



Storm Tide Evacuation Guide **Cairns Regional Council**

Storm tide evacuation maps

A photograph showing a person's arm and hand pointing at a map or document on a dark table. The person is wearing a light blue shirt and jeans. A purple bag is visible in the foreground. The background is a blue textured surface.

Storm surge

Be prepared by planning ahead

Several cyclones will form across northern Australian waters each year, although they may not make landfall. Cyclones that do make landfall may generate storm tides – dangerous waves that can cause widespread damage to coastal areas and properties on tidal waterways.

It's therefore important that residents and visitors understand if they are at risk of storm tide inundation and what to do if a storm surge is predicted.



Not all cyclones generate storm surge. If a storm surge is predicted by the Bureau of Meteorology, the Cairns Local Disaster Management Group (LDMG) may issue evacuation advice based on storm tide zones, which correspond to the expected height of the storm surge – red, orange and yellow. Residents in storm tide zone should have a plan to shelter with family or friends living outside the storm tide evacuation area.

Cairns also has two Public Storm Tide Cyclone Shelters that are a place of last resort for residents who have nowhere else to go.



Storm tide cyclone shelters are designed to save as many lives as possible during the immediate cyclone threat and consequently offer very basic services. You will be locked in for up to 18 hours, while the cyclone passes; there are no showers nor cooking facilities; smoking and alcohol are not allowed; and you will have a chair to sit in throughout the emergency – there are no beds (see more information on Public Storm Tide Cyclone Shelters on page 6).



Sheltering with family or friends is much more comfortable and is your first and best option.

If evacuation is needed, official advice will be issued via the Cairns Disaster Dashboard, Cairns Disaster Centre Facebook page, the Cairns Regional Council website, ABC radio and other local news outlets.

Act immediately. Don't wait.



Keep in mind many other people will also be evacuating and roads may be congested. Minor roads may also be flooded, following heavy rain as the cyclone approaches. When planning your evacuation route, consider a secondary route in case your main exit is not available. Consult the evacuation maps in this booklet.

Take your household emergency kit with essential supplies for you and your household with you.



If you don't live in a storm tide area you will not be advised to evacuate.

If you live in a home built after the mid-80s, when building codes were strengthened to ensure homes were more cyclone resilient, your best option is to shelter in place.

If you aren't comfortable sheltering at home, have a plan to stay with friends or family, or to leave the area well in advance of the cyclone.

Residents who don't come from the affected storm tide zone are likely to be refused entry to Public Storm Tide Cyclone Shelters.



Am I in a storm tide zone? To determine if you are in a storm tide zone inundation area:

- Check the maps in this booklet
- Enter your address in the Storm Surge Search tool on Council's website, **www.cairns.qld.gov.au/stormsurge**
- Check your electricity meter box for a storm tide sticker (please note, newer properties may not have a sticker)

Understanding storm surge and cyclones



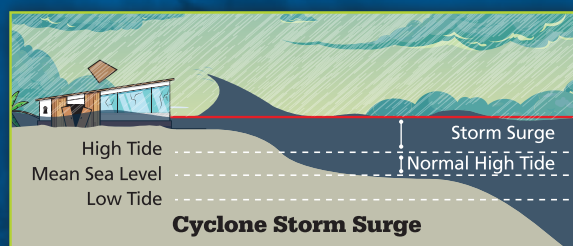
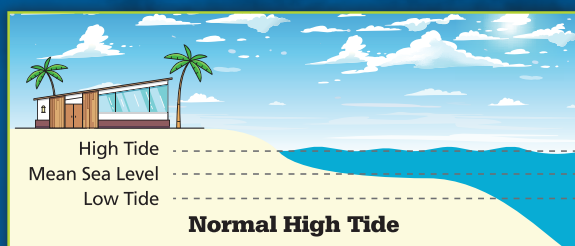
Storm surge and storm tide

A storm surge is a rise in the ocean level associated with cyclones.

Storm surge is caused by high winds pushing on the ocean's surface and lower than normal air pressure from the storm. As a cyclone reaches the coast huge winds whip up the sea and push the dome of water over low-lying coastal areas and along tidal waterways, causing flooding, damaging buildings and cutting off evacuation routes.

Storm tide is the combination of the storm surge and the 'normal' tide. If the storm surge is 3m and the high tide is 2m above the mean sea level, that will produce a storm tide that is 5m.

The worst (highest) storm tides therefore occur at high tide.



Cyclones

A cyclone is a violent tropical storm with very strong winds and heavy rain that can cause extensive property damage and injuries to people. The eye or centre of a cyclone is an area made up of light winds and often clear skies. However, this is not the end of the cyclone, as very destructive winds from the other direction are to come. Stay inside!

The Bureau of Meteorology provides regular updates once a low-pressure system (the forerunner of a cyclone) forms.

Cyclone advice - This is a "warning" that advises the location of a cyclone, its movement and strength, and identifies areas that could be affected.

Cyclone watch - A watch is issued 48 hours before the cyclone is predicted to cross the coast and is updated every six hours in terms of location, movement and strength, and areas that could be affected.

Cyclone warning - A warning is issued if winds are expected to affect coastal or island areas within 24 hours. The warning is updated every three hours, and then every hour if the cyclone poses a major threat.

The warning includes information on location, movement and strength of the cyclone, areas that are threatened, as well as anticipated rainfall, flooding and storm surge.

Residents and visitors to the Cairns region should take immediate precautions to safeguard their lives and property.

Cyclone categories

CATEGORY	STRONGEST GUST	TYPICAL EFFECT
1	Less than 125kmh	<ul style="list-style-type: none">• Damaging winds• Very minor house damage• Damage to some crops, trees and caravans• Boats may drag at moorings.
2	125-170kmh	<ul style="list-style-type: none">• Destructive winds• Minor house damage• Significant damage to signs, trees and caravans• Heavy damage to some crops• Small boats may break mooring.
3	175-225kmh	<ul style="list-style-type: none">• Very destructive winds• Some roof and structural damage to houses• Some caravans and crops destroyed• Power failure likely.
4	225-280kmh	<ul style="list-style-type: none">• Significant roof loss and structural damage to houses• Many caravans destroyed and blown away• Dangerous airborne debris• Widespread power failures.
5	More than 280kmh	<ul style="list-style-type: none">• Extremely dangerous with widespread destruction.

What to do if you are advised to evacuate

Evacuation advice will be issued by the Local Disaster Management Group via:



Cairns Disaster Dashboard, **disaster.cairns.qld.gov.au**



Cairns Disaster Centre Facebook account, **@CairnsDisasterCentre**



Cairns Regional Council website, **www.cairns.qld.gov.au**



ABC Far North Radio, 106.7 FM, 95.5 FM and 801 AM



Emergency services may also door knock areas likely to be impacted.



If you are advised to evacuate, do so immediately, via the most direct route. Don't wait.



Take your household emergency kit with you (see page 21).
Turn off electricity and gas.

Public Storm Tide Cyclone Shelters

There are two purpose-built Public Storm Tide Cyclone Shelters in Cairns.

These shelters are designed to protect as many people as possible. Consequently, they provide basic services and are not comfortable.

- You will have a chair to sit in and your possessions must fit underneath – there are no beds
- You have to supply your own food and snacks
- There are no cooking facilities
- There are no showers
- Smoking, alcohol and recreational drugs are not allowed
- There is no access to electricity to recharge phones, computers and other devices
- You will be locked into the facility until the cyclone passes – up to 18 hours

Once the immediate threat of the cyclone has passed, shelters will be opened and you can go outside. However, do not return home until you have been told it is safe to do so.

Following the cyclone, the LDMG will set up temporary accommodation (eg in evacuation centres) for people who cannot return home.



Be prepared for cyclones

Not all cyclones generate a storm surge. As a cyclone approaches take these precautions to protect yourself and your family, your home and broader community.

