per cent). Seventy per cent of Burdekin respondents said that they undertook regular maintenance of their

property to reduce the effect of disasters, while 34 per cent said they would have time to prepare if a disaster event were likely to happen. These results, paired with the perception that cyclones are the most likely disaster to take place, may show a strong local awareness of cyclones and consequential action.

### Preparedness and planning

The Office assessed Burdekin Group's Shared Responsibility of Preparedness and Planning as well placed.

#### *Capability Integration*

It is evident that the Burdekin Group places a strong emphasis on ensuring people with disaster management responsibilities are well trained to effectively undertake their roles. The Group also identifies lessons from exercises and events to drive continuous improvement. The Training Needs Analysis (TNA) for LDMG members is regularly reviewed and actioned by the EMC and the core members of the Burdekin Group have completed most Queensland Disaster Management Training Framework (QDMTF) modules. Recovery sub group chairs have been assigned and they have completed the recovery modules. Annual training for Guardian was undertaken in November 2017 to ensure that the information management system relied on during disaster events is well understood.

As well as multiple activations since 2011, members of the Burdekin Group have participated in annual exercises developed in conjunction with QFES and QPS. The Group participated in the district-wide exercise Echo Alpha in 2016, where all groups prepared and submitted an Emergency Alert (EA) and situation report as a means of testing the effectiveness of disaster management operational systems, and their interoperability between the District and State systems and processes. The Group chose to extend the immediate objectives of the exercise by activating the LDMG and LDCC "*to remind all participants of the importance of their role in managing disasters and how complex it may be*".<sup>21</sup> It was highlighted to us that having all LDMG and LDCC representatives present and working together under time pressure provided an opportunity to build working relationships. The importance of tested and trusted relationships in effective disaster management and operations was a theme we heard repeatedly from this Group. Lessons identified are recorded in the LDMG minutes and then monitored at subsequent meetings. Examples include: reviewing EA polygons after exercise Echo Alpha; reviewing EA content; and improved recovery planning and communications after Tropical Cyclone Debbie. We were informed that evacuation planning arising from Exercise Dam-Nation! in 2015 is a developing capability.

#### *Planning*

The Burdekin Group's disaster management planning process involves key stakeholders and addresses known hazards and risks, identifies priorities and responsibilities and is regularly reviewed. The foreword to the local plan is written with community context in mind and provides important disaster management information. It outlines the key hazards and provides advice to the community.

The planning process is undertaken throughout the year during LDMG meetings and exercising. An outcome of this process is a plan where priorities, roles and responsibilities are identified and understood. Eight sub plans have been developed and all are available to the public via the council website. This is not a widespread practice across Queensland, and other groups are encouraged to consider this approach. Except for the evacuation and recovery sub plans, all doctrine was reviewed

last year. Community surveying by our Office continues to suggest that community members wish to make informed decisions about disaster management. Being able to access and understand the sub plans enables community members to be better informed and should be considered by all local groups.

Burdekin's Local Plan includes an operational checklist for evacuation which refers to assessing the specific area under threat and identifying vulnerable populations. The evacuation zone layers can also be alternated with planning maps to quickly and accurately inform land-use planning.

Planning work undertaken between the LDMG and aged care providers in the LGA is encouraged. As a result, during preparedness activities for Tropical Cyclone Debbie, the Burdekin Group was able to clearly identify groups vulnerable to a cyclonic event.

### **Emergency communications**

The Office assessed the Burdekin Group's Shared Responsibility for Emergency Communications as well placed.

#### *Public Engagement*

The Burdekin Shire Council has a Community Engagement Policy, Community Engagement Guideline and Social Media Policy integrated into the council's standard operating procedures. The Local Group leverages existing council policy and procedures as a basis for disaster management communications. This approach enables the LDMG to ensure considered and agreed upon practice. These documents are publicly accessible on the Council's website.

The LDMG's communications sub plan provides guidance for public engagement. There are plans to review this sub plan and align with embedded Council doctrine. Pre-formulated communications developed for potential hazards may minimise effort during disaster events.

We heard how this group has actively engaged their community in a variety of forums. Some examples include: the school based education program; meetings and presentations to aged care groups, Rotary, Lions, sports groups and the Scouts; community surveys; street and festival stalls and specific social and multi media campaigns. We also learned how these engagement strategies have adapted over time to maximise community participation and value for money. The group has moved away from facilitating disaster specific events. This strategy is validated in the results of our community survey which indicate that only 9

### **Hazard information contextualized for the community**

The Burdekin Shire Council's website includes a plain language web page on flood height effects.

The page explains what different height recordings at the Burdekin Bridge may mean for residents living in different areas.

Another page provides definitions of storm surge, storm tide, highest astronomical tide (HAT) and evacuation zones.

Storm tide evacuation zone maps that are interactive or printable are located here and in the Emergency Action Guide.

These two pages use plain language and are contextualised to make flood and tide reports more meaningful and relevant to the community.



per cent of local respondents attended disaster specific events. More recent public awareness campaigns are consistent with state wide *Get Ready* Campaigns.<sup>3</sup>

The Burdekin Group has incorporated storm tide mapping into the Burdekin Council's interactive public mapping system on the Council website. This system enables users to view the Red, Orange, Yellow and Blue Evacuation Zones as well as search specific locations or addresses to find out which zones they reside in.

Learnings following Tropical Cyclone Debbie have resulted in the LDMG developing community recovery fact sheets. This has been undertaken in collaboration with key stakeholders such as QFES, QPS, QRA, DCDSS and the Australian Red Cross. Information has been included to complement the Group's Emergency Action Guide, which will be distributed to all residents. This approach could be further enhanced by considering a wider range of mediums to engage a diverse community. The Local Group could consider frameworks for community engagement to enhance local community resilience. This involves more than the dissemination of information to residents, rather including stakeholders in locally led collaborative action.

This is also reflected in the results of the community survey. Respondents indicated that receipt of information about planning or preparing for a disaster in the Burdekin area was reported as being at only 39 per cent. We are aware that every household receives the information through a mail drop.

A new online disaster dashboard display on the Council website is under development and will be a critical public engagement tool. This dashboard will help support sharing information that is timely and targeted. Our community survey suggests that more timely information about what work is being carried out by officials in times of disaster would be useful. More assistance for the elderly was also flagged as a key issue by survey respondents.

### *Communication systems*

The Burdekin Group has a comprehensive communications sub plan to provide an effective communications network for a multi-agency response. The sub plan includes inter-agency system requirements; agency representatives on the LDMG are asked to provide a radio to the LDCC to mitigate being on different frequencies. Hand-held radios are provided to all evacuation centres. This sub plan also includes information about the equipment held by agencies including the SES, QPS and Queensland Ambulance Service (QAS). Field services radios belonging to Council are checked annually to ensure they can still access the agreed emergency frequency. The Group is aware of a small number of farms that may be in telephone black spots and Burdekin's Local Area Warden system is designed to mitigate this.

The LDMG has robust communications redundancies in place. The primary LDCC location is in the Council chambers. Electronic infrastructure is in a secure location and is replicated at the Burdekin multi-purpose facility and an identified place of refuge in Ayr. Call centre and LDCC back-up locations have been identified. These facilities are also on the Council network and have fibre optic cabling. The sub plan states that the Burdekin SES has an emergency operation centre caravan fitted out with a communications network. There is fortnightly testing of council generators and the

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<sup>3</sup> The "Get Ready Queensland" Campaign is about building resilience to deal with the extreme weather and natural disasters that are part of living in Queensland. The program provides \$2 million in state funding to help local governments improve their communities' resilience and aligns with QRA's mission to make Queensland the most disaster resilient state in Australia Get Ready Queensland Week 2017-18 was October 8-15.

Council undertakes a complete power shut down prior to each wet season to test generators. Despite redundancies in place, the LDMG acknowledged concerns about system viability during an extreme weather event. Along with other local groups, the Burdekin Group has raised concerns about the impact of the NBN rollout on communications systems due to its reliance on continuous power. Local Groups in areas where the NBN has already been rolled out have raised this as a residual risk and are collaborating on possible solutions. The communications sub plan identifies a UHF CB channel for use by the public in an emergency if all primary systems are unavailable. Advice about UHF usage for urgent assistance during an event may need further community education.

Like four other groups in the Disaster District, the Burdekin Group uses Guardian as their primary disaster management information and communication platform. Guardian, along with the Council's record management system, supports good disaster management governance. Records of past events are retained in Guardian and are reviewed for learnings.

### *Warnings*

The Burdekin Group has a community information and warnings sub plan. This plan supports the continuous flow of critical, up-to-date and relevant information. A table of communication phases for disaster management, ranging from seasonal preparedness to recovery, is included. The inclusion of community profiles, such as for vulnerable persons or groups, would enhance the actioning of this sub plan. The Group has also identified this as an area for improvement.

The LDMG has pre-prepared Emergency Alert (EA) messages for their most likely natural hazards including human-caused hazards of chemical spill and toxic plume. This document provides definitions of EA terminology, guidance on use and preferred method of dissemination to enable swift preparation of warnings for these hazard events. This component may be further strengthened through an improved understanding of how warning message content is received and understood by the community.

The community information and warnings sub plan notes that the Council website and social media links will be altered during an event to ensure that information is available to the community. A list of links to disaster information is also included. The LDCC also operates a dedicated Facebook page during activations that assembles and posts warnings about river heights, traffic alerts and weather.<sup>22</sup>

Burdekin respondents to our community survey stated they are most likely to rely on the Bureau website and local radio for information (80 per cent) in the event of an impending disaster, while accessing the Council website was at 69 per cent<sup>23</sup>. Given the extensive information available on the Council website, the LDMG may wish to promote this site more vigorously, or provide some of the web information through other channels. We were advised the LDMG ensure pre-prepared messages for local radio are regularly reviewed, and the Chair and Deputy Chair contribute to live radio segments during events to provide the community with up to date information. We encourage the Group to continue this approach given the importance of this channel to the community. As with all groups in this District, Burdekin respondents' most preferred way of receiving a warning was by a voice or text message to their phone<sup>24</sup>.

## Response

The Office assessed the Burdekin Group's Response Shared Responsibility as well placed.

### *Control*

The Burdekin LDMG's control system is well governed and documented through the Local Plan and LDCC concept of operations sub plan. Senior staff from Council are utilised to perform functional roles within the LDCC and a strong commitment from local liaison officers to information sharing and working collegially within the LDMG was observed by the review team. We observed that the group was passionate and committed to maintaining disaster operations under the leadership of their experienced Chairperson and they identified that they were well versed at managing response to identified risks in the area, including tropical cyclone and flooding. While the Group noted that they would exhaust local capability after three to five days, particularly in the event of isolation caused by a major flooding event, this has been communicated to the Disaster District Group as a residual risk.

### *Command*

Communication processes within the Burdekin Local Group to support the command structure are well defined in the communications sub plan produced by the group. We saw that command decisions are articulated and communicated by way of meeting minutes. The Local Plan provides for the operational reporting structure to be used within the group, however, is silent on how critical decisions are distributed. An opportunity exists to strengthen this doctrine by the Group utilising a critical decisions register. This would ensure all involved agencies maintain common situational awareness of the background to alternate viewpoints considered and resultant command decisions made in the response environment.

### *Cooperation and Coordination*

A strong culture of cooperation and coordination across the Burdekin and neighbouring North Queensland LDMGs was observed by the review team. An MOU is in place for the coastal councils of the Townsville Disaster District which formalises cooperation arrangements across the groups that share a common risk profile. Importantly, this MOU provides accountability to signatory councils to share information freely as well as the supply of small or large plant in a disaster event. Detailed operational checklists are articulated within the LDMP, which provide good evidence of event-specific planning. This documentation supports the combined efforts of the Burdekin community to respond to and recover from disaster events.

### *Operational Information and Intelligence.*

Operational information during an event in Burdekin is managed via the Guardian system. An intelligence function is identified by the group in the documentation provided to the review team outlining staff (Council) roles during a disaster. During review validation meetings, we were informed that the LDMG relies heavily upon local knowledge to inform the group's intelligence function during activation and utilises senior Council staff within the intelligence capability. A risk to the group was raised during validation meetings regarding the loss of the locally based Bureau member. Subsequent inquiries by the review team with the Bureau Regional Director revealed that this capability will remain in the District. The group's intelligence capability could be enhanced by the development of doctrine outlining its specific functions and duties to ensure guidance for relieving liaison officers and overarching business continuity. This would ensure that if the key council staff

identified are unavailable during an activation. Wardens in the Burdekin Shire will also inform situational awareness in disaster response.

### *Resource Management*

The Burdekin Group utilises Council business-as-usual arrangements for plant hire to deliver resource requirements during an activation. Extensive emergency supply and resource registers were supplied to the review team. These documents show good intent by the LDMG to ensure resource availability within the local area is well mapped. Burdekin stores records of resource suppliers in Guardian. GIVIT<sup>4</sup> has been identified by the Burdekin Group as the organisation to be tasked with managing offers of assistance locally and at the time of the review were considering MOUs. Greater assurance for this capability could be provided through a formalised agreement with this organisation.

The 2016-17 Disaster Management Plan Assessment process identified resource management as an area for the Burdekin Group to focus on enhancing. Through this review, we found their resource management component has been improved by incorporating lessons identified from the group's activation for Tropical Cyclone Debbie. The Groups have pre-arranged with the District Group to escalate the need for deployments to staff the local place of refuge.

### **Relief and recovery**

The Office assessed The Burdekin Group's Relief and Recovery Shared Responsibility as well placed.

The community recovery sub plan considers short and long term recovery priorities and there are agreed upon strategies to address identified priorities. The Deputy Chair of the Burdekin Group is appointed as the Community Recovery Coordinator and Councillors have been appointed to chair the functional sub committees. Each sub-committee has a Senior Manager appointed as the Coordinator supporting the Chair. The sub plan identifies all five functional areas of recovery, including a list of contact details, key supporting agencies, resources required and a list of priorities to consider depending on the impact and severity of an event. This sub plan is available on the council website and dated 2015, but is currently being reviewed in line with consideration of broad recovery arrangements. We recommend that in reviewing the plan, identification of the phases of recovery, including transition between response, relief and recovery, be articulated.

### *Relief*

We heard that all senior council executives and the DMO have a good understanding of the needs of the community when it comes to support for relief, reflected in the sub plan. The community recovery sub plan refers to relief activities as emergency welfare and focuses responsibility for this with the SES Local Controller and Burdekin Group's designated Welfare Services Coordinator. Provision of relief services are coordinated with identified local voluntary organisations. Services focus on the provision of basic needs and in support of evacuation. Priority focuses on those impacted by an event and who may need temporary shelter. Vulnerable groups, such as older people and clients of aged care facilities, have previously been identified for priority assistance. The sub plan articulates the roles and responsibilities of support agencies in delivering relief measures.

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<sup>4</sup> GIVIT is a national not-for profit organisation that works in partnership with local charities, community groups, state and local governments to match donation offers with identified areas of need following disasters.

As this sub plan is reviewed, we would encourage the Group to incorporate the Queensland Policy for Offers of Assistance and supporting guidance.

There are 5 nominated evacuation centres across the LGA. In the event of evacuation centres being opened the Council has formal agreement with the Australian Red Cross (ARC) to manage these centres. Communication strategies to support these shelters are considered in the communications sub plan. The Group's Chairperson is recognised as the authoritative lead for communicating with the community.

### *Recovery*

The Burdekin Group is the only group in the district that has progressed their planning for recovery to the five distinct functional recovery areas, also known as the five pillars of recovery. The group can be commended for exploring this and documenting the priorities and strategies for some of these areas in more detail in the BSC Sub- Group Priorities 2016-2017 workbook. This proactive approach to relief and recovery illustrates the investment already underway and being planned for in community recovery work projects, as well as their commitment and desire for continuous improvement to increase capability in this area of disaster management.

There is a strong emphasis on human social recovery in the plans. This was also evident following the Home Hill hostel incident in 2016. The Group's Chairperson approached community recovery in a similar manner to that following a disaster event, engaging ARC to provide welfare services. We found human social recovery to be of the highest priority. While not so well documented in the Local Plan or sub plan, strategies for restoration of essential services and key infrastructure and funding arrangements are managed by the Group. This was evidenced in actions following Tropical Cyclone Debbie.

We heard from the group, their intentions to revisit their Recovery Framework, plan and sub plans with a view to incorporate more arrangements to support sustainable community resilience. This will also help ensure plans are consistent with contemporary practice, as well as the recently released State Recovery Plan, guidelines and the Queensland Strategy for Disaster Resilience.

Recovery workshops were facilitated in 2017 to enhance understanding of the functional recovery areas. We were told by the Group that the anticipated outcomes of these workshops will be the revised sub plan, including public engagement and education information, as well as a manual for personnel working in each functional recovery area. As part of the redevelopment of recovery functions, key representatives from community groups are being included to partner with the Group.

This is also an opportunity for those with recovery responsibilities at the District level to provide guidance and support through the functional recovery lead agencies. Planning could be enhanced by involving key local stakeholders, community groups and businesses and through more formalised agreements. These arrangements should be clearly documented and shared. This may improve the group's and local stakeholders' shared understanding of the complexity of community led recovery, informing effective exercising of relief and recovery.







# Charters Towers











## Charters Towers Local Disaster Management Group

### Capability assessment

This section provides an assessment of the capability of the Charters Towers Local Disaster Management Group (Charters Towers Group or LDMG) to deliver the Key Outcomes of the Standard and to fulfil its functions under the Act.

| Shared Responsibility                     | Standard Component  | IGEM Rating      |   |
|---|---|------------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Well placed      |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Strong           |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Well placed      |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed      |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed      |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Development area |  |

### Context

Charters Towers Regional Council has the largest geographical area of all the LGAs in the Townsville District. At 68,571km<sup>2</sup>, Charters Towers is the same size as Tasmania and has a population of 12,000, with a mixed ABS remoteness classification of outer regional, remote and very remote. The LGA includes cattle and mining industries and the railway between Townsville and Mt Isa, used for transporting hazardous substances, passes close to the Charters Towers CBD. Charters Towers is notable for its eight schools, four of which have boarding facilities. There are two aged-care facilities and a large cattle sale-yard. While raising the risk profile somewhat, these facilities also provide access to some excellent infrastructure for evacuation and recovery operations. Human-caused hazards for the Charters Towers area include major transport accidents and livestock disease outbreaks. Two referable dams<sup>5</sup> are in the LGA: Suhrs Creek Dam, and Burdekin Falls Dam. There are many rivers crossing the region, one of which is the Burdekin River. The Charters Towers Local Disaster Management Group (LDMG) was last activated during Tropical Cyclone Debbie in March 2017. The North-Eastern part of the LGA is more susceptible to cyclonic events.

### Hazard identification and risk assessment / Hazard mitigation and risk reduction

The Office assessed the Charters Towers Group’s hazard identification component as well placed and the hazard mitigation component as strong.

<sup>5</sup> A dam is referable if a failure impact assessment demonstrates there would be more than two people at risk if the dam was to fail. <https://www.dews.qld.gov.au/water/dams/safety/guidelines-referable-dams#what>.

### *Hazard identification and risk assessment*

The Charters Towers Group regularly identifies hazards and assesses risks in collaboration with stakeholders. The risk assessment is robust, replicable and authoritative and is used by the Charters Local Group to develop plans for all phases of disaster management. Flood is identified as a key risk in the assessment. The local disaster management plan states that there are three main river systems in the region which are fed by 10 major systems, 21 sub-river systems and three tributaries, and flooding occurs in the Charters Towers local government area every year.

The Charters Towers Group has identified assets and the associated hazards they are exposed to; such as dams and flooding, the cattle sale-yard and animal disease. The Local Group engages with the appropriate stakeholders to ensure risks are treated or reduced. Like other lower capacity LDMGs in the district, the Charters Towers Group established a specialist advisors group to support the LDMG. This advisory group includes representatives from a broad range of stakeholders, including Mine Rescue Group, local schools, NGOs and Queensland Rail. Representatives from the two local aged care facilities have been inducted as specialist advisors to the LDMG to support and inform planning for vulnerable groups. This strategy ensures a collaborative and comprehensive approach to disaster management. It also enables visibility and better sharing of information without requiring regular mandatory attendance to reach quorum.

A study advisory group was formed in 2009 to undertake the hazard assessment and develop a risk register that defined lead agency roles and responsibilities for each hazard. Engagement of people with the right knowledge and expertise has ensured local risk assessment is contextualised and that mitigation strategies are relevant and cost effective. This has also been a successful mechanism to enhance state agency integration with the Local Group. A common understanding of state agencies' risks locally would help to ensure the Charters Towers Group maintains a detailed understanding of its risk context.

Residual risks have been identified by the Group; some have been accepted by the Council and others escalated to the Townsville District Group for inclusion on the residual risk register. While the risk register is available to the public as part of the Local Plan, the risk assessment or study could also be shown on the Charters Towers Regional Council website to increase community awareness.

### *Hazard mitigation and risk reduction*

The Charters Towers Group strategically prioritises hazard mitigation strategies according to their risk and resources. Risk reduction activities are evidence-based and informed by lessons identified from previous events, activations and exercises.

The Charters Towers Group emphasised to us the importance placed on submitting effective funding applications, with support from the Council, that deliver on prioritised mitigation projects. Charters Towers Regional Council contributed to the 2015 review of Queensland's Flood Gauge Network<sup>25</sup>, which found there was a high to very high need for improving flood gauges. The Group obtained funding to conduct the Mossman Creek Flood Study in 2015, to inform council's planning for localised urban flooding. The study also identified the need for new, repaired and additional flood gauges. To treat these risks, the Charters Local Group has applied for funding through a local

government subsidy scheme to enable the Council to purchase, repair and install the gauges in their area.

The results of our community survey showed the respondents from Charters Towers considered bushfire, animal or plant disease, and cyclone disasters to be of similar likelihood and more likely to occur than river flood in their LGA. Of the respondents who had not acted to mitigate against the effects of a disaster, the main reasons given were that they believed disasters were unlikely to happen in their region, and that they had not thought about taking risk reduction actions. Most respondents from Charters Towers LGA who had acted to reduce the effects of a disaster had performed regular property maintenance. The exercise at Hidden Valley that involved residents is an example of good practice in capability integration, detailed below. We suggest actively involving the more parts of the community in disaster management activities that align to the Charters Towers hazard mitigation plan, to help increase awareness of risks and what residents can do to reduce them.

### Preparedness and planning

The Office assessed the Charters Towers Group's Preparedness and Planning Shared Responsibility as well placed.

#### *Capability integration*

It is apparent that the Charters Towers Group focuses on building local capability. Training priorities are articulated to ensure the Group can meet its legislated responsibilities. Training is not only undertaken with core members of the LDMG, but also community agencies that support disaster management and operations locally. We note that recovery sub group chairs have been assigned and that they have completed the QDMTF Recovery modules. Training of identified deputies and advisers would support succession planning and fatigue management.

