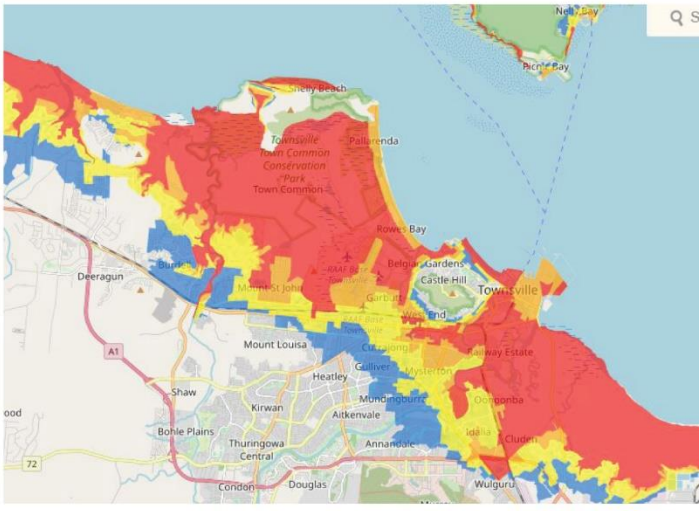
TOWNSVILLE LOCAL DISASTER MANAGEMENT GROUP

City of Townsville

Evacuation Sub Plan

Local Disaster Management Plan (LDMP) Sub Plan

V7 July 2025



This plan is to be read in conjunction with the Townsville Local Disaster Management Plan (LDMP)

Executive Summary

This Evacuation Sub Plan has been developed by the Townsville Local Disaster Management Group (TLDMG) to outline the arrangements for evacuating at-risk persons in the Townsville City Council (TCC) local government area.

Section 1 provides an overview of the plan including the aim and objectives, ownership, functional responsibility and the support agencies required to implement the plan. It also provides links to other key documents that inform this plan.

Section 2 relates to how the plan is activated, who needs to be notified and includes a visual aid flowchart as a quick reference guide. This section also identifies how the Evacuation and Transport Working Group will be activated.

Section 3 provides an overview of the Evacuation and Transport Working Group including membership and meetings.

Section 4 provides an overview of the TLDMG's evacuation strategy including the authority to evacuate, the three types of evacuation (self-evacuation, voluntary and directed evacuation), the requirement for District and State support during local evacuation operations and outlines the five stages of the evacuation process.

Section 5 covers the decision phase which is the first stage of the evacuation process and identifies the requirement to develop timelines for evacuation operations.

Section 6 provides details on the warning phase including the requirement to issue community warnings regarding evacuation operations.

Section 7 provides details on the withdrawal phase which involves the safe and efficient process of relocating community members from hazardous or potentially hazardous environments to safer areas including evacuation routes, traffic management strategies, transportation, evacuation of vulnerable persons and animals and implementation of a security strategy to protect evacuated communities.

Section 8 provides detail on the shelter phase including the shelter and evacuation options available for residents and visitors to the TCC area.

Section 9 provides covers the return phase which is the last stage of the evacuation process and covers the decision for return as well as development and implementation of the return strategy.

Appendices A-D provide supporting information such as an Evacuation Operational Checklist, Storm Tide Evacuation Zone Maps, Riverine Flood Mapping and Evacuation Zones associated with the Ross River Dam and a map of the TCC area depicting the pre-identified evacuation routes for the entire local government area.

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Endorsement

This plan is recommended for distribution by the Townsville Local Disaster Management Group.

Inspector Todd Noble
Chair TLDMG Evacuation & Transport Working Group
Townsville Local Disaster Management Group

Date: 15 July 2025

Zac Dawes
Local Disaster Coordinator
Townsville Local Disaster Management Group

Date: 15 July 2025

Cr Andrew Robinson
Chair
Townsville Local Disaster Management Group

Date: 15 July 2025

Version Control & Record of Amendments

Amendment		Plan Updated		
Version No.	**Issue Date**	**Inserted by**	**Action**	**Date**
01 Initial Plan	February 2018	Wayne Preedy	Initial Plan (combined Evacuation & Transport SubPlan)	5 February 2018
02	January 2019	Wayne Preedy	Annual Review	24 January 2019
03	February 2021	Wayne Preedy Darron Irwin	EA Coloured Zones changed(All reference to brown removed) wording in voice message and text also updated.	10 February 2021
	May 2021	Wayne Preedy (LDC) Melissa McKeown Damien Crosby (QPS) Margaret Lessells(QFES-EM) Anthony Melrose(TMR-MSQ) Ben Sanderson(EnergyQ) CAPT Trent Lamb(Defence) Libby Preedy (Q Health)	Annual Review	27 May 2021
04		Wayne Preedy – LDC TLDMG Members	Annual Review	30 June 2022
05	March 2023	Wayne Preedy – LDC Dean Cavanagh – QPS	Annual Review	30 June 2023
06	August 2024	Zac Dawes – LDC Todd Noble – QPS Deloitte	Annual review Remove Transport Component Deloitte Consultation	
7.0	June 2025	Z. Dawes - LDC Todd Noble - QPS	Annual Review	July 2025

Consultation

A consultative process is used when developing the LDMP and associated Sub Plans. Prior to adoption, the Sub Plan is released for consultation with all core members and advisors of the LDMG and the working group members The key stakeholders to be consulted in the development of Sub Plans varies for each plan and is determined by TCC. Updates to plans are based on stakeholder feedback and records are maintained by TCC on the stakeholders that were consulted and those that provided feedback.

1. Overview of Plan

1.1. Aim & Objectives of Plan

The aim of this Evacuation Sub Plan is to outline the arrangements for the implementation of an evacuation of "at-risk" persons (including transportation) within the Townsville Local Disaster Management Group (TLDMG) area of responsibility. The objectives are to:

- Identify the persons exposed and at risk.
- Document the processes for making decisions to evacuate.
- Coordinate an organised movement of persons to a safer location and their eventual return.
- Define emergency services and supporting agencies responsibilities.
- Provide effective liaison between all emergency services and supporting agencies.
- Provide arrangements for efficient coordination of local resources and any external support resources.

1.2. Context & Assumptions

Evacuation is a strategy that can mitigate the adverse effects of a disaster on a community. Evacuation may be required pre-impact as a protective measure, or post-impact as a result of a loss of services. The decision to evacuate is not taken lightly and is not without risk.

Some disasters are slow-moving and provide ample decision and reaction time. The worst-case scenario is little to no warning of the need to evacuate. There may not be time to obtain support from outside resources and, as a result, local resources could be severely stretched.

Past events suggest that between 5% and 20% of those at risk will spontaneously evacuate before being directed to do so. Most of the community will act in their own interest and evacuate dangerous areas when advised by authorities. However, some people will refuse to evacuate, regardless of the threat, and owners of animals may refuse to evacuate unless arrangements have been made to care for their animals.

Evacuees will be encouraged to be self-sufficient and seek shelter with family or friends or use commercial accommodation providers. In some circumstances, evacuation centres may be established to meet the basic needs of evacuees. Evacuation centres may be required for a few hours to several days. Only shelter and refreshments will be provided initially but, in an extended event, more substantial catering and support may be necessary. If accommodation is required for a period beyond a few days, the Local Disaster Management Group (LDMG) will consult with the Department of Housing, Local Government, Planning and Public Works.

The evacuation process is based on the Australian Institute for Disaster Resilience National Evacuation Planning Handbook. It highlights the need to work with communities at risk well before a disaster occurs to mitigate negative impacts on the success of evacuations.

1.3. Ownership

This sub-plan is owned by the Local Disaster Coordinator (LDC) on behalf of the TLDMG. All significant amendments must be approved by the TLDMG.

The LDC will ensure the:

- master document is retained with relevant supporting documents.
- level of circulation of the sub-plan is determined by the TLDMG, and details are recorded of copyholders.
- sub-plan is updated and reviewed on at least an annual basis, or after activation, whichever is the sooner.
- sub-plan is tested and exercised as determined by the TLDMG.

1.4. Functional Responsibility & Support Agencies

Evacuation is the functional responsibility of Queensland Police Service (QPS) and the LDMG.

The LDC is to ensure all agencies and members of the TLDMG are aware of these evacuation procedures.