Before the cyclone

- Stay informed via the Cairns Disaster Dashboard, Cairns Disaster Centre Facebook account, the Bureau of Meteorology, Cairns Regional Council's website and ABC Far North radio
- Check your Household Emergency Kit is ready and nearby
- Tie down or pack away all outdoor items and furniture
- Cover windows/doors with timber sheeting, and close all doors
- Make sure your vehicle is full of fuel and park undercover if possible
- Ensure your boat or caravan are garaged, or if not, make every effort to secure with strong ropes to a dependable anchor point
- Evacuate from caravans and tents
- If visiting the area, talk to your accommodation provider about what you should do and where you can go
- Fill drinking containers, your bathtub and wheelie bin with water – this water can be used to flush toilets if water supplies are affected
- Freeze water in case of power failure

- Place important documents and valuables in plastic bags or other waterproof containers and put in a safe place
- Turn off and unplug all non-essential electrical equipment.

During the cyclone

- Continue to stay informed. If power and internet are impacted, a battery powered radio will be your best way to stay up-to-date. Tune to ABC Far North.
- Stay inside and keep yourself and your household calm
- Shelter in the strongest part of the building, this is often the bathroom, toilet or hallway
- Mattresses and blankets may protect you
- Beware of the calm eye/centre of the cyclone. Stay inside!

After the cyclone

- Stay inside until officially advised that the cyclone has passed
- Stay well clear of fallen powerlines. Always assume that fallen powerlines are 'live'.
- Stay out of floodwaters.

Evacuation maps

The evacuation maps in this booklet show predicted storm tide flooding associated with a tropical cyclone.

There are three coloured zones on each map.



Red - These properties face the highest risk of being flooded by sea water. They are generally up to 2m above mean sea level.



Orange - These properties face a high risk of being flooded by sea water. They are generally between 2m and 3m above mean sea level.



Yellow - These properties face a moderate risk of being flooded by sea water. They are generally between 3m and 4.5m above mean sea level.

Areas outside storm tide areas are not coloured and are sometimes referred to as being in the White zone.

Evacuation will be advised by zone based on the predicted height of the storm tide. For instance, if the storm tide is expected to reach 2.5m, residents in the Red and Orange zones will be advised to evacuate.

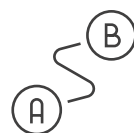
How to use the maps



1. Find your residence on the map to determine your evacuation zone.

Pay attention to the storm tide zone/zones around or near your property to determine your risk. For instance, you may live in an Orange zone, but surrounding streets are all in the Red zone. If the Red zone is impacted, your property may not be directly impacted, but you could be cut off if surrounding infrastructure is damaged.

The Barron River and its tributaries are tidal waterways. If you live near a waterway, even some way inland, you may still be impacted by storm surge.



2. Familiarise yourself with the evacuation route/routes, indicated by a solid black line, and if available, a secondary route, indicated by a dotted black line (not all maps show secondary routes.)



3. Plan where you will go.

If you live in a storm tide zone, make a plan to stay with family or friends outside the impacted area, in case you are advised to evacuate.

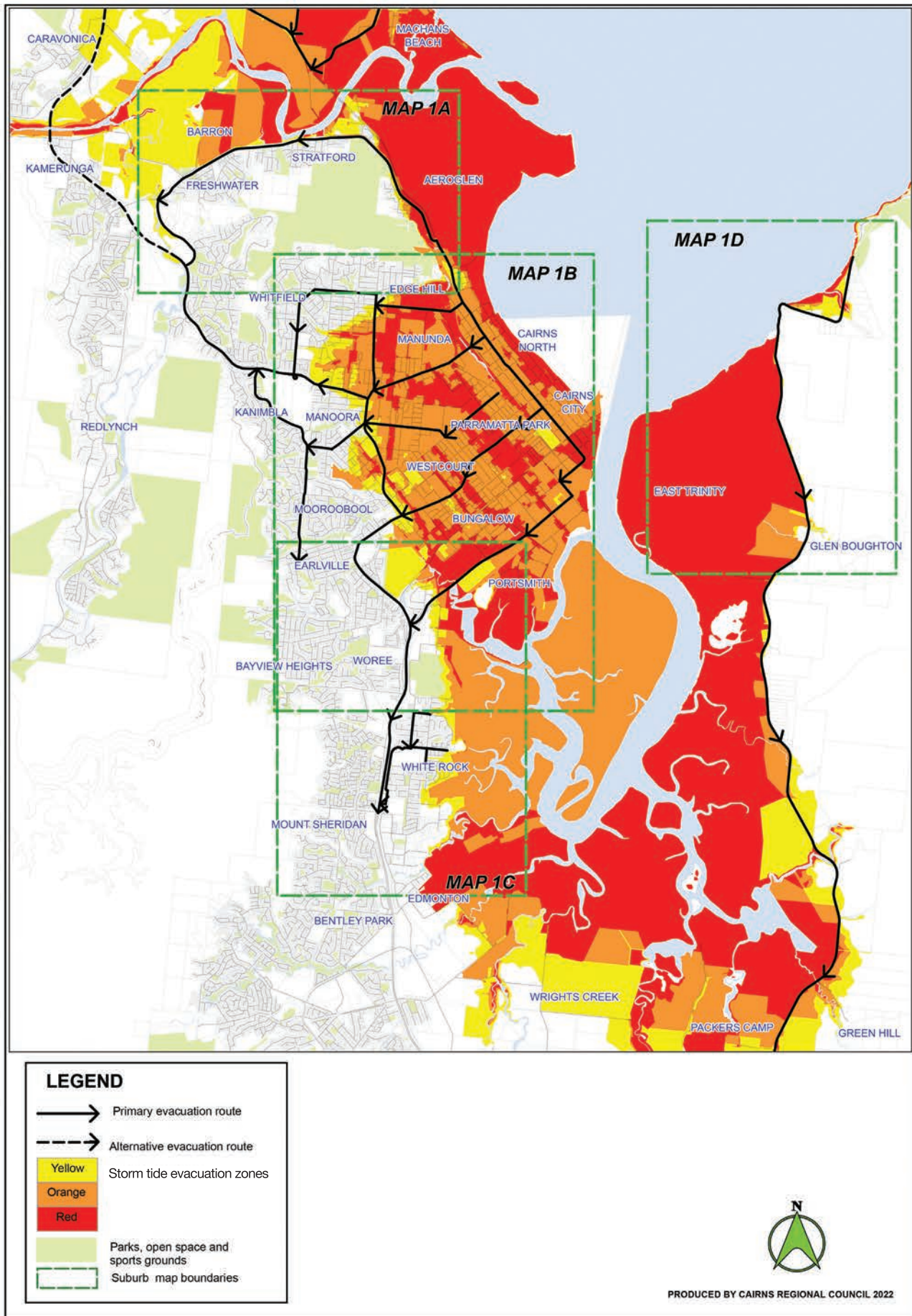
If you have nowhere else to go, you will be advised to attend a Public Storm Tide Cyclone Shelter. These will be opened as needed. Locations will be announced by the LDMG.