Members of the Group have participated in annual exercises on a range of topics including dam failure, chemical spill, emergency alerts and requests for assistance. The Group was also activated for Tropical Cyclone Debbie in 2017. Guardian training has been conducted for relevant personnel. Of note is Exercise Dam-nation! which was extended from a desk-top discussion to a site visit to actively consider how the Happy Valley community would evacuate in the event of a Paluma Dam failure.

We have seen a culture of improvement and commitment to actioning lessons identified. Opportunities to improve disaster planning for the town's aged care facilities were identified through the comprehensive Tropical Cyclone Debbie hot debrief.

### Involving residents in exercises

The Charters Towers Group's Exercise Dam-nation! ran in three parts, combining desktop research, discussion and a site visit. During the second phase of the exercise there was an inspection of the referable Paluma Dam and a public meeting with Hidden Valley residents living downstream from the dam.

While the dam is in the Townsville LGA and operated by Townsville Water, Hidden Valley residents, who would be affected if the dam failed, reside in the Charters Towers LGA. Representatives of Townsville Water, Charters Towers Council and the Charters Towers LDMG participated in the site visit and meeting.

The outcomes of the exercise included improved shared understanding of the Hidden Valley community's preparedness, calculations of evacuation times and creation of a contextualised emergency alert.

Consequently, aged care representatives were invited onto the LDMG and work is now underway to develop a stronger aged care facility partnership.

### *Planning*

The disaster management planning process coordinated by the Charters Towers Group involves key stakeholders, addresses known hazards and risks, identifies priorities and responsibility for performing functions and is regularly reviewed. The process considers all phases of disaster management and the collaborative approach promotes interoperability of systems, programs and resources. The Local Plan includes a broad assessment of the capability of the Local Group. It can only support other Groups if it is unaffected. In a major and rapid onset event the Group would immediately seek assistance.

The planning process undertaken by the Charters Towers Group to reconfigure their Local Plan should be considered by other local groups. Planning was undertaken during a two-day workshop with the Chairperson demonstrating strong commitment to the process. Commitment to the workshop by all members is evidence of a culture of collaboration. The outcome is a Local Plan that aligns with the Standard. The process has enabled robust discussion of risk, roles and responsibilities. It is recognised that the revised plan is strategic in focus, enabling efficiencies. The Group also acknowledge that the plan has not been tested by an activation since its rewrite and will review sub plans to ensure they are more operationally focussed. The sub plan review will take on a similar format to the Local Plan process. The Group also advised us that event action plans would be critical to operationalise the new Local Plan. Along with exercising the plan, consideration of how this capability is undertaken during activation should be tested.

Robust disaster management planning has provided the group with an understanding of capability limits and escalation points. The planning process also ensures each member agency agrees their priorities for disaster management and the responsibilities for key functions and roles.

We observed a commitment between the Charters Towers Group and the Burdekin Group to share responsibility and work together to minimise the risks posed by critical infrastructure. The Burdekin Falls Dam is in Charters Towers LGA and the residents who would be impacted by a dam failure or overflow reside in Burdekin and Whitsunday LGA's. The three Groups work together to ensure there is a shared local awareness and responsibility for the hazards associated with the dam. They do this through regular communication and information sharing, and through their

## **A shared, comprehensive process for disaster management planning**

The Charters Towers Local Disaster Management Group's disaster management planning process involved the attendance of the entire core LDMG group, several of whom were new to Council and the LDMG.

Over two days, the group worked through each section of the plan and reorganised the content in line with the Standard. This concentrated effort by the Local Group has given both new and existing members thorough knowledge of their disaster management plan, as well as bringing to the Group's attention some risks that are now being assessed for treatment.

The Group intend to undertake the same process to review other local disaster management doctrine, such as sub plans. This process demonstrates significant commitment to disaster management.



coordinated approach to the review and approval of the Burdekin Dam Emergency Action Plan developed and actioned by SunWater.

During our validation meeting we heard from the Chairperson of the commitment to better plan for and support vulnerable people within the LGA. The Group is actively seeking ways to improve identification of those who are vulnerable, such as engaging with providers of aged care services. Additionally, the membership of the LDMG now includes representatives from nursing homes and specialist advisors from Blue Care, rehab centre, the Prospect Neighbourhood Centre and ACCESS Group which support people with a disability, locally. The Group have proposed that planning for vulnerable people is considered as part of the capability enhancement strategy of this review.

To strengthen this Group's planning governance, we suggest implementing a clear review schedule and review dates on all documentation. Making the sub plans available to the community alongside the Local Plan on the Council website will also enable community members to be better informed and should be considered by all local groups.

### **Emergency communications**

The Office assessed the Charters Towers Group's Emergency Communications Shared Responsibility as well placed.

#### *Public Engagement*

The Charters Towers Group has been active in ensuring that members of the public are encouraged to prepare for disaster events. We heard how the Council has run similar programs to Townsville City Councils' Cyclone Sunday in the past. More recently Council leveraged existing, established local events which it advised had improved community interest and engagement. Our community survey indicates that this is likely to provide better value for money, given that only 5 per cent of respondents indicated that they attend events, meetings or information stalls specifically about disaster management.

We also heard that since 2015, the Council has had a community display at the Charters Towers Show. Throughout 2016, the group engaged the community at well-known, well attended race meetings and community days. As a lesson identified in Tropical Cyclone Debbie and previous events, the LDMG has used *Get Ready* funding to provide critical information and an increased online presence for the community through a web-based emergency dashboard. The information generated from the Guardian system will be pushed straight out to the public, as one point of truth, through both social media and other means.

We also heard the LDMG's intent to progress the development of community engagement plans. This includes community engagement with pre-identified target audiences; for example, vulnerable residents and with groups that work with vulnerable people.

In addition, the Group could strengthen its capability by adopting stronger governance and formalising roles and responsibilities to reflect existing relationships with partner agencies. We heard that because of planning process undertaken with key stakeholders, there is a clear understanding of the escalation process for addressing issues in the media in times of disaster. Distribution of all public warnings are conducted through a controlled process. Hard copies are also available at the Council library, city hall and administration building for public access. Opportunity exists for the group to develop and agree upon templated communications for their most likely hazards that could be used as a basis and customised as required in times of disaster.

The group is planning an exercise for evacuation. This exercise is to be based on a scenario engaging schools and the Department of Education. The LDMG have identified boarding schools as a potential vulnerable group. In addition, QFES provides education support at local primary schools.

The Council's website has clearly worded information for the community regarding Emergency Alerts (EA), including not to wait for a text to act and what children should do if they receive an EA while they are at school. Online and hard copy surveys targeting community feedback have been deployed in recent years, incorporating lessons learnt and incentivising community participation in the survey by offering prizes. There is readily accessible information relating to pre, during and post disaster situations for the public to access online. We also saw how information is provided and displayed in the visitor centre to educate tourists.

A public-address system is available for mounting to a vehicle and announcements can be recorded to broadcast on a repeat basis, which we heard works well in the context of this smaller community. We also heard the LDMG acknowledge the benefit of utilising the national translation service to support communication during operational activity. Our community survey results indicate that respondents would like to see higher engagement and resources for community groups and local organisations to engage in disaster management arrangements across all phases of disaster.

The Charters Towers LDMG aims to empower its community through engagement activities and has been deliberate in their strategy to ensure value for money. Sixty eight percent of respondents from our community survey were aware of the Local Plan. There is opportunity for the Group to promote their revised plan to support community understanding.

#### *Communication systems*

The Charters Towers Group has access to systems that can effectively share critical information. The Local Plan identifies the communication systems of the various emergency services and the Council. The LDCC uses Guardian and has a paper system as a redundancy. LDMG members can also access Guardian through their own electronic devices. The LDCC has access to a generator and an alternative LDCC location has been identified at the police station. Satellite phones are available and there is a heavy reliance on UHF to contact people, especially in outlying areas. Recent upgrades to mobile towers will also better enable emergency communications. In the event of a total loss of communications, the Group identified that support could be provided by the local amateur radio club.

We sighted a detailed contact list for property owners in the LGA, however it is not clear how regularly this list is checked and updated. There are also lists held of property owners living downstream of Paluma dam, Suhrs Creek dam (Ravenswood) and Burdekin Falls dam.

The LDMG is aware of communications black spots within the Council area and, like other groups, is concerned about the effect on disaster communications of the NBN roll-out. This risk was raised in their 2016-17 Disaster Management Plan assessment and was subsequently identified as an area to focus on. Vulnerabilities in the NBN remain an issue for the Group and measures to address it include: seeking advice on where the NBN nodes have been placed within the region; the Council and LDMG contributing to the Federal Government's mobile blackspot program; and successfully advocating for the installation of a mobile tower to enhance mobile coverage in Greenvale, a remote township 2.5 hours' drive north of Charters Towers CBD. It would be beneficial to the community if the Group could consider ways of mitigating the poor communications access in these areas

through further promotion of the existing UHF system, or through considering if the Local Area Wardens model used in Hinchinbrook and Burdekin could also be applied in Charters Towers.

### *Warnings*

The LDMG has a public information and warnings sub plan to operationally guide the authorisation and release of information to the public. It includes suggestions for alternative ways of communicating warning messages, should there be a power failure. We understand this will be included for discussion in the upcoming sub plan review workshop.

When defining at-risk groups to prepare contextualised warning messages, the focus has been on rural residents at risk of isolation. More recently though, the Group has been developing an understanding of the disaster plans of the two aged care facilities, building from learnings from Tropical Cyclone Debbie, and on the work currently occurring across the District. Less work has been done to define other vulnerable groups, although there are strong links with community groups in the area. Importantly, the Chairperson has prioritised that an enhanced understanding of warnings for the vulnerable should be an area of focus for the Group.

Participation in Exercise Echo Alpha in 2016 provided the Group with improvement suggestions for Emergency Alerts (EA) and general IT access and operations in the LDCC. The need for more regular training in emergency alerts was identified. Since then, emergency alerts have been created for hazardous plume, road crash and hazardous materials. The LDMG also has an emergency communications strategy to inform the public of potential health risks. The strategy was developed in response to learnings related to issues in water quality identified in 2014. The group's self-assessment notes acknowledge the need to test their warning messages with the community.

If river heights need to be checked, we were advised that contact is made with property owners along the banks of the major rivers in the Charters Towers Region, and particularly in the catchment of the Burdekin and Cape Rivers. The Charters Towers Regional Council Network Investment Plan<sup>26</sup> supplied to the review team, states that there is an over-reliance on manual reporting gauges and there is a decline in reports that the Bureau is receiving from these stations. As previously noted, the Group is submitting funding applications for new gauges.

In the event of an impending disaster, Charters Towers respondents to the community survey are most likely to rely on local news services on television for information, followed by local radio and neighbours, family or friends<sup>27</sup>. This indicates that future public education campaigns about disasters should perhaps focus on distribution through local television or radio. Respondents most preferred way of receiving a warning was by phone<sup>28</sup>. Updated doctrine, more developed community profiles, and testing of message content with the community would strengthen this component.

### **Response**

The Office assessed Charters Towers Group's Response Shared Responsibility as well placed.

### *Control*

The group has put considerable effort into planning and recrafting the Local Plan. The plan is a strategic document supported by operational sub plans. Communication processes and information sharing protocols between stakeholders during response to a disaster event, were agreed upon during the planning process. The group also benefits from a cadre of experienced government and non-government members. Whilst some elements of the plan were tested during the group's

response to Tropical Cyclone Debbie, a full exercise of the new plan in simulated operational conditions would be beneficial in informing future updates.

#### *Command*

During our validation meetings, we observed a strong culture of collegiality and trust within the group, led by the Chairperson. The leadership team of the Chair and Local Disaster Coordinator (LDC) place a strong emphasis on achieving the best possible outcomes in disaster response for their community. A hot debrief document regarding the Group's response to Tropical Cyclone Debbie was provided to the review team. This document illustrates a considered approach to continuous improvement, comparing initial strategic intent to actual operational outcomes. As is the case with several other groups across the district, command decision making for the Charters Towers group is disseminated by way of SITREPS to the district group and meeting minutes. This is considered by the group as suitable for their needs but could be supplemented by the development of a key decisions register to accurately track all command processes under response conditions.

#### *Cooperation and Coordination*

The Charters Towers group benefits from some experienced members and committed local stakeholders. This should ensure integration during the delivery of disaster related services in an activation. This structure could be enhanced through the development of event planning doctrine that outlines specific roles and responsibilities, agency leads and generic tasks for a range of disaster events linked to the Group's identified natural and human-caused risks. This planning would ensure that the LDMG's response capability remains robust, regardless of staffing availability throughout the year.

#### *Operational Information and Intelligence*

The Guardian system is used by the Charters Towers LDMG to manage and share operational information and is considered by the group to be suitable for their current operational needs. We were informed by the group that during activations, intelligence is managed in an ad hoc fashion and does not require the establishment of a resourced intelligence cell. This may be effective in a small activation and with stable and experienced staff. The Group has developed trusted relationships over time and relies upon the strong local knowledge of the membership which is harnessed and used to contextualise Bureau advice. In a larger event, or without the reliance on local knowledge, the lack of a formal intelligence cell maybe of risk. The Tropical Cyclone Debbie hot debrief document captures actions and learnings in relation to the Group's Intelligence function and shows the Group's strong drive for continuous improvement. Whilst this current system appears to be working well, it would be strengthened by the development of doctrine around Intelligence cell roles and functions to support the LDCC in the event untrained or non-local staff deploy to assist operations. This will future-proof the group's intelligence capability.

#### *Resource Management*

The Local Plan provides evidence of detailed planning around the Group's resource management and potential logistical support needs. Sub plans have been developed for logistics, finance and resupply operations. We found the content of the logistics sub plan to be generic in nature and it would be made more comprehensive by end-to-end management processes for local and incoming resources. These improvements would strengthen the application of this operational document. In conjunction with the District, the Charters Group has identified the potential for Charters Towers to

be utilised as a reception area for large numbers of evacuees from a coastal disaster event. Forward planning involving the utilisation of the four boarding schools as evacuation centres has been completed and exercised which highlights good practice. Furthermore, the group's use of the School of the Air as a redundancy for maintaining rural property registers and isolated property communication in the event of activation is commendable. The Group has identified further work to analyse current assets registers to explore and record specific resource availability and requirements during hazard-specific events. This is a good example of context driven, risk based planning.

### **Relief and recovery**

The Office assessed the Charters Towers Group's Relief and Recovery Shared Responsibility as a development area.

Good governance arrangements and the revised Local Plan have provided the foundation for this component. The Local Plan references the key outcomes to be achieved during the relief and recovery phases of disaster management and centres activity on functional recovery areas. Included in the Local Plan is a recovery strategy that provides clear direction for the Group. There is an incomplete draft impact assessment sub-plan which includes consideration of the management of pets.

There is also a draft recovery sub-plan which was disseminated for consultation in 2016, but it is not endorsed or finalised. As we understand, the intention to revise all sub plans will include addressing relief and recovery in a more comprehensive manner, including the identification of specific roles and responsibilities. This sub plan should include specific detail to inform local actions and the transition between the phases.

#### *Relief*

Relief triggers and actions are noted in the activation for recovery arrangements table in the Local Plan and we heard that they are well understood by the locally appointed coordinators. We commend that triggers are identified for immediate relief arrangements during the response. It is understood that actions for relief and recovery will be included in their specific event action plan. Importantly, deployment considerations for immediate relief are also considered. It is recognised that functional recovery agencies will be supporting relief activities moving in to recovery.

Plans for relief address resupply across the LGA. Remote and isolated communities are well considered and documented, identifying major suppliers and addressing the immediate needs of small communities. Tenders for helicopter availability during the wet season to support resupply are called for and agreed annually. We heard how vulnerable local groups and individuals, such as those accessing care in hospital and children and families attending school, were highlighted as important groups to engage in the future as an outcome of Exercise Dam-Nation!

During our validation meetings, we spoke with the SES Local Controller. There is a strong volunteering commitment within this LGA and SES provides support to relief activities. Like many rural councils, maintenance of membership and commitment to volunteering is challenging. There is opportunity for QFES to work with Charters Towers as part of the implementation of their Volunteerism Strategy.



An area for development, recognised by the Group, is reception planning. The Group has identified provision for reception in Charters Towers Hospital, at the local schools, its aged care facilities and can open several evacuation centres.

The Group has identified specific groups within the community that may require relief assistance. Four boarding schools, two aged care facilities, people with disabilities and residents who live in remote areas are identified as the more vulnerable people in this community. We heard how the council integrates servicing these residents and their needs are dealt with on a day to day basis, not just during events. This demonstrates how a council of smaller nature integrates business as usual activities with activities that would also be performed in disasters.

The NDRRA is given consideration in the Local Plan. We also heard that it is expected that the LDMG will enter an MOU with GIVIT soon. However, exploring how all types of offers of assistance are effectively managed and matched to pre-identified local need would strengthen this capability. Consideration of community participation and volunteering assistance could increase capability in community recovery.

#### *Recovery*

Four functional recovery areas have been identified. Planning to support and implement functional recovery sub groups remains in its infancy. State agencies and NGOs have been identified in support of short and long term recovery priorities and functional areas. The Plan also identifies the establishment of a recovery centre, with plans to co-locate with evacuation centre. Triggers for recovery activation are identified, along with associated actions. A local Councillor has been appointed to coordinate community recovery and we heard of the strong relationships with community groups who work with the more vulnerable residents in the area. Functional recovery sub groups have yet to be established.

Following development and implementation of the Relief and Recovery sub plan, it would be beneficial to test the trigger points, communications between the LDMG and recovery groups and decision making. Those agencies responsible for functional recovery areas and represented at the District Group, are encouraged by the review team to work with Charters Towers Group as they plan for this component.

In addition, the group should consider community engagement strategies and public education to ensure increasing knowledge of community recovery. The policy for Offers of Assistance and supporting guidance would be of value in developing consistent messaging to the community. This should also consider local volunteering efforts and options and how unsolicited offers of volunteering and goods and services can be managed to effectively meet community need.















## Flinders Local Disaster Management Group

### Capability assessment

This section provides an assessment of the capability of the Flinders Local Disaster Management Group (Flinders Group) to deliver the Key Outcomes of the Standard and to fulfil its functions under the Act.

| Shared Responsibility                     | Standard Component  | IGEM Rating |   |
|---|---|-------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Well placed |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Well placed |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Well placed |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Well placed |  |

### Context

Flinders Shire Council is responsible for a large geographical area, 41,192 km<sup>2</sup> in size, which includes four townships, Hughenden, Torrens Creek, Prairie and Stamford, and rural areas. There is a population of 1550<sup>29</sup> and it is classified by the Australian Bureau of Statistics as 'very remote'. Natural hazards are fewer than those of the coastal councils in the District and the main natural hazard is from Flinders River flooding. Significant human-caused risks may arise from a critical incident on the Flinders Highway, the main access road into and out of Hughenden, or the Kennedy Development Road, connecting Hughenden with Cairns. Distance from a major population centre (Hughenden is four hours' drive from Townsville) reduces the capacity available from state agencies to support the Shire's disaster management arrangements outside of an actual event. Nonetheless the Emergency Management Coordinator and District Executive Officer each make regular visits to the Shire to attend Local Group meetings or conduct exercises. Hazard awareness is enhanced by the extensive local knowledge brought to the Group by the Mayor and other Council staff who have lived in the area for decades. A lack of regular activations means that plans, preparations and systems are rarely tested by an actual event. Given that reality, the dedication by the LDMG and related disaster management practitioners and support staff to preparedness and planning is noteworthy.

### Hazard identification and risk assessment / Hazard mitigation and risk reduction

The Office assessed the Flinders Group risk management components as well placed.

#### *Hazard identification and risk assessment*

Hazards and risks are identified and assessed regularly by the Flinders Group for all types of events. This is undertaken in collaboration with relevant stakeholders and skilled individuals. Assessments are used by the group to develop plans for all phases of disaster management.

The Flinders Group has assessed for natural and human-caused hazards. Flooding, severe storms, tornadoes, bushfire, and major transport accidents are considered high risks. Consideration has also been given to the residual risks associated with the outbreak of animal disease affecting livestock and any event that causes more than ten casualties, as these hazards are assessed as having an extreme impact on local capacity to manage. The Group share their hazard information with the community via the Council website which provides content on local disasters as well as the risk assessment included as part of the Flinders Shire Council Local Disaster Management Plan (the Local Plan). The Flinders respondents to our community survey perceived river flood, and bushfire as similarly likely disasters to impact the Shire, followed by plant or animal disease. This community perception of risks aligns with the Group's risk assessment and Local Plan.

The LDMG's risk assessment was undertaken by a study advisory group as part of the development of a disaster risk mitigation plan. This incorporates the findings of a community survey conducted to ascertain residents' perceptions of the different hazards that threaten the area, their likelihood and potential impact; as well as residents' preparedness for disaster events, including protracted events. Collation of the risk assessment and the survey results informed risk treatment options.

The Mayor and Council staff are heavily involved in disaster management activities for Flinders Shire. The Flinders Group also utilises different branches of the local Council by sharing flood studies and tapping into storm water modelling for both town planning and hazard risk assessments. The Local Plan is reviewed annually by the LDMG which includes stakeholders from the local hospital and aged care group. The Group also reviews its mitigation plan and mitigation projects register annually. A major review of the mitigation plan is conducted by the group every five years.

The Flinders risk assessment considers previous events. There is also a good awareness by the Flinders Group, the Council and residents, of the impacts of the most likely and frequent events in the region. The Group demonstrated acute awareness of the unique way the river floods the lower north bank at Hughenden, whereas the elevated part of the town south of the river is more at risk from storm water flooding. There is extensive knowledge about the varied behaviour of rivers in the area, dependent on catchment levels and the direction of rain events.

Hazard identification and risk assessments for the Flinders Group are evidence-based, use a broad range of sources, are informed by valid data and draw on lessons identified. The Flinders Group also ensures their stakeholders have a shared understanding of, and ready access to, risk information for all types of events.

#### *Hazard mitigation and risk reduction*

The Flinders Group involves the community in risk reduction activities, aligning to risk treatment priorities. Their mitigation priorities are included in strategic and operational plans and inform land-use planning schemes. The local community is also engaged in disaster management exercises. Over half of the Flinders respondents to our survey said they had taken steps to reduce the effects of a disaster. The most common action was undertaking regular maintenance of properties.

Lessons from previous events have also been incorporated into risk mitigation measures by the Flinders Group. Following Severe Tropical Cyclone Yasi in 2011, the Flinders Group developed community awareness campaigns aimed at caravanning tourists, who make up a significant portion of the transient population in Flinders. The Group collaborated with local community organisations to prepare care packs for evacuees and transient people ahead of disaster events.

The Group has ensured mechanisms used for mitigation and risk reduction projects best represent value for money. A major mitigation project is being conducted by the Flinders Council to stabilise the southern bank of the Flinders River near the bridge and Hughenden town. This work is being undertaken using local businesses, workers and local natural resources.

The Flinders Group knows that prolonged events will quickly exceed local capacity and support from the District Group will be needed. These risks have been identified and communicated to the District Group as part of regular reporting and are included on the District residual risk register.