1.5. Links with Other Documents

This sub-plan is interdependent on, and should be read in conjunction with, the Local Disaster Management Plan (LDMP). It links directly to all other sub-plans including the TLDMG Emergency Contact Lists. This sub plan also links to the:

- Townsville Local Disaster Management Plan
- Townsville Evacuation Operational Procedure.
- TLDMG Public Information and Warnings Sub Plan
- TLDMG Logistics Sub Plan
- Hazard Studies and Reports
- TLDMG Shelters and Evacuation Centres Sub Plan
- TLDMG Community Education and Marketing Strategy
- Queensland Disaster Management Act 2003
- Evacuation: Responsibilities, Arrangements and Management 2018
- Evacuation: Responsibilities, Arrangements and Management Manual – M.1.190
- Queensland Evacuation Centre Planning Toolkit
- Queensland Evacuation Centre Management Handbook
- Queensland Evacuation Centre Field Guide
- Australian Red Cross COVID-19 Evacuation Centre Planning & Operational Considerations

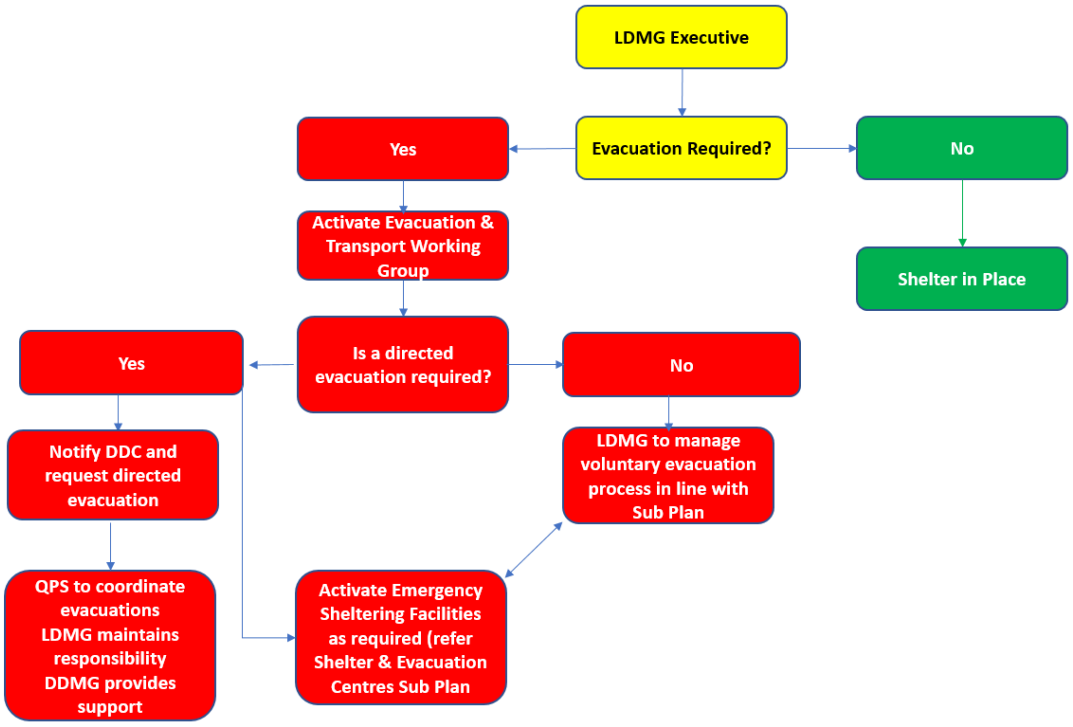
2. Activation & Notification Procedures

2.1. Activation of the Plan

This Sub Plan will be activated by the Local Disaster Coordinator (LDC) of the TLDMG where the nature of a threat/hazard to the community will require the movement of "at risk" persons to a safer location.

In any evacuation scenario, it is likely that the TLDMG and/or the Townsville Local Disaster Coordination Centre (LDCC) will have already been activated. Further details regarding activation are located within 5.2 & 5.3 of the Townsville Local Disaster Management Plan, LDCC Standard Operating Procedures (SOP) and the TLDMG Standard Operating Procedure (SOP).

2.2. Notification Flowchart



2.3. Notification Process

The LDMG will maintain a state of readiness for evacuation operations. All evacuation operations will be undertaken in close collaboration with the District Disaster Coordinator (DDC).

If a directed evacuation is not required, the LDMG may recommend voluntary evacuation and manage in accordance with this sub-plan. The decision to recommend voluntary evacuation will be made by the Evacuation and Transport Working Group to the TLDMG, subsequent to a situational briefing. If evacuation is deemed necessary, the TLDMG will activate the Evacuation Sub-Plan.

If a directed evacuation is required, the DDC may be required to declare a disaster situation under the *Disaster Management Act 2003*. Emergency Sheltering Facilities will be activated as deemed necessary by the TLDMG to support evacuation operations. Refer to Shelters and Evacuation Centres Sub Plan.

2.4. Activation of the Evacuation & Transport Working Group

The LDC or the Chair of the TLDMG will direct the Chair of the Evacuation & Transport Working Group to activate when and if required. When time permits this will be endorsed via the core membership of TLDMG – refer section 3.

3. Evacuation & Transport Working Group

3.1. Meetings

The Evacuation & Transport Working Group will meet at least annually to perform planning, review and renew activities associated with the arrangements outlined within this sub plan. A formal Attendance Record will be kept, and minutes will be documented for each meeting.

3.2. Membership

The Evacuation & Transport Working Group is responsible for planning and coordinating evacuation & available transportation requirements in the event of an emergency or disaster.

The QPS Core Member of the TLDMG is the Chair of the Townsville Evacuation & Transport Working Group based on their primary role for evacuations.

The Evacuation & Transport Working Group consists of government and non-government agencies with operational roles in evacuation planning and operations– refer confidential contact list in Guardian IMS.

The roles and responsibilities of members of the Evacuation and Transport Working Group is.

- Review and maintain the Evacuation Operation Procedure
- Develop event-specific evacuation plans as required.
- Assess Rapid Damage Assessment and hydrology data to inform the decision to evacuate.
- Establish strategies, tactics and operational requirements for the development of traffic management plans.
- Provide reports and make recommendations to the TLDMG about matters relating to transportation disaster management issues.
- Regularly review and assess the Evacuation Sub Plan
- Review and maintain the Transport Resource List available to assist the TLDMG with its response to disaster events.
- Coordinate the provision of transport of personnel, equipment, provisions and the public as required, in the event of a disaster or major event.

4. Evacuation Strategy

4.1. Authority to Evacuate

Evacuations undertaken during small-scale incidents for the purposes of public safety would be conducted by Emergency Service responders in the execution of their normal duties and authorised in accordance with their relevant legislation. This Evacuation Sub Plan is designed for the evacuation of persons at risk from large-scale disaster events in accordance with, and under the authority of, the *Disaster Management Act 2003*.

There are three (3) types of evacuation:

4.1.1 Self-Evacuation

Self-evacuation refers to when persons, who may be impacted by an impending hazard, proactively choose to evacuate without advice or direction from authorities (Evacuation: Responsibilities, Arrangements and Management 2018).

4.1.2 Voluntary Evacuation

Voluntary evacuation refers to the encouragement of exposed (i.e. “at-risk”) persons, who may be impacted by an impending hazard, to commence evacuation voluntarily (Evacuation Responsibilities, Arrangements and Management 2018).

The voluntary evacuation of "at-risk" persons may be authorised and implemented by the LDC of the TLDMG. The LDC will take reasonable steps to consult with and brief the Townsville District Disaster Coordinator (DDC) prior to the implementation of this decision.

4.1.3 Directed Evacuation

Directed evacuation refers to the directed evacuation of exposed (“at-risk”) persons by the DDC or Declared Disaster Officer under legislation to evacuate an exposed (disaster) area (Evacuation: Responsibilities, Arrangements and Management 2018).

A directed evacuation requires the approval of the DDC upon recommendation by the Townsville LDC. This request would also be based on advice from the chair of the Evacuation & Transport Working Group. Upon receipt of a recommendation for directed evacuation from the LDC or following consultation between the DDC and the LDC, the DDC will seek the approval from the Minister of Police, & Corrective Services and Emergency Services for the declaration of a disaster situation in accordance with the provisions of the *Disaster Management Act 2003*.

Upon approval of the declaration, a directed evacuation order may be issued by the DDC, and persons may be authorised to exercise declared disaster powers to enable the effective conduct of the withdrawal process. This is detailed in the QPS Townsville Operational Evacuation Procedure.

4.2. District & State Support

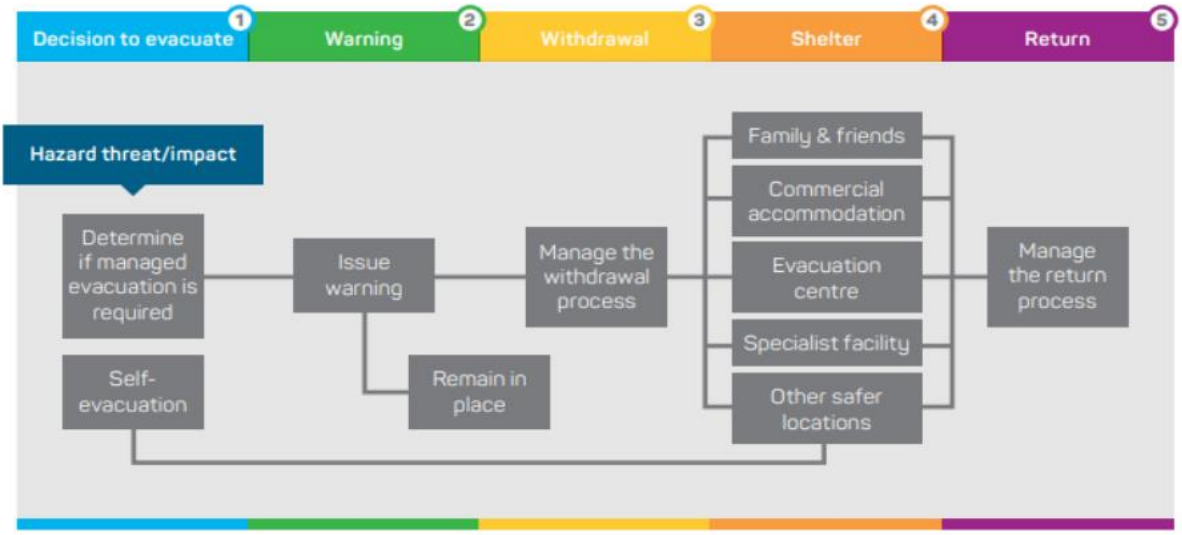
The movement of evacuees requires local and district collaboration and may also require state-involvement. Some individuals and groups in the community will require more assistance than others, and support may be needed with evacuation centre operations. Early liaison with the DDC should be initiated, as positioning of state resources may take several hours or days to occur.