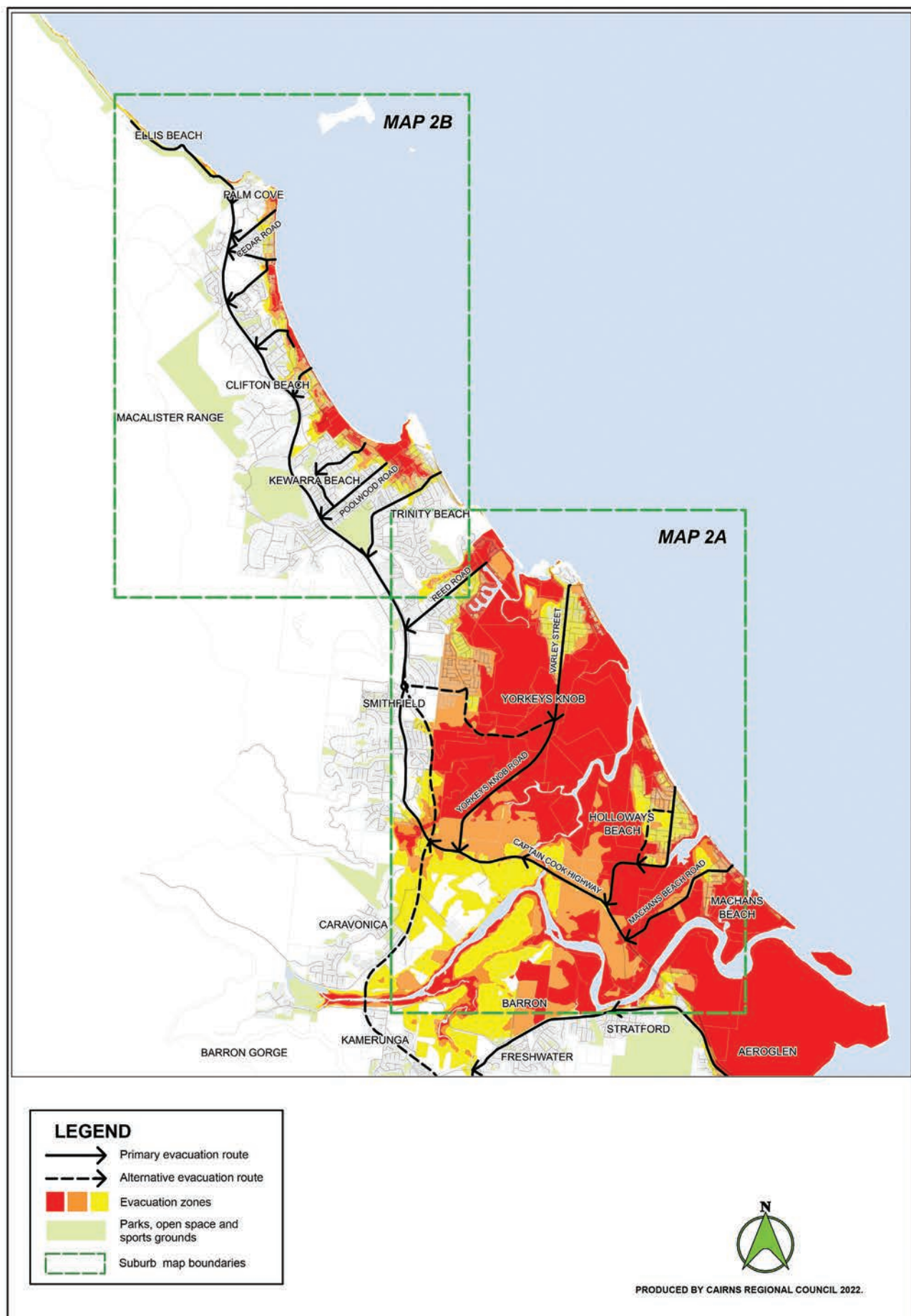
4. Create a Household Emergency Plan (see template page 22) so everyone in your household knows what to do.

DISCLAIMER - Storm Tide Evacuation Zones are modelled using geographical data and may not be an exact representation of what happens in an event. Evacuation mapping is designed to provide an easy-to-understand method for the public to identify coastal areas that may be affected by storm tides caused by tropical cyclones. While every care is taken to ensure the accuracy of this data, Cairns Regional Council makes no representations nor warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitations, liability in negligence) for all expenses, losses, damages (including indirect or consequential damages) and costs which you might incur as a result of the data.

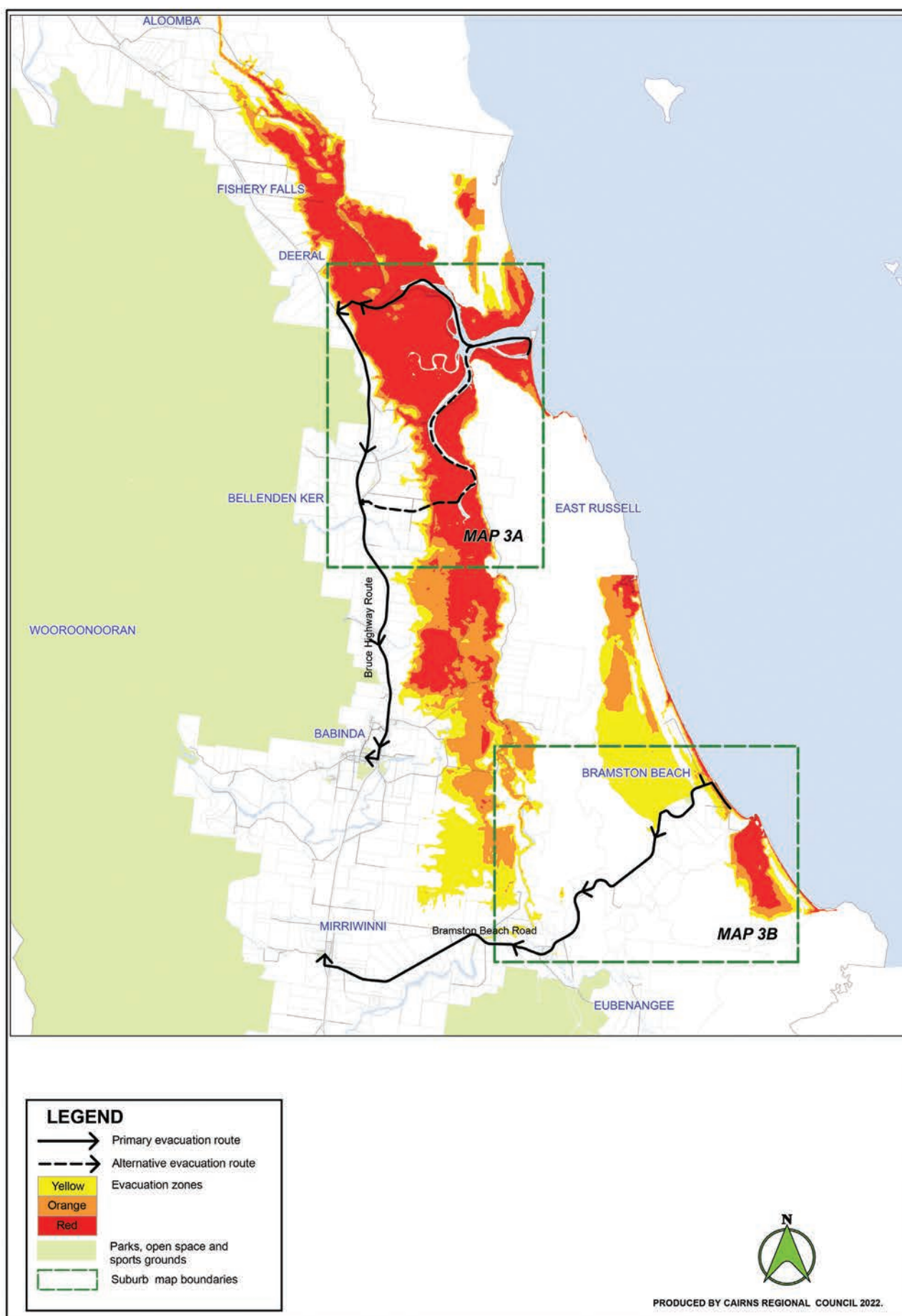
Map 1 - Cairns CBD: Barron River To Trinity Inlet - Evacuation Routes Overview