The SOP for the LDCC notes a risk that Council may need equipment that the LDCC also needs, leading to the LDCC hiring equipment during the lean forward stage. If there was ever a rapid onset event or transport outage, the option to hire equipment may be difficult. This risk should be escalated to the District for consideration. It would not be an uncommon risk for rural and remote councils in Queensland, given the heavy reliance on council facilities and staff, both to support the LDMG and LDCC and to lead response operations, as required under legislation<sup>30</sup>. There may be an opportunity for all Disaster Districts that contain rural/remote councils to collectively discuss an approach for dealing with the inevitable escalation of significant events to districts.

### Preparedness and planning

The Office assessed the Flinders Group's Preparedness and Planning Shared Responsibility as well placed.

#### *Capability integration*

The Flinders Group is building capability in key functional areas. Evidence shows that members of the Group have regularly participated in exercises. We have sighted evaluation reports and seen evidence of improvements being introduced. The process for prioritising and assigning outcomes from these exercises is not clear. The Local Group acknowledges that lessons management could be enhanced.

Two members of the LDMG's core group are still to complete QDMTF modules. Recovery chair roles have been assigned to councillors with training to be completed. The Flinders Group has taken steps to address an identified lack of staffing depth for their LDCC, by training and exercising additional council staff in disaster management and Guardian. To support succession planning and fatigue management during an event, deputies and advisers should be nominated. The Flinders Group might also

### Innovative approaches to ensuring depth of trained staff

The Flinders Group runs an exercise to stand up the LDCC every one to two years. The exercise is held at the beginning of the storm season and includes the staff, trained in Guardian and LDCC roles, who will be rostered on over the holiday period.

The LDMG has recently built a test site for Guardian to enable its unrestricted use during these exercises and to partially mitigate for never having used Guardian during an activation. This is an excellent way for smaller councils to ensure they are prepared for activation.



consider if there are community members who could support their disaster arrangements like the Local Area Wardens program in Burdekin and Hinchinbrook.

The LDMG's most recent exercise, Exhale, in October 2017, was a detailed airport exercise involving a full contingent of disaster management personnel, Group representatives, senior and key Council staff, including the Mayor, and SES cadets from Hughenden and surrounds. Exercise Exhale also included a detailed LDMG debrief the following day which generated significant discussion about, amongst other things, capacity to respond in the event of a sudden major incident in the Shire.

### *Planning*

The Flinders Group planning and assessment process, including documenting roles, responsibilities and timelines, involves engagement with relevant entities. The Local Plan and its sub plans are accessible to all stakeholders, including the community, and it is exercised on a regular basis.

The Flinders Group regularly reviews its Local Plan and has developed sub plans, including community recovery, evacuation and an aerodrome emergency plan. The Local Plan clearly identifies roles and responsibilities, including each lead agency across all hazards with roles for specified events. The Plan also includes operational checklists and describes the process for setting up the LDCC.

The Flinders evacuation sub plan includes evacuation planning based on flood, cyclone, severe weather, bushfire, pandemic/epidemic and chemical spill. The evacuation zones for each hazard have been drawn from appropriate sources, such as flood modelling and advice from hazard specific lead agencies. The plan specifically identifies and treats the risk presented by the dual river levels along the Flinders River, and pays attention to residential houses identified as exposed to riverine flooding on the southern bank. The plan considers the populations of each area in the Flinders Shire as well as vulnerable groups, and the transient population. A community engagement plan forms part of the evacuation sub plan and describes engagement strategies designed for school children, aging population, residents and visitors to be implemented before, during and after disaster events. The plan also includes hazard-specific evacuation timelines, methods for disseminating warnings, processes for return of evacuees, and an operational checklist.

A community care program, co-located with Flinders Council, is represented on the Flinders LDMG and helps the Flinders Group

## Collaborative evacuation planning for vulnerable groups

Effective collaboration between local entities and the Flinders Group ensures information is kept confidential whilst also being used to ensure people's safety during disaster events.

Details of vulnerable residents likely to need additional support, such as residential addresses, which side of the river they are located, and what supplies they would need if they were required to evacuate, are known to the Flinders Community Care program and are used by the LDMG to plan for targeted warnings, evacuation, shelter and recovery from disasters.

plan for vulnerable people across all phases of disaster management. The Flinders Group engages with and utilises the knowledge of local services and agencies. This model should be considered by similar rural and remote LDMGs in the support of vulnerable people.

The 2016-17 Disaster Management Plan assessment identified recovery as an area of planning to improve. The Flinders Group have extensive planning and processes in place for drought recovery, particularly in human-social recovery, however, work to enhance disaster management recovery planning is still required. This can be transferred to planning for other hazards.

There is currently limited mention in Flinders' plans of Hughenden's aged care facility. At time of writing, the LDMG had not seen the aged care facility's evacuation plan due to potential patient confidentiality breaches. We encourage the Flinders Group to consider including the aged care facility manager on the LDMG as a specialist adviser. This is an opportunity to seek options to improve evacuation and business continuity planning and integration into the Local Plan. Learnings from the other LDMGs within the Disaster District may provide solutions to this issue.

In addition to meeting Civil Aviation Safety Authority (CASA) requirements, the Flinders Group designed the Exercise Exhale scenario to address an identified issue of different interpretations of the triggers and roles in the Aerodrome Emergency Plan. Post-exercise, it was agreed by the LDMG that more detail would be included in the aerodrome sub-plan to ensure everyone has sufficient information to know when the LDMG should be activated, as well as roles and responsibilities. The exercise evaluation has been submitted to CASA for approval and changes to the sub-plan are underway.

### **Emergency communications**

The Office assessed The Flinders Group's Emergency Communications Shared Responsibility as well placed.

#### *Public Engagement*

The LDMG undertakes public engagement activities on a regular basis and utilises Council's customer request system and social media to deal with public enquiries. Opportunity for testing the community understanding of these engagement strategies is still yet to be taken up in a targeted way.

Public engagement activities include having a dedicated disaster preparedness stall outside the Hughenden newsagency. Furthermore, mail outs to rural properties, businesses and residents in addition to information disseminated through local pubs in the form of flyers and fridge magnets on the counter, with the aim to reach passing residents and tourists. These activities take place from October to December annually. Community engagement and presence at local events such as pest management forums, are further instances where preparedness messaging and resources were disseminated in a targeted way.

The Flinders LDMG aims to inform its community through engagement activities and has been deliberate in their strategy to ensure value for money, but also in producing locally relevant information to meet community needs. In our community survey, only ten per cent of respondents said they read material about planning for disasters, this may warrant the council exploring different mechanisms to engage community.

#### *Communication systems*

The Flinders Group's communication systems are responsive to the range of reasonably foreseeable operating environments. The Group uses Guardian for tasking, document management and to record offers of assistance. The Flinders Council also uses Guardian for other purposes to help ensure value for money. There is a SOP for the LDCC that includes a public phone number for the LDCC, forms, contacts, maps and a process for approving media releases. Like other groups in this District, Flinders uses UHF for communication and through this channel can obtain advice from truck drivers about road conditions. A backup LDCC location is identified. Back up radio communications for Council and emergency services including, if necessary, runners and couriers, are outlined in the SOP. Liaison Officers are asked to ensure access to their organisation's radio equipment. Council conducts a satellite phone 'muster' before each storm season to collect and check Council radios so they can be deployed by the LDCC if necessary.

### *Warnings*

The Flinders group is focussing on developing a strong understanding of community members at greater risk of impact from a disaster (beyond those at risk of river flooding). The Group is developing relationships with the aged care support agencies who work with vulnerable individuals as a means of achieving this. As with other groups, warning message content is not currently being tested with the community and so consideration could be given to obtaining feedback on message content as part of their agency outreach. The Flinders Group has been appraised of new bushfire community warnings developed by QFES, using simple, concise and less technical language. The Group should consider adding these messages to its suite of EAs.

The Flinders evacuation sub plan discusses dissemination of warning messages, with a table that includes six vulnerable groups and the agency primarily responsible for communicating with them. The table is different to the vulnerable persons' section in the Local Plan and so the group may find it useful to link one to the other rather than needing to maintain the same material in multiple places.

There is a flood warning system in the Flinders River catchment. The system includes volunteers who phone in when the river has passed a certain height at their station. There is also a series of rainfall stations and 'streamflow gauging stations'. As there is no Bureau radar coverage for the region, Flinders does not receive severe weather warnings using this medium. The Chair and LDC raised this with the review team as a significant issue for the LGA, as it is for Richmond. The Local Plan identifies all other channels available to the group for issuing warning messages, including the Council website, Facebook page and UHF. Exercise Echo Alpha in 2016 provided the Group opportunity to test Emergency Alert submission to the State Disaster Coordination Centre.

Respondents to the community survey indicated that they are most likely to rely on neighbours, family or friends for information in the lead-up to an event. Flinders respondents are the only group to indicate this as their most likely information source. This may provide the Flinders Group with opportunity to continue to build on the strong local community networks for disaster management that are already established. Other preferences were local radio, the Bureau and local council websites<sup>31</sup>. The Flinders group may wish to consider whether one of the formal channels for communicating information, such as the Council website or local radio, should be chosen and then profiled with the community as the source of truth for disaster information. The most preferred method of receiving a warning message was by a voice or text message to phone<sup>32</sup>.

## Response

The Office assessed Flinders Group's Response Shared Responsibility as well placed.

### *Control*

The Flinders Local Plan provides clear guidance for the control function of lead agencies responding to hazard specific threats. This doctrine also succinctly outlines the procedure for appointment of members to the group. The communication processes across the Group are not specifically documented. At present this works well, with most member agencies located in close physical proximity to the LDCC and all communicating on a near daily basis. With staff changes, there is a risk of communication failure relating to identified roles and responsibilities of the group. We were told by the Chairperson and LDC that they were comfortable with the representation, requisite skill set and authority of local liaison officers to the Flinders Group. Council staff provide training for liaison officers in the Guardian system and during local visits we observed well considered business continuity processes for the LDCC including; backup generator power, emerging NBN considerations and a paper based redundancy for use in the event of a complete information technology failure.

### *Command*

A command structure is documented by the roles and responsibilities statement listed within the Local Plan and a communication process is outlined within the SOP's for the Flinders LDCC. This communications process could be further developed by providing strong linkages as to how it works to support the group's command structure. Much like several other groups subject to this report, Flinders tracks command decision making via formal meeting minutes and operational information more generally by way of the Guardian system. We were told that the Group considered this system fit for purpose but it could be strengthened by including a key decision register for use in activation to inform an after-action review and any subsequent exercising program.

### *Cooperation and Coordination*

We observed the Flinders Group to be proactive and engaged, informed by local knowledge and supported by liaison officers who are cognisant of the needs within their local community. During meetings with the Group, we were told of the critical significance of the Flinders Highway to the ongoing operation of the group, given most resources come into the community by road. We note that the Group maintains ongoing dialogue with Department of Transport and Main Roads (DTMR) throughout the year to ensure they maintain visibility of all road mitigation works. Furthermore, the Group utilise the UHF networks of road transport companies to inform situational awareness of arterial road information during response activities showing good use of existing resources to inform operational decision making. The LDCC SOP's, while quite detailed, could also benefit from event specific planning doctrine, for example, for severe storms. This would ensure a higher level of operational capability throughout the year, regardless of which Group members are available when an event affects the community.

### *Operational Information and Intelligence*

Guardian is utilised by the Flinders Group to manage operational information and as previously discussed, local trainers are embedded within Council to maintain and increase staff capability in the use of the system. During meetings, we saw a well-developed culture of information sharing. A database of contact details for rural property owners is maintained by the group and updated

regularly. Capturing lessons from disaster events and exercises is ad hoc. The LDMG would benefit from adopting a more formalised lessons management approach to inform future planning, thus ensuring valuable learnings are not lost for future activations.

The Group has identified an emerging risk in the growing number of vulnerable and aging people on rural properties that can be readily isolated during a severe weather event. We were advised that the stoicism of these residents can also compound the problem given their reticence to seek help when required. This risk is currently being managed by regular visits conducted by community care groups, messaging via 'Cooee' the local council newsletter and updated lists of all people on properties and their medical requirements (where same have been provided). The LDC conducts all weather event planning with consideration of these vulnerable people.

### *Resource Management*

Like many smaller LDMGs, the Flinders Group has a heavy reliance on Council plant and equipment in response activities. Residual risks for the Flinders Group, including resource needs, are shared with the District Group. Resupply to isolated properties is managed in the first instance by maintaining a list of rotary wing assets across the region that can be utilised along with quotes for potential usage. As in many rural areas, Flinders benefits from an interconnectedness of local people and therefore, isolated properties are well considered by the group. A resupply brochure has been developed as a community engagement strategy and it gives members of the community a useful synopsis of the process and what can and cannot be supplied. The Council has a good supply of generators to maintain business continuity for the LDCC, water treatment plants and bores. The group identified that documented procedures for the management of resources in an event is a developing capability, however, the procedural basis for sound doctrine is already in place. Key council staff have already received training in NDRRA and cost recovery and they are confident in their ability to capture all relevant resource costings. These procurement procedures should also be captured in any newly developed resource management plans.

### **Relief and recovery**

The Office assessed Flinders' Group's Relief and Recovery Shared Responsibility as well placed.

The Local Plan considers relief and recovery. We understand LDMG will review their recovery model and plan in 2018. Once finalised, exercising would support implementation. There is intent to also involve the community in this process to enable locally led activities. Those with recovery responsibilities at District level should support this revision through the capability enhancement strategy. Opportunities for the group increase their capability in this area will require more attention to be given to transitioning to skilled and qualified recovery partner agencies.

There are a broad range of recovery initiatives – short and long term – in place to support drought recovery across the LGA. This Council has been proactive and creative to support local producers and businesses during prolonged drought. The Council, with support from the Federal Government, Mental Illness Fellowship North Queensland and Country Callback offers social, emotional and wellbeing services for drought affected and isolated communities in the area. The Council also provides information and assistance through relief arrangements including financial, social and emotional support for drought relief through the farm household allowance program. The Council also offers grants and sponsorship for community events that support drought affected residents, with the aim of supporting local community organisations, to increase community connectedness, social wellbeing and increased access to support services. The Council has significant expertise,



networks and learnings that can be translated from drought recovery to broader disaster management.

Supported by NGOs, the Council operates an evacuation centre. This evacuation centre has not been operational since Sever Tropical Cyclone Yasi, 2011. The LDMG recognise this centre maybe required to be opened, not necessarily for residents but for tourists or those evacuating from coastal areas. Pets are catered for at the Council Pound and local hotels are pet friendly. The LDMG have identified a centre manager and all relief supplies are organised through local community groups, for example, emergency packs are pre-prepared. A secondary evacuation location has been identified and redundancies, such as a backup generator, are in place. The stand-up of the evacuation centre was exercised in 2016.

The group should incorporate into planning how offers of assistance is managed. Consideration of local volunteering efforts and how unsolicited offers of volunteering and goods and services can be managed to effectively meet community need in times of disasters.





# Hinchinbrook











## Hinchinbrook Local Disaster Management Group

### Capability assessment

This section provides an assessment of the capability of the Hinchinbrook Shire LDMG to deliver the Key Outcomes of the Standard and to fulfil its functions under the Act.

| Shared Responsibility                     | Standard Component  | IGEM Rating |   |
|---|---|-------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Well placed |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Well placed |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Well placed |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Well placed |  |

### Context

Hinchinbrook Shire Council is responsible for 2,600km<sup>2</sup>, located primarily on the Herbert River flood plain and including exposed coast line, cane farming and a series of small towns, communities and rural properties. The Shire is bisected by the Herbert River, representing both a crucial resource and a natural hazard when in flood. The other major natural hazard is cyclones, which cross over or near the Shire every few years, and related storm surge. Human-caused hazards would be similar to other councils along the coast, including the consequences of transport accidents and exotic animal and plant disease. Hinchinbrook has a population of nearly 11,000 and is classified by the ABS as a mixture of 'outer regional' and 'remote'.<sup>33</sup> The Hinchinbrook population is significantly older on average (50 years) than the state average of 36. The Local Group activated for Tropical Cyclone Debbie in 2017 and Cyclone Yasi in 2011.

### Hazard identification and risk assessment / Hazard mitigation and risk reduction

The Office assessed the Hinchinbrook Shire Group risk management components as well placed.

#### *Hazard identification and risk assessment*

The Hinchinbrook hazard risk assessment is evidence-based, uses a broad range of sources, is informed by valid data and draws on lessons identified. It uses plain language and is readily accessible to the community. The hazard identification and risk assessment processes employed by the Hinchinbrook group follows the ISO 31000:2009 Standard.

The Hinchinbrook Group has made local disaster risk information visible to their local community by way of a feature on the home page of the council website. The disaster and emergency information page prioritises disaster management information for flood, storm tide and cyclones, which draws attention to the three highest-rated risks in the area. The Local Plan is also easy to find on the

website and includes the full risk assessment. The results of our community survey suggest the Group's focus on the three key hazards to Hinchinbrook Shire aligns with the community's perception of hazards.

The risk assessment was undertaken in 2008 and informed by the Council's Natural Disaster Risk Study 2007-08. It is reviewed annually and is considered current. We were also advised that the Council is hoping to undertake another full risk assessment in 2018-2019. The current assessment considers natural hazards and the influence climate change will have on their scale, severity and frequency. It draws on information from previous events, particularly flooding in the region. Other hazards such as exotic animal and plant diseases, road, air and marine accidents, oil and chemical spills, epidemics and water supply contamination are noted in the Local Plan, with warnings timeframes, lead agencies, and roles and responsibilities defined for each hazard. They are not currently incorporated into the risk assessment. We noted that Orpheus Island and its associated risks that may impact effective evacuation are not included in the Hinchinbrook Group's hazard assessment. The risk assessment could be strengthened by better understanding the risks that human-caused hazards may pose to the LGA. For example, exploration of risks associated with a bio-security disaster event in the LGA would provide greater confidence.

The risk assessment defines the secondary hazards likely to occur following each primary hazard. For example, severe storms may cause secondary hazards, including fire from lightning strikes, loss of power and water supply, and road traffic accidents. Prolonged events and their potential impacts, particularly for local businesses, are considered in the risk assessment. The capability and capacity limits of the Hinchinbrook Group have been assessed and are provided in the LDMP. This information draws on experience from previous activations and lessons identified in more recent exercises.

Hinchinbrook is one of the 10 coastal or near coast councils to have signed an MOU to collaborate in a disaster event. The number of staff at each of the emergency services facilities and the number of SES volunteers in the shire are listed in the LDMP. This may inform specific requirements. If power is disrupted there will also be risk to water supply. This should also be included as a residual risk and mitigation strategies considered.

Hinchinbrook's Natural Disaster Risk Study includes a community vulnerability profile. It notes the older age of the population in comparison with other towns of similar size, the potential hazard created by older residential housing, issues with critical infrastructure and risks to the economy. The profile also notes the risk that a widespread event may mean that neighbouring LGAs cannot assist Hinchinbrook. The small, transient population of tourists, researchers and resort staff on Orpheus Island should also be considered in this vulnerability profile. We heard about the Hinchinbrook demographic during this review, the Group's knowledge of non-English speaking groups who are also part of the ageing population. The significant representation of multicultural groups is referenced in the Local Plan.

#### *Hazard mitigation and risk reduction*

The Hinchinbrook Group prioritises hazard mitigation strategies and risk reduction activities through mechanisms that ensure service delivery and represent value for money. To mitigate the risk of some communities being isolated during flooding events, a sub group to the LDMG has been established for Halifax and the Lower Herbert River. The capacity limits of this sub group are known and can be incorporated into a calculation of capacity limits for Hinchinbrook. This model of using



sub groups when populations are widely dispersed and potentially separated by the most likely hazards (in this case river flooding) is a good practice example. The Townsville Group also has sub groups on Magnetic Island and in Rollingstone and we know that this model is also successfully applied in the Warwick Disaster District.

The Local Area Warden (Warden) program in Hinchinbrook commenced after some communities were isolated by Cyclone Yasi in 2011. Thirty-three Wardens have been nominated for 19 local communities in the Shire. Their role is to act as a link between the LDMG and the community. They are responsible for providing intelligence and supporting information flow to the LDCC regarding how the local area is coping during response, relief and recovery; assisting in the coordination of food and medical supplies; and providing up-to-date information to the community about the disaster event and response efforts. The Wardens receive minutes from the Hinchinbrook Group's meetings and are provided with two-way UHF radios allowing them to maintain communication with the LDCC during power outages. The Wardens also support preparation communication by door knocking in their local community. To support this program, the Group has developed a handbook with useful information that is provided to nominated Wardens.

Engineering requirements, such as needed upgrade of bridges and roads, is accepted by the Council as an ongoing residual risk. Some modification options are not considered cost effective when compared with the level of risk. The Council has completed two Betterment Fund projects to decrease flood effects. One project focussed on extending the causeway and protecting culverts to reduce the risk of Bosworths Road, a major access road to Ingham, being cut due to floodwaters. The other involved increasing the resilience of the levee at Old Wharf Road, by lowering and armouring different sections of the levee, creating a detention basin to hold floodwaters, raising the road and creating additional drainage<sup>34</sup>.

Community risk reduction activities established by the Hinchinbrook Group involve a cohesive and proactive approach. Risk reduction activities are performed by community members and align with risk treatment plans. Sixty-two per cent of Hinchinbrook respondents to our community survey said that they undertake regular property maintenance to reduce the effect of a disaster, and 20 per cent of respondents have prepared an emergency kit.

### Local Area Wardens program

The establishment by the Hinchinbrook Group of Local Area Wardens in areas that are at risk of being isolated during a disaster is another example of risk mitigation, and an effective strategy for a lower capacity council.

The role of the Wardens is described in the Local Plan, along with the process for their dissemination of warnings, situational reporting and resupply arrangements.

The Warden's system is shared with the public via the Hinchinbrook Shire website. Community members are encouraged to contact their Warden to report issues or request assistance, and a downloadable contact list and essential food supplies order form are available on the website.

We heard from the Group's Chairperson that the Wardens are crucial to capability, are highly involved, before, during and after a disaster event and support the delivery of good community outcomes.

## Preparedness and planning

The Office assessed the Hinchinbrook Group's Preparedness and Planning as well placed.

### *Capability integration*

The Hinchinbrook Group participates actively in training but has identified the need to increase the depth of skilled and knowledgeable people able to support disaster operations. A part-time Disaster Management Coordinator commenced with the Council shortly before this review. As we have seen in other councils, the expertise provide by this type of role enhances local coordination and capability. Hinchinbrook Group core members have received QDMTF training, with two core members still to complete modules at time of writing. We note several deputies and advisers had received training. The Group acknowledges the depth of available trained staff, should an event continue for more than a few days, would be challenging. However, this is considered as a residual risk and has been escalated to the District Group. The LDMG is also taking active steps to mitigate low capacity and recently recruited people interested in supporting the LDCC during activations. Risk treatments such as encouraging more Council staff to undertake disaster management training, and arranging for deployments from other councils, are also being explored.

Recovery chair roles have been assigned, with two chairs yet to complete QDMTF recovery module training and an eight-member cyclone shelter management team has been fully trained. The LDMG advises that the team needs to be supplemented through more experienced deployments and has been actively working with the District regarding this requirement. The LDCC utilises Guardian and annual training is provided to support its application.

