



HINCHINBROOK
LOCAL DISASTER
MANAGEMENT GROUP



STORM SURGE EVACUATION GUIDE



STORM TIDE EVACUATION MAPS



All threats outlined in the Hinchinbrook Local Disaster Management Plan have the potential to, at some time, warrant an evacuation of certain areas within our community. A copy of the Hinchinbrook Local Disaster Management Plan can be found on Council's website.

It is the nature of our location, that our community could become threatened by tropical cyclones and storm tide inundation. This emphasises the fact that we must be prepared.

In the event of a cyclone approaching our coastline, an evacuation will only be ordered if it is identified that a storm tide surge is likely to occur in developed areas. For this reason, it is important that you familiarise yourself with this guide so you are aware of your zone, if you are required to evacuate because of a storm surge.

STORM SURGE

A storm surge is a rise above the normal water level along a shore resulting from strong onshore winds and/or reduced atmospheric pressure.

Storm surges can accompany a tropical cyclone as it comes ashore. The combination of storm surge and normal (astronomical) tide is known as a 'storm tide'.

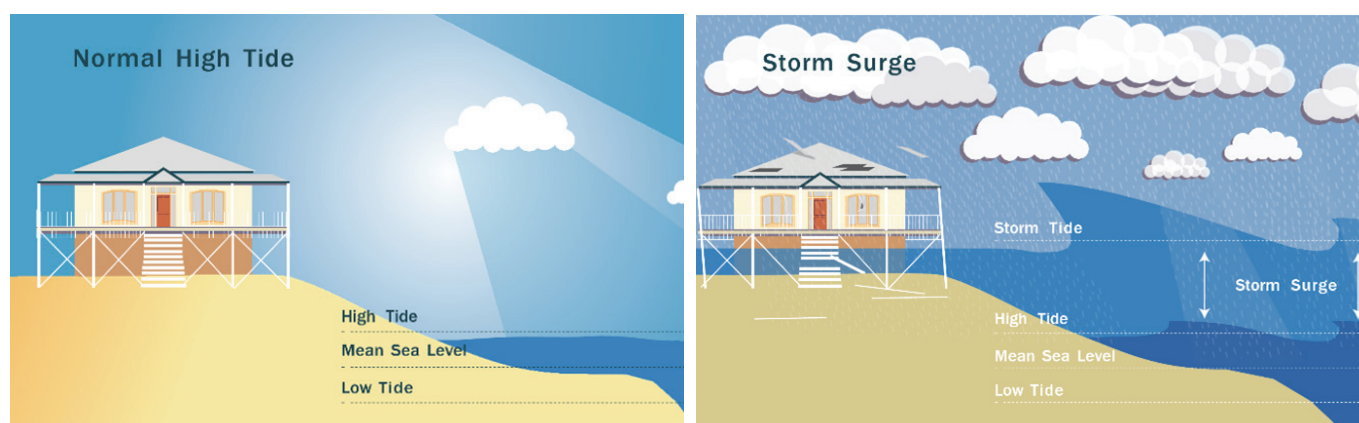
The worst impacts occur when the storm surge arrives on top of a high tide and when this happens, the storm tide can reach areas that might otherwise have been safe. Additionally, there are pounding waves generated by the powerful winds.

The combined effects of the storm tide and waves can destroy buildings, wash away roads and run ships aground.

How high will the storm surge be?

The height of the storm surge varies depending on several factors, being:

- **The intensity of the tropical cyclone** – stronger winds allow for increase in wave height and the sea water is piled on top of this;
- **The movement of the tropical cyclone** – the faster the cyclone crosses the coast, the quicker the surge will build up and create a more powerful impact when it hits the coastline;
- **The angle the tropical cyclone crosses the coast** – a direct hit will encourage a larger surge, but other angles can lead to local zones of enhanced surge in areas such as narrow inlets and bays;
- **The profile of the sea floor** – a shallow coastline allows the surge to increase strength, whereas steep slopes or fringing reefs can allow the surge to be less; and
- **Topography of the area** – islands, bays and headlands can amplify the storm surge.