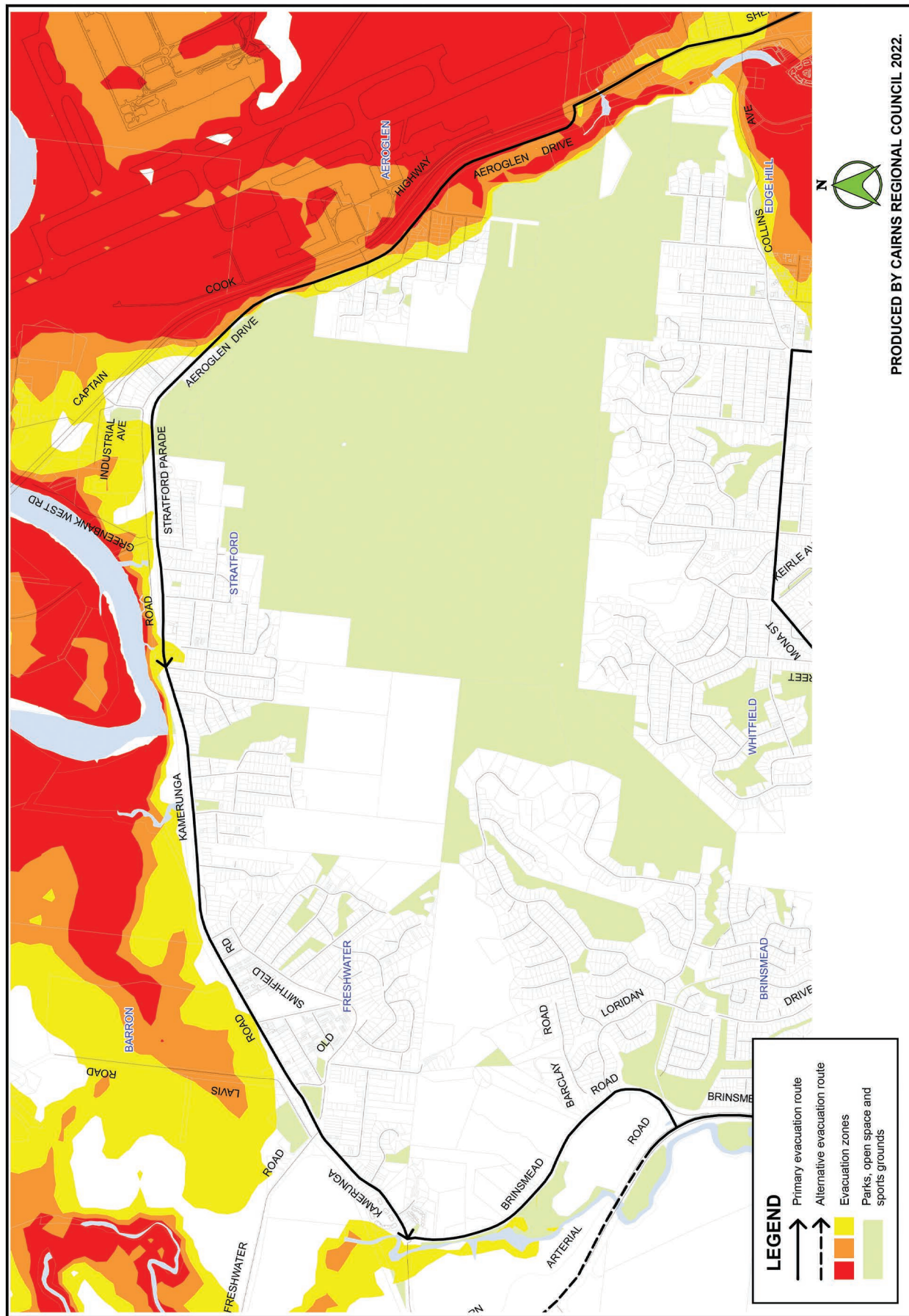
Map 2: Northern Beaches, Machans Beach to Ellis Beach - Evacuation Routes Overview



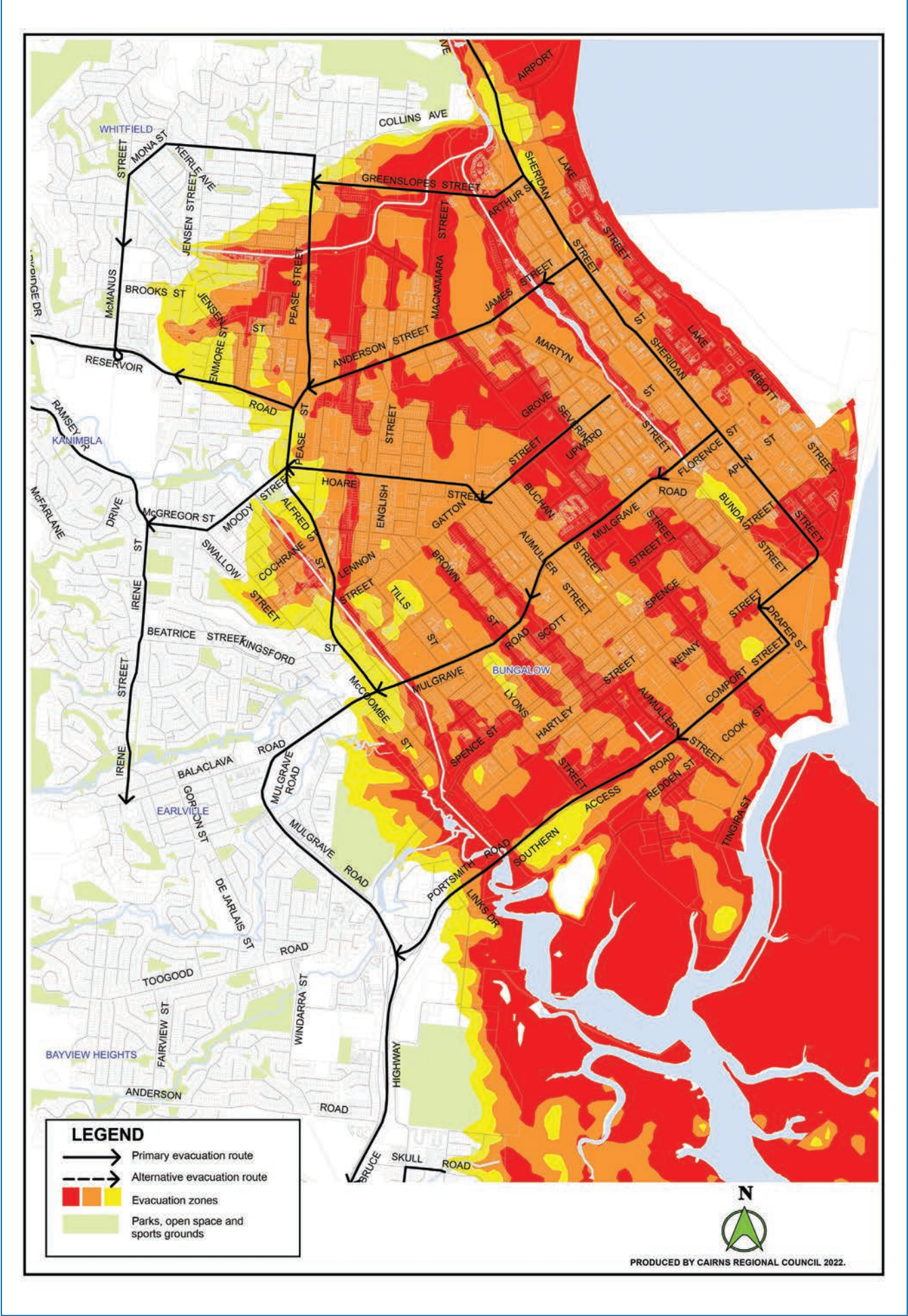
Map 3: Trinity Inlet to Bramston Beach - Evacuation Routes Overview