The Hinchinbrook Group participates in the broader district regular program of exercises, including Exercise Echo Alpha in 2016. Innovative methods could be employed by the Hinchinbrook Group to ensure regular testing of skills of key positions. Another opportunity for the LDMG to exercise is available by using or extending the aerodrome exercise noted in the Ingham Aerodrome sub plan. This would also provide opportunity to update this sub plan.

The Hinchinbrook Group formally debriefed after Tropical Cyclone Debbie passed to the south of the Shire in March 2017. This debrief was incorporated into the LDMG minutes. We are advised that lessons are included in future planning, incorporated into community education and shared with the District Group. Stronger doctrine and governance process to ensure lessons identified are prioritised, actioned and reported on would enhance sustainable improvements.

### *Planning*

The Local Plan is an extensive document that provides strategic context and operational information that meets legislated requirements and supports the achievement of Key Outcomes of the Standard. The planning process involves key stakeholders, addresses identified hazards and risks, as well as priorities and responsibilities of relevant agencies. The plan addresses known and experienced hazards, along with human-caused hazards.

The Local Plan is provided in full on the Council website, with annexures, Memorandums of Understanding, and Standard Operating Procedures. Our community survey suggests the accessibility of the Local Plan is well known to the community, as 98 per cent of respondents in the Hinchinbrook area stated they knew about the plan, and 39 per cent of respondents stated they had also read the document. These results show a considerably higher awareness of the Local Plan than most other areas across the Townsville Disaster District. As the Local Plan is a key source of

information, the Group should continue to ensure that information provided is contextualised for the community members. This may also present an opportunity for development of community-based disaster management planning, particularly in conjunction with the Wardens program and in more isolated areas of the LGA.

The Local Plan is reviewed and updated by the council and endorsed on an annual basis. It is distributed to over 50 local organisations, including schools, aged care facilities, local NGOs and State agencies. There are opportunities to include key stakeholders in the process of reviewing and updating the plan and to encourage involvement in disaster management planning activities.

In discussions with the Group, it was acknowledged that the Local Plan must include detail regarding Orpheus Island. While we were advised that actions in the event of an impending cyclone are well known and understood, evacuation planning should be strengthened. The Local Group is actively seeking more planning information from the resort owners. There is opportunity to encourage a shared approach to disaster management operations with the relevant stakeholders for Orpheus Island, such as sharing process documents. The inclusion of representatives from the Department of Environment and Science, who manage the island's national park, James Cook University who undertake research on the island, and the island's holiday resort, should link into the planning process. As a result of this issue being raised during the review period, the Chairperson initiated discussions with key stakeholders, including the District Group. We are confident that the Local Group will update plans accordingly. Furthermore, the Chairperson noted that they may face similar issues with Hinchinbrook Island. While the island is not in their LGA, the departure point is. We were advised that the Hinchinbrook Group will work with the Cassowary Local Disaster Management Group to consider in more detail.

Current, cross-district engagement with aged care providers may assist evacuation planning in Hinchinbrook. We heard from the group, challenges faced in evacuating these facilities. In a flooding event, this becomes particularly challenging, to ensure access to evacuate and reception that is appropriate for high needs clients. As highlighted in the Office's *Review of evacuation management arrangements* (2017), evacuation planning regarding community messaging, communications and decision making would be beneficial for this Group.

The Hinchinbrook Group's assessment of the effectiveness of their Local Plan was consistent from 2015-16 to 2016-17. Their rating of well placed across most shared responsibilities aligns with our assessment of the effectiveness of their plan, as observed through this review. Risk remains around Orpheus Island but this is actively being addressed and the group have requested copies of the resorts evacuation plans and documents.

### **Emergency communications**

The Office assessed the Hinchinbrook Group's Emergency Communications Shared Responsibility as well placed.

#### *Public Engagement*

The Hinchinbrook Group advised us that they have an aging community with a significant population of European immigrants, for whom English is not their first language. We heard how the group are developing resources to cater to different levels of English literacy and are also translating some materials into Italian, including the development of some community education videos. This is a good example to ensure that identified community demographics are well understood and catered for in disaster management.

Council currently does not have a public information and warnings sub plan for disasters. However, there are a range of scheduled activities that engage the community to promote preparedness and resilience building. For example, we heard that the SES provide information at the local festivals (Australian Italian Festival, Maraka Festival). We were also informed that the Council had previously produced a community survey to gauge community preparedness and awareness for disasters with Maraka Festival attendees and will this year repeat this approach, promoting it at other markets throughout the area. It should be noted that our community survey results indicated low engagement rates with only five per cent of local respondents acknowledging their attendance at public events, meetings or visiting information stalls about disasters. Opportunity exists for the LDMG to develop a community engagement plan that incorporates key disaster management related activities into other points of community engagement throughout the year. In addition, consideration should be given to targeting engagement with younger people, transient workers, travellers and tourists, as well as the acknowledged older members of the community. Attention to how tourists and staff are informed about the risks at point of booking trips, such as with Hinchinbrook Island, and the potential need to evacuate in the case of tropical cyclones should be incorporated into public engagement.

Council have seven dedicated LCD screens located in prominent positions throughout the district which are used to disseminate disaster related information. We heard how this concept developed from the television displayed in the window of the Council building, which is regarded locally as an acknowledged point of truth. The council strategically placed additional large screens around the vicinity of the town to increase exposure to passing traffic. Most recently, videos about storm surge and public cyclone shelters have been played on these screens.

Council has a dedicated disaster information page on Facebook and a web-based disaster management dashboard, which includes reports, news feeds, and public awareness information. The dashboard will have direct links to warnings from the Bureau, DTMR and Ergon. Once live the Council will be promoting the dashboard and there is the intention to also conduct a community survey to ensure its effectiveness.

We heard from LDMG members that established residents of the Hinchinbrook area have experience in dealing with major disasters. The LDMG also acknowledges that there is an ageing population within their community and we were advised many in this demographic are resilient; in both attitude and in dealing with and preparing for disasters. At the same time, this presents increased vulnerabilities in terms of increasing health care requirements and reduced preparedness activities undertaken, such as building maintenance and yard preparations. This may be reflected in our community survey results, where 36 per cent of community survey respondents indicated that they took no action after they received information about disasters. The Council may wish to explore why respondents didn't take action even when they knew about the Local Plan or had received information.

The Council has a selection of community education resources online and uses multi-media to disseminate resources. This includes a comprehensive Emergency Action Guide. We also heard how the LDMG works with local business, including real estate agents, to distribute information to new residents. This is a good example to reach community beyond the usual information distribution channels.

Overall, the Hinchinbrook Group's public engagement is informative and empowers the community to better prepare for, respond to and recover from disaster events. This is also reflected in the community survey results which show that there is a very high confidence among respondents.

### *Communication systems*

The Hinchinbrook Group's communication systems support the provision of reliable and accurate information across the disaster management system. Guardian is its disaster information management system and are trained in its application. A secondary LDCC location is identified and we are told that LDCC communications equipment can also be relocated.

The Local Plan annexure includes Request for Assistance forms and a process map for requesting council-to-council assistance. A Standard Operating Procedure (SOP) for the LDCC provides information about record-keeping, how to use the phones and different levels of backup communications. A phone line for public enquiries is made available when the LDCC stands up.

We are advised that Council-owned generators are available for use by the LDCC. They are used frequently for other purposes and are tested regularly. The Council should assure itself that its business continuity can be maintained if the LDCC requires these generators. The radio system is currently being upgraded and Council has advised that it needs to purchase new compatible radios. This purchase should be given priority. A UHF channel is available to broadcast information about disasters. Wardens' two-way radios are checked annually prior to the commencement of the cyclone season so they can maintain contact should general communication systems fail. Like other groups, we heard that the Hinchinbrook Group is concerned about the effect of the NBN roll-out on the continuity of disaster communications. This risk has been escalated to the District Group.

A Lower Herbert sub group is led by the QPS Officer-in-Charge and managed from the Halifax police station. A specific, plain language SOP is provided for the operation of this subgroup, including the equipment available, generators and communication systems such as UHF. Halifax uses a paper log and a message registration system is described in the SOP. Staff have also been trained in the use of Guardian and enquiries are underway about installing the program on QPS systems at this location. This innovative, community-focused approach is a scalable, adaptable response to the geography and high number of small communities in this local government area. Regular testing of the communication system in the Ingham LDCC, and communication between Ingham and Halifax, would improve assurance of the continuity of operations during all phases of an event.

### *Warnings*

Without a comprehensive public information and warnings sub plan the Hinchinbrook Group's capability may be compromised. The Local Plan includes some guidance about which agency is responsible for what kind of warning; however, it is unclear how these warnings and agency specific responsibilities would be integrated into local action. The Group demonstrated to the review team extensive knowledge of the behaviour of river catchments in the LGA and the types of warnings that are likely to be required to effectively communicate with communities at risk of impact. Information about flood heights and local triggers is available on the Council's website and in the Local Plan. However, it was less clear in time critical and emergent situations how warnings would be communicated. As noted earlier, systems for sending warnings should be tested more regularly.



The evacuation sub plan includes a range of pre-prepared media releases about evacuation in the event of Herbert River flooding, storm tide and tsunami. We are advised that a number of pre-populated Emergency Alert templates are saved for the most likely risks. To ensure continuity during operational activity, governance would be strengthened if media releases and other alert messages were in the one sub plan.

In keeping with the developing focus on vulnerable people, there is opportunity for the Group to develop targeted and contextualised warnings. Representatives from Hinchinbrook recently participated in the forum facilitated for aged care in the Townsville Disaster District. Communications about disasters, including warning messages, have been considered as part of these forums. We are advised that Council is working with aged care providers in the Shire to ensure that evacuation plans are enhanced and redundancies are considered, for example, that generators are in place. Regular testing of fit-for-purpose warning messages and stronger doctrine around public information and warnings would provide greater assurance of the Group's performance and capability for this component.

The community survey respondents from Hinchinbrook indicated that the information source they would most likely use if a disaster was impending, is the Bureau website (80 per cent), followed by local TV (76 per cent). Hinchinbrook respondents were less likely than the average for the District to rely on emergency services (police, fire) social media, non-Bureau weather sites or an employer for information. The most preferred method of receiving a warning was through voice or text message to phone.

## **Response**

The Office assessed the Hinchinbrook Group's Response Shared Responsibility as well placed.

### *Control*

Annexure T of the Hinchinbrook Local Plan provides detailed advice on the ways liaison officers work together, communication processes, information sharing and roles and responsibilities for control. The Plan references section 33 of the Act in that liaison officers to the group have the appropriate skills and authority to represent their respective agencies. We received further evidence of the experience, qualifications and skill sets of individual members of the LDMG in our ongoing engagement with the group. The group has not activated their response capability since 2013.

### *Command*

Command structures for the Hinchinbrook group are clearly outlined in the doctrine provided, including the legislative functions of the Chair and LDC, processes for the activation of LDCC and the roles and responsibilities of hazard-specific lead agencies represented on the group. Like many of the groups in the district, Hinchinbrook captures command decision-making via Group meeting minutes and more generally, in the Guardian operations log during an activation. In the event of the Group standing up, a process to track requests from the Chair to agencies (during LDMG meetings) would be beneficial given the increased operational tempo and minutes not immediately being available. Furthermore, the Group could consider a paper based redundancy for tracking key command decisions as a contingency in the event of an information technology failure.

### *Cooperation and Coordination*

The Hinchinbrook Group and its liaison officers have been provided detailed guidance in the Local Plan articulating how each agency is coordinated within hazard specific arrangements. The network of local wardens can be used as a conduit for information out to the community and situational awareness and intelligence into the group to inform LDCC operations. In the event of a Tropical Cyclone and/or associated riverine flooding, the Halifax sub group to the LDMG becomes isolated, however, they are aware of local capacity and capability, plan for this contingency and communicate this to the LDMG. The group works closely with the District regarding numbers of trained coordination centre and Public Cyclone shelter staff and have suggested that in the event of the group standing up, a Request for Assistance for extra staff would be submitted early. The disaster management coordinator has attempted to mitigate this recently through Expressions of Interest for new staff as discussed previously. An opportunity exists for the group to consider, perhaps via the DMO forum, how other coastal LDMGs have managed staffing shortages in this area and any successful recruitment campaigns that have occurred.

#### *Operational Information and Intelligence*

Guardian is identified by the group as the main system to manage operational information and intelligence. During meetings, we were told that the Hinchinbrook community is largely resilient. In particular, long term residents who understand the dynamics of living on a flood plain including the time it takes for the tributaries to fill and flood townships in the region. A challenge for the group exists in how this knowledge is shared and passed to younger generations and new arrivals to the community. This community engagement will be vital for the Group's ongoing ability to manage disaster operations effectively. A further opportunity exists for the group to exercise and implement lessons management strategies for the intelligence function (individually or as a part of a full response) given the lack of recent operational activation. In a period where the group is recruiting staff to build capacity, these actions will ensure all learnings are well captured to develop capability.

#### *Resource Management*

The Hinchinbrook group has Memorandums of Understanding in place with neighbouring coastal councils, the Australian Red Cross, GIVIT and St Johns to assist in the collection and distribution of resources in a disaster response. The review team was provided with a list of local resource providers that can be utilised by the Group for emergency supply, evacuation centre and public cyclone shelter resourcing. Council plant and equipment including local procurement procedures established by council are used by the LDMG as required. We were advised that there have been challenges in finalising the aerodrome sub-plan, as part of planning for emergency supply. As we understand, remaining issues between stakeholders have been resolved, with the plan near completion. The Group's Chairperson is cognisant of the logistical issues the LGA faces and has been active in ensuring these issues are resolved and risks mitigated.

A risk identified by the group is staffing to the cyclone and evacuation centres and this has been discussed previously. As per the intelligence function, an opportunity exists to improve the group's capability in resource management by developing an exercise to test the group's ability to resource local response activities in a large-scale disaster event. This exercise should result in learnings of updated thresholds for the LDMG where outside assistance is needed. This can then be shared with the district group to inform and update their residual risk register.

## Relief and recovery

The Office assessed Hinchinbrook Group's Relief and Recovery Shared Responsibility as well placed.

### *Relief*

Relief triggers and actions are noted in the activation for recovery arrangements table in the Local Plan. We commend that clear triggers are identified for immediate relief arrangements. The Plan also provides high level actions and identifies communication requirements.

We also heard from the Chairperson how the Hinchinbrook Group utilises damage assessment data to ascertain levels of need within the community. Relief priorities are informed by this information, along with intelligence gathered through the Wardens program. We note the Aerodrome sub-plan, which forms part of the management of emergency supply, has been the subject of recent negotiations between critical parties. This has been the subject of review to ensure continuity of operations following a flooding event.

Broader than resource management, the Hinchinbrook Group maintains a range of MOUs with local NGOs to support relief and recovery activities. Explicit detail about roles, responsibilities and expectations would strengthen the actioning of these MOUs. We were advised that most volunteering within the LGA is undertaken by SES or RFS, with limited spontaneous volunteering. Offers of assistance are managed using the Guardian email system. However, in better preparing for future needs, the Offers of Assistance policy and guideline should be further actioned by the Group.

### *Recovery*

As part of the Local Plan, recovery is considered through an implementation plan. Recovery is contextualised to the local area and the Hinchinbrook model for recovery articulated. The plan is strategic in intent and more operational detail would enhance clarity of expectations, roles and responsibilities. The plan considers four functional areas of recovery and provides for clear governance arrangements. Strategies to support recovery in the short, medium and long term are considered and priorities incorporated into the plan. Orpheus Island should also be considered as part of the recovery plan.

The original Community Recovery model was developed in 2009 and the community recovery plan was revised in 2011, 2013 and 2016 to reflect minor changes in arrangements. Opportunity exists for this plan to be thoroughly revisited. In-depth risk assessment and considerations such as changes in demographics i.e. the ageing population, warrant review of the model and plan. With turnover of council staff and members of the LDMG in recent years, the team are also less experienced in fully enacting this plan in the event of major disasters.

We heard how the local recovery group activates based on identified triggers. Core members include the Local Recovery Coordinator, sub group chairs and coordinators, all of whom have been pre-identified and trained in these roles. It is noted this group has not been fully activated since 2013 and opportunity exists for the recovery sub group to meet more regularly for planning and exercising purposes.

Refreshing the recovery model would enable a more contemporary sub plan. This is an opportunity to consider community led and locally relevant community relief and recovery. Further consideration

could also be given to building community resilience for disasters. Revisiting and exercising the model and plan would provide an opportunity to engage new community stakeholders, as well the new cohort of staff at Council who have yet to be activated. It would also enable clarification on the different roles and responsibilities and how to operationalise transition through relief in the short, medium and longer term recovery.





# Palm Island











## Palm Island Local Disaster Management Group

### Capability assessment

This section provides an assessment of the capability of the Palm Island Local Disaster Management Group (Palm Island Group or LDMG) to deliver the Key Outcomes of the Standard and to fulfil its functions under the Act.

| Shared Responsibility                     | Standard Component  | IGEM Rating      |   |
|---|---|------------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Development area |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Well placed      |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Development area |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed      |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Development area |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Limited          |  |

### Context

Palm Island is located north east of Townsville, approximately a two-hour ferry trip and approximately a 20-minute flight from Townsville airport. The major natural hazard is cyclones and related storm surge. Palm Island has an official population of about 2,500 but local estimates put a variable population between 4,000 and 5,000 people. The island is classified by the ABS as 'remote'.<sup>35</sup> A range of services, schools, grocery store and the hospital are positioned along Coolgaree Bay, with residential areas scattered across the eastern part of the island. New residences are currently under construction through the Department of Housing and Public Works, which has a permanent presence on the island.

The local government administers infrastructure projects and essential services, as well as operating essential services and enterprises that would otherwise be the responsibility of government agencies, non-government organisations or the private sector. We recognise this LDMG and Council face complexities not experienced by others in the district. These include diminished revenue streams with less capacity to raise revenue, dependency on securing grant funding and requiring further support from all levels of government. The island location also presents a set of logistical issues that require significant planning, resourcing, and multi-agency commitment. The Council and the Disaster District work closely together to mitigate this.

### Hazard identification and risk assessment / Hazard mitigation and risk reduction

The Office assessed the Palm Island Group's risk management components as a development area to well placed.

#### *Hazard identification and risk assessment*

The Palm Island Group has ensured its stakeholders, particularly the Townsville District Group, have a shared understanding of the natural and human-caused hazards that present risks for the island. In discussions with the Group, it is evident that there is a thorough understanding of natural hazards, resource requirements and human-social vulnerabilities that make up the island's risk profile. We were advised that a Palm Island Natural Hazard Risk Assessment study was undertaken in 2013 and included consideration of natural and human-caused hazards. The review team have not had visibility of this risk assessment.

A population and dwelling profile is an annex to the Local Plan and describes estimated population, population change and projections; this could be readily updated to incorporate 2016 Census data but more importantly, local knowledge. The study and storm tide inundation maps are listed as annexes to the plan and are publicly available in the Palm Island storm tide and evacuation guide. Based on this mapping, triggers for the DDMG to support evacuation are activated. Hazard specific lead agencies, represented on the District Group assist to inform planning.

Palm Island has a substantial transient population with many residents splitting their time between Palm Island and Townsville. There were 54,000 individual journeys taken on the ferry between the island and mainland in 2016. We heard this factor may reflect a level of community resilience, as many residents can self-evacuate to the mainland if a cyclone is in the region. However, the lack of on-island capacity, both in terms of human resources and places of refuge, is recognised by the Palm Island Group as a significant risk.

The Group has formally identified that any significant event (for instance beyond a Category 2 cyclone) would be immediately escalated to the District and the District has accepted this. The capacity of the Palm Island Group is significantly increased by the regular and comprehensive support provided by the District Group, which is effectively supported by positive relationships and a shared understanding of hazards and risks.

While a low number of residents were surveyed, our community survey results suggest Palm Island residents perceive cyclone, storm surge and storm tide as likely disasters to impact the island. Bushfire and plant or animal disease were recognised as more likely than riverine flooding. This is in line with the hazards and risks discussed with the Group.

The Palm Island Group understand the natural hazards and risks faced. This could be strengthened through visible and current assessment documentation. This documentation may be of greater benefit for the Disaster District membership, to assist in agency planning to appropriately support Palm Island.

#### *Hazard mitigation and risk reduction*

The review team observed that the Palm Island Group prioritises its hazard mitigation strategies and projects based on risk and resources. This ensures that measures are adaptable to a changing environment and present value for money. The Palm Island Group is one of several in the Townsville Disaster District that regularly makes submissions for and is successful in receiving funding for hazard mitigation and betterment projects. These activities are informed by hazard risk information and lessons from previous events. The Group recently secured funding to construct a sea wall at Butler Bay, which is regularly cut off by storm surge, causing implications for evacuation and resupply. A successful application for funding has also led to the construction of sea walls along the foreshore at Doctor's Point. The construction of these walls also mitigates against shoreline erosion<sup>36</sup>. The Group is currently seeking funding to address communication black spots on the

island. Risk assessment information also informs land-use planning; an example of this is a feasibility study informing the building requirements of new residential buildings which are now constructed to category 4 cyclone resistance.

Sixty per cent of Palm Island respondents to our community survey said that they had taken steps to reduce the effects of a disaster. The most common risk reduction activity undertaken was regular property maintenance, followed by digging fire breaks. The main reasons given for taking no action was never having thought about it or not knowing what to do. Nearly 50 per cent of respondents said that a reminder from authorities would encourage them to undertake risk reduction activities.

Risk reduction activities delivered by the Palm Island Group are tailored for and made accessible to the local community. They encourage residents to be aware of and to plan for the key hazards they are exposed to on the island. The Palm Island Group should continue to work in partnership with the Disaster District to ensure that prioritised mitigation activities are addressed and supported through the disaster management system.

### **Preparedness and planning**

The Office assessed the Palm Island Group's Preparedness and Planning as a development area.

#### *Capability integration*

The Palm Island Local Group benefits from the substantial disaster management experience provided by the Mayor, CEO/LDC and QPS Officer in Charge. Along with a small group of councillors, local leaders and the state agency representatives living on the island, this group continue to provide knowledgeable management and leadership. There is high commitment from some residents who undertake multiple roles in disaster management. We observed trusted relationships between District Group representatives and the Palm Island leaders during Exercise Papa India. These key disaster management positions provide consistent support to the LDMG through regular meeting attendance, development of exercises and public education. Like all other groups in this District, this Group has access to experienced QFES trainers for QDMTF modules. Regular training and advice is also provided by QFES to the RFS and SES team on the island. The Palm Island Group advised us that these relationships have been further strengthened because of the pre-deployment of emergency services staff to support the LDCC ahead of Tropical Cyclone Debbie.

As the Council has limited capacity to provide trained operational staff to support the LDC and Deputy LDC during an event, there is an accepted reliance on the District Group to provide that support, including pre-deployment from state agencies. Most members of the core LDMG have completed QDMTF modules.