4.3. Evacuation Stages

The evacuation process is based on the Australian Institute for Disaster Resilience National Evacuation Planning Handbook. It highlights the need to work with communities at risk well before a disaster occurs to mitigate negative impacts on the success of evacuations.

Evacuations involve five stages.

1. Decision to evacuate — decision makers analyse event intelligence and assess the need to evacuate persons.
2. Warning — disaster event conditions and appropriate actions are conveyed to the public.
3. Withdrawal — exposed persons are moved from a dangerous or potentially dangerous area to a safer location.
4. Shelter — refuge and basic needs are provided in evacuation facilities.
5. Return — the disaster area is assessed and return of evacuees planned. Planning at each of these stages is crucial.



The evacuation process must provide relative safety to evacuees. The decision to evacuate, the withdrawal process, the period of shelter and the return process should not expose the community to risks. An evacuation is not considered to be complete until all five stages have been implemented, and the evacuated population has been returned (where possible) to their original location.

4.4. Evacuation Strategy

Evacuation strategies have been considered for:

- Cyclone only
- Storm Tide (associated with cyclone)
- Flooding including riverine flooding associated with Ross River Dam or Ross River Dam break.
- Tsunami (if time permits to consider evacuation operations)
- Landslide
- Bushfire.

Table 1 outlines a pre-determined evacuation strategy for a range of threats and associated risks identified in Townsville's All Hazard Risk Assessment Study.

Threat	Areas at risk	Population	Evacuation Method	Safer Location	Evacuation Route	Estimated Evacuation Timeframe	Transport Issues
Cyclone Cat 1	Nil	195,223	Shelter in Place	n/a	n/a	n/a	n/a
Cyclone Cat 2	Nil	195,223	Shelter in Place	n/a	n/a	n/a	n/a
Cyclone Cat 3	Total LG Area	195,223	Voluntary for "atrisk" homes	• Family and friends • Place of Refuge/Shelter	As per plan (see *Appendix D*)	12 - 18 hours	Rail, Airport and Port will be closed
Cyclone Cat 4	Total LG Area	195,223	Voluntary for "atrisk" homes	• Family and friends • Place of Refuge/Shelter	As per plan (see *Appendix D*)	12 - 18 hours	Rail, Airport and Port will be closed
Cyclone Cat 5	Total LG Area	195,223	Voluntary for "atrisk" homes	• Family and friends • Place of Refuge/Shelter	As per plan (see *Appendix D*)	12 - 18 hours	Rail, Airport and Port will be closed.

Threat	Areas at risk	Population	Evacuation Method	Safer Location	Evacuation Route	Estimated Evacuation Timeframe	Transport Issues
Storm Tide	**Red Zone**	9,935	Directed	• Family and friends • Place of Refuge/Shelter	As per plan (see *Appendix D*)	12 - 18 hours	Rail, Airport and Port will be closed
	Orange Zone (plus Red Zone)	12,151 **(Total = 22,086)**	Directed	• Family and friends • Place of Refuge/Shelter	As per plan (see *Appendix D*)	12 - 18 hours	Rail, Airport and Port will be closed
	Yellow Zone (plus Red/Orange Zones)	20,850 **(Total = 42,936)**	Directed	• Family and friends • Place of Refuge/Shelter	As per plan (see *Appendix D*)	12 - 18 hours	Rail, Airport and Port will be closed
	Blue Zone (plus, Red/Orange/ Yellow Zones)	23,294 **(Total = 66,230)**	Directed	• Family and friends • Place of Refuge/Shelter	As per plan (see *Appendix D*)	12 - 18 hours	Rail, Airport and Port will be closed
Minor Flooding		Nil	Shelter in Place	n/a	n/a	n/a	n/a
Moderate Flooding	As per flood maps(see Appendix C)	Dependent upon location	Voluntary	• Family and friends • Place of Refuge/Shelter	As per plan	Unknown	Dependent upon location
Major Flooding (including Riverine Flooding)	As per flood maps(see Appendix C)	> 1,000	Voluntary or Directed	• Family and friends • Place of Refuge/Shelter	As per plan	12 - 18 hours	

Threat	Areas at risk	Population	Evacuation Method	Safer Location	Evacuation Route	Estimated Evacuation Timeframe	Transport Issues
Tsunami (marine threat)	Marinas	>200	Directed	As per Marina EvacuationPlan	n/a	n/a	n/a
Tsunami (land threat)	Coastal suburbs	<30,000	Directed	As per Tsunami Evacuati on Guide	As per Tsunami Sub Plan (see *Appendix D*)	1 to 3 hours	Nursing Homes willrequire assistance
Severe Weather (flash flooding, damaging winds, anomalously high tides <0.5m above HAT)	Nil	Nil	Shelter in Place	n/a	n/a	n/a	n/a
Severe Weather (flash flooding, damaging winds, anomalously high tides >0.5m above HAT)	Parts of coastal suburbs	<5,000	Directed	Evacuation Centre (see relevant Procedure)	As per plan (see *Appendix D*)	1 to 3 hours	Nursing Homes willrequire assistance
Bushfire	As per Bushfire Study	Unknown	Directed	Bushfire Safe Locations	As per plan (see *Appendix D*)	6 to 8 hours	-
Landslide	As per Landslide Study	<1,000	Directed	Away from steep slope areas	n/a	4 to 6 hours	-

- Population figures are based on 2021 census data.

1. Estimated evacuation timeframe is derived from the Timelines outlined under Decision to Evacuate.
2. Minor flooding: Causes inconvenience. Low-lying areas next to water courses are inundated which may require the removal of stock and equipment. Minor roads may be closed, and low-level bridges submerged.
3. Moderate flooding: In addition to the above, the evacuation of some houses may be required. Main traffic routes may be covered. The area of inundation is substantial in rural areas requiring the removal of stock.
4. Major flooding: In addition to the above, extensive rural areas and/or urban areas are inundated. Properties and towns are likely to be isolated and major traffic routes likely to be closed. Evacuation of people from flood affected areas may be required.
5. Severe Weather: Includes any non-tropical cyclone conditions that may produce anomalously high tides and coastal inundation, for example East Coast Lows.

The evacuation strategy provides a basis of reference data to enable prompt decision making and can be refined at the time of an event, where the data is influenced by event specific factors such as size, magnitude and impacts of the event.

Evacuation Zone Maps (refer Appendices) have been developed for Storm Tide, Tsunami and Riverine Flooding threats. These will be utilised to inform decision making regarding areas and suburbs requiring to be evacuated.

Refer to Section 5.2 of this plan for details on evacuation timelines and timeframes.

5. Decision Phase

5.1. Situational Analysis - Decision to Evacuate

Evacuation is a last resort. The best advice will often be to shelter at home and await further advice if safe to do so. Reaching the decision that evacuation is required can be very easy — it becomes obvious that evacuation is the only sensible way of protecting the population. In other instances, the decision is less obvious, and if delayed could cause substantial problems.

The decision to evacuate is the first stage of the evacuation process and must be made in a timely manner to ensure it can be effectively implemented. During this stage, the TLDMG will analyse specific event information and intelligence and make an assessment on the necessity to evacuate persons at risk. If they consider that an evacuation “may” be required, they will activate the Evacuation and Transport Working Group. Factors, which will affect this decision, include:

- Advice from relevant authorities on severity, arrival and impact areas.
- The applicability of predetermined vulnerable zones and modification of existing or development of additional maps as required.
- The population within the "at risk" area and the numbers of persons that may require evacuation.
- The time required to complete the evacuation and the lead time available.
- The best shelter and evacuation option.
- The capacity of proposed evacuation routes to support rapid egress by pedestrian and/or vehicular traffic given the specific event-related conditions.
- The suitability of proposed shelter and/or assembly points, including the ability to establish them quickly and sustain them for the duration of the event.
- Specific transportation requirements (e.g. for vulnerable groups).
- Specific arrangements for facilities to support and accommodate special needs populations.
- Availability and access to the resources required to effectively manage the evacuation.

Is evacuation achievable, safe and the most suitable option?

Is shelter in place a safer alternative?

What type of evacuation is necessary - voluntary or directed?

The final decision to conduct an evacuation will be based on a full and measured risk assessment of all available data, as well as consideration for the availability of alternative public protection measures.

5.2. Timelines

Understanding the timeline of hazard impact and how long it will take to safely evacuate is vital. Evacuation timelines guide the decision making for evacuation. Once a predicted impact time is assessed, planners work backwards, subtracting time allowances for warning and withdrawal. The resulting time is the latest time a decision can be made. The TLDMG should develop evacuation timelines when the assessed impact of a hazard indicates evacuations may be required. Timelines have been developed for planning purposes and will be refined at the time of an event.

6. Warning Phase

6.1. Issuing Warnings

A warning to evacuate needs to be communicated when exposed areas have been identified, the locations of safer areas have been determined, and the decision to evacuate has been made.

The prime function of a warning is to elicit action from the community. If a warning does not describe the situation, risk and required actions in clear terms, then it will not be effective.

Sufficient warning time must be given to allow the movement of a population from a place of danger to a safer place, given the restriction of weather conditions, transport and the capacity of the road network.

Public information in relation to a recommended evacuation should include:

- areas to be evacuated
- evacuation routes
- evacuation centre locations
- lead time
- anticipated duration
- evacuation kit contents
- request to pass on information to friends and neighbours.

The community are also to be reminded of the need to take with them their Evacuation Kit which should contain details of prescription medications, food, water, clothing, and other personal supplies needed during an evacuation and to be a good neighbour and help others who may need assistance.

Refer to the Public Information and Warnings Sub-Plan.