TROPICAL CYCLONE

A tropical cyclone is defined as a non-frontal low-pressure system of synoptic scale developing over warm waters having organised convection and a maximum mean wind speed of 34 knots or greater extending more than half-way around near the centre and persisting for at least six hours.

The severity of a tropical cyclone is described in terms of categories ranging from 1 (weakest) to 5 (strongest) related to the maximum mean wind speed as shown in this table:

Category	Maximum Average Wind (km/h)	Typical Effects
1	63 – 88	Damaging winds. Negligible house damage. Damage to some crops, trees, and caravans. Craft may drag moorings.
2	89 – 117	Destructive winds. Minor house damage. Significant damage to signs, trees, and caravans. Heavy damage to some crops. Risk of power failure. Small craft may break moorings.
3	118 – 159	Very destructive winds. Some roof and structural damage. Some caravans destroyed. Power failures likely. (e.g. Clare, Olwyn).
4	160 – 199	Significant roofing loss and structural damage. Many caravans destroyed and blown away. Dangerous airborne debris. Widespread power failures. (e.g. Tracy, Debbie, Lam).
5	> 200	Extremely dangerous with widespread destruction. (e.g. Yasi).

IMPORTANT CONTACTS

EMERGENCY

Police, Fire and Ambulance..... 000
Policelink (non-emergency)..... 131 444
SES..... 132 500

INFORMATION

Hinchinbrook Shire Council..... 4776 4600
Disaster Dashboard
Bureau of Meteorology
Weather and warnings..... 1300 934 034
Cyclone warnings..... 1300 659 210

ROAD CONDITIONS

Department of Transport and
Main Roads..... 13 19 40



www.qld.gov.au/emergency

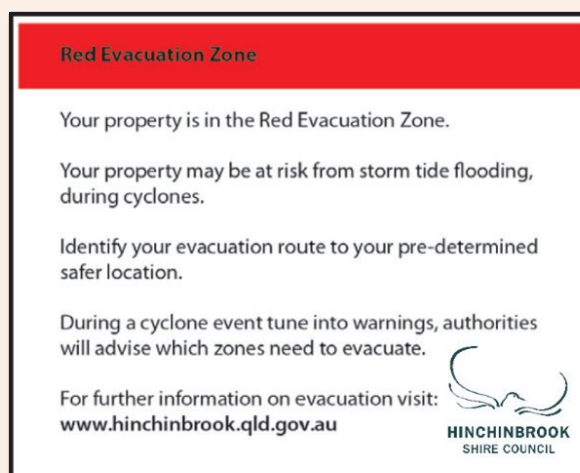
www.hinchinbrook.qld.gov.au
www.disaster.hinchinbrook.qld.gov.au
www.bom.gov.au

www.qldtraffic.qld.gov.au

BE PREPARED

Checklist for evacuation

- Do you know the evacuation zone in your area?
A sticker identifying your zone should be located in your electrical meter box (see example opposite).
- What is your zone colour?
- Do you know your emergency evacuation route?
- Have you packed your emergency evacuation kit?
- Is your vehicle full of fuel?
- Is your zone currently under threat?
- Have you heard any official advice to evacuate?



Prepare your emergency kit

- ☐ Portable radio with fresh spare batteries;
- ☐ Torch with spare batteries, candles and matches;
- ☐ Mobile phone and charger/car adaptor;
- ☐ Non-perishable food (three days supply), plus can opener, self-contained cooking gear with gas, plates and utensils;
- ☐ Clean water in sealed containers and spare water containers (10 litres per person is recommended to last three days);
- ☐ Essential medical supplies, first aid kit and toiletries;
- ☐ Shoes and sturdy gloves;
- ☐ Face masks, tissues, hand sanitiser and wipes;
- ☐ Important documents in sealed plastic bag, including cash;
- ☐ Put precious documents such as photo albums in plastic bags up high in cupboards;
- ☐ Knife, whistle, duct/masking tape, and plastic (garbage) bags;
- ☐ Tarpaulin, blankets, pillow and sleeping bag; and
- ☐ Pet food, water bowls, leash and other pet needs.