The Mayor raised an issue that has, in the past, been of repeated and significant concern for the Council, local LDMG members and the community. Prior to Tropical Cyclone Debbie it was common for NGO and government workers to leave the island en masse as soon as warnings were issued. We heard that this left the community experiencing a sense of abandonment. During Tropical Cyclone Debbie, the decision was made to pre-deploy specialist QFES and QPS personnel to the island. This visible presence of QFES and QPS vehicles and staff was well received by the community. We were told the obvious presence of emergency service personnel provided a degree of confidence and reassurance that authorities were prepared to safeguard the community. We

commend approaches to disaster management in which community needs are well understood and the provision of appropriate, visible support for communities is prioritised.

We heard from Palm Island Group representatives about the status of formal volunteering. The island has a very limited membership of SES and RFS, with one Palm Island family being members of both and with little representation from the broader community. The Group liaises with RFS on the mainland to obtain permits for controlled burning and receives regular visits and training. It was suggested to us that some elements of the formal SES and RFS training may hamper membership interest on the island. There is opportunity to consider flexible training options that may encourage Palm Islanders to become actively involved in volunteering. Queensland Fire and Emergency Services has an opportunity, through the [Volunteerism Strategy Discussion Paper: 2017](#), to explore and implement mechanisms to enhance volunteering participation. Opportunity also exists to engage residents in creating their own local and contextualised version of the Area Warden system that is used in Burdekin and Hinchinbrook, especially in the telecommunications black spots or where some of the more vulnerable residents are located. This may only require episodic volunteer participation and could create opportunity for local leaders and interested locals to better engage in locally led disaster management activities.

The review team, including the IGEM, observed a discussion exercise with the Palm Island Group about its disaster management capability and the roles and capabilities of a range of entities to support Palm Island to respond to and recover from disasters. Discussion considered the local risk profile, including infrastructure, environment and human-social vulnerabilities, as well as disaster management systems and arrangements for the Group.

### *Planning*

The Palm Island Group engages relevant disaster management stakeholders in its planning. The process includes documenting roles and responsibilities as well as identifying capability limits and escalation points. We were advised the Local Plan was reviewed in 2016, along with sub plans. The most recent plan we saw was dated 2013 and is available on the Council website. We have also been advised that the local plan is due for a comprehensive review. Including the Palm Island community in the planning process would help to ensure all relevant stakeholders know the Local Plan's content, are aware of any changes to the plan, and are given the opportunity to provide input.

### Partnering with local stakeholders to understand capability

Exercise Papa India was developed by the Townsville District Executive Officer as a discussion exercise about Palm Island's capability limits.

Along with the Mayor (Chair) and other LDMG members, the exercise was attended by 40 representatives of emergency services agencies, state departments including Health, Housing and Communities, food suppliers, barge owners, air services, the Australian Defence Force, Red Cross, Ergon and Telstra. Attendees provided information about their assets and logistics and any limitations to the support that could be provided to Palm Island in a disaster or impending event.

As well as improving shared knowledge of capability and performance enablers, the exercise also demonstrated how forging partnerships with the island community can achieve stronger outcomes.



The 2016-17 Disaster Management Plan assessment for Palm Island identified several components to focus on to enhance the effectiveness of the local disaster management plan. We have observed improvements in some of these areas, such as resource management, and hazard mitigation and risk reduction. These developments should be reflected in the plan, through this year's review of the document, to increase the plan's effectiveness.

The substantial collaborative effort undertaken to attend and contribute to the recent Exercise Papa India on Palm Island is an excellent example of robust disaster management planning, where entities shared information about their capability limits and escalation points as a precursor to the plan revision. The process enabled a shared understanding to be built of the capacity of the Palm Island Group. The exercise also demonstrated that LDMG members and stakeholders understand and agree to their roles and responsibilities, which are documented in the 2013 Local Plan. The agreed outcomes of the exercise were to rework current plans, investigate options for Council-to-Council support and ask member agencies of DDMG to provide support for a range of specific action items that arose from the exercise.

### **Emergency communications**

The Office assessed the Palm Island Group's Emergency Communications Shared Responsibility as well placed.

#### *Public Engagement*

While doctrine is limited to support formal public engagement, there is strong and stable leadership of the Group. This supports connectedness between the Groups, Council and residents. We heard and observed how the Palm Island LDMG has numerous public engagement strategies and communication channels. The public engagement and messaging for disasters has been tailored appropriately to the community's needs to ensure broad understanding of the messages.

The Palm Island Group shares disaster information with the local community through hard copy resources, the Palm Island Voice community newsletter and the council website. Another channel to engage with the community is the Council's Facebook page. There are public noticeboards and public meetings. In the past, football carnivals and Council barbeques have also been used to profile disaster preparedness. The Palm Island Group has developed an emergency action guide, and a storm tide and evacuation guide to inform residents about hazard risks and what to do during a disaster. The LDMG is also developing evacuation zone stickers for residential and commercial buildings on the island. The stickers identify which of the zones (Red, Orange, Yellow, or Blue) the property is in and provide information about what to do when evacuating from a cyclone.

The LDMG used this year's *Get Ready* funding for a community education day with more than 100 locals attending the event in the main square, hosted in partnership with Council and multiple local agencies like QFES and QPS. Our community survey results indicate that community members have confidence in the official local response with 67 per cent of respondents stating this was the case and 60 per cent of respondents reporting that they have taken steps to reduce the effects or consequences they might face during a natural or human-caused disaster.

#### *Communication systems*

The Palm Island Group uses a range of means and methods to share critical information. The LDCC is situated in the police station and has access to satellite phones and UHF. The Group identified that satellite phones are unable to be used when there is extensive cloud coverage and cyclonic events. Multiple generators are available on the island; their location and capacity to act as a backup for the LDCC should be documented by the owners and a process put in place to provide this information to the Group periodically. The telecommunications tower in the centre of the island is difficult to access, even by 4WD. Palm Island does not use dedicated disaster management software or information systems, rather email and paper which, due to the close liaison with the Disaster district and QPS, meets operational needs.

The provision of on-the-ground capability by state agencies during an event helps to ensure that critical information is immediately shared with the District Disaster Coordination Centre (DDCC). However, the reliability of regular communications through a major or prolonged event is not assured.

### *Warnings*

Palm Island's small size and population means that the LDMG is aware of community members particularly vulnerable to impact from a cyclone and storm surge. Emergency Alert was utilised during Tropical Cyclone Debbie in 2017, supplemented by the local RFS, SES and QPS door knocking in known mobile black spot areas.

In 2016, Palm Island participated in Exercise Echo Alpha, which involved creating and sending an emergency alert message. Feedback was that communication between the DDCC and the LDCC worked well and that around 3,000 devices on Palm Island were contactable via the polygon. In March 2017, the island's LDCC was again tested when it activated for Tropical Cyclone Debbie. The District is assisting the Group to fill gaps in governance, doctrine, enablers and capability, so that barriers relating to capacity and remoteness can be overcome and performance improved.

The Palm Island community survey respondents confirmed that their preferred method for receiving a warning is via a voice or text message to their phone, with the second preference being localised warnings such as door-knocking, loud hailer, sirens or telephone trees<sup>37</sup>. This highlights the benefit to Palm Island of the LDMG continuing to regularly test their EA process. This process could be supplemented periodically by asking community members for feedback on warning message content and the action they would take, to give the Group assurance that messages are understood. There are other channels also available for intra-island warnings, including message boards and a community radio station. The community survey indicated that for information about an impending event, respondents would rely on local radio, followed by local news on TV. The LDMG's detailed local knowledge and the proactive support of QFES and QPS members means that fit-for-purpose Warnings communications can be expected.

### **Response**

The Office assessed the Palm Island Group's Response Shared Responsibility as a development area.

### *Control*

The Palm Island Local Plan and LDCC SOPs reference roles and responsibilities for hazard-specific agencies within a control framework. Whilst the group is aware of communication processes anecdotally, a significant opportunity exists to build on this documentation by including further detail

of communication processes and record keeping of command decision-making. The LDMG has identified a lack of depth in trained staff on the island for LDCC operations and works closely with the QPS to mitigate this risk, utilising the local Police Station and QFES and QPS staff from across Queensland, if necessary, to operate the coordination centre. The LDC and Chairperson also work closely with the Townsville District Group via a Palm Island Response Strategy. This doctrine provides a checklist for fly-in QPS staff on steps to take upon arrival to the island. When the island was threatened by Tropical Cyclone Debbie in March 2017, QPS and QFES representatives were deployed to the island to support the LDMG and help staff the LDCC.

### *Command*

Command decision-making is shared between the Chairperson, LDC and Officer in Charge of Police and appears to be effective, with the Chairperson complimenting the Emergency Services during a meeting with review team members in August 2017, on the support he receives. We are told that command decisions are passed to stakeholders without delay and implemented promptly during severe weather events. This process could be further supported by a critical decision register to log and track this important dialogue. An opportunity exists to include in future updates to the Local Plan, command and communication structures to ensure redundancy of the system, should key members of the island be absent during an activation.

### *Cooperation and Coordination*

We observed a commitment to cooperation and coordination during meetings with the Palm Island Group. All stakeholders are committed to achieving positive emergency management outcomes for the community and work with all available resources to that end. The roles and responsibilities table included in the Palm Island Local Plan provides a useful guide to agencies' practical involvement and coordination in hazard-specific events. We note these statements are contextualised to the area and do not simply replicate the agency roles found in state level doctrine. The LDCC SOPs provided to the review team show evidence of event planning and priorities for disaster operations. It is widely accepted that, due to limited local resources, escalation to district level support has and will occur rapidly during a disaster event and this is enshrined in the Palm Island Response Strategy doctrine.

### *Operational Information and Intelligence*

Whilst not formally documented, there is an extensive intelligence network of local knowledge surrounding previous weather events that is leveraged by decision makers during activation. This contextualised application of operational information and intelligence, is fit for purpose in this community.

The Palm Island Shire Council has actively used lessons identified from previous disaster event activations. Whilst not always officially documented, these learnings have formed the basis for several successful grant and funding applications for betterment on the island. For example, Telstra Black Spot zones and the Sea Wall construction.

### *Resource Management*

The LDMG has identified its limited resources of council plant and equipment, lack of rate payer base and reliance on State and Federal funding as significant challenges to moving forward as a group. This is mitigated by the leadership and strong level of local understanding of the group's

capabilities and capacity. Furthermore, the early support provided by the District Group in a disaster event shows a healthy level of interoperability in local arrangements. During Exercise Papa India, advice on transport logistics and food supplies was shared so that a clearer picture of resupply and emergency supply now exists. An opportunity exists for the group to submit a funding request for plant and equipment that serves multiple purposes.

### **Relief and recovery**

The Office assessed the Palm Island Group's Relief and Recovery Shared Responsibility as limited.

There is an opportunity for the Palm Island Group to improve its relief and recovery doctrine as part of the Local Plan review. Specific roles and responsibilities for relief activities should be documented. Governance for multi-agency acceptance of these roles could also be strengthened and would assist with the transition from response to relief and recovery. The restricted capacity for the Palm Island Group to perform effective relief and recovery on the island is acknowledged and considered in the Local and District Plans.

There is no recognised evacuation centre or place of refuge on Palm Island. Based on risk assessment, residents of the main community may be advised to shelter in place, while in the event of a cyclone/storm surge threat, those living at one of the beach side communities would be advised to move in with friends or family in the main community. During the Tropical Cyclone Debbie activation, a shuttle bus from beachside communities into the main community was provided and residents of the aged care hostel were moved to the Joyce Palmer Health Service due to concerns that it could be cut off from other facilities. Townsville Hospital and Health Service has advised the LDMG that this is not a permanent solution, particularly if an event causes significant casualties, and alternative options are now being explored.

We heard during our visit to the island about planning for emergency supply for relief purposes, as well as the logistics required to evacuate residents. The discussion demonstrated that LDMG and District groups were working together to integrate their planning for relief and recovery activities and further clarify the roles and responsibilities of the many critical stakeholders involved both on the island and from the mainland.

High awareness of the needs of the community is a strength that allows local leaders and key stakeholders to understand and more readily assess need. Triggers for requesting assistance are understood and the escalation process for assistance is also clear and agreed upon with all stakeholders from the local level through to the district and state. We heard the Chairpersons concerns about the displacement of potential evacuees into Townsville and the reception of locals on the mainland. The Chairperson also highlighted issues of past experiences during the on-island water shortages and how the prolonged burden of staying with family and friends on the mainland would need to be considered, to avoid the potential increase of homelessness and other social economic issues resulting from movement off island.

The Department of Communities, Disability Services and Seniors is the lead agency for managing community recovery on Palm Island. We were advised that the department starts planning as early as five days out from disaster impact in the event of a tropical Cyclone and will deploy once needs are clearly established and prioritised. The department works closely with several state agencies including the Department of Aboriginal and Torres Strait Islander Partnerships and the Department of Housing and Public Works.



The Palm Island Group could incorporate into their planning for relief and recovery, how they will ensure clear and timely information is provided to community. This should consider how the management of offers of assistance is undertaken. This should also consider local volunteering efforts and options and how unsolicited offers of volunteering and goods and services can be managed to effectively meet community need in times of disasters.









# Richmond

## Richmond Local Disaster Management Group

### Capability assessment

This section provides an assessment of the capability of the Richmond Local Disaster Management Group (Richmond Group or LDMG) to deliver the Key Outcomes of the Standard and to fulfil its functions under the Act.

| Shared Responsibility                     | Standard Component  | IGEM Rating      |   |
|---|---|------------------|---|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Well placed      |  |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Well placed      |  |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Well placed      |  |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed      |  |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Development area |  |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Development area |  |

### Context

The Richmond Shire Council is responsible for a 26,581 km<sup>2</sup> which includes part of the Gregory Range and wide-ranging grass plains. The Council area is divided by the Flinders River and its tributaries. Key industries include agriculture and tourism. The tourist industry in the town of Richmond has developed around the significant discovery of marine fossils in the area. There is a highly stable population of 800<sup>38</sup> including generations of family property holders in the area. The area is classified by the ABS as 'very remote'. There are around 300 rural properties within the LGA, all of which are susceptible to being cut off from the main town by riverine flooding. However, risk of natural hazards is lower than for the coastal councils in the Disaster District with the main natural hazard from slow-onset Flinders River flooding. A greater risk is anticipated as being from a transport accident along the Flinders Highway or adjacent rail line. This is the primary focus of preparation and mitigation activities by the local group, all of which are typically managed through the normal operations of response agencies and the Council. The Group provided traffic management, spill containment and clean up support to the neighbouring McKinlay Shire during the Julia Creek train derailment and acid spill in 2015. The relatively lower hazard and risk exposure combined with the self-sufficiency of this small population, is a feature of Richmond and this context is crucial when assessing the LDMG's capability and capacity.

Despite the remoteness of the town, strong multi-agency relationships are valued, with active local leadership from the LDMG often travelling to Townsville and Brisbane to engage their relevant stakeholders. The EMC and District Executive Officer regularly attend LDMG meetings and support the Group.

### Hazard identification and risk assessment / Hazard mitigation and risk reduction

The Office assessed the Richmond Group's risk management components as well placed.

### *Hazard Identification and Risk Assessment*

Hazard identification and risk assessments by the Richmond Group are evidence-based, use a broad range of sources, including extensive local knowledge. They are informed by valid data and lessons identified. Residual risks are identified by the group and formally transferred to the District level.

The Richmond Group has demonstrated a thorough understanding of the likely risks for their shire and take steps to mitigate those risks in a prioritised way. The Richmond risk assessment was undertaken in 2006 to AS/NZ 4360 standard and is considered by the group to still be current. It assesses natural hazards and draws information from previous events. While the Local Plan includes all forms of hazard with regards to roles and responsibilities, biological and human-caused hazards are not part of the risk assessment. The Richmond Group's experience with and knowledge of risks posed by human-caused hazards such as train derailments, road train accidents and chemical spills could be better reflected by incorporation into the risk assessment and plans.

The Richmond Group and its stakeholders have a shared understanding of, and access to, risk information relevant to the Richmond Shire. The Local Plan describes the events identified by the group that are beyond their capacity to manage, such as exotic animal disease and events causing multiple fatalities and serious injuries. Events that involve mandatory evacuations and those that would require sheltering accommodation and staffing for lengthy periods have been transferred to the District Group as residual risks. The Group is also aware of the limitations posed by their remote location when it comes to receiving support during events, and has ensured that the most likely hazards can be dealt with at the local level. This occurs through the utilisation of workforce and assets, such as machinery and equipment, owned and managed by local businesses and the Council. Residents in Richmond who responded to our community survey considered river flood and bushfire to be of similar likelihood to impact the Richmond Shire, closely followed by plant or animal disease.

### *Hazard mitigation and risk reduction*

The work of the Richmond Group is closely integrated with that of the Richmond Shire Council. This ensures cost-benefit and value for money analyses are conducted for all significant hazard mitigation and risk reduction activities. Mitigation priorities are included in strategic and operational plans and inform land-use planning schemes. The Richmond Group engages relevant stakeholders and skilled Council staff to identify and mitigate against hazards in the region.

A mitigation plan has been developed from the risk assessment. Activities are prioritised and based on opportunities for sustainable development. Work to remove asbestos from all town piping to reduce associated health risks has recently been completed. Additional flood gauges and cameras have been installed and images are uploaded to the council website for community information.

The Richmond Group, particularly the Chair and CEO, communicate with each other, stakeholders and community members on a regular basis through regular LDMG meetings, the council website, via an opt-in email service for community members and with phone calls and house visits. As a result, there is a shared awareness of risks across the community. Every station owner is known to the LDMG and maps showing which family live at each rural property are used by the Group. As with the Flinders and Charters Towers Groups, the Richmond Group contract local helicopter owners in preparation for each wet season.



Sixty-five per cent of Richmond respondents to our community survey said they had taken action in the past 12 months to reduce the effects of a disaster. Actions taken included regular property maintenance, stock of non-perishable food, prepared an emergency kit and created fire breaks. These risk reduction activities align with the key risks in the Richmond Shire. Of the respondents who had not acted recently, the majority believed disasters were unlikely to occur in the area. The survey showed respondents in country LGAs considered the risk of disaster to be less likely, in comparison with the respondents in coastal LGAs.

We heard from the Mayor the methods used to inform residents and tourists about hazards, particularly those that cut access to the Flinders Highway. In addition to this informal communication, we were advised that remote cameras have been set up at key points along the highway to capture when the road is blocked due to an incident or flooding. The images are uploaded to the Richmond Shire Council website and the Kronosaurus Korner tourism website to provide visual information to residents and tourists. During this review, we also learned about the inherent resilience of the residents in Richmond Shire and believe the combination of formal and informal communication about local hazards to be fit-for-purpose. There are still opportunities to enhance local knowledge, and to support succession planning through documenting information.

The Group also recognises the importance of mitigating against flood waters cutting access to Richmond along the train line and Flinders Highway. They are working with Queensland Rail to ensure culverts along the railway are regularly maintained. In the event of a serious road incident, or in the case of bridges being inaccessible, the Council have widened the Flinders Highway in a designated area to create an emergency airstrip.

### **Preparedness and planning**

The Office assessed the Richmond group's Preparedness and Planning shared responsibility as well placed.

#### *Capability integration*

Key stakeholders in the Richmond Group have the skills and knowledge required to perform their role in all events. Several representatives are long standing Group members and leadership from the Chairperson is strong. The Chairperson has been Mayor for 20 years, intimately knows the LGA and its hazards and directly responds to any emerging risk. The Local Group works closely with the EMC and the District Executive Officer for assistance with disaster preparedness and planning.

### **Sustainable fire hazard mitigation involving the community**

The Richmond Shire Council and LDMG actively involve the local community in hazard mitigation and risk reduction activities.

In addition to supporting the local rural fire service with seasonal back burning and using council equipment and staff to dig fire breaks, the Council also encourages members of the community to bring their horses to feed on the grass at the edge of town when appropriate.

This simple and sustainable approach to hazard mitigation also raises community awareness and is an excellent platform to engage with the community in this context.

Lesson identification for improved training and exercises appears to be largely undertaken by the EMC and District Executive Officer.

The QDMTF training register for this Group identifies the small number of people formally trained in disaster management. We heard this reflected competing priorities, lower capacity and is commensurate with the risk assessment. There is potential for the Richmond Group to adopt the Charters Towers approach and extend QDMTF training to identified key community members, to create more depth in staffing resource for disasters.

We note that the CEO, through the 2016 Disaster Management Plan Assessment process, identified a shortage of volunteers in the LGA and expressed a desire to see more young people joining the SES. When touring the SES sheds, we heard how the Council is attempting to recruit new volunteers when new staff or contractors for Council are inducted in to positions.

The Richmond Group participated in Exercise Echo Alpha in 2016. Also in 2016, a training exercise was held at the Richmond Aerodrome and a session was held to familiarise members with emergency response vehicles. Periodic flooding requires the Local Group to operationalise aspects of their disaster arrangements, including resupply to isolated properties. Support to the neighbouring McKinlay Shire during the Julia Creek train derailment and acid spill in 2015 was made possible because the Council has a significant amount of plant and equipment due to its funded roadworks projects. Operational activities such as these have assisted to maintain knowledge and skill of the Group.

### *Planning*

The Richmond Local Plan considers all phases of disaster management and describes the response, continuity of operations, roles and responsibilities and recovery. Their planning involves key stakeholders, addresses known hazards and risks, and identifies priorities and responsibility for performing functions. The Local Plan is published on the Council website.

While the published date of the Local Plan is 2013, we were advised that the plan was last reviewed with key stakeholders in 2015. The Office also has evidence of the annual plan assessment results and continued improvements made to the plan. To meet legislative requirements the Local Plan's revised date should be updated and published. The Local Plan describes the hazards and secondary hazards that pose a threat to the Richmond Shire. Roles and responsibilities of relevant agencies for each disaster event are outlined in an operational register in the Local Plan.

The Local Plan also defines the group's capability limits clearly by describing the scenarios that are likely to exceed the local capacity and what support and resources would be required from the District Group. We heard about the growing capacity of the group, through access to Council assets and through positive working relationships with local businesses and suppliers. The Group understand the implications of remoteness and are confident that most disasters can be initially managed without the need to request support from the Disaster District. The Plan could be strengthened by reflecting how the Group integrates Council business as usual to enhance capacity and deliver disaster management outcomes. As the group acknowledged in their assessment, the support of the District in developing and updating plans is essential to the continuous improvement of the disaster management plan and supporting doctrine.

If a flooding event occurs in the LGA, resupply to property owners will be required. Resupply planning is well thought out and detailed in the Local Plan. It also highlights the local community's

experience and resilience with regards to flooding events in the Shire. The Local Plan identifies that the potential for prolonged events has been carefully considered, including the ramifications for recovery activity.