7. Withdrawal Phase

7.1. Process of Withdrawal

The withdrawal phase involves the safe and efficient process of relocating community members from hazardous or potentially hazardous environments to safer areas. Specific withdrawal arrangements for "at risk" areas in the Townsville local government area have been pre-planned – refer table below. Withdrawal of other communities will require event specific planning to be undertaken.

"At Risk" Area	Transport Mode	Transport Provider	Pick Up Point	Destination	Comment
Magnetic Island	Ferry	Private company	Nelly Bay Harbour	Ross Creek terminal	
	Barge		Nelly Bay Harbour	Ross Creek terminal	
Bolton Clarke Rowes Bay Residential Aged Care Facility	Ambulance/ Bus	QAS Council	Pallarenda Road	To be advised	As per TACPG Agreement
	Ambulance/ Bus	QAS Council	Pallarenda Road	Other Aged Care Facilities, likely to be Bolton Clarke Glendale facility on Dalrymple Rd	As per TACPG Agreement
Cungulla	Cars	Personal	Cungulla	Australian Institute of Marine Science (AIMS)	For inundation events
Paluma	Cars	Personal	Mutarnee	To be advised	

7.2. Evacuation Routes

Evacuation Routes are reflected in Appendix D.

TCC will work with QPS, State Emergency Service and Department of Transport and Main Roads to ensure designated evacuation routes are kept trafficable and clear of debris.

7.3. Traffic Management Strategy

Transport issues will be assessed and managed by the Chair of the Evacuation and Transport Working Group on advice from the DTMR representative and the TCC Team Leader Traffic Management. Community messaging will be issued advising on road conditions and evacuation routes for disaster events. Refer to the Public Information and Warnings Sub Plan.

7.3.1 Localised Traffic Management Plans

Localised Traffic Management Plans (LTMPs) should be scalable, flexible and continually monitored and reviewed in order to be responsive to changing operational tempo, intelligence, priorities and conditions. The objectives of LTMPs are to:

- Increase traffic management planning and preparedness.
- Reduce the adverse impacts of a disaster event or other critical incident on the community.
- Support the emergency management framework.
- Facilitate timely response and recovery activities.

Personnel familiar with the local area should be responsible for the development of localised traffic management plans as it is their local knowledge that will inform the detailed planning. Council and local QPS should be the lead agencies with support from additional agencies as required.

7.3.2 Heatley Public Cyclone Shelter Localised Traffic Management Plan

The LDC, Chair of the Evacuation & Transport Working Group and Chair of the Shelters & Evacuation Centres Working Group have established an agreed process with a major shopping centre to utilise an area of their carpark as a “staging area”, which will allow members of the public to park private vehicles there and be transported (via buses sourced by TransLink) to Heatley Public Cyclone Shelter (PCS) (when activated). At the time of the event messaging will be pushed out to the community to detail the parking and ride arrangements.

7.3.3 Managing the Transportation Network

Priority should always be given to major and arterial roads for evacuation purposes – see Appendix D.

Where evacuation is deemed necessary, exclusion zones should be established where entry is only permissible to emergency vehicles, other authorised vehicles and operators (e.g. commercial operators clearing waste), and bona fide residents.

Where possible, closures should be established early to prevent unwanted traffic from entering the area. Consider whether closures require control by police, a contracted traffic controller, or a member of the SES. If the closure will be unmanned, determine the type of barrier and signage that will be required.

Consideration should be given to:

- Establishing dedicated routes IN and OUT (i.e. one way, contra flow) if necessary. Use of Variable Messaging Signs should be considered to support key messaging.
- Implementing rolling and static closure programs and grid closures. This approach may assist with effective and efficient resource allocation and minimise the time spent in any one particular location.
- Identifying and establishing suitable haulage routes and run-on areas for trucks to marshal prior to entering the controlled area. Separate these routes from general traffic routes
- Identifying suitable vehicle staging areas for persons visiting and assisting such as volunteers and trades people (e.g. nearby parks' carparks)
- Identifying and establish suitable staging areas for the disembarkation from public transport of mass volunteers
- Identifying and establish suitable pedestrian routes for general pedestrian traffic as well as mass volunteers
- Identifying alternate routes and options
- Establishment of strategic traffic control points. Monitor the wider traffic area for emerging issues such as congestion or other incidents that may impact on the traffic management plan.

7.4. Transportation

The provision of transport resources in response to a major event is an area, which requires the development of information in relation to the resources available locally. The Logistics Sub Plan provides information relating to transport assets.

In the context of evacuation, transportation assets may be required to support:

- Persons requiring assistance to evacuate
- Return of evacuees
- Transportation of mobility impaired persons

While many residents without their own transport will evacuate with friends or neighbours, it may be necessary to provide support to those requiring transport assistance.

Where additional transport requirements are identified (which cannot be sourced by the TLDMG), requests shall be made to the Townsville District Disaster Management Group (TDDMG) for assistance – refer Logistics Sub Plan.

7.5. Evacuation of Vulnerable Persons

Vulnerable groups for the purposes of this Sub Plan include the following members of the community:

- Homeless persons
- persons living in wind-vulnerable accommodation (i.e. boats, vessels, in marinas and caravan parks)
- persons issued with an evacuation order
- travellers with caravans and other transient accommodation facilities
- travellers unable to return to their homes
- persons that have not been able to leave the storm-tide evacuation zone
- persons that have been unable to shelter with friends or family in modern homes (built since 1982) outside the storm-tide evacuation zone
- residents unable to return to their homes following a disaster event.

Vulnerable groups should be given priority for placement at shelters and evacuation centres where possible.

The Aged Care Facility at highest risk of storm tide inundation is –

- Bolton Clarke Rowes Bay

In the threat of a flood or storm surge, the managers of this aged care facility have made alternate arrangements under their plans to move residents to other facilities but may need assistance from the TLDMG.

Education Queensland has developed evacuation plans for their facilities, which include the notification of parents and the involvement of school bus providers.

Private day care providers are responsible for the development of their own evacuation processes.

Aged and disability care providers are responsible for their own evacuation plans and finding suitable alternate accommodation for their clients. These providers may seek assistance from the TLDMG where the scale of the event is beyond their own resources and arrangements.

Caravan parks are often situated in hazard-prone areas. The permanent residents of these parks may be vulnerable. Caravan parks operators should ensure they have appropriate evacuation plans in place.

The TLDMG may be required to support organisations that deal with vulnerable groups to effect evacuation.

7.6. Evacuation of Animals

It is recognised that separating people from their animals during disasters can cause stress and some people may refuse to evacuate unless arrangements are made for their animals. Registered assistance animals are accepted at all evacuation centres.

Public information on arrangements for pets will be provided to evacuees prior to withdrawal. Refer to the Public Information & Warnings Sub-Plan.

The TLDMG will nominate a facility that is designated for pets. This provision is for small domestic animals only e.g. (dogs and cats) and not for stock (e.g. cattle, horses and goats) – refer Shelters and Evacuation Centres Sub Plan.

Residents will be encouraged, via annual community awareness campaigns, to:

- Plan ahead
- Make a household or farm emergency plan that includes your animals
- Be aware that not all shelters and evacuation centres will accept animals
- Gather essential phone numbers (for services that affect your animal) for your emergency plan
- Make a disaster kit for your animal and
- Consider and act on your plan when an event is expected.

Additional information can be found in 'Remember your Pets' section of council's Get Ready Townsville Guide (www.townsville.qld.gov.au).

7.7. Security Strategy

The withdrawal phase should also consider a security strategy for the evacuated area to prevent unauthorised entry. The security strategy may include:

- Suitably signed physical road closures - staffed by Council, SES, QPS, private security personnel,traffic controllers or a combination of the above.
- QPS may undertake mobile patrols of evacuated areas.
- **Physical road closures will NOT be established if a cyclone threatens the local community.** Decisions on closures will be considered by TLDMG/DDMG once winds subside.

8. Shelter Phase

8.1. Shelter & Evacuation Options

Shelter and evacuation options for residents of the Townsville region include:

1. Shelter in Place	• If you live in a well-constructed home (built after 1982) • located outside of the storm tide evacuation zone
2. Evacuate to Shelter in a Safer Place	• (Preferred option) • with friends or family, who: • are located outside the storm tide evacuation zone and in a well-maintained structure/home, or • live in another community outside the cyclone warning area
	• commercial accommodation located outside the warning area;
	• Public Shelter (Last resort) • Place of Refuge • Public Cyclone Shelter, or • Evacuation Centre (if emergency is not a cyclone)

8.2. Facility Locations

Detailed information of each nominated Shelter and Evacuation Centre is contained within the TLDMG Shelters and Evacuation Centres Sub Plan. This plan also contains specific information to support decision-making in selecting locations most suitable to the nature of the event.

Shelters and/or evacuation centres that have been activated during an event will be displayed on council's Emergency Management and Disaster Dashboard (disaster.townsville.qld.gov.au)

9. Return Phase

9.1. Decision for Return

The decision for the return of evacuees and the development of a Return Strategy will be undertaken by the TLDMG in consultation with:

- Evacuation & Transport Working Group
- District Disaster Coordinator and relevant District Functional Committees
- Electricity provider
- Telecommunication providers
- Council's Emergency Response Group (including environmental health, water and sewerage, roads and drainage and infrastructure services).

Council's Impact Assessment Process will be implemented as soon as possible after an event. Data gathered will be used in assessing the Decision for Return. (Refer to TLDMG Local Disaster Management Plan).

To determine if the disaster area is safe for return the following issues will be assessed:

- Absence of the hazard and the possibility of its return
- Safety of buildings and structures
- Safety of transport infrastructure
- Availability of evacuation centres and routes
- Availability of schools and workplaces
- Operation of utilities; power, water, sewerage, and communications
- Public health
- Security of remaining damaged or unsafe areas and
- Availability of support services and infrastructure.