What if I am in a storm surge area?

- Make arrangements with friends or family who live in a safe place; and
- In the event of an evacuation, emergency services may door knock your street to direct you to a safer place, and you may receive a message on your home or mobile phone.

During a natural disaster alert

- Listen to your portable radio constantly and check phones for messages;
- Close up the house – secure doors, board or tape windows and secure outdoor furniture;
- Disconnect electrical appliances;
- Secure your pets in a safe place;
- Fill water containers;
- Fuel your car and place under cover;
- Remain indoors with your emergency and evacuation kit;
- Ensure all electrical/gas appliances are turned off if you need to evacuate; and
- Remember to take your evacuation kit when you leave.

Be prepared to leave your house in the event of a storm tide evacuation.

Know your Storm Tide

EVACUATION ZONE

How to use STORM TIDE EVACUATION MAPS

1. Identify where your residence is on the map;

2. If you are in one of the coloured zones, you may be at risk from storm tide flooding during cyclones;

3. Identify your evacuation route to your pre-determined safer location. For further information on evacuation, visit
- Council's website Disaster and Emergency Information page: www.hinchinbrook.qld.gov.au;

4. During a cyclone event tune into warnings; and

5. Authorities will advise which zones need to evacuate.

STORM TIDE EVACUATION ZONES

What do they mean?



INDICATES AREAS AT HIGHEST RISK OF FLOODING FROM A STORM TIDE

Properties in the Red Zone face the highest risk of coastal flooding from a storm tide. The Red Zone may experience flooding in areas located up to two and three metres above AHD*.



INDICATES AREAS AT HIGH RISK OF FLOODING FROM A STORM TIDE

Properties in the Orange Zone face a high risk of coastal flooding from a storm tide. The Orange Zone may experience flooding in areas located between three and four metres above AHD*.