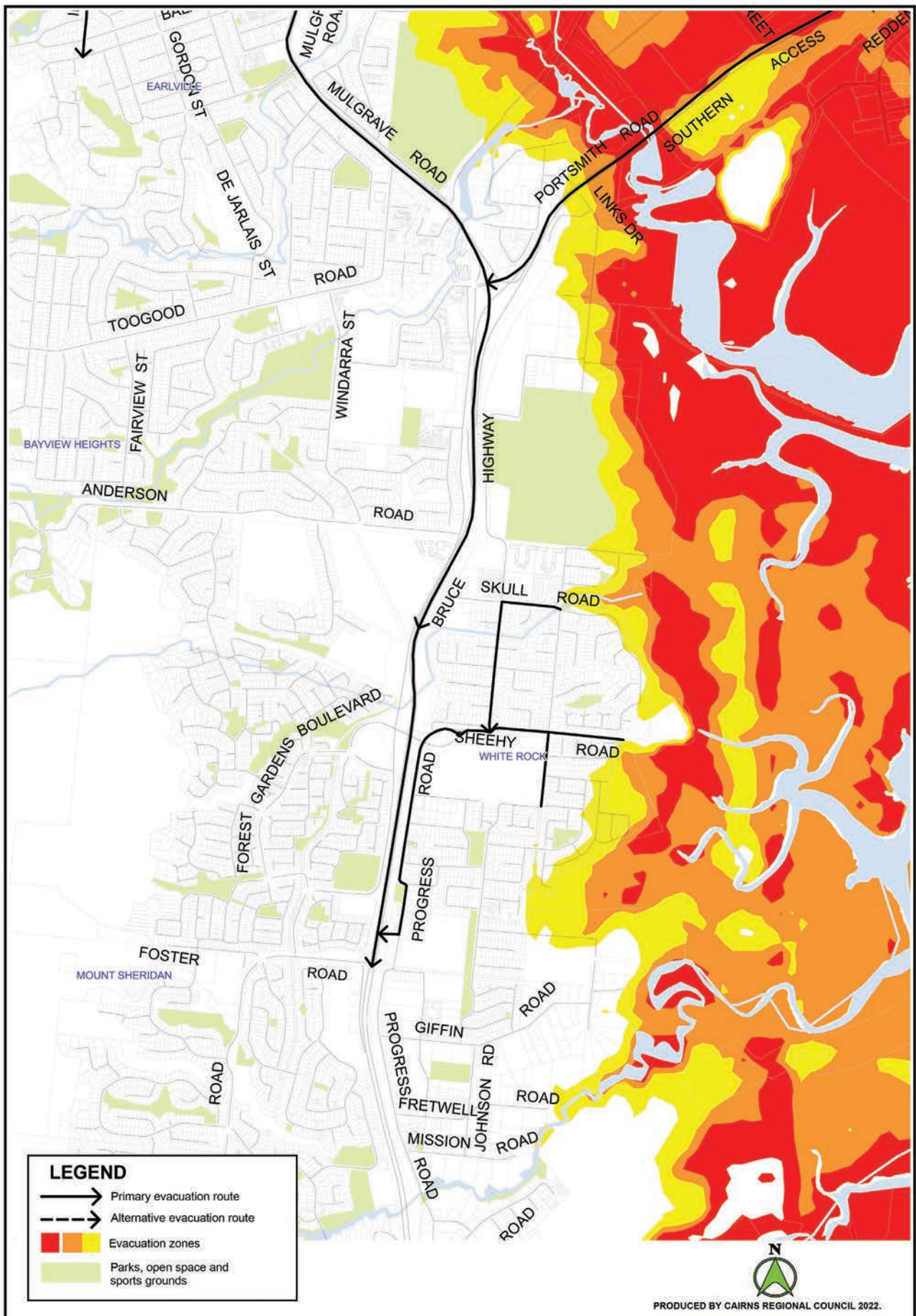
Map 1A: Cairns CBD (North) - Evacuation Routes