8.2 Return Strategy

Once it is determined that areas are safe for return, a Return Strategy will be developed to outline the arrangements necessary to plan and execute an organised return and how that process will be coordinated and managed. The Return Strategy will address:

- Specific areas deemed safe for return
- Security of damaged, unsafe structures or infrastructure
- Detailed return advice to evacuees
- Traffic management plans
- Transportation requirements
- If staging areas are planned to be used, transportation requirements from evacuation locations back to staging areas.

Appendix A: Evacuation Operational Checklist

Action	Responsible Agency/ Officer	Specific Information	Status
Decision to Evacuate			
Consider the specific circumstances of the event and review/ refine the pre-determined Evacuation Strategy considering:			Assigned ☐ Completed ☐
• advice from relevant authorities on severity, arrival and impact area;	LDC	Detailed data on possible event	
• the applicability of predetermined vulnerable zones and modification ofexisting or development of additional maps as required;	LDC/Intel & Planning	Analysis of existing disaster managementmapping layers and data	
• the nature of the "at risk" population;	LDC/ Intel & Planning	Analysis of existing disaster managementmapping layers and data	
• the capability of proposed evacuation routes to support rapid egress giventhe specific event related conditions;	LDC/ Intel & Planning	Analysis of existing disaster managementmapping layers and data	
• the suitability of safe shelter options;	Shelters & Evacuation Centres Working Group	Analysis of event and location of centres	
• the needs of special needs populations and associated actions;	LDC	Areas affected	
• specific transport issues	LDC	Areas affected	
• the availability of appropriate resources to effectively manage all aspects ofthe evacuation.	LDC / Chair of TCC Emergency Response Group	As per Emergency Response Plan	
• Consider all aspects with particular emphasis on the time required tocomplete the evacuation and the lead time available. • Conduct a risk assessment. Is evacuation achievable, safe and the mostsuitable option?	Evacuation & Transport Working Group	As listed above	Assigned ☐ Completed ☐
Make decision on the type of evacuation being contemplated.	Evacuation & Transport Working Group		Assigned ☐ Completed ☐

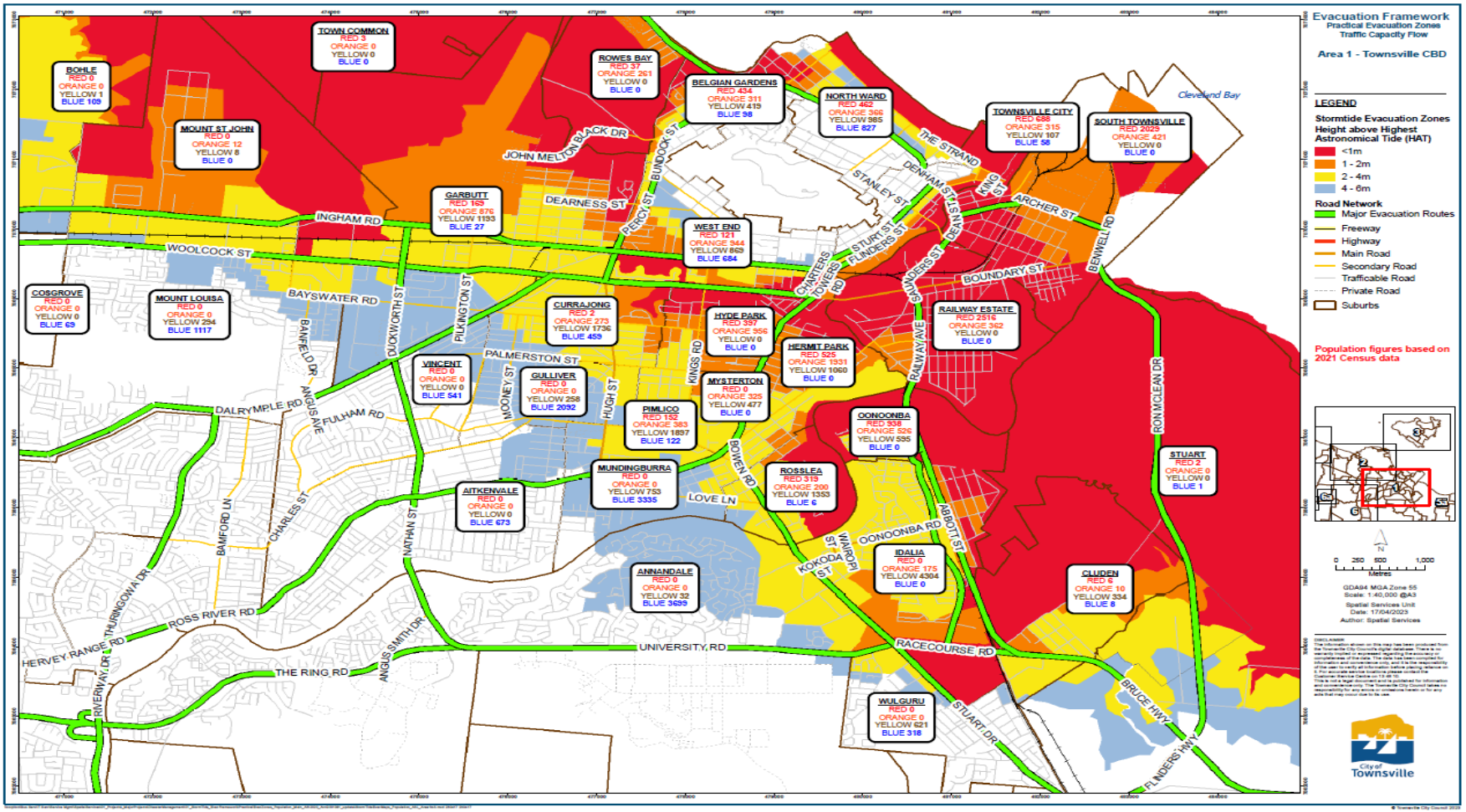
Action	Responsible Agency/ Officer	Specific Information	Status
Define the timeframe for conduct of evacuation if pre-impact.	Evacuation & Transport Working Group		Assigned ☐ Completed ☐
Determine the amount of external assistance that will be required to affectevacuations.	Evacuation & Transport Working Group	Request to DDMG if necessary	Assigned ☐ Completed ☐
Advise DDC that evacuation decision has been made and make request forassistance, if required.	LDC	Request to DDMG if necessary	Assigned ☐ Completed ☐
If determined necessary, recommend to DDC that directed evacuation isrequired.	LDC	Request to DDMG if necessary	Assigned ☐ Completed ☐
Pre-Implementation Preparation			
Ensure adequate copies of evacuation zone maps for operation teams.	LDC		Assigned ☐ Completed ☐
Check current and predicted status of evacuation routes.	TCC Emergency Response Group	Report data to LDCC	Assigned ☐ Completed ☐
Populate Evacuation Order templates with relevant information including affected zones and sequence of evacuation. Hold pending approval for release.	LDC / TLDMG Communications	As per templates and plans	Assigned ☐ Completed ☐
Confirm and ready warning mechanisms.	TLDMG Communications	As per templates and plans	Assigned ☐ Completed ☐
Where transportation will be required, review Transport Strategy and activate. *Townsville Evacuation Operational Plan*.	LDC / TCC Emergency Response Group		Assigned ☐ Completed ☐
Refine traffic management strategy and stage traffic control at requiredlocations.	LDC / TCC Emergency Response Group		Assigned ☐ Completed ☐
Confirm evacuation centres, arrange opening, manning of centres and test ofcommunication system back to LDCC.	Shelters & Evacuation Centres Working Group	As per SOPs	Assigned ☐ Completed ☐
Activate *Shelters and Evacuation Centres Sub Plan*.	Shelters & Evacuation Centres Working Group	As per Shelters and Evacuation CentresSub Plan and SOPs	Assigned ☐ Completed ☐
Where warning mechanisms will include door knocking, mobile public addresssystems, etc., refine grid/locality system to ensure coverage.	LDC	Request to DDC	Assigned ☐ Completed ☐
Warning			

Action	Responsible Agency/ Officer	Specific Information	Status
Upon authorisation for release, issue evacuation advice to "at risk' population.	TLDMG Communications	As per Communications Plan	Assigned ☐ Completed ☐
Provide notice to "at risk" population establishments of requirements toevacuate.	LDC	Through LDCC	Assigned ☐ Completed ☐
Receive authorisation for directed evacuation from DDC.	LDC		Assigned ☐ Completed ☐
Issue directed evacuation order to "at risk" population.	TLDMG Communications		Assigned ☐ Completed ☐
Issue advice re self/Voluntary evacuation			
Directed			
Provide evacuation teams with written order to be provided to members ofpublic.	LDC		Assigned ☐ Completed ☐
Activate traffic management strategy.	LDC / QPS		Assigned ☐ Completed ☐
Activate transport strategy.	LDC / QPS		Assigned ☐ Completed ☐
Activate door to door evacuation teams.	QPS		Assigned ☐ Completed ☐
Withdrawal			
Ensure evacuation messages continue to be conveyed to public.	TLDMG Communications / QPS		Assigned ☐ Completed ☐
Provide regular situation reports (SitReps) on evacuation to TLDMG / DDMG.	LDC	SitReps	Assigned ☐ Completed ☐
Ensure regular reporting from field teams of completed tasks.	LDC	Impact Assessment Process	Assigned ☐ Completed ☐
Implementation of security strategy for evacuated areas.	QPS		Assigned ☐ Completed ☐
Shelter - Requires Updating			