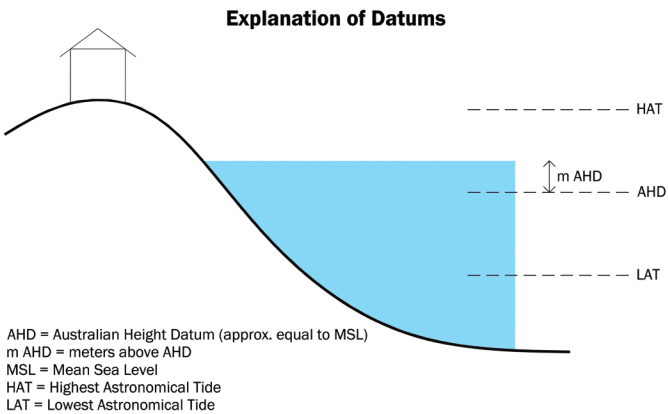


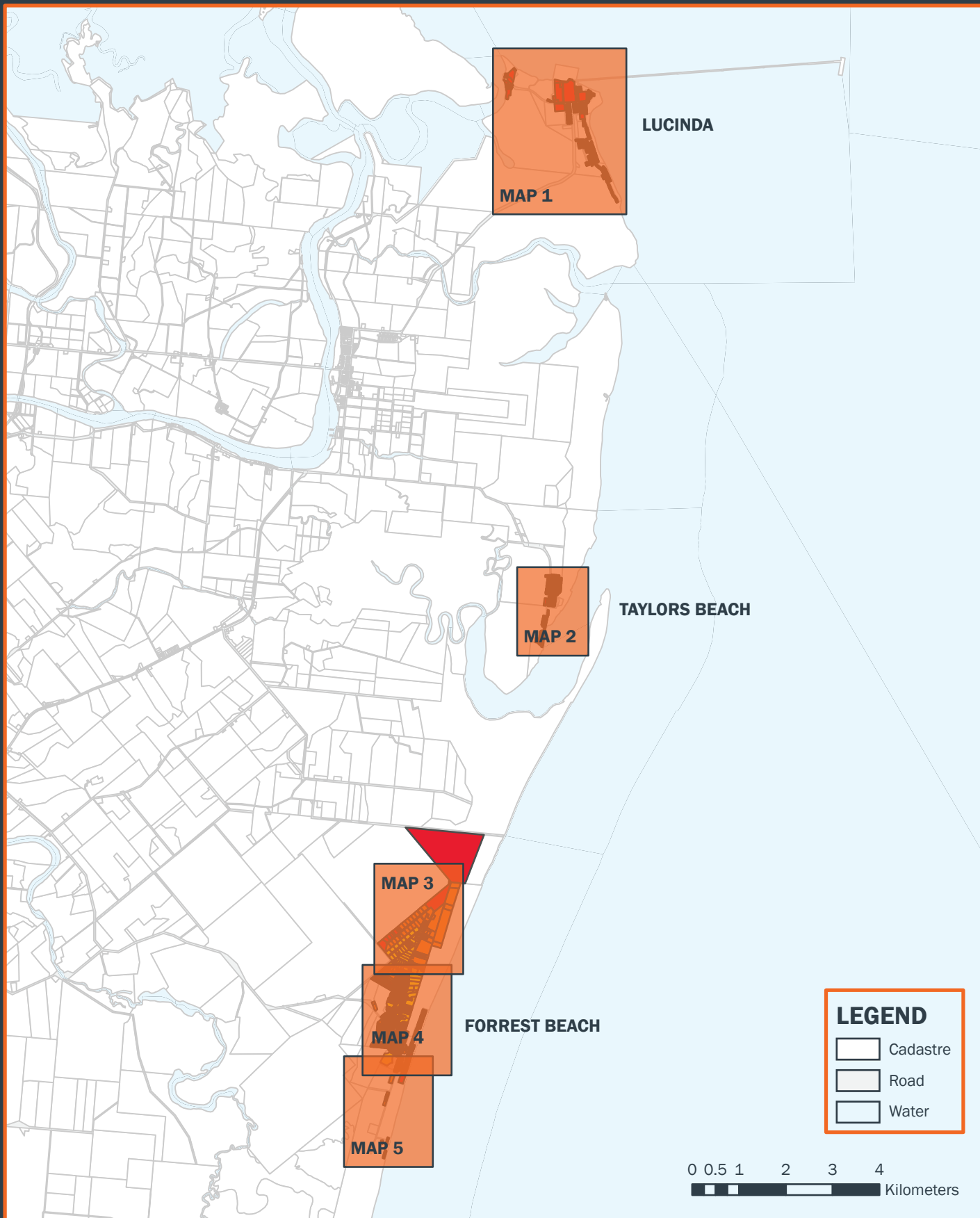
INDICATES AREAS AT MODERATE RISK OF FLOODING FROM A STORM TIDE

Properties in the Yellow Zone face a moderate risk of coastal flooding from a storm tide. The Yellow Zone may experience flooding in areas located between four and six metres above AHD*.

WHAT IS AHD?

*AHD stands for Australian Height Datum and is the term used to describe the reference level for defining ground levels in Australia. The level of 0.0m AHD is approximately mean sea level at that location.





Data Sources & Acknowledgements

Storm Tide Evacuation Zones are based upon geographical data from the National Storm Tide Mapping program. Evacuation Zones are 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 or severe east coast storms.