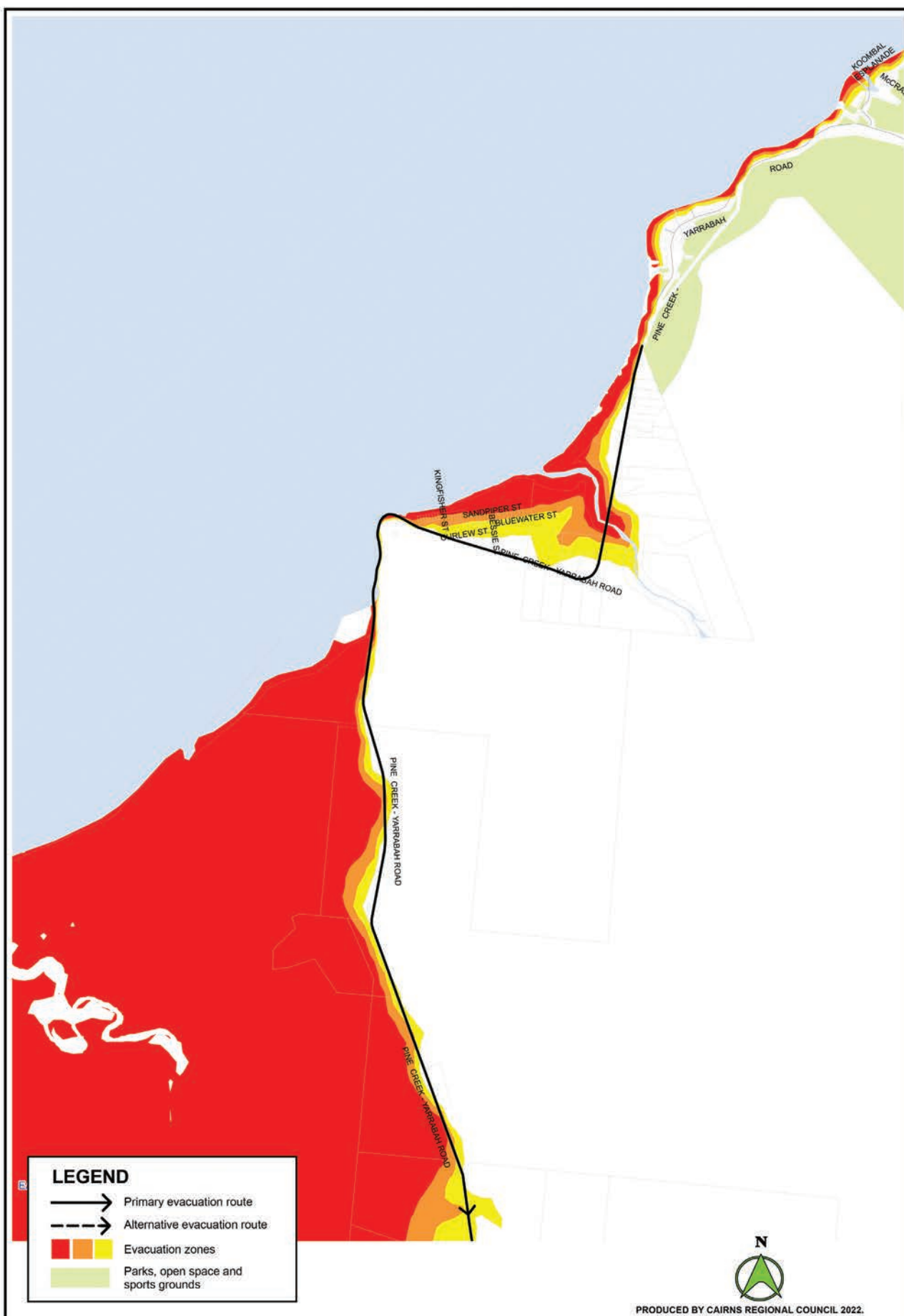
Map 1B: Cairns CBD - evacuation routes



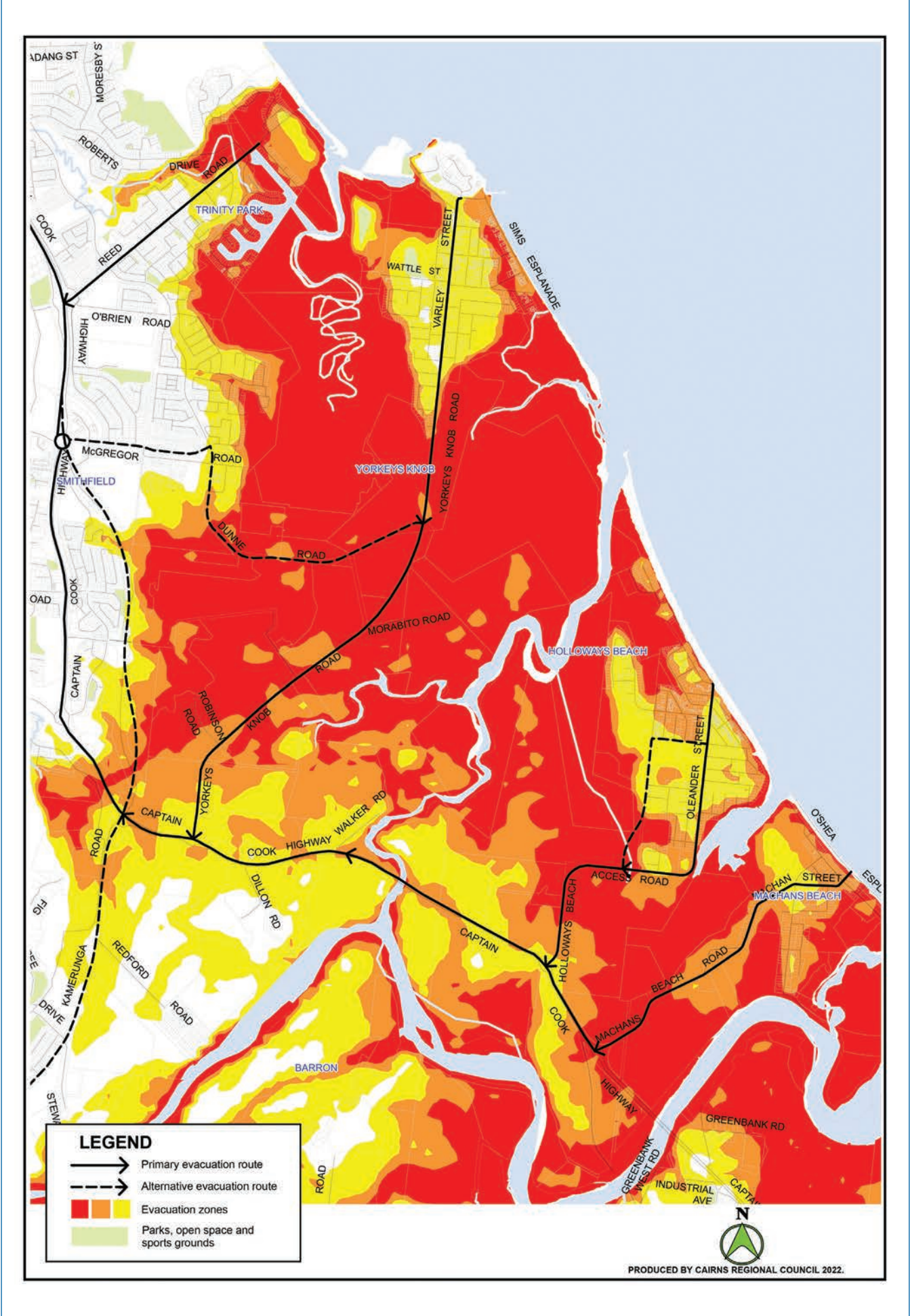
Map 1C: Cairns CBD, South - Evacuation Routes



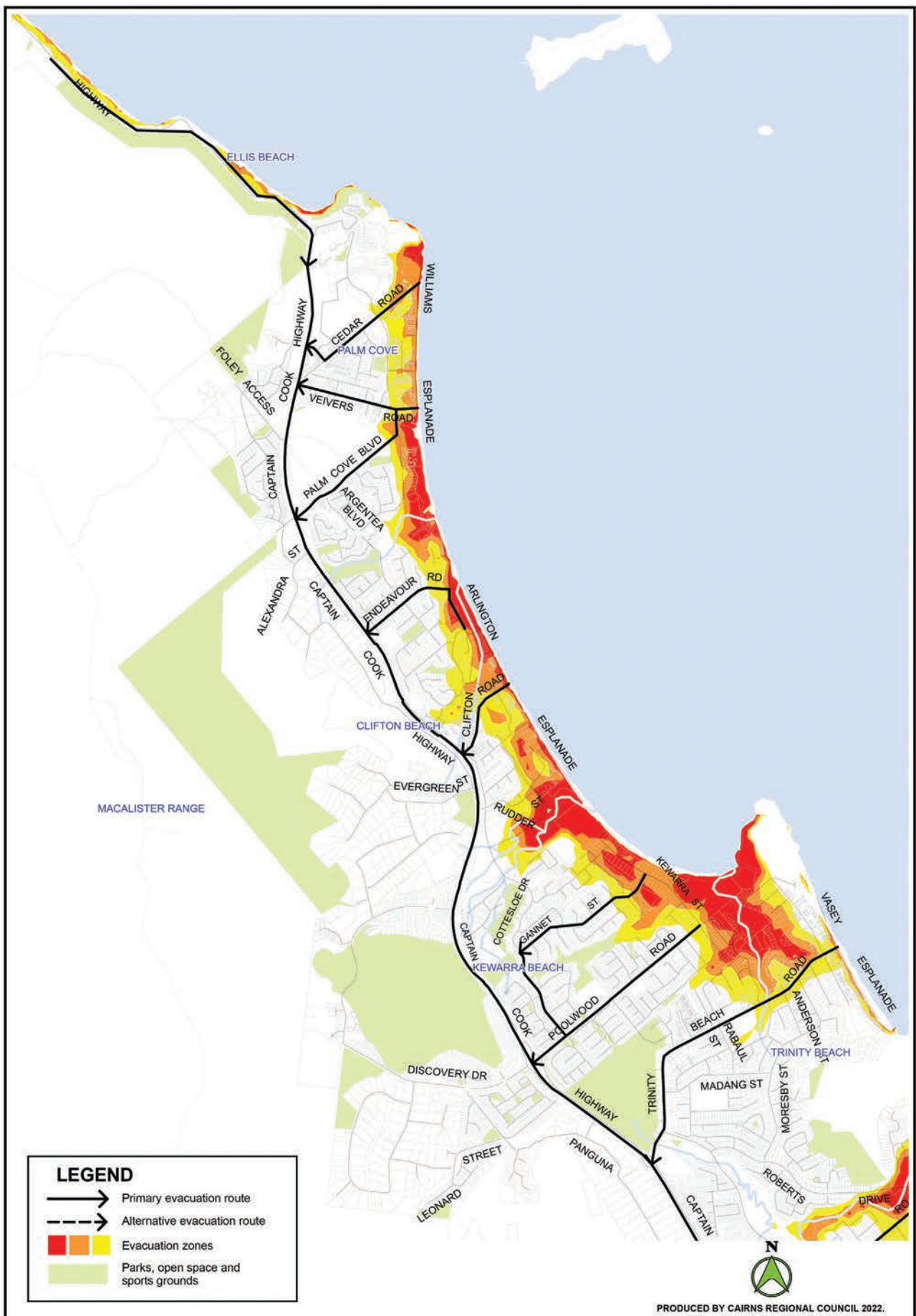
Map 1D: East Trinity - Evacuation Routes