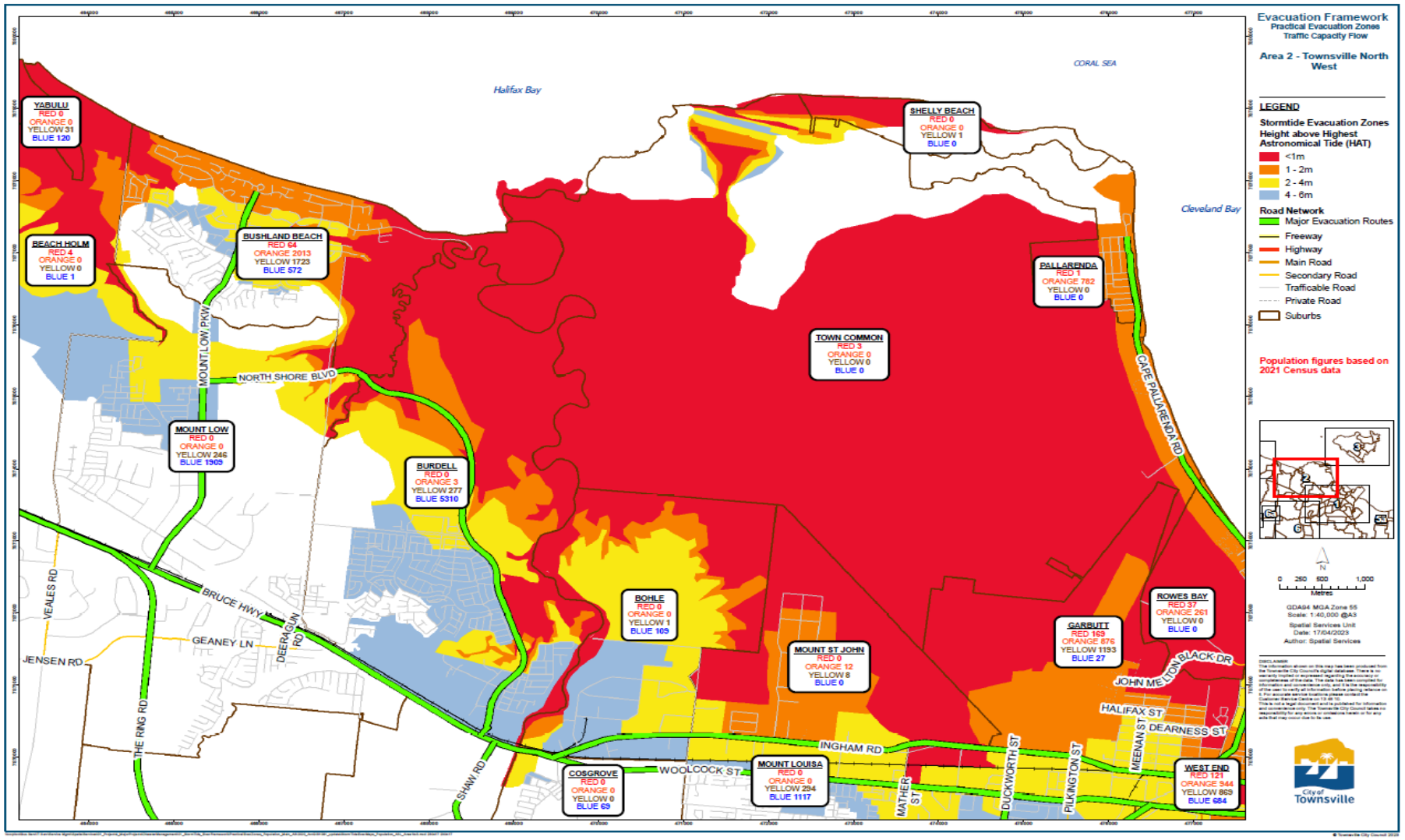
Action	Responsible Agency/ Officer	Specific Information	Status
Ensure evacuation centre management being coordinated through *EvacuationCentres Standard Operating Procedures*.	Shelters & Evacuation Centres Working Group / Australian red Cross	As per SOPs	Assigned ☐ Completed ☐
Request and maintain a record of evacuees at evacuation centres.	Shelters & Evacuation Centres Working Group / Australian Red Cross / Council	As per SOPs	Assigned ☐ Completed ☐
If evacuees are being registered upon leaving "at risk" areas, ensure record isbeing maintained including details of destination.	Australian Red Cross		Assigned ☐ Completed ☐
Return			
Determine areas that are safe for return with consideration of the followingissues: • Content of impact assessment. • Health and safety issues. • Functioning of utilities; power, water, sewerage and communications; and • Status of repair; clearing and re-opening of roads.	LDC / Impact Assessment Teams	Status of infrastructure	Assigned ☐ Completed ☐
Review and modify the Return Strategy, addressing: • Specific areas deemed safe for return. • Security of damaged, unsafe structures or infrastructure. • Detailed return advice to evacuees. • Traffic management plan; and • Transportation requirements.	LDC / Impact Assessment Teams	Status of infrastructure	Assigned ☐ Completed ☐
Advise DDMG of Return Strategy.	LDC		Assigned ☐ Completed ☐
Issue media release outlining return strategy for evacuees. Distribute returnadvice to Evacuation Centres and notify specific facilities.	LDC	Communications Plan	Assigned ☐ Completed ☐
Release appropriate information to returning evacuees on reactivation ofutilities, damage repairs, clean up and debris removal.	Mayor	Communications Plan	Assigned ☐ Completed ☐
Implement traffic management plan.	LDC / QPS		Assigned ☐ Completed ☐
Maintain security controls for those areas that cannot be safely reoccupied.	QPS		Assigned ☐ Completed ☐

Action	Responsible Agency/ Officer	Specific Information	Status
Ensure the coordination of temporary housing for evacuees unable to return totheir residences.	Local Recovery and Resilience Group		Assigned ☐ Completed ☐
Close Shelters and/or evacuation centres.	Shelters & Evacuation Centres Working Group	As per SOPs	Assigned ☐ Completed ☐
Complete final SitRep on evacuation and stand down Evacuation & TransportWorking Group.	LDC		Assigned ☐ Completed ☐

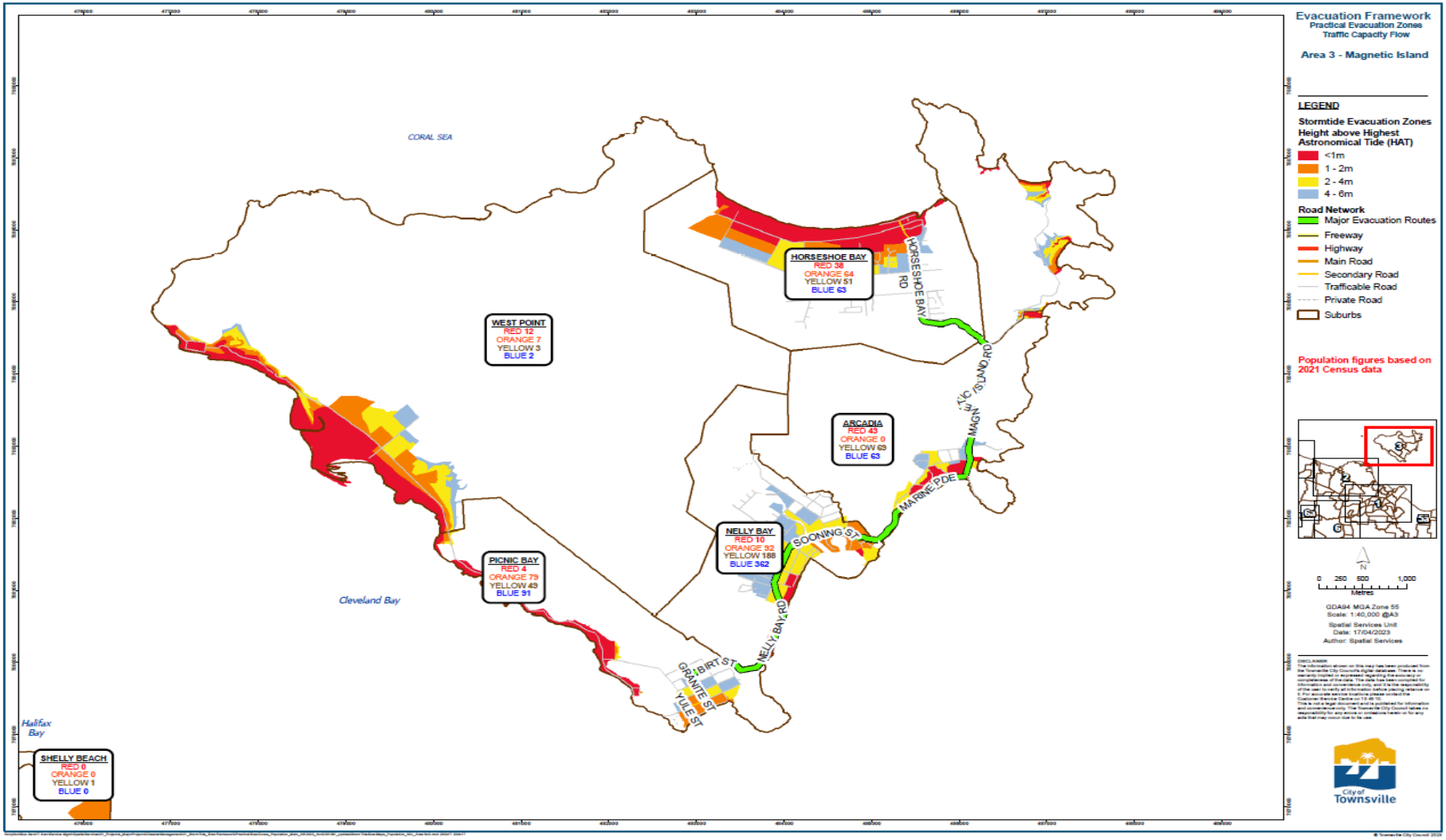
Appendix B: Storm Tide Evacuation Zone Maps