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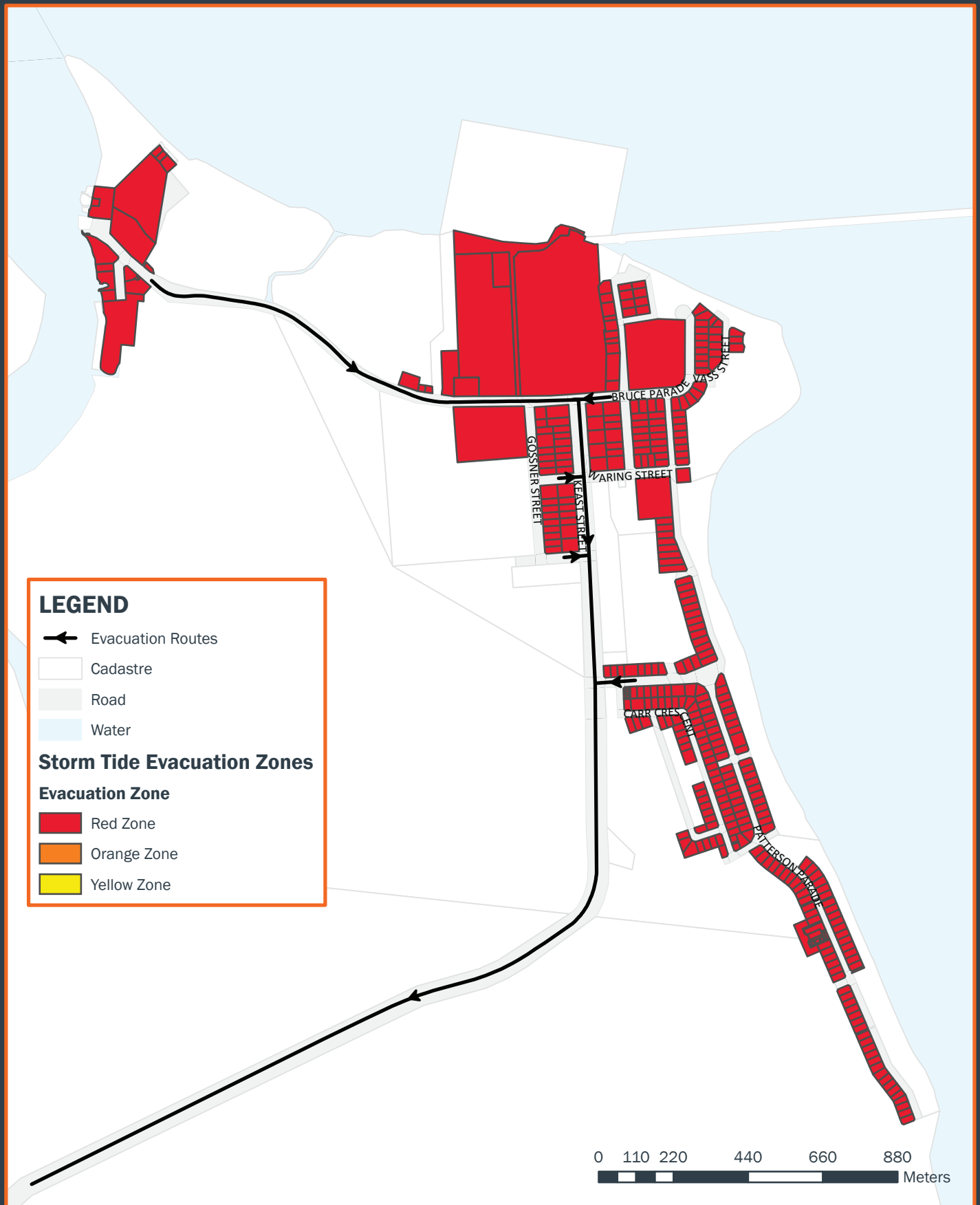
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MAP 1