In practice, we saw evidence that disaster management is well planned for with considerable involvement and commitment from stakeholders, Council staff and the community. The Richmond Group's disaster management planning is integrated with entity core business and service delivery and provides the group and the council with an understanding of their capability limits and escalation points. We recognise that significant effort is made by the Richmond Group to communicate regularly and share information with stakeholders. We are also cognisant of the group's limited capacity for developing planning and process documentation, in the context of numerous competing priorities for a small council. We encourage the Richmond Group to participate in the Disaster Management Officer forum where there is opportunity to share in planning and operational documents prepared by other groups in the State, and to receive guidance and support from peers in the sector. Establishing up-to-date planning and process documentation would enable succession planning, increasing depth of staff, training new staff and sharing information.

### **Emergency communications**

The Office assessed the Richmond Group's Emergency Communications Shared Responsibility as well placed.

#### *Public Engagement*

While the Richmond Group do not have a public information and warning sub plan, public education strategies are integrated with Council business-as-usual strategies. In this remote community, where 300 properties the equivalent size of several small European countries make up the area, the community is well connected and the Council facilitates this connectedness.

The Council operates a community broadcast email network that people can subscribe to. A wide variety of information is distributed including road reports, health messages, news and warnings. The Council also has a Facebook page and we are advised that the Council replicate warnings advice via these channels. The Council also uses a redeveloped website, local newsletters, community notice boards and word of mouth to engage locals in the area. There is an annual community event calendar uploaded to the council website. These community events present opportunities for residents to engage with each other about disaster management preparedness.

The Richmond Group has a detailed understanding of its infrastructure, community assets and service providers. They work closely with service providers who support residents with health and social issues. Due to the size of the population, there is a thorough understanding of vulnerable individuals and families and what their needs are. The Group liaises with community support agencies that provide information or support to community wellbeing. The Group liaises regularly with representatives from the local community groups providing another mechanism to engage with the public. In the event of activating, the Local Group engages with Community Care and the Richmond Hospital to ensure that the needs of vulnerable people are considered.

The Council ensures that public education material is available at the Shire Administration building. Prior to the onset of the traditional wet season, additional public education is undertaken by SES. Education targets school-aged children. The Council did not access *Get Ready* funding in 2017, due to prioritising other funding applications for Council operations.

Overall, Richmond's public engagement outcomes aim to empower locals to act across the different phases of disaster. The community survey results indicated a very high (91 per cent) confidence in the official local response to a disaster, and risk reduction activities carried out by local respondents were also noted as 65 per cent. Of the remaining 35 per cent, a high proportion of respondents (69 per cent) stated they didn't view natural disasters as a likely occurrence in their area.

### *Communication systems*

The Richmond Group has access to communication systems that can respond to a range of reasonably foreseeable operating environments. The Council has recently completed construction and fit-out of new Chambers, including a multi-purpose function room that can also serve as a LDCC. We observed an extensive communications network in the new building, including telecommunications, radio and internet. An alternative LDCC location is noted in the Local Plan, which also states that all equipment is relocatable. To confirm that communication systems will support the continuity of operations, the Group should test and exercise the new LDCC and its communication systems, and update related governance and doctrine. This should also include updating the Local Plan to reflect the existence of the new facility. It is understood that a DDMG exercise and workshop is scheduled to take place in the new facility in 2018.

The Council has backup generators and stores significant amounts of fuel. The Council has tapped into the main fibre optic cable running from Adelaide to Darwin, so the risk of power or communications outage is lower than elsewhere. The Richmond Group does not use specialist disaster management information systems or software, instead using the Council's internal file management system to manage disaster management information. This is appropriate for a council of this size and risk profile.

### *Warnings*

The Richmond Group enables its community to access fit-for-purpose warnings systems and messages suited to a community of this size. The Local Plan has a protocol that supports radio stations to issue public warnings. During flood and other events, the Council works closely with the media, including local radio, to ensure that the condition of roads in the Shire is widely disseminated. This aims to assist in reducing the number of people becoming stranded in the town and on roads in the Shire. Tourists and travellers can be informed about road blocks via the council website in the form of a road report loaded on the website<sup>39</sup>. Signs are also placed at the local caravan parks. The Council website provides daily snapshots from cameras at seven river and creek crossings located east, west and north of the Shire<sup>40</sup>. Funding has been obtained to place additional flood gauges in the Flinders River in response to an identified need for longer warning notice. It is anticipated that gauge readings will also be available on the redeveloped website.

Exercise Echo Alpha in October 2016 required the Group to generate an EA message and polygon, situation report and request for assistance for a chemical spill and Richmond town evacuation. The evaluation states that the Local Group has sufficient technical expertise to prepare EAs and polygons independently. An action arising from this exercise was for the Richmond Group to develop a pre-prepared bank of EAs for the most likely hazards, including chemical spill. We do not believe this has occurred and we suggest this should be prioritised by the Group. This is especially important as Richmond respondents to the community survey stated that their most preferred method for receiving a warning is a voice or text message to their phone, followed by local radio or television bulletins<sup>41</sup>.



Respondents to the community survey indicated that in the event of an impending disaster they would most likely rely on the Council website for information (74 per cent), followed by local television<sup>42</sup>. Given this, the revision to the Council's disaster management web page (in progress at time of writing) should be completed as a priority. Richmond respondents were less likely than the District average to use the Bureau website, local radio or Facebook. The nearest Bureau radar is in Longreach. Like Flinders Shire, the lack of radar capability reduces the targeted warnings for storm events across the LGA. We note that Richmond Council has been proactive in corresponding with the Bureau about the possibility of installing an additional radar, to provide better warning of the likelihood of storms and tornadoes that regularly pass through both Richmond and Flinders. Escalating this risk through the disaster management system is encouraged by us.

The Local Group's detailed local knowledge and the supporting communication channels provided by the Council means that fit-for-purpose warnings communications before and during an event can be expected. More regular testing of emergency alerts and creation of pre-prepared messages for the most likely hazards would improve the Group's capability.

## Response

The Office assessed Richmond Group's Response Shared Responsibility as a development area.

### *Control*

It is acknowledged by the review team that the Richmond Local Group has a risk profile vastly different than its coastal neighbours in the Townsville District and is more likely to activate its response function in relation to a severe storm or major road accident. During the 2016 Disaster Management Plan Assessment, the Group stated that while they lacked membership in certain response roles, they felt confident that they could adequately handle any event that occurred in the area.

Doctrine is several years old and includes references to previous government agencies that no longer exist due to machinery of government change. However, the Local Plan does provide a detailed list of combat agency roles and responsibilities. Whilst the document is silent on information sharing protocols, the team found during our visit to Richmond that information sharing strategies are fit-for-purpose in this community and supporting doctrine is not viewed as priority to effectively share information. All agencies in the community are literally 'next-door' to each other and can share intelligence and respond to any impending event at a moment's notice. This shows good practice attributes of scalability and adaptability. The group could enhance its current control capability by conducting a review of the LDCC SOPs to ensure the documentation is current and accurately displays the good practice attributes as described above.

### *Command*

The legislative authority of the Chairperson and Local Disaster Coordinator is documented within the Local Plan which further references media management, meeting protocols and activation procedures. We note that the doctrine also references reporting timeframes which shows a commitment to command decision-making based on timely advice from its liaison officers. During meetings with the group, we observed that the group members who undertake the command function coexist with hazard specific agency leads, and all work in unison to support their community. As per the control function, the group would benefit from updating their command doctrine including the LDCC duty cards to accurately reflect this current capability, how key decisions are made, actioned and documented.

### *Cooperation and Coordination*

Given the interconnectedness of this small rural community, it was not surprising to find that the leaders of the Richmond Group had a strong understanding of their communities needs based on its risk profile. We found that the group could quickly integrate its response activities due to the small number of agencies within the community and relationships across the group were well developed and productive. Each year the Local Group engages in a tendering process for rotary wing assets based in the area to facilitate potential resupply operations in the wet season. This illustrates the group's support for service delivery to its isolated properties through relationships forged with commercial operators. An opportunity exists for the group to develop event planning doctrine around response activities to a severe storm and/or serious traffic crash. This planning process would help ensure business continuity if key people are absent from the community when a coordinated agency response may be required.

### *Operational Information and Intelligence*

The Local Plan provides for an exercise regime and implementation of lessons learnt. Identified capability could be further enhanced with the development of an operational plan outlining the exercises planned for the year and the capabilities to be tested. Operational information is currently managed by way of email, fax and telephone which is fit for purpose for this group. During validation meetings, we were told that local knowledge is a strength and for their local context can be positively leveraged against a more formalised intelligence capability.

### *Resource Management*

The Local Plan outlines how financial management, including management of NDRRA claimable expenses, will be conducted by the group. A review of the group's 2016 plan self-assessment shows that they activated resupply operations successfully during the wet season based on their current Standing Offer Arrangements with local rotary wing asset providers. We were supplied with a list of local providers for emergency supply and a full list of council plant and equipment available should the group be required to activate. If an activation exhausts local resources, residual risks are formally shared with the District Group. However, the distance to higher resourced councils means the group must be self-sufficient wherever possible and innovative in how they use scarce local resources to generate the effect needed. An opportunity exists to improve the group's governance procedures, through the development of end-to-end management procedures for the procurement and management of resources during response, as opposed to reliance on resource spreadsheets alone. This will improve the accountability for the group in this important capability.

This Shared Responsibility could be strengthened by the development and implementation of supporting doctrine. While challenging, developing Council staff with the skills to support operational activity would be beneficial.

### **Relief and Recovery**

The Office assessed Richmond Group's Relief and Recovery Shared Responsibility as a development area.

The Local Group is practised in relief and recovery arrangements for managing drought and the impact it has on primary producers across their LGA. The Council website provides information to support primary producers affected by previous events, including bushfire, linking to support services and financial support options.

The Flinders Local Plan contains a brief recovery strategy, articulating triggers and associated actions for relief and recovery. Like the Flinders Group, Richmond could translate drought recovery activities to recovery in disaster management. We recommend this Group apply their knowledge into the development of a comprehensive relief and recovery sub plan. While we understand, local providers and NGOs support relief activities, including resupply, strengthening governance arrangements for the delivery of responsibilities would enhance community confidence.

Richmond Group's authorisation for expenditure of funds during an event is in accordance with Council's financial management policies. Expenditure limits are as per Council's Financial Delegations Register. For each event, specific cost centres are established for emergent works expenditure and counter disaster operations in accordance with NDRRA guidelines. Funding considerations for relief, short, medium and long term recovery should also be understood and incorporated into documented relief and recovery sub plans.

We did not expect to see separate functional recovery sub groups in a small rural council. However, the Richmond Group would benefit from consideration of how they would address all functional areas of recovery. Enhanced capability through ensuring recovery training and exercising of arrangements was undertaken. Recovery planning could also be enhanced by developing strategies to involve the community. We encourage the District Group, especially those with recovery responsibilities to work with the Richmond Group, to strengthen arrangements. This could be achieved through the District capability enhancement strategy.





# Townsville











## Townsville Local Disaster Management Group

### Capability assessment

This section provides an assessment of the capability of the Townsville Local Disaster Management Group (Townsville Group) capability to deliver the Key Outcomes of the Standard and to fulfil its functions under the Act.

| Shared Responsibility                     | Standard Component  | IGEM Rating |  |
|---|---|-------------|--|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Well placed |   |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Strong      |   |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Strong      |   |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Strong      |   |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed |   |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Well placed |  |

### Context

Townsville city has a population of close to 190,000<sup>43</sup>, making it the largest Australian city north of the Sunshine Coast. It has a major port facility, an international airport, hosts a major defence force base and is the regional headquarters for many state and some federal agencies. Located in the dry tropics on the North Queensland coast, it is subject to regular cyclones crossing over or near to the city, along with related storm surge and flooding rain. Consequently, Townsville city exhibits strong capability against many Standard components, due to the relative availability of resources and the need for strong disaster management arrangements because of its location, population size and critical infrastructure. The Townsville Group activated for Tropical Cyclone Debbie in March 2017.

### Hazard identification and risk assessment / Hazard mitigation and risk reduction

The Office assessed the Townsville Local Group's hazard identification component as well placed and the hazard mitigation component as strong.

#### *Hazard identification and risk assessment*

Hazard identification and risk assessment undertaken by the Townsville Group is evidence-based, uses a broad range of sources, is informed by valid data and draws on lessons identified through extensive exercising and previous activations. The Townsville Group's hazard assessment considers six natural hazards: severe storms (cyclones and thunderstorms), floods, storm tide, landslide, bushfire and earthquake. It includes thorough assessment of vulnerabilities, draws information from previous studies and events and considers the influence of climate change on these hazards. The 2009 assessment was undertaken for the Townsville city region, and in 2010 following the amalgamation of Townsville city and Thuringowa city, an addendum report was written to incorporate the two areas.

The risk assessment does not include hazards such as tsunamis, biohazards or human-caused hazards. However, human-caused hazards are considered by the Townsville Group through marine port and airport exercises, as well as representation from the Port of Townsville, Queensland Rail, and Townsville Airport as advisory members on the LDMG. Epidemics, emergency animal disease, exotic plant disease, tsunamis, major infrastructure failure, dam failure, hydrocarbons/chemical/hazardous materials/oil spills are described in the Local Plan. Residents in Townsville who responded to our community survey perceived cyclone disasters to be highly likely in their local area, more likely than disasters such as storm surge, bushfire and river flood and much more likely than plant or animal disease. Respondents considered chemical spill or plume, or oil spill to be the least likely of these disasters to occur. While it is evident that the Townsville Group considers both natural and human-caused hazard risks, there are opportunities to assess these hazards collectively to inform planning.

The Townsville Group ensures its stakeholders have a shared understanding of, and ready access to, risk information for all types of events through their Local Plan and supporting documentation. The Townsville Council emergency dashboard, launched in October 2017, provides the public with live information on weather, power outages and road closures as well as links to useful emergency information such as evacuation and caring for pets. An interactive map on the dashboard displays storm tide zones and evacuation routes, which is further supported by a Storm Tide Evacuation Guide designed to educate and raise community awareness. The council website displays risk assessments and disaster risk management studies for the public. A newly created resilience officer role, to increase community awareness of hazard risks in the Townsville region has just been recruited for.

#### *Hazard mitigation and risk reduction*

The Townsville Group's prioritisation of mitigation strategies and risk reduction activities is robust, replicable and authoritative. A considerable amount of work has been undertaken to transition to probabilistic modelling for storm surge and storm tide. The application of probabilistic modelling was profiled as good practice in the Office's *Cyclone Debbie Review* in 2017.

The Townsville Group work with the council planning team to ensure risk and mitigation information informs land use planning. Residual risks have been identified and this information is shared with the District Group for inclusion on the District Residual Risk Register. Detailed organisational capability statements have also been collected by the group from Aviation Rescue Fire Fighting, Surf Life Saving Queensland and Sunbus as part of their disaster management planning. The statements include information such as relevant contact details, details of staff resources, facilities, machinery and vehicle assets available locally and, in the case of Surf Life Saving Queensland, from across the State. This level of engagement and collaboration with relevant stakeholders is an example of good practice.

Many of the Townsville respondents to our community survey said they had undertaken risk reduction activities in the past 12 months (68 per cent). Most respondents had performed regular property maintenance. The percentage of respondents in Townsville who had planned for evacuation was higher than every other LGA surveyed. Other actions taken included preparing an emergency kit (10 per cent) and stocking non-perishable food (8 per cent).

Hazard mitigation strategies and risk reduction activities undertaken by the Townsville Group are developed in partnership with relevant stakeholders and are reviewed at regular intervals by

individuals or entities skilled in the process. There are many experts in different areas of disaster management located in proximity to Townsville; the Townsville Group utilises this by engaging and consulting with these stakeholders, based on identified risks, in disaster management activities including exercises, planning, hazard mitigation strategies and risk reduction activities. Relevant stakeholders, such as engineers, meteorologists and flood modellers are involved in the planning and review of plans and developing other disaster management products, such as the probabilistic modelling developed with the Bureau. The Townsville Group engages regularly with the Cyclone Testing Centre and the Centre for Disaster Studies, James Cook University (JCU). Expert knowledge of engineering, cyclone impacts, behavioural science and sociology, along with action research opportunities has provided Townsville Group with data to better understand risk and tailor mitigation approaches. Further opportunities exist to collaborate with JCU for the SWIRLnet ([Surface Weather Relay and Logging Network](#)) project and we encourage all groups in the district to engage with these teams to utilise the subject matter experts. The group also involves the community in disaster management activities wherever possible. Exercise Trojan Horse was a large-scale field exercise held in 2015, for which the group included involvement from various stakeholders, as well as members of the community.

### Preparedness and planning

The Office assessed Townsville Group's Preparedness and Planning Shared Responsibility as strong.

#### *Capability integration*

The Townsville Group possesses comprehensive capability, reinforced by ready access to representatives from state agencies, critical infrastructure providers, NGOs, pertinent commercial providers and the Australian Defence Force. The Group membership is stable and provides expertise against defined roles and responsibilities. The Group regularly conducts formal training and exercises and we were provided with reports and evaluations of these exercises. The training register demonstrates core Group members' commitment to QDMTF training. We note Townsville Council staff and Australian Defence Force personnel attended three-day QDMTF training in August 2017.

The Local Plan provides a clear explanation of the LDMG's annual exercise cycle, which includes: testing the communications systems and activation of the LDCC a desktop exercise for the LDMG; an operational exercise; and a debrief following any actual event<sup>44</sup>. Recent exercises of note include responding to an activation of the Ross River Dam Emergency Action Plan and a full field exercise with the scenario of a multi-vehicle incident with multiple phases. There is also a training package detailed for Council staff, which integrates the QFES training packages and Council-specific training. Guardian training is regularly provided.

Currently, the training register includes core members only (most of whom are Council and emergency services representatives). It may be useful for the LDMG to have visibility of the trained representatives of other agencies to provide the Group with a more complete picture of capability.

Lessons identified through operational events and exercises influence improvements to local arrangements. A register of actions is on the LDMG agenda as a standing item. A consolidated list of outstanding actions arising from all exercises and events would make it easier for the LDMG to review and prioritise its program of work and collectively identify the focus of future training or

exercising. There is opportunity for this Group to share good practice more broadly across the sector.

### *Planning*

The Townsville Group's planning and assessment process involves engagement with all relevant stakeholders and includes documenting roles, responsibilities and timelines. Planning is undertaken, reviewed and assessed at regular intervals in collaboration with entities skilled in the process, is compliant with the legislation and ensures alignment to other key documents. The Local Plan sets out the governance hierarchy under which the plan is written, including descriptions of the Queensland disaster management system and the Emergency Management Assurance Framework. This detail demonstrates a strong focus on governance and doctrine. The Local Plan clearly outlines LDMG membership and that of 12 working groups on which the Townsville Group is represented. Roles and responsibilities are clearly defined.

The Townsville Group has developed a comprehensive suite of sub plans as part of the Local Plan. These sub plans include evacuation, resupply, community education and marketing, environmental health, local recovery and reconstruction, and animal management. All sub plans are reviewed, and amended to reflect identified improvements, annually by the LDMG and associated working groups.

The Townsville Group have established eight working groups to support the planning and, importantly, the implementation of the Local Plan and sub plans. The membership, roles and responsibilities of these working groups are detailed in the Local Plan. The working groups are responsible for developing and reviewing the sub plans relevant to their group and providing advice to the LDMG based on reviews of processes, systems and activation. Each group is required to provide regular status reports to the LDMG which include training needs, operations and exercises conducted and updates on reviews in progress, staffing, meetings and membership. A sub group has been established to coordinate a disaster coordination centre on Magnetic Island and a procedures document with maps, a resources list and community care register has been developed to provide guidance to this sub group.

The Group have identified vulnerable populations as an area to focus engagement. The Group have led a district wide strategy to engage with aged care providers. This is consistent with recommendation from our Cyclone Debbie Review recommendations. Future forums are planned with service providers to vulnerable communities and various business sectors.

For the 2016-17 Disaster Management Plan Assessment process, the Townsville Group's self-assessment of the effectiveness of their Local Disaster Management Plan gave lower ratings in comparison with their 2015-16 results. We view this change as indicative of the Group's determination to reach high standards in disaster management practices. In this review, resource management was identified by us as an area to prioritise and the Group are addressing this through a number of measures including planning for a MOU with GIVIT to manage offers of assistance, and conducting an audit of critical infrastructure and power restoration.

The Townsville Group has developed a plan matrix, showing each of the disaster management plans and standard operating procedures under the Local Plan for: evacuation, communications, response, health, recovery and disaster coordination centres. This is an excellent reference tool for disaster management staff in Townsville. We noted the matrix is included in each of the sub plans, which is an ideal way to inform practitioners of how the plans relate to each other and where to find



the information they need quickly. of plans and operating procedures for practitioners and stakeholders.

While stakeholders are involved in planning for disaster management activities there is potential for increased contribution from LDMG members into the planning process. For example, critical infrastructure entities are represented on the LDMG, which means they are provided with the plans and operating procedures of the group. However, their disaster plans have not been shared and this information is provided verbally in LDMG meetings and as required. Enhanced integration will strengthen understanding of specific risks, understanding of capacity limits and support collective mitigation.

### Emergency communications

The Office assessed Townsville Local Group's Emergency Communications Shared Responsibility as strong.

#### *Public Engagement*

*Cyclone Sunday*, hosted annually by Townsville City Council, is an established, widely known and well respected event. There were more than 30 exhibitors at the event this year, including the Council, SES, Ergon Energy, the Bureau, Suncorp, QPS, QAS and QFES. This event attracts thousands of locals each year. We were advised that hundreds of people lined up for free Council and Ergon information bags, while interest in home repair tips and alternative power was strong. This event provides the public with the chance to ask questions of emergency services personnel about individual and local preparedness and what it is like be impacted by cyclones. Council's new emergency management dashboard was launched by the Mayor at this event in 2017.

Significant changes have been made to the Council website to enable easier navigation and access to disaster management information for the public. In one place, the dashboard contains information about power outages, provides emergency contacts, profiles evacuation centres and other pertinent information on disaster preparedness. It also provides information relating to road conditions, whether they be roadworks or information on roads cut due to flood waters or bushfires. We were advised that this dashboard would be the 'source of truth' for the community during disaster events. Local radio and news sources would complement the dashboard's information.

Significant public engagement through multiple media channels encourages locals to be aware, clear out their rubbish and prepare their yards and homes for the summer storm season. This is

### Cyclone ready streets

The community engagement programme Cyclone Ready Streets, a joint initiative of Townsville City Council and Suncorp, is a great way to bring neighbours together and to help prepare for cyclone season.

Cyclone Ready Street also helps to educate people on survival strategies such as the 3 x 3 Plan, with the Cyclone Ready 3 x 3 checklist highlighting three key things for residents to do 3 weeks, 3 days and 3 hours before a cyclone.

Rewards include free barbeque packs and tip vouchers for those who register a team.

further incentivised with the Council offering a free 3-day rubbish dump weekend.

There is a range of community education, awareness and engagement programs and resources which have been developed across multiple media formats. This information is offered to the community in multiple formats, catering to non-English speakers and younger residents. Driven by strong leadership and commitment, these resources represent a large investment into public education and engagement.