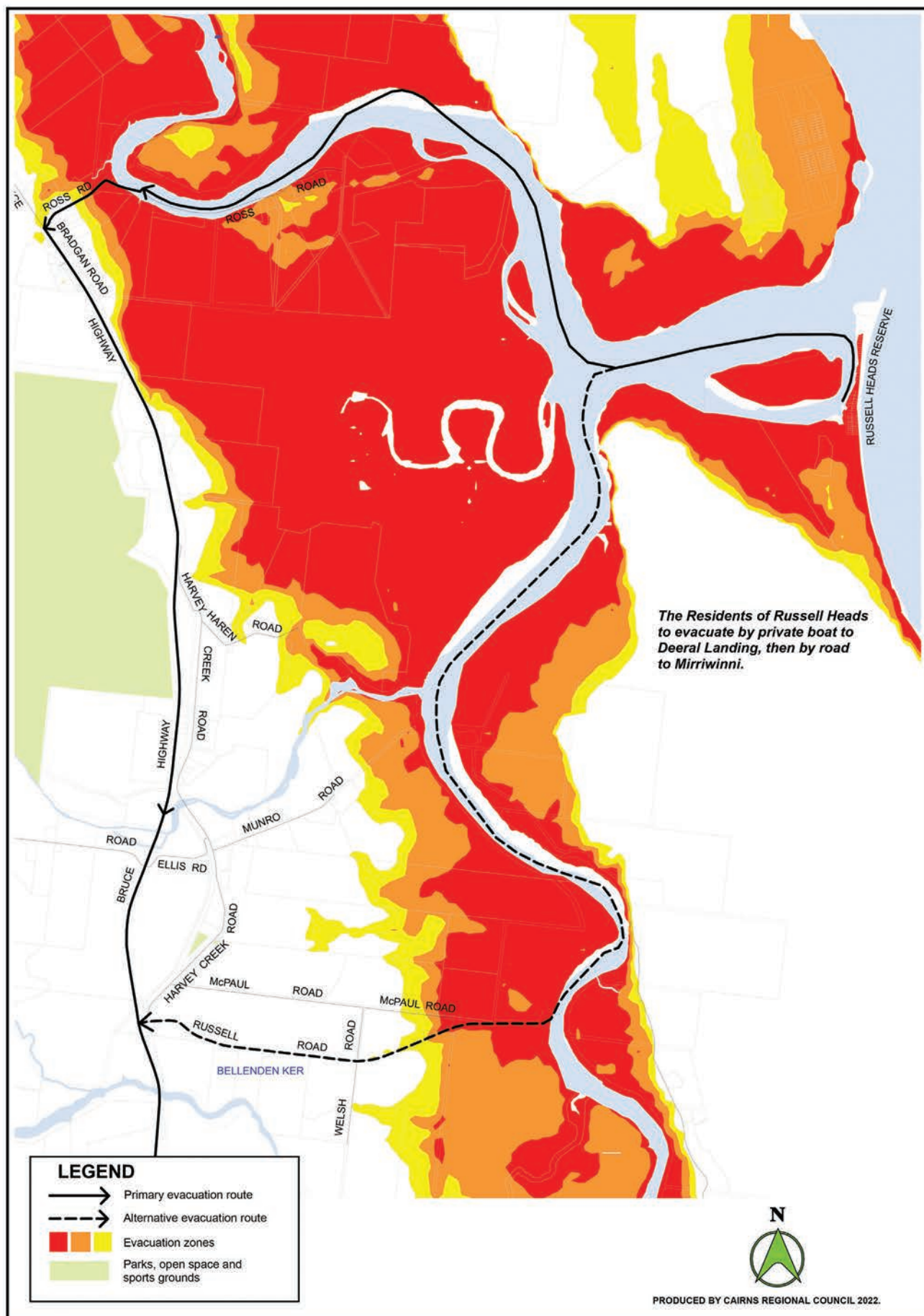
Map 2A: Northern Beaches, Machans Beach to Trinity Park



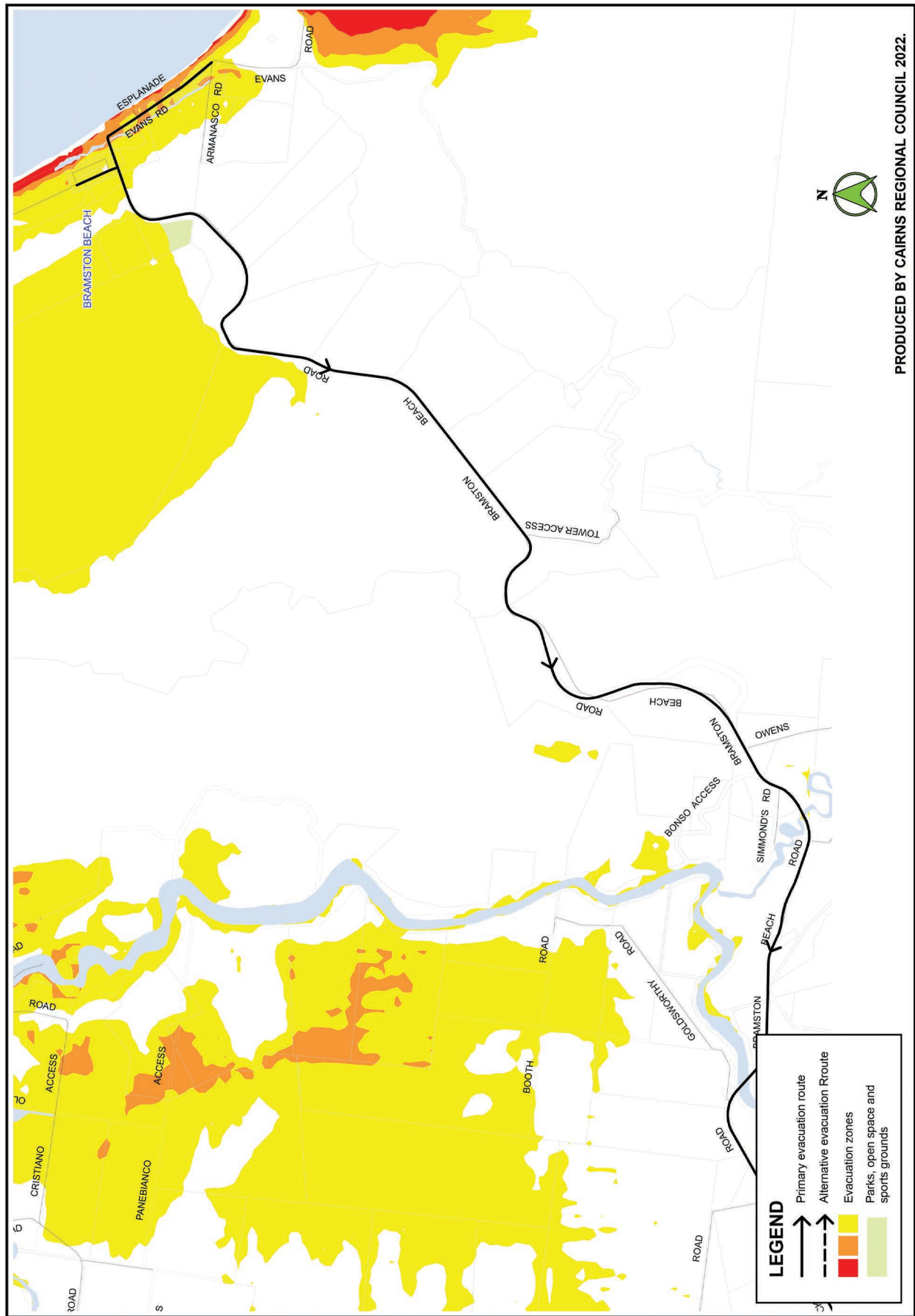
Map 2B: Northern Beaches, Trinity Beach to Ellis Beach



Map 3A: Deeral to Mirriwinni - Evacuation Routes



Map 3B: Bramston Beach - Evacuation Routes



Resources to help you prepare

Stay informed

The Cairns Local Disaster Management Group (LDMG) will provide emergency information and advice during a cyclone or other natural disaster.