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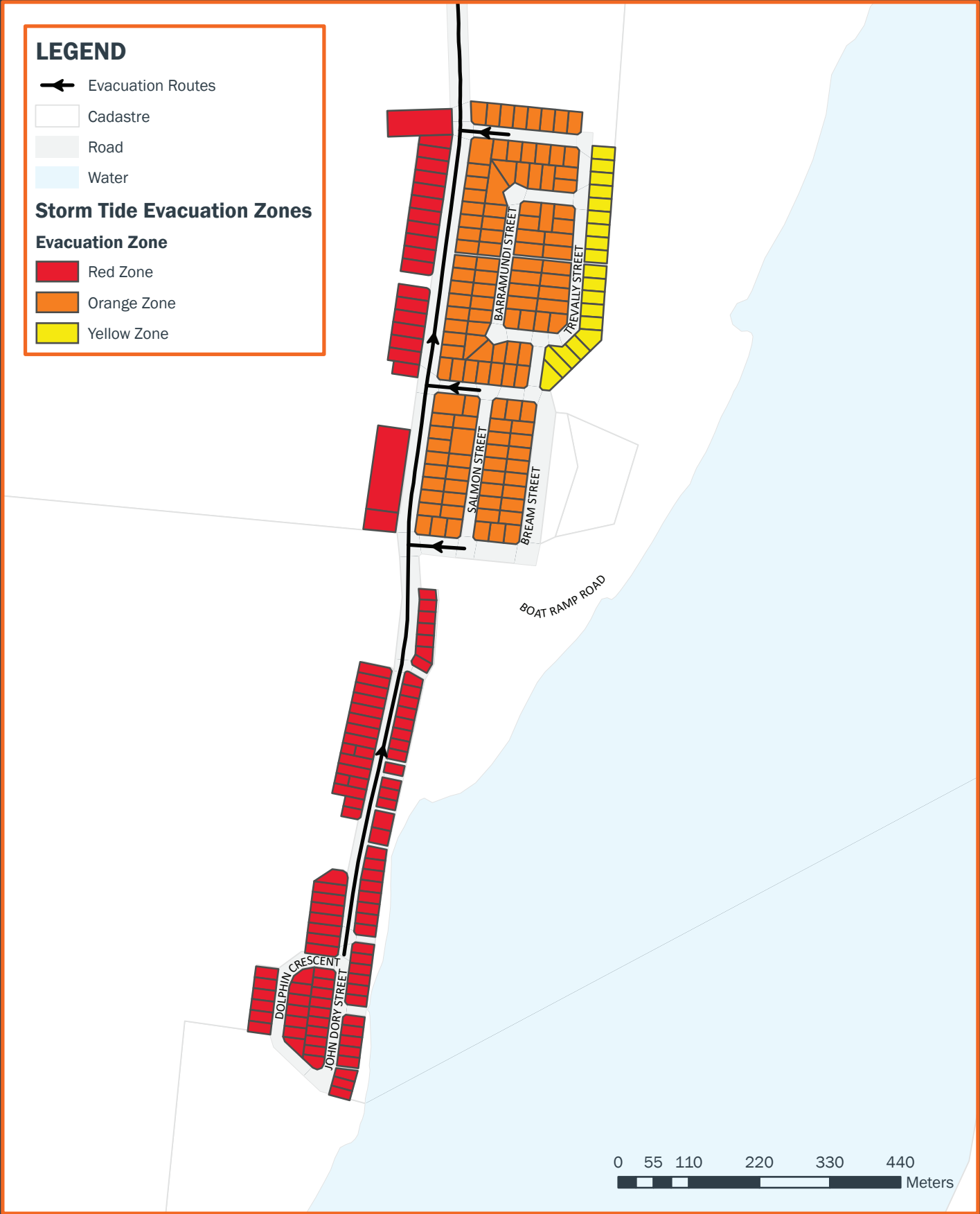
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MAP 2