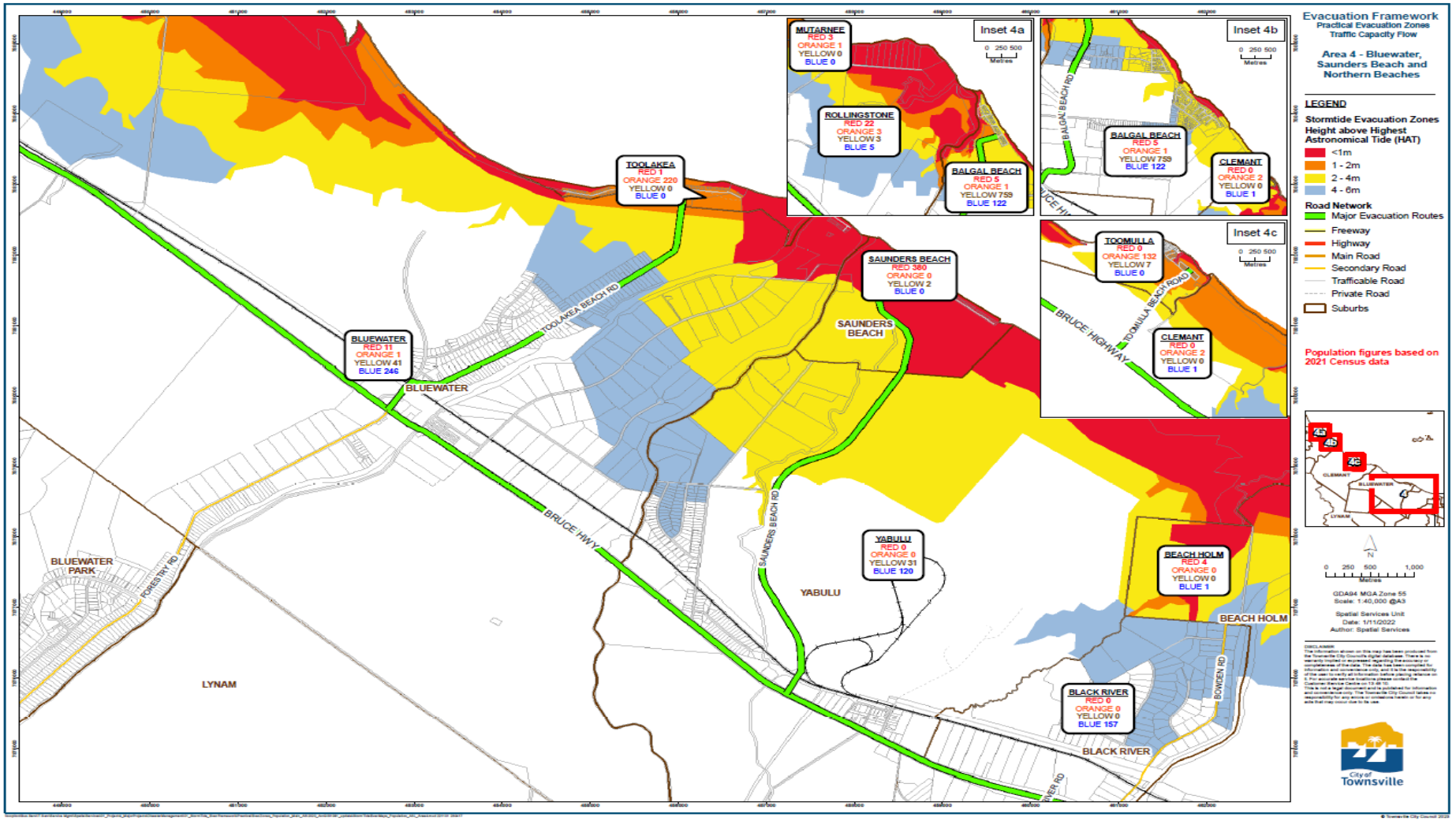
Storm Tide Evacuation Framework Practical Evacuation Zones, Traffic Capacity Flow Area 1, 18/04/22 (based on 2021 census data)



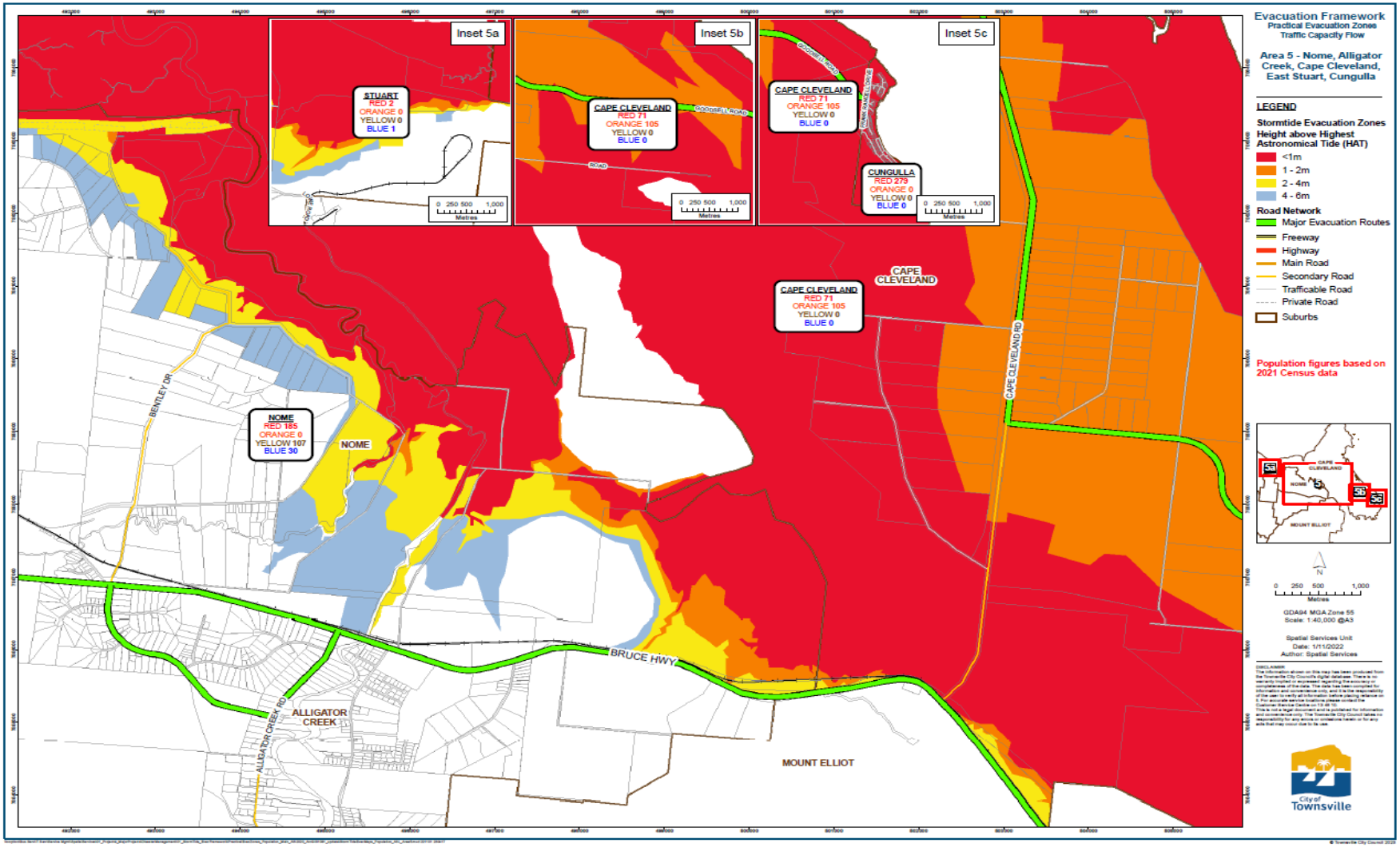
Storm Tide Evacuation Framework Practical Evacuation Zones, Traffic Capacity Flow Area 2, 18/04/22 (based on 2021 census data)



Storm Tide Evacuation Framework Practical Evacuation Zones, Traffic Capacity Flow Area 3, 18/04/22 (based on 2021 census data)