Exercise Trojan Horse was a full field exercise conducted in December 2015 in Townsville. The aim of the exercise was to test procedures and interoperability from the responding agencies through to the DDCC. The exercise was based around a complex multi-vehicle incident and a potential Hazardous Chemicals response. The community were engaged during this exercise. The LDMG has conducted community surveys and works closely with JCU on more formal research with the community. This research has been commissioned following previous events. The data from this research assists in driving future engagement and campaigns.

Our community survey results indicate that community members have a high confidence in the official local response with 93 per cent of respondents stating this was the case and 68 per cent of respondents reporting that they have taken steps to reduce the effects or consequences they might face during a natural or human caused disaster.

#### *Communication systems*

The Townsville Group's comprehensive communication systems strongly supports continuity of disaster operations. Documents provided demonstrate that there is regular review, update and preparation of material prior to 1 November each year. Examples provided to us included Guardian cheat sheets, information about a paper-based back up system, phone setup manual, generator instructions, an operational briefing form and debrief templates. Townsville City Council also has a good range of internal procedures and plans to enable its employees to effectively perform their disaster management responsibilities.

In 2017, the Townsville Group introduced a bulk SMS messaging system to allow the Chair and Disaster Management Officers to rapidly communicate with the LDMG, the LDCC and relevant Council members. The system promotes two-way communication via SMS and can create message templates, schedule distribution, advises receipt and captures responses from recipients. The system was successfully used by the CEO for communicating with Council personnel during Tropical Cyclone Debbie.

Guardian was exercised in 2015, 2016 and 'live' for Tropical Cyclone Debbie in 2017. Requests for Assistance and situation reports were also exercised in 2015, 2016 and 'live' in 2017. An RFA and situation reports from Tropical Cyclone Debbie were provided to us, with plain language evident.

Townsville city's communications systems appear well equipped to provide reliable, accurate and timely information. Nevertheless, their self-assessment notes refer to the challenge of dealing with multiple disaster communications systems during an event, to the point where they report reverting to email and phone due to the lack of integration of these other systems. This reflects the findings of *The Cyclone Debbie Review*, which found that a technical inability to share information successfully

contributed to the wide spread use of 'work-arounds' to respond appropriately to community needs<sup>45</sup>.

### *Warnings*

The Townsville Group has a community information and warnings sub plan with clear roles and responsibilities. The Group is familiar with the Emergency Alert (EA) requirements and responsibilities of the Emergency Action Plans for the Burdekin and Ross River Dams.

The sub plan provides tables of pre-prepared EA messages and polygon references for the most likely hazards, including storm tide, tsunami, flood and dam failure, chemical plume and spill. This table could be replicated by other groups. The message text is clear and in plain English. The sub plan also provides a list of fact sheets and television commercial templates that are available. Dependant on the event, the Townsville Group will alter the Council website and social media links to give prominence to disaster information. The EA process was exercised in 2015 and 2016 and conducted 'live' in 2017 during Tropical Cyclone Debbie. Video messages were released on YouTube in support of the Tropical Cyclone Debbie Emergency Alert.

The community survey reveals that 85 per cent of Townsville residents who responded to the survey would tune into local radio for information in the event of an impending disaster. This percentage is higher than the district average, suggesting that the Townsville Group consider emphasising radio messaging as a means of achieving greater value for money. Also, higher than the District average was accessing the Bureau website (88 per cent), and obtaining information from emergency services websites or Facebook pages, employers and Facebook in general. The most preferred way to receive a warning message is by phone, followed by local radio or television bulletins.

The Townsville Group has created comprehensive community profiles of their area of responsibility. Information on population size, hazardous and critical infrastructure and some vulnerable features such as caravan parks are included. The maps focus on the five key natural hazards outlined in the Townsville LDMG risk assessment. They can be shared with relevant disaster management stakeholders upon request. While much of the information can be pre-populated by Townsville Council Geographic Information Systems staff, it is expected that more items will be included in a scheduled 2018 refresh, including aged care facilities, flood gauges and population updates from the 2016 census.

### Council internal preparedness

Townsville City Council has an excellent communication operating procedure for use by the Council marketing communications and media units.

The procedure includes disaster management tasks to be completed by these groups through all phases of Prevention, Preparedness, Response and Recovery. Preparedness tasks, for instance, include taking refresher training in Guardian Lite and Council operating procedures, updating sub-plans and media contacts and establishing emergency response kits for internal use.

An emergency communications plan also exists specifically for Council Infrastructure services and, as well as responsibilities, also includes information about an internal SMS process. It includes an emergency response agenda template which is a prompt for users to consider their response to dealing with typical infrastructure items such as waste, power and roads.

The eventual goal is to improve interoperability by importing all the information into Guardian for intelligence and planning purposes.

As with many other groups in the Disaster District and across Queensland, the testing of warning message content with the community to ensure it is understood, is still a development area for Townsville. The emerging work to better understand their vulnerable communities (beyond the geographically vulnerable) provides Townsville with an opportunity to test their messages with diverse groups and to consider barriers that may exist to the community receiving and understanding warnings. There is a comprehensive set of community profiles for the Council area. The Local Plan lists multiple local organisations and we were advised that, “council maintains year-round discussions” with agencies that represent identified vulnerable groups in the community. This includes attending forums run by agencies such as Blue Care and Meals on Wheels. The Townsville Group should also work with tourism providers to clarify appropriate warnings communication channels for tourists. Given the current focus on better understanding the vulnerable groups across the District it may be useful for these ongoing discussions to be a more formal plan of action that can then be shared with the District so that the various activities taking place can complement each other and avoid duplication.

## **Response**

The Office assessed Townsville Local Group’s Response Shared Responsibility as well placed.

### *Control*

The Townsville Group’s control system is well positioned with effective governance documentation in the Local Plan and activation sub plans and is further supported by mutually agreed upon roles and responsibility statements. The SOPs for the activation of the LDCC are detailed though easy to follow, making the document fit for purpose. The leadership group sets strategic direction through demarcation of core and advisory meetings, this process ensuring meetings are structured for maximum relevance of the respective members attending. We saw evidence of strong rapport forged between member agencies, developed outside periods of activation; which moving forward, should ensure trusted working relationships in a response environment. The Group’s control system adheres to a risk management framework as articulated in the Tropical Cyclone Debbie key decisions register.

### *Command*

We found the Townsville Local Group to have a strong command focus under the leadership of the Chairperson. Decisive decision making is supported by all core members and deputies having the requisite knowledge and skillset to sit on the group, formal appointments conferred and ongoing QDMTF course attendance by agencies. Meeting minutes are utilised to articulate and disseminate command decisions with agency action items and return dates for same monitored by the Council’s emergency management team. The post Tropical Cyclone Debbie hot debrief provided by the Group illustrates the clear focus of the Group on continuous improvement regarding lessons management. This document is a resource to inform future event planning.

### *Cooperation and Coordination*

A strong culture of cooperation and coordination was observed within the Townsville Group. The LDC has championed devolution of hazard and event specific sub-groups such as bushfire and evacuation planning from council led to combatant agency and subject matter expert led.



Furthermore, the LDC is leading discussions with disaster management practitioners from across QLD to develop and roll out 'fly-in' teams during activation to lead various cells within the Townsville LDCC. This is an excellent example of shared responsibility and interoperability in action; the group sharing work load and resources to ensure improved performance outcomes. Event planning was well managed by the group during Tropical Cyclone Debbie with comprehensive documentation provided to the office of the Group's activation tasks, outcomes and lessons learnt.

#### *Operational Information and Intelligence*

Townsville LDMG manages operational information via the Guardian system which is informed by a functional intelligence cell. The LDCC layout and SOPs provided to the Office identify the physical location, roles and responsibilities of the intelligence capability during response activities. A detailed exercise regime managed by the LDC includes the intelligence capability in mock disaster events and desktop discussions. The Tropical Cyclone Debbie LDCC hot debrief provided seven intelligence action items to improve response arrangements. It is excellent to see that the Townsville LDCC imbeds flood modelling staff to inform command decision making with timely and accurate technical data sets. The maturity of their intelligence capability is typified by the group's decision during Tropical Cyclone Debbie to use probabilistic storm tide modelling layered over evacuation zones to support decisions about risks to the community<sup>46</sup>. Information sharing between member agencies is well developed as evidenced by the excellent member attendance and participation in group meetings.

#### *Resource Management*

There is a detailed level of planning evident regarding the tracking of resources available to the group within the local area and documented MOU with neighbouring councils to assist across borders with resource needs. A detailed Emergency Supply and Financial sub-plan exists and we are informed that offers of assistance are to be managed by GIVIT. Minutes from the July 2017 LDMG meeting show the group moved to enter an MOU with GIVIT though this was yet to be finalised at time of writing. The implementation of this sub-plan, including how the data is shared with the District Group, will provide greater clarity for resource management. A draft Townsville Aged Care Partnership Group Agreement was provided to the us and discussed during validation meetings. This initiative provides an opportunity for the Group to highlight risk-based planning in the coordination of local resources. This in turn provides practical support to a vulnerable community group, particularly during evacuation activities. We note that the LDMG has identified that further training in resource management is required for coordination centre staff. Inclusion of resource management in upcoming exercises could further enhance this capability.

#### **Relief and Recovery**

The Office assessed Townsville Local Group's Relief and Recovery Shared Responsibility as well placed.

The LDMP has a comprehensive local recovery plan titled the Townsville local human-social, economic, environmental and infrastructure recovery and reconstruction plan. This plan is publicly available and was reviewed in 2016. Numerous sub plans that support relief and recovery are documented, including: animal management, impact assessment, shelter and evacuation and asbestos containing material. These are underpinned with SOP's for health management, places of refuge and for the provision of specific support to Magnetic Island. Townsville Group's recovery model is based on 'four pillars' of recovery and local arrangements are well articulated. Clarity of

governance is provided, including for the Local Recovery Group and Local Community Support Group. Roles are clearly documented through all phases of recovery, as are the responsibilities of all stakeholders.

### *Relief*

Relief activities are guided by the local recovery plan under immediate-short term recovery. Entity roles and responsibilities to support relief activities are clearly articulated. We have been advised that the Impact Assessment Sub Plan has been updated. Work currently being undertaken by Council, in conjunction with QFES, will enhance impact assessment data and provide for a single point of truth for the group.

The operating procedures for the Local Recovery Coordination Centre (LRCC) are updated annually and training for the LRCC, including Guardian, is provided to staff. The Group manages relief activities through the LDCC and Local Recovery Coordinator (LRC) and prioritises actions based on urgency, need and the resources available. This process is consistent with sub plans. A range of operating procedures are in place to support the management of evacuation centres, places of refuge and the Heatley Public Cyclone Shelter. These procedures provide for responsibilities and specific details of required resources. As we understand, the Council has placed significant emphasis on preparing community members about the different types of places of refuge.

The Council has identified a range of 'special interest groups' whose needs maybe of priority. We were advised that pertinent agencies help address the needs of these groups. The Townsville Group have been proactive working with aged care providers. An aged care sub committee meets three monthly, informing assessment of vulnerability. Another outcome has been a plan for providers to ensure that appropriate stock-piling of medical supplies has been undertaken as part of their relief arrangements. This will reduce impost on the Townsville Hospital and Health Service.

Capability for this Group could be enhanced through continued engagement and partnership with key relief and recovery stakeholders. This should also consider funding requirements and service level agreements. At the time of writing the report, we were told of new MoU's being implemented with partner entities. The Council is currently developing a capability using Team Rubicon (ADF veterans) and St John's Ambulance are to provide ongoing medical support and resources in evacuation centres. Further arrangements are being formalised with GIVIT and the International Rotary Club.

### *Recovery*

The Chairperson has provided authority for councillors to chair five functional recovery groups. The Local Recovery group works closely with the District Community Recovery Committee in the delivery of recovery services for the disaster affected communities and when activated, acts as a subcommittee of the LDMG. Membership is flexible. There are core members but others may be co-opted as necessary to provide specialist knowledge and expertise. This enables the Committee to adapt to changing recovery needs as the situation changes. State agencies with functional recovery responsibilities support these sub groups.

The local recovery plan provides a Local Recovery Framework, based on the national Disaster Recovery Principles and Queensland Recovery Guidelines, to enable establishment of Recovery Action Plans. These action plans form the basis of specific event recovery planning and enable the tailoring of activities to address impact of an event and risk to the community. Importantly, there is

direct alignment with the broader District Community Recovery Strategy and key recovery roles delivered in the District Group.

To be commended, Recovery planning has been considered in detail through all phases of disaster management. For example, as part of recovery preparation, the Local Recovery Coordinator has specific roles and responsibilities to ensure the Local Community subcommittee is prepared. During a period of Lean Forward, Council functional units such as infrastructure services and water and waste services will review the application of plans to the 'specific and imminent circumstances'. During Stand Up, corporate communications will manage the release of public messaging to community groups involved in recovery process.

Also, to be commended is the attention the Townsville Group give to all functional areas of recovery. As with many Local Groups, human-social recovery is well considered. The Townsville Group have also placed significant emphasis on the other functional areas. This is in line with identified risks to agriculture, tourism and the environment.

To continue strengthening this capability, the Townsville Group is encouraged to work with key recovery agencies, especially QRA. Following review of the local recovery plan, testing the plan through exercising would also enhance the Group's confidence.





# Townsville District











## Townsville District Disaster Management Group

### Capability assessment

This section provides an assessment of the capability of the Townsville District Disaster Group's (District Group) capability to deliver the Key Outcomes of the Standard and to fulfil its functions under the Act.

| Shared Responsibility                     | Standard Component  | IGEM Rating |  |
|---|---|-------------|--|
| 1 Hazard identification & risk assessment | Hazard identification & risk assessment   | Well placed |   |
| 2 Hazard mitigation & risk reduction      | Hazard mitigation & risk reduction  | Well placed |   |
| 3 Preparedness & planning                 | Capability integration<br>Planning  | Strong      |   |
| 4 Emergency communications                | Public engagement<br>Communication systems<br>Warnings  | Well placed |   |
| 5 Response                                | Control<br>Command<br>Cooperation & coordination<br>Operational intelligence<br>Resource management | Well placed |   |
| 6 Relief & Recovery                       | Relief<br>Recovery  | Well placed |  |

### Hazard identification and risk assessment / Hazard mitigation and risk reduction

The Office assessed the Townsville District Group's Hazard and Risk Reduction Shared Responsibilities as well placed.

The District Group's risk register is informed by the State-wide Natural Hazard Risk Assessment, prepared by Risk Frontiers in 2011. It is comprehensive, incorporates a broad range of hazard scenarios, and considers in detail the impacts and capacity of the Group to treat the risks across prevention, preparedness, response and recovery. We noted the assessment looks at risks that are significant and wide spread, and could be strengthened by also considering risks from the perspective of smaller, localised events. The District Group has established a residual risk register and formalised a process for collecting information on the risks that overwhelm the capacity of local groups. [The State Natural Hazard Risk Assessment 2017](#) should inform a review and update to the District risk assessment. There is opportunity to develop a highly-contextualised District risk assessment and risk register, of all- hazards and their implications, informed by residual risk. Using information from local risk assessments, debriefs and exercise evaluation reports, it would be possible to specify the capacity limits and escalation points of local groups that would trigger the activation of the District group, and the impact they will have on the District group's capacity limits for each type of hazard.

The Townsville District residual risk register is populated and kept up to date by LMDGs formally notifying the District of the risks they need to transfer. LDMGs submit their residual risks to the executive officer as part of their regular reporting for DDMG meetings. The register details which circumstances, such as prolonged events, events that require specialised staff, or events that cause a significant number of casualties, are likely to require escalation to district level and how the assessment of the residual risk was made i.e. identified through an activation, exercise or review. At

the time of writing, Townsville was the only District in Queensland utilising this formalised process of collecting residual risk information.

The District Group transfers its residual risks to the State via communication between the Executive Officer and the QPS Disaster Management Unit. We understand a state wide formalised process to support residual risk escalation is in development and will utilise the Disaster Incident Emergency Management System. The application of the Risk Framework may also inform enhanced processes to the escalate residual risk.

The District Group have identified plans for all major hazard facilities in the region. This specifically considers uncontained chemical breaches where liaison with these facilities regarding emergency response and evacuation plans would be required. Meetings are held with relevant state agencies about these facilities to ensure adequate response strategies are in place including evacuation of surrounding areas and the risk of offsite impact. The District Group has sourced various data sets to inform planning, including chemical information, area, transport mapping, climate outlooks and scenario plans. Exercises have commenced in relation to major hazard facilities for stakeholders to consider scenarios and to share response plans. Following workshops, stakeholders have reviewed various response plans and provided feedback to ensure strategies in place will be effective.

In collaboration with QFES, the Townsville District Group engages with local groups to undertake bushfire mitigation activities. Local groups report high and medium fire risks in their LGAs to their Local Fire Management Group, who then develop a fire mitigation plan. The process is supported by the Regional Inter-Departmental Committee for Bushfires, providing strategic direction and ensuring coordination and resource sharing. Bushfire risk has significantly reduced in the district because of planned hazard reduction burns.

Risk assessment has informed a shared understanding of capacity and capability of the Palm Island Group. Both groups know that the capacity of the Palm Island Group is quickly exceeded requiring escalation to the District for support. Triggers for this escalation are well understood and documented. The District Group is proactively treating this risk to their capacity by establishing robust, scalable support for Palm Island, while also undertaking collaborative activities to help improve the local group's capacity at the local level. A multi-agency taskforce has been established to perform disaster management activities with full involvement of the Palm Island group. A latent risk does exist for the District Group if all local groups are activated. The Group acknowledge that it would require assistance from the State to support Palm Island effectively in this scenario. Given there has not been an event in the District in recent years that has been both major and widespread, an exercise that includes local triggers for escalation at all levels of the arrangements. Deployment options of a range of state agencies should also be considered.

The Disaster Management Plan Assessment 2017 discussion paper suggested that engagement and collaboration between agencies to plan for maintaining sustainability of staff will result in improved understanding of limits and allow these to be documented in plans. If the strategy of an agency or group is to call for assistance from others, having this documented as a residual risk will assist the disaster management system to have appropriate plans in place. More integrated planning between agencies will allow groups to maintain stand-up and be scalable for different size events. The Townsville Disaster Group may wish to consider this finding.

## Preparedness and planning

The Office assessed Townsville District Group's Preparedness and Planning Shared Responsibility as strong.

### *Capability integration*

The Townsville Disaster District has access to regular formal training and many stakeholders with high levels of skill and knowledge. The Disaster District possesses strong leadership with the Chairperson having extensive disaster management experience in a variety of settings across Queensland. The *Cyclone Debbie Review* found that fatigue significantly affected the sustainability of critical roles. We note actions that the Chairperson has endorsed to build capacity. There is a deputy Chairperson, a senior police officer, who is developing skills to perform in the DDC role. During an operation, this will ensure 24-hour coverage of the role as well as improved fatigue management.

The District, through the EMCs and District Executive Officer, is heavily involved in coordinating exercises for the local groups to participate in. We observed cooperation and partnerships between the Executive Officer and EMCs. Eleven exercises involving the District Disaster Management Group or agency representatives were conducted between October 2016 and November 2017. In addition, there was an activation to prepare for the possibility of Tropical Cyclone Debbie crossing the District. The EMCs and the District Executive Officer in this Disaster District share their learnings from events with their respective agencies. Likewise, they act as exercise facilitators and evaluators in other disaster districts to enhance their capability. We suggest this practice should continue to provide increased interoperability and act as a mechanism to more formally share lessons across the system.

Evidence and observation indicates that the QDMTF training provided by QFES to key stakeholders occurs regularly, consistently and in a variety of formats. This includes sessions at LDMG meetings, one-on-one training for decision-makers such as Chairs of Groups, and a three-day intensive course offered in Townsville twice a year. On-line training is also available through the QFES learning management system. We were advised that the continued liaison with and the close working relationship between the EMCs and the QFES Emergency Management Training Command ensures that modules are current and evaluated to meet the needs of stakeholders.

The District's action plan states that DDMG, DDCC staff and Liaison Officers are provided with DIEMS training to support information management during an event. We note that 45 QPS staff were trained in DIEMS in June 2017 in this region. We understand that QPS Liaison Officers will attend Guardian training to improve IT interoperability.

The District Executive Officer maintains a continuous improvement register that records actions arising from exercises, reviews, audits and actual events. Less clear is how the actions and improvements are integrated into plans and future exercises, so that improvements can be tested. We saw that all the actions currently on the register are led by QPS. It is recognised that these actions are predominantly focused on response phase activity. We were advised the District Executive Officer works closely with relevant agency representatives to finalise actions in the register.

The 2017 Disaster Management Plan Assessment process, found that District Executive Officers were advised that member advisory agencies were required to manage fatigue of their staff in line with internal agency policies and procedures. Districts were confident of timeframes for QPS roles,

but not so for other agency roles. This is no different in the Townsville District Group. We heard that QPS, along with some Group member agencies, were considering fatigue management strategies.

### *Planning*

The Townsville District Disaster Management Plan (District Plan) and supporting documents are reviewed and updated annually. The process includes input from all DDMG members and the revised plan is approved and minuted at a DDMG meeting. In 2017, the District Group reformatted the District Plan to align more clearly with the Standard. The 2017 Disaster Management Plan Assessment found plans that were similar in structure to this District. More developed than other disaster district plans, the Townsville District Plan doesn't copy content from local plans. Rather, it has been contextualised for the District needs. Also, different to other plans considered in plan assessment process, this Plan includes a range of sub-plans to guide operational activity and direction for event action planning.

The community can access the District Plan online via the QPS website, and stakeholders are provided with additional operational documents, such as information for liaison officers and supporting SOPs. Roles and responsibilities are documented in the plan and based on the State Disaster Management Plan. This could be strengthened by articulating how entities fulfil their roles and responsibilities across the Disaster District, before, during and after an event. Representatives of member agencies on the District Group understand and agree to their roles and responsibilities. Capability and capacity information, as well as situational information and status updates are shared by functional agencies with the District Group on a regular basis ahead of storm season and during events.

The District Plan includes response and recovery strategies for immediate to long-term recovery, as well as operational plans and discussion on the district's context from an operational perspective. Each of the local groups within the district are considered in the District Plan from a geographical, demographic and critical infrastructure perspective. As with the district risk assessment, the plan could be further contextualised to the Townsville Disaster District by incorporating more specific details provided in local plans.

### **Emergency communications**

The Office assessed Townsville District Group's Emergency Communications Shared Responsibility as well placed.

## **Aged care planning**

Learnings from the Tropical Cyclone Debbie activation led to a district-wide forum about aged-care facility disaster planning in Townsville in August. Representatives from aged-care facilities throughout the District attended, along with participants from councils, emergency services and Queensland Health.

The forum discussed critical elements of disaster planning for these facilities, including staff fatigue management, provision of medical supplies, evacuation options and crisis communications.

Because of this forum, partnerships are being developed between facilities to provide practical support and resource sharing in the event of a disaster. Working groups have also been established in some areas to allow Local Groups to build a clearer understanding of the disaster plans of the facilities in their jurisdictions.