LEGEND

← Evacuation Routes

□ Cadastre

□ Road

□ Water

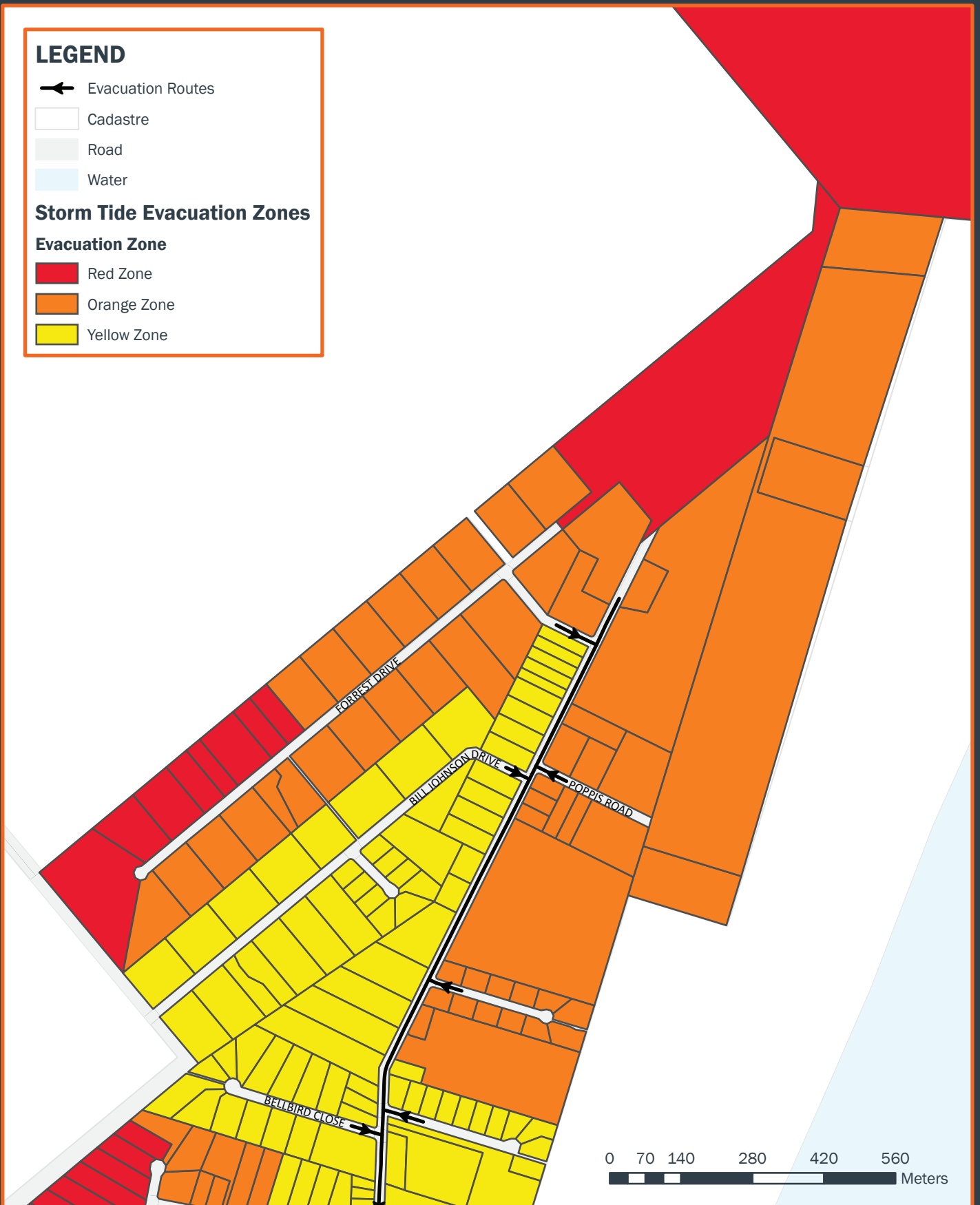
Storm Tide Evacuation Zones

Evacuation Zone

Red Zone

Orange Zone

Yellow Zone



MAP 3



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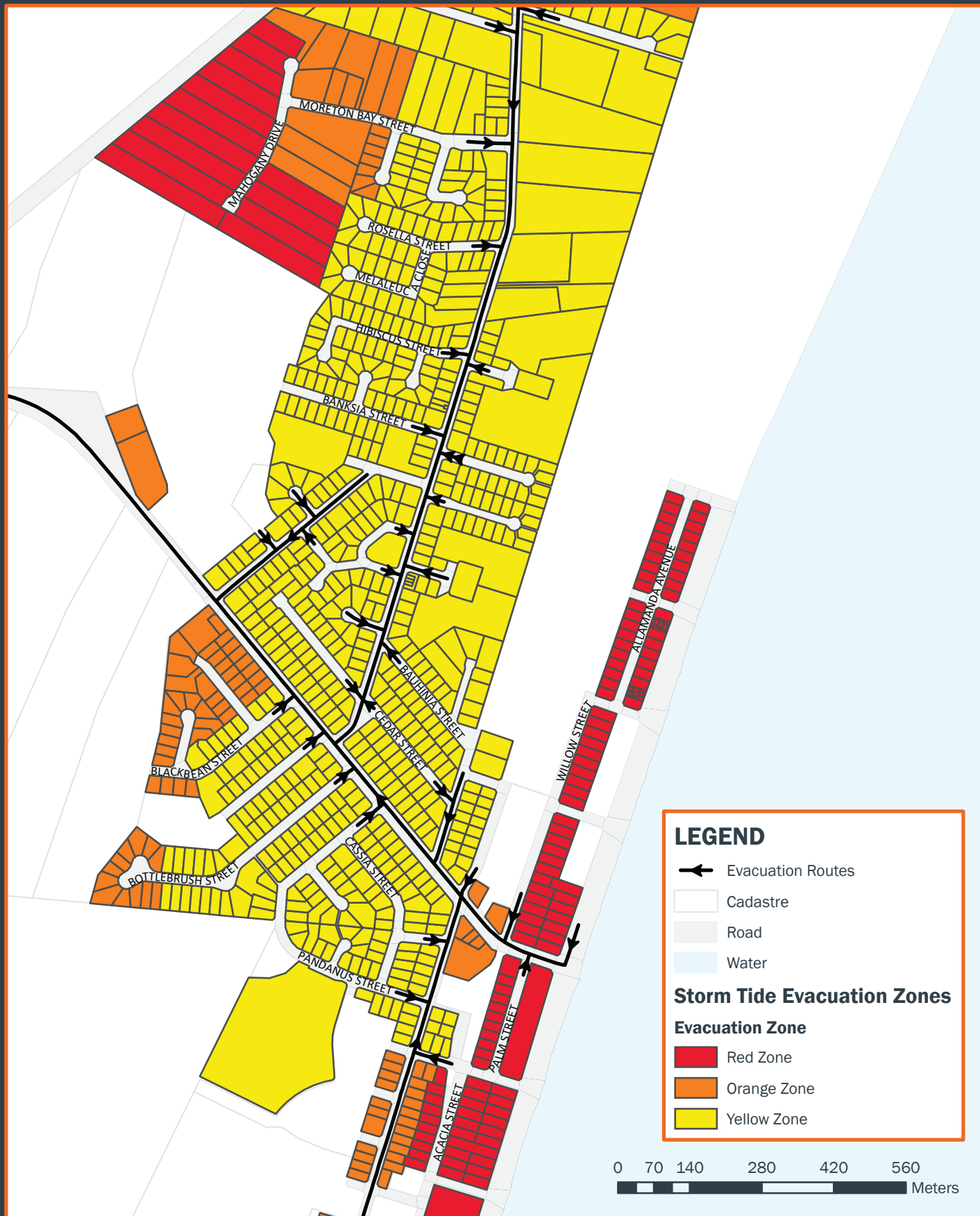
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MAP 5



HINCHINBROOK
SHIRE COUNCIL

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HINCHINBROOK
STORM TIDE EVACUATION ZONES
FORREST BEACH MAP 3 OF 3

1

Is your home in a storm tide evacuation zone?

DO NOT KNOW?
Contact Hinchinbrook Shire Council

✓ NO

⚠ YES

Plan and Prepare in case you need to go

2

Was your home built before 1982, or is your home in bad condition?

DO NOT KNOW?
Contact Hinchinbrook Shire Council for a building search. If you rent contact your real estate agent or the owner

✓ NO

⚠ YES

Plan and Prepare in case you need to go

3

Do you live alone or have special needs?

Have a plan ready. Contact family and friends and advise them of your plan

✓ NO

⚠ YES

Plan and Prepare in case you need to go

✓ Shelter in place

⚠ Evacuate and shelter in a safer place