The LDMG includes representatives from Cairns Regional Council, Queensland Fire and Emergency Services, Queensland Ambulance, Queensland Police, Ergon, Telstra, Ports North, Cairns Airport and other leading agencies.

Information will be issued via:



Cairns Disaster Dashboard, **disaster.cairns.qld.gov.au**



Cairns Disaster Centre Facebook account, **[@CairnsDisasterCentre](https://www.facebook.com/CairnsDisasterCentre)**



Cairns Regional Council website, **www.cairns.qld.gov.au**



ABC Far North Radio, 106.7 FM, 95.5 FM and 801 AM

You can also opt-in for SMS notifications via Cairns Alert to receive critical information, such as evacuation advice, directly to your smartphone. Sign up at [Cairns.qld.gov.au/cairnsalert](https:// Cairns.qld.gov.au/cairnsalert).

Notifications may also be sent to landlines and mobile phones through the Queensland Emergency Alert network (from number 0444444444).

For more information on being prepared for natural disasters that could impact Cairns, including cyclones, storm surge, flooding, tsunamis, earthquakes, landslips and wildfires, visit **[Cairns.qld.gov.au/disaster](https:// Cairns.qld.gov.au/disaster)**



Sign up now for Cairns Alerts



Household Emergency Kit

If a cyclone impacts Cairns the airport, port, roads and bridges could be damaged, shops and petrol stations will be closed, electricity and water supplies could be cut and phones and internet may not work.

A household emergency kit with enough supplies for your household for at least three days, is a must. These include:

- Battery-operated radio and spare batteries
(radio broadcasts will be a key way of getting information)
- Torch and spare batteries
- Candles, lighter and waterproof matches
- Water in sealed containers (3 litres per person per day)
- Non-perishable food
- Portable gas stove with fuel
- Can opener and utensils
- Combination multi-tool
- First aid kit and manual
- Pet food, water and other animal needs
- Cash (ATMs and EFTPOS may not be available)
- Personal documents (insurance certificates, photographs etc)
- Strong plastic bags (for clothing and valuables etc)
- Emergency phone numbers
- Toiletry and sanitary supplies including hand sanitiser, disposable gloves and face masks
- Medication
- Change of clothes and strong shoes
- Special needs items for infants, older people and people with disabilities.

Our household Emergency Plan



Household members:

Name:

Phone:

Name:

Phone:

Name:

Phone:

Name:

Phone:

Name:

Phone:

Hazard zones:

(Storm tide, flood, bushfire, hillslope)

.....
.....
.....

Where we will go if leaving:

(Family, friends, neighbours)

Name:

Address:

Phone:

How we will get there:

.....
.....
.....

Emergency meeting place:

.....
.....

Our emergency kit is located:

.....

Essential medications:

.....
.....

Pets:

Name:

Registration no's:

Insurance details:

Home insurer: Phone:

Policy no:

Contents insurer: Phone:

Policy no:

Car insurer: Phone:

Policy no:

Emergency contact numbers

Police/Fire/Ambulance: **000**

SES: **132 500**

Local Disaster Coordination Centre: **1300 396 102**

Ergon: **13 22 96**

Mainroads: **131 940**

Doctor:

School:

Childcare:

Workplace:

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Friends:

.....

Neighbours:

.....

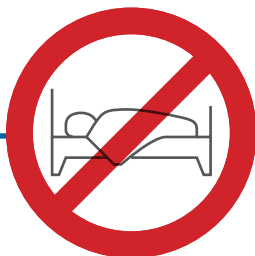
Vet:

Others:

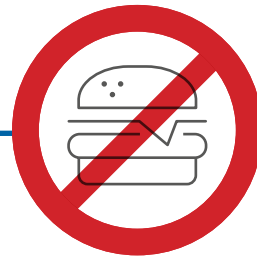
Cyclone Shelter Allowance

ONE

Standard chair per person



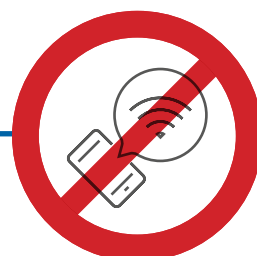
No bed or mattresses supplied or allowed. You will have to sleep in your allocated chair.



No food supplied or available. You can bring your own food and drinks but no alcohol permitted.



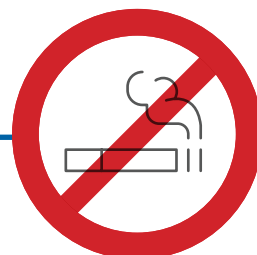
No showers.



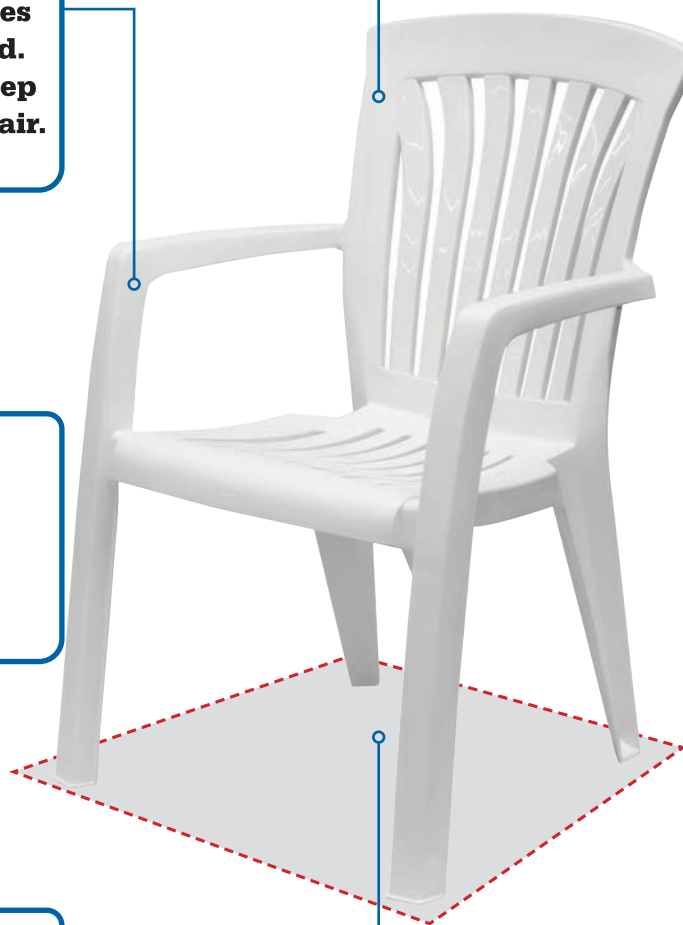
No wifi or power points. You can bring electronic devices but there are no recharge facilities.



No cooking facilities.



No smoking.



ALL

your belongings must fit under the chair

*Plastic chair pictured is for illustration only. More sturdy chairs may be provided.

KEEP UP TO DATE ONLINE



Cairns Disaster Dashboard, **disaster.cairns.qld.gov.au**



Cairns Disaster Centre on Facebook, **[@CairnsDisasterCentre](https://www.facebook.com/CairnsDisasterCentre)**



Cairns Regional Council website, **www.cairns.qld.gov.au/disaster**

Council Administration Centre: 119-145 Spence Street, Cairns.

Postal Address: PO Box 359 Cairns Qld 4870

Email: council@cairns.qld.gov.au

Phone: 1300 69 22 47