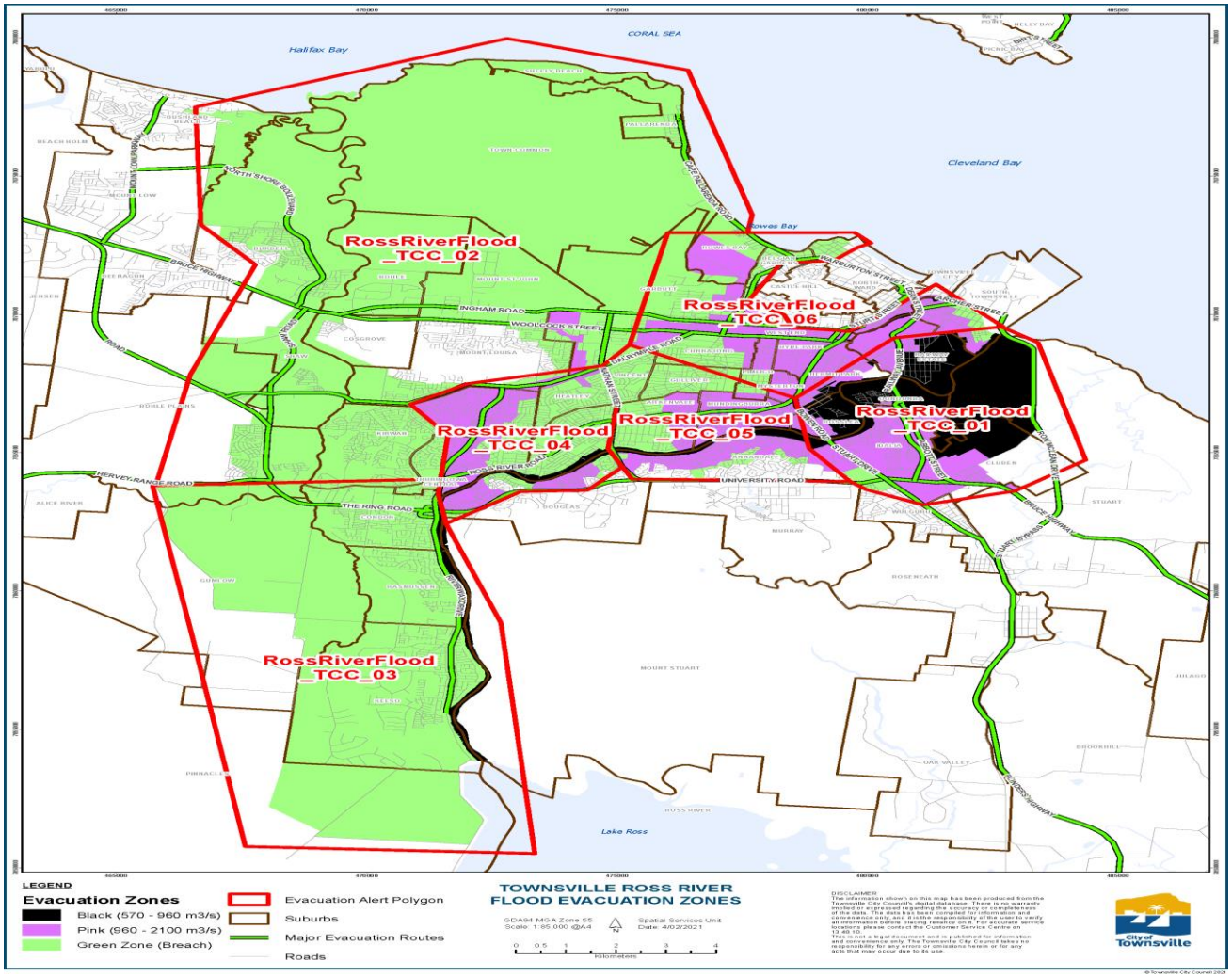


Storm Tide Evacuation Framework Practical Evacuation Zones, Traffic Capacity Flow Area 4, 18/04/22 (based on 2021 census data)



Storm Tide Evacuation Framework Practical Evacuation Zones, Traffic Capacity Flow Area 5, 18/04/22 (based on 2021 census data)

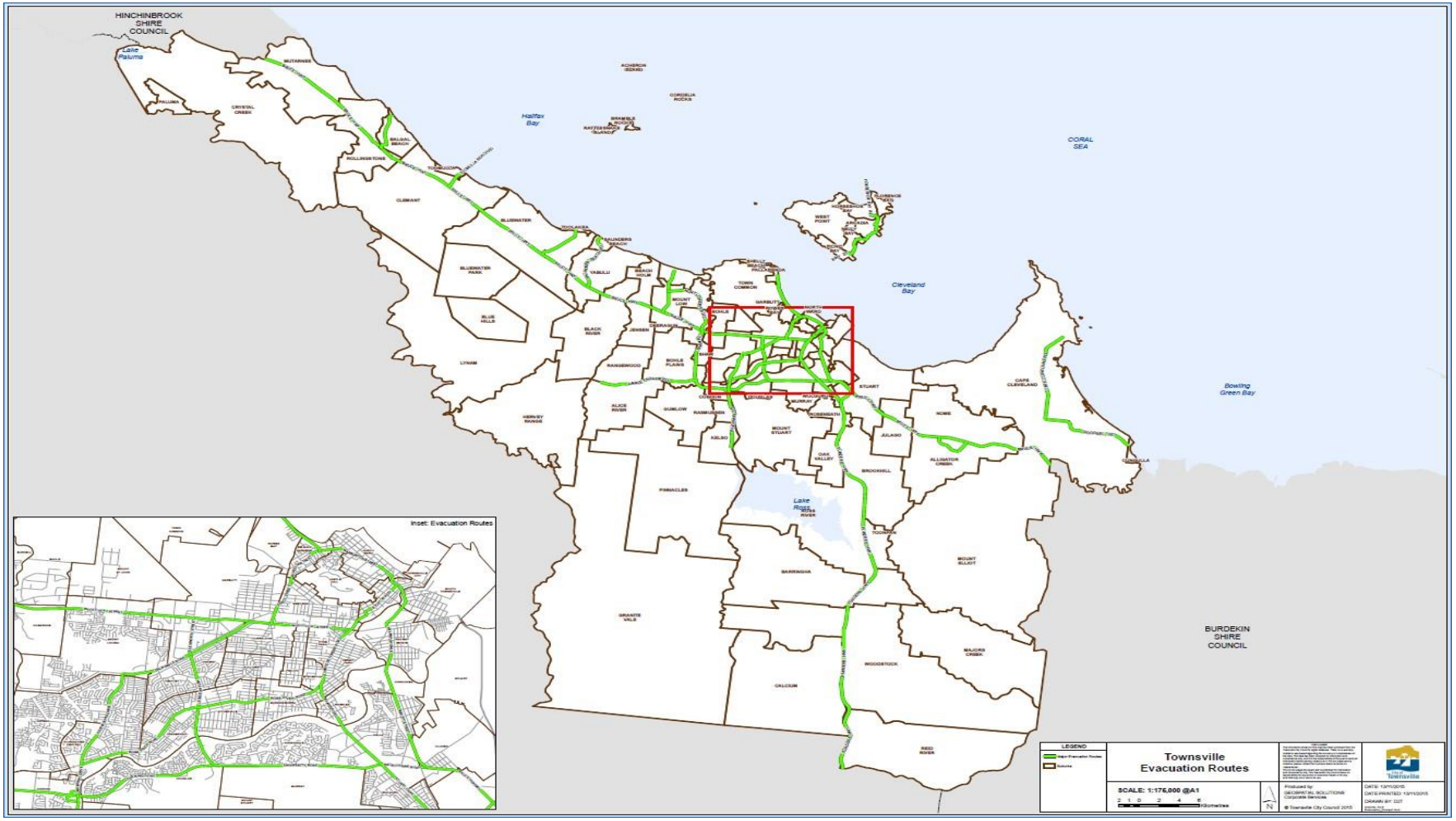
Appendix C: Riverine Flooding associated with Ross River Dam



Evacuation Zones for Ross River Dam are as follows:

Evacuation Zone	Description
Black Zone	The Black Zone represents the areas of Townsville first impacted by flows within Ross River. Ross River Dam discharges commence at a dam water level of 38.65m AHD. Residential property starts to become flooded after 435m3/s discharge from Ross River Dam (40.3m AHD). Buildings commence flooding at approximately 570m3/s (41.1m AHD). The dam gates continue to open at small increments until960m3/s (42.4m AHD), when approximately 105 residential properties are impacted, and after which accelerated gate opening occurs. The Black Zone depicts the flood extent up to this stage. Areas within the Black Zone include parts of Rosslea and Railway Estate, Oonoonba and Idalia. which may also be impacted when tidal levels are elevated. With standard operating conditions for the dam gates, the probability of flood emergency issues in the Black Zone is between 5% and 0.5% in any given year. It should be noted that rainfall downstream of Ross River Dam will also influence flooding, potentially beyond the zone depicted.
Pink Zone	The Pink Zone represents the areas of Townsville impacted by large flows from Ross River Dam from the stage where accelerated gate opening occurs, to when the gates are no longer able to control the releases downstream, and up to the point where the vicinity of the dam is also to be evacuated. Accelerated gate opening commences at 960m3/s (42.4m AHD dam water level). Gates are fully open at 1,777m3/s (43.0m AHD). The vicinity of the Ross River Dam is required tobe evacuated at 2,100m3/s (43.8mAHD) at which stage 4,280 residential properties are expected to be impacted. Areas within the Pink Zone include parts of Rosslea, Railway Estate, Oonoonba, Idalia, Hermit Park, Hyde Park, Pimlico, Currajong, West End, Mundingburra, Aitkenvale, Annandale, Douglas, Kirwan, and South Townsville. With standard operating conditions for the dam gates, the probability of this event is between 0.5% and 0.05% in any given year. It should benoted that rainfall downstream of Ross River Dam will also influence flooding, potentially beyond the zone depicted.
Green Zone	The Green Zone represents the areas impacted by flows in the event of a failure ofRoss River Dam. The Green Zone depicts areas with flood emergency issues for a collapse of the dam embankment followed by a massive outflow from the dam. Much of the urban area of Townsville around and to the east of the Bohle River is within the Green Zone, other than higher ground around Mount Louisa, Castle Hill and Mount Stuart (Annandale/Douglas). The probability of the dam failure is difficult to quantify; however, it would be an extremely rare event, with a probability far lower than that for the Pink Zone event.

Appendix D: Evacuation Routes Map



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