### *Public Engagement*

Legislatively the District Group's function and role differs to the local groups in the delivery across the public engagement component. The roles and responsibilities of the District Group are to ensure the local groups and therefore local communities, are engaged in ways that increase awareness, preparedness and community resilience.

The District Group does this by coordinating and supporting local groups and enabling flow of information. As a standard practice the DDMG endorses formal responses before public statements are issued. While the Group acknowledges public enquiries are managed primarily at local level, the DDMG uses the social media sites of QPS and other group members, such as Queensland Health, during events. The QPS social media for District Disaster Coordinator "Townsville blog" in the *Get Ready* campaign, directs the public to local council websites. These mediums are a widely recognised point of truth in the community.

QFES is finalising a Northern Region Community Engagement Plan that includes permanent and volunteer networks and engagement strategies. Furthermore, QFES embed Public Information Officers in their command structure to ensure timely and accurate information is passed onto state, LDMG's and their respective communities. Using a multiagency approach, members of the Group take a lead in areas for which they are the subject matter experts. They use the DDMG as a vehicle for sharing information and collaboration on key issues.

The District Executive Officer has demonstrated significant stakeholder engagement across the sector and often acts as a conduit across the groups in the district. This role is critical to information sharing. Profiling the importance of this part of the District Executive Officer role would be of benefit to other disaster districts.

The media strategy in the DDCC is a critical tool in engaging the public at a district level. Community engagement performed by DDMG is evidence through the attendance and presence at events such as Cyclone Sunday.

### *Communication systems*

The District Group has a legislative role to establish and review communication systems between local groups in the District, for use when a disaster happens<sup>47</sup>. Evidence demonstrates that the District does have access to effective communication systems that provide reliable, accurate, timely and integrated information across all levels of the arrangements<sup>48</sup>.

The DDCC primary location is in Hermit Park, which may be affected by storm tide, with a backup location in Condon. Both venues are fully equipped and have generators, police communications systems, satellite phones and radios. Other alternative locations are also listed in the District Plan. An SOP provides instructions for using the DIEMS activity log and managing Requests for Assistance; there is also a DIEMS flow chart with common terms and critical. A significant advantage of police stations hosting DDCCs (as they typically do throughout Queensland) is that every station is required to have a business continuity plan. Local Disaster Coordination Centres in the District have been offered the opportunity to link into the police UHF frequency.

### *Warnings*

While District Groups are not responsible for issuing formal warnings, they do have a legislative role to ensure the community is aware of how to respond to a disaster<sup>49</sup>. The District Plan includes an

explanation of the agencies responsible for hazard warnings and of the EA process. The District Group actively supports the Palm Island Local Group to issue warnings when required. This is accepted and planned for by the District and can mean that from time to time district representatives will be involved in the production of warning messages on behalf of the Palm Island LDMG. Exercise Echo Alpha in 2016 was arranged by the District and required all local groups to produce an EA text and polygon and submit it to the State Disaster Coordination Centre – an excellent way for the District to seek assurance that disaster communication systems and warnings processes are working effectively.

The District Group, along with the local groups, is proactively working on improving its understanding, doctrine and processes relating to vulnerable people. Identification and profiling will reduce risks and refine contextualised emergency communications. There is the district-wide focus on improving aged-care facility disaster planning, and recently the District Group conducted a chemical plume exercise during which a potential risk to people on home oxygen was identified. The District Group should continue to play a strong role in coordinating this capability across the Disaster District.

## **Response**

The Office assessed Townsville District Group's Response Shared Responsibility as well placed.

### *Control*

The Townsville District Group has a control structure that is well governed with agreed communication processes across member agencies that is adaptive to emerging and changing disaster events. Information technology upgrades to the DDCC over the last two years has improved multi-agency access to corporate intranet and intelligence products resulting in more timely information sharing across agencies. Roles and responsibilities of the functional lead agencies are well articulated in the District Plan and a strong culture of information sharing is apparent across the network of government and non-government liaison officers.

Documented processes exist within the District Plan to review membership of the District Group annually to ensure members have the requisite authority to commit resources on behalf of their respective agencies. The EMC maintains a training register for all members of the group to ensure that all required Disaster Management Training, including Coordination Centre Operations, is completed by all core group members.

### *Command*

Command of the Townsville District Group is identified by us as strong. This is evidenced by the leadership provided by their experienced DDC and Executive Officer. Command decision-making is recorded in DIEMS and all liaison officers have visibility of DIEMS via access granted by the Executive Officer. The District Operational Plan and DDCC instructions provide insight into the strategic direction and operational decision-making capability of the group and are supported by the suggested information flow chart provided in the DDCC Instructions. This ensures that all information informing command decision-making is received succinctly and communicated unambiguously to all relevant stakeholders within the QDMA.

### *Cooperation and Coordination*

We observed a culture of cooperation during meetings with the Townsville District Group. The DDCC Instructions address cooperation and coordination across agencies succinctly, providing clear doctrine for operational goal setting. There appears to be strong engagement at all DDMG meetings by state agencies evidenced by high attendance rates. Queensland Health and DCDSS district subgroups to the DDMG share information readily on vulnerable persons and groups across the disaster district which aids situational awareness for the DDC in evacuation planning. The DDMG positions a QPS liaison officer in the Queensland Health Emergency Operations Centre during activations which further highlights the group's commitment to cross-agency coordination.

Following Tropical Cyclone Debbie, fatigue management considerations within the DDCC were identified by the Townsville District Group as a potential risk. The Executive Officer of the group has subsequently completed deployment planning to allow for the seamless transition into the DDCC of deployed coordination staff arriving to fill second and third shift capabilities. Pre-identification of staff with a complementary skill set for coordination centre operations has also been conducted by the Executive Officer to ensure improved service delivery to the Townsville District community. During validation, we heard other state agencies considering strategies to ensure staffing redundancies during protracted and extended events.

#### *Operational Information and Intelligence*

An intelligence cell operates within the DDCC with tasking managed as per the Townsville DDCC Instructions and QPS business practices. This operational cell informs District Disaster Coordinator decision making and event planning. Due to the strong cross-agency relationships previously discussed, intelligence products are disseminated rapidly and effectively. The Total Operational Mapping system (QFES) is utilised to further support cross-agency intelligence sharing. Operational information is managed via DIEMS with linkages via the IXP system to Guardian at local government level and Noggin at the SDCC. The Executive Officer is responsible for maintaining a SITREP update board on DIEMS to provide the State Disaster Coordination Centre with real time awareness of events in Townsville district. The office saw evidence that intelligence products are readily shared with LDMGs across the District LGAs which enhances all groups' capability.

#### *Resource Management*

The logistics capability within the DDCC is well placed to manage resource needs during response activities. The District Plan provides guidance for dealing with resupply requests from LGAs, information about NDRRA and robust advice covering financial accountability within the DDMG. Furthermore, the Townsville DDCC Instructions provide detailed role descriptions for staff working within the logistics capability. An emergency supply sub plan forms an annexure to the District Plan providing evidence of strong multi-agency contingency planning within the district. Relationships have been forged between the Townsville DDMG, Woolworths, Caltex and Puma Fuels to ensure the DDC maintains visibility of district resource capacity for these items, showing the DDMG's prioritisation of resources is consistent with community need.

A detailed spreadsheet of plant, equipment, removal and storage services across the Northern region was provided, however, the development of doctrine on the responsibilities and processes for management and delivery of these resources would improve district governance in this area. It would be beneficial for this planning to consider how the Townsville DDMG maintains visibility of offers of assistance being collated and managed at the LDMG level. The District Group should develop doctrine outlining responsibility for the management and delivery of government and non-

government resources based on identified and prioritised need which would further improve governance procedures and financial accountability in this area.

### **Relief and recovery**

The Office assessed Townsville District Group's Relief and Recovery Shared Responsibility as well placed.

The Disaster District Plan has a clear Recovery Strategy which is based on the Queensland Recovery Guidelines. The Strategy provides for the coordination of recovery operations across the District. The Plan also articulates activation triggers and transition across the phases of recovery.

#### *Relief*

Relief activities are supported by range of guiding documents, including an emergency supply sub plan. The partnerships developed and inclusion as members on the DDMG, support coordinated relief strategies with critical infrastructure providers and suppliers. We would encourage other District Groups to actively partner with these entities which are vital to ensure timely relief occurs. The District Plan and SOPs ensure that RFAs are well managed.

Impact assessment processes and relief activities are based on local groups and state agency plans. Queensland Fire and Emergency Services and QRA support relief work through damage assessments. conducted by a disaster assistance response team. An Air Support sub plan is in draft and has been developed to enhance the management of emergency supply. We encourage its completion and endorsement.

The District has a comprehensive approach to ensure that relief activities support the needs of Palm Island. We have heard about generator testing and discussions with the Island's shop to ensure levels of water and food are maintained leading up to an event. Positive relationships between the District and Palm Island Group enable this.

#### *Recovery*

The District Community Recovery Committee coordinates functional recovery areas. We were advised that turnover of personnel and varying levels of experience and skill sets have continued to present challenges. During our validation meetings, agencies with recovery lead roles were represented. We heard that following Tropical Cyclone Debbie these agencies have considered the issue of fatigue and deployment plans to better support relief and recovery activities. The Townsville District Human and Social Recovery committee meets outside of operational activity and has a sub plan to support activity.

Event planning is undertaken to ensure activities are tailored to communities that have been impacted. The Community Recovery Group provides governance and direction for this plan. We found the District Group understands funding arrangements and are supported by the QRA.

The District Group has documented learnings that are considered as part of their improvement process. This DDMG coordinated the QFES reception plan to take evacuees from the Whitsundays during Tropical Cyclone Debbie. The learnings from this activity should facilitate the broader development of reception planning across the District. Exercising recovery arrangements across the District would enhance capability.



## Conclusion

In a Disaster District comprised of seven diverse councils, dealing with an array of hazards and risks, collaboration and cooperation outside of disaster operations was visible to us. The level of leadership and disaster management expertise demonstrated by all Groups ensures that collectively Townsville Disaster District can effectively achieve the Key Outcomes of the Standard. Importantly, all Groups are positioning capability for future disaster events.

All groups actively seek out and employ good practice and fuse this with a pragmatic approach to disaster management. The arrangements in place are contextualised and commensurate with hazards faced and balanced with community needs. Where possible, these arrangements are integrated into normal council business practice, ensuring value for money, strengthening knowledge and expertise.

The principles of the Emergency Management Assurance Framework provide strategic guidance for the implementation of the Townsville Disaster District capability strategy. By using the Standard as the basis to guide effectiveness, the Townsville Disaster District continue to analyse performance and mechanisms to enhance capability. By adopting the strategy as a framework for action, the Townsville Disaster District can enhance workforce capability, make greater use of data and intelligence and produce a well-developed relief and recovery capability which will support a sustainable and resilient community. This will place this Disaster District as a recognised leader of excellence in disaster management.

## Appendix A: Relevant recommendations from previous reviews

| IGEM Review  | Rec No. | Responsible entity   | Recommendation  |
|--|---------|--|---|
| Review of state agency integration at a local and district level | 4       | <b>Lead:</b> Queensland Police Service<br><b>Support:</b> Queensland Fire and Emergency Services | Responsibilities of functional lead agencies and hazard-specific primary agencies are clearly articulated in state level doctrine, including the <i>Queensland State Disaster Management Plan</i> .   |
| Review of Local Government's Emergency Warning Capability        | 4       | <b>Lead:</b> Queensland Fire and Emergency Services  | The Public Information and Warnings Sub-plan Guide is reviewed to include: <ul style="list-style-type: none"> <li>• good practice examples</li> <li>• a broader range of considerations for barriers to effective communication</li> <li>• guidance to ensure warnings and public information is linked with state agency arrangements, when the event is led by a hazard-specific primary agency.</li> </ul> |
| 2015 Callide Creek Flood Review                                  | 10      | <b>Lead:</b> Banana Shire Local Disaster Management Group  | Local Disaster Coordination Centre capability and capacity should be reviewed to ensure adequate staffing arrangements are in place to fill key positions and that operational protocols are known and practiced across all functions to provide redundancy. Assistance for review and necessary training should be sought from key Local Disaster Management Group member agencies.                          |
| The Cyclone Debbie Review  | 2(a)    | QRA  | The operation and maintenance of flood gauges should be developed and planned for on a catchment basis.   |
| The Cyclone Debbie Review  | 2(b)    | DSITI/ QRA/ QFES   | Queensland should examine the feasibility of the installation of storm tide markers in prominent public places and the exploration of new technology to highlight storm tide risk to the community and its visitors.  |
| The Cyclone Debbie Review  | 2(c)    |  | Planning and warnings for storm tide should be based on modelling that shows the chances of events occurring (probabilistic).   |
| The Cyclone Debbie Review  | 3(b)    | QFES (with LDMGs)  | Local disaster management groups should focus on the business continuity of local critical infrastructure and its integration with other plans.   |
| The Cyclone Debbie Review  | 6(a)    | QFES   | Warnings and Emergency alerts: Efforts are made to improve the timeliness, accuracy and targeting of Emergency Alert messaging by: a) educating the sector about how Emergency Alert works in detail, <b>and involving them in its testing.</b>   |
| The Cyclone Debbie Review  | 8       | QHealth  | Evacuation: The Queensland Chief Health Officer should work with the Office of the Inspector-General Emergency Management to raise, with the Commonwealth, the need for all aged care providers to plan and exercise for evacuation to a similar safe establishment.  |

|                           |      |          |   |
|---------------------------|------|----------|---|
| The Cyclone Debbie Review | 9(b) | DPC      | Fatigue management strategies and guidance should be improved to ensure sustainable staffing practices are incorporated into disaster management planning.  |
| The Cyclone Debbie Review | 10   | QPS/QFES | Exercising should focus on vertical integration and include all levels of the system. A strategic program of exercises should be developed and implemented. |

## Appendix B: Consultation and engagement

Burdekin Shire Council

Burdekin Shire Local Disaster Management Group

Bureau of Meteorology

Chairpersons of Local Government Disaster Management Groups

Chairperson of District Disaster Management Group

Charters Towers Regional Council

Charters Towers Regional Council Local Disaster Management Group

Department of Aboriginal and Torres Strait Islander Partnerships

Department of Communities, Child Safety and Disability Services (former), renamed Department of Communities, Disability Services and Seniors

Department of the Premier and Cabinet

Disaster Management Interdepartmental Committee

Flinders Shire Council

Flinders Shire Local Disaster Management Group

Hinchinbrook Shire Council

Hinchinbrook Shire Local Disaster Management Group

James Cook University, Cyclone Testing Station

Local Government Association of Queensland

Palm Island Aboriginal Shire Council

Palm Island Aboriginal Shire Local Disaster Management Group

Richmond Shire Council

Richmond Shire Local Disaster Management Group

Queensland Fire and Emergency Services

Queensland Health

Queensland Police Service

Queensland Reconstruction Authority

Townsville City Council

Townsville Local Disaster Management Group

Townsville District Disaster Management Group



## End notes

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- <sup>1</sup> Disaster Management Act 2003, s.16C(g).
- <sup>2</sup> Townsville City Council 2016, Townsville Local Disaster Management Plan, version 10.0, p. 14.
- <sup>3</sup> Australian Bureau of Statistics 2016 census data, quoted by QFES GIS
- <sup>4</sup> Townsville City Council 2016, Townsville Local Disaster Management Plan, version 10.0, p. 17.
- <sup>5</sup> Townsville City Council 2016, Townsville Local Disaster Management Plan, version 10.0, p. 20
- <sup>6</sup> Townsville City Council 2016, Townsville Local Disaster Management Plan, version 10.0, p.25.
- <sup>7</sup> Disaster Management Act 2003, s. 80.
- <sup>8</sup> Disaster Management Act 2003, s. 23(b) (d).
- <sup>9</sup> Queensland Reconstruction Authority 2017, Queensland Strategy for Disaster Resilience 2017: Making Queensland the most disaster resilient state in Australia, <http://qldreconstruction.org.au/QSDR>, p. 7.
- <sup>10</sup> Disaster Management Act 2003, s. 30(i).
- <sup>11</sup> Disaster Management Act 2003, s. 23(f), s. 30(e).
- <sup>12</sup> Inspector-General Emergency Management 2017, The Cyclone Debbie Review, Queensland Government, Brisbane, [https://www.igem.qld.gov.au/reports-and-publications/Documents/Cyclone%20Debbie%20Review%20Rpt1-17-18\\_PUBLIC\\_WEB.pdf](https://www.igem.qld.gov.au/reports-and-publications/Documents/Cyclone%20Debbie%20Review%20Rpt1-17-18_PUBLIC_WEB.pdf), p.94
- <sup>13</sup> Inspector-General Emergency Management 2017, The Cyclone Debbie Review, Queensland Government, Brisbane, [https://www.igem.qld.gov.au/reports-and-publications/Documents/Cyclone%20Debbie%20Review%20Rpt1-17-18\\_PUBLIC\\_WEB.pdf](https://www.igem.qld.gov.au/reports-and-publications/Documents/Cyclone%20Debbie%20Review%20Rpt1-17-18_PUBLIC_WEB.pdf), p.91-95.
- <sup>14</sup> Disaster Management Act 2003, s. 4A(c).
- <sup>15</sup> Disaster Management Act 2003, s. 80(1)(a).
- <sup>16</sup> Disaster Management Act 2003, s. 23(b) (d), s. 30(b) (c).
- <sup>17</sup> Disaster Management Act 2003, s. 30(h).
- <sup>18</sup> Disaster Management Act 2003, s. 30(d).
- <sup>19</sup> Disaster Management Act 2003, s. 23(g) (h) (i).
- <sup>20</sup> Department of Communities, Child Safety and Disability Services 2016, People with vulnerabilities in disasters: A framework for an effective local response, <https://www.qld.gov.au/community/documents/disasters-emergencies/supporting-people-with-vulnerabilities-framework.pdf>.
- <sup>21</sup> Burdekin Shire Council 2017, Exercise Echo Alpha - Burdekin self-evaluation, unpublished, p.58.
- <sup>22</sup> Burdekin Shire Council 2017, Burdekin Shire Council Disaster Coordination Centre Facebook page, <https://www.facebook.com/BurdekinDCC>, viewed 9 November 2017.
- <sup>23</sup> Office of the Inspector-General Emergency Management 2017, Townsville District Capability Review: Quantitative Research with Community Members - Report, Queensland Government, Brisbane, s.3.7, p.45.
- <sup>24</sup> Office of the Inspector-General Emergency Management 2017, Townsville District Capability Review: Quantitative Research with Community Members - Report, Queensland Government, Brisbane, s.3.8, p.51.
- <sup>25</sup> <http://qldreconstruction.org.au/the-queensland-betterment-fund-building-resilience/queensland-flood-warning-gauge-network-review-copy>
- <sup>26</sup> Bureau of Meteorology 2017, Charters Towers Regional Council Network Investment Plan, unpublished, p.11.
- <sup>27</sup> Office of the Inspector-General Emergency Management 2017, Townsville District Capability Review: Quantitative Research with Community Members - Report, Queensland Government, Brisbane, s.3.7, p.45.
- <sup>28</sup> Office of the Inspector-General Emergency Management 2017, Townsville District Capability Review: Quantitative Research with Community Members - Report, Queensland Government, Brisbane, s.3.8, p.51.
- <sup>29</sup> Australian Bureau of Statistics 2016 census data, quoted by QFES GIS.
- <sup>30</sup> Disaster Management Act 2003, s.80(1)(a) and (2).
- <sup>31</sup> Office of the Inspector-General Emergency Management 2017, Townsville District Capability Review: Quantitative Research with Community Members - Report, Queensland Government, Brisbane, s.3.7, p.45.
- <sup>32</sup> Office of the Inspector-General Emergency Management 2017, Townsville District Capability Review: Quantitative Research with Community Members - Report, Queensland Government, Brisbane, s.3.8, p.51.
- <sup>33</sup> Australian Bureau of Statistics 2016 census data, quoted by QFES GIS
- <sup>34</sup> Queensland Reconstruction Authority 2017, *Reconstruction Projects Map*, <http://qldreconstruction.org.au/maps/reconstruction-projects-map>
- <sup>35</sup> Australian Bureau of Statistics 2016 census data, quoted by QFES GIS
- <sup>36</sup> Queensland Reconstruction Authority 2017, *Reconstruction Projects Map*, <http://qldreconstruction.org.au/maps/reconstruction-projects-map>

<sup>37</sup> Office of the Inspector-General Emergency Management 2017, Townsville District Capability Review: Quantitative Research with Community Members - Report, Queensland Government, Brisbane, s.3.8, p.51.

<sup>38</sup> Australian Bureau of Statistics 2016 census data, quoted by QFES GIS.

<sup>39</sup> Richmond Shire Council 2017, Road report – as at 9:30AM, October 25th 2017, [https://www.richmond.qld.gov.au/images/Road\\_Conditions/Road\\_Conditions\\_25\\_10\\_2017.pdf](https://www.richmond.qld.gov.au/images/Road_Conditions/Road_Conditions_25_10_2017.pdf), viewed 6 November 2017.

<sup>40</sup> Richmond Shire Council 2017, Richmond Shire Council website, *Road Conditions*, <https://www.richmond.qld.gov.au/council/road-conditions>, viewed 15 December, 2017.

<sup>41</sup> Office of the Inspector-General Emergency Management 2017, Townsville District Capability Review: Quantitative Research with Community Members - Report, Queensland Government, Brisbane, s.3.8, p.51.

Office of the Inspector-General Emergency Management 2017, Townsville District Capability Review: Quantitative Research with Community Members - Report, Queensland Government, Brisbane, s.3.7, p.45.

<sup>43</sup> Australian Bureau of Statistics 2016 census data, quoted by QFES GIS

<sup>44</sup> Townsville City Council 2016, Townsville Local Disaster Management Plan, version 10.0, p.70-71.

<sup>45</sup> Inspector-General Emergency Management 2017, The Cyclone Debbie Review, Queensland Government, Brisbane, [https://www.igem.qld.gov.au/reports-and-publications/Documents/Cyclone%20Debbie%20Review%20Rpt1-17-18\\_PUBLIC\\_WEB.pdf](https://www.igem.qld.gov.au/reports-and-publications/Documents/Cyclone%20Debbie%20Review%20Rpt1-17-18_PUBLIC_WEB.pdf), p.98-101.

<sup>46</sup> Inspector-General Emergency Management 2017, The Cyclone Debbie Review, Queensland Government, Brisbane, [https://www.igem.qld.gov.au/reports-and-publications/Documents/Cyclone%20Debbie%20Review%20Rpt1-17-18\\_PUBLIC\\_WEB.pdf](https://www.igem.qld.gov.au/reports-and-publications/Documents/Cyclone%20Debbie%20Review%20Rpt1-17-18_PUBLIC_WEB.pdf), p.75.

<sup>47</sup> Disaster Management Act 2003, s.23(j)

<sup>48</sup> Inspector-General Emergency Management 2014, Emergency Management Assurance Framework, <https://www.igem.qld.gov.au/assurance-framework/Documents/IGEM-EMAF.pdf>, p.24.

<sup>49</sup> Disaster Management Act 2003, s.23(f)