



ARE YOU PREPARED FOR A FLOOD



MARYBOROUGH



ARE YOU PREPARED FOR FLOOD SEASON

"Disaster Resilience is your responsibility too, you have a role to play and to be prepared".

Fraser Coast Region is a vibrant and fast growing area that has a wide range of topography and changing demographics. It exhibits an abundance of natural, world heritage, historic, aquatic, flora and fauna attractions.

Despite the region's idyllic lifestyle, there will be occasions when the community is affected by a disaster, whether natural or otherwise.

Each year from October to April our region is in the acknowledged storm and cyclone season. It is important to remain vigilant during this period and be prepared for emergency situations such as cyclones, severe storms, storms surges and floods.

Local Government in the Fraser Coast Region has always and will continue to play a critical role in disaster management. Flooding, cyclones and east coast lows are an inevitable part of living in this region and we cannot afford to become complacent about the dangers they present to our community and the environment.

Flooding in the Maryborough area does not necessarily mean we have encountered a tropical cyclone. Flooding can result from water flow from the catchment area of the Mary River which starts in the Conondale Ranges near Kenilworth, flowing through Amamoor area and then to Gympie. Flooding in the Mary River at Gympie can result in flooding in Maryborough. High tides in the riverine system will also have a dynamic impact on flood water heights.

It is necessary to remain alert and continually monitor the Fraser Coast Regional Council website, Councils Disaster dashboard and disaster management Facebook site as well as the Bureau of Meteorology and media outlets.

To assist you to counter such events and protect yourself and your family, this information booklet has been produced as a local guide for the Maryborough area and as a source of information in regard to flood heights and how they affect residential areas.

Fraser Coast Regional Council is committed to minimising the adverse effects through comprehensive planning, preparation, managing effective response and recovery. Paramount to this is having the community Get Ready and Be Prepared.

Your active preparation and helping your family, neighbours and working with others through community connectedness with a shared sense of responsibility is the key to our resilience, survival and collective ability to recover.

CONTENTS

Historical Information	3	Flood Cameras	10
Inundation Levels	4	Preparation	11
Mary River Catchment	5	Map Index	13
Warnings & Bulletins	6	Household Emergency Plan	34
Manual Gauges	7	Evacuation Plan & Kits	35
Automatic Gauges (ALERT)	8	Important Telephone Numbers & Contacts	36
Flood and Rain Monitors	9		

HISTORICAL INFORMATION

Detailed flood data for the Mary River has been recorded since 1910, but the highest recorded level was at 12.27m in February 1893. For a major flood to occur in Maryborough large scale rainfall is required over the catchment area. At each flood warning river height station the severity of the flooding is described as minor, moderate or major according to the effects caused in the local area or in nearby downstream areas. All forecasting (flood height monitoring) in Maryborough city is recorded from the official Bureau of Meteorology (BOM) gauge in Macalister Street. Terms used in 'flood warnings' are based on the following definitions.

Flood level definitions



MINOR FLOODING

Causes inconvenience. Low-lying areas next to watercourses are inundated, minor roads may be closed and low-level bridges submerged.



MODERATE FLOODING

In addition to MINOR FLOODING, the area of inundation is more substantial. Main traffic routes and buildings may be affected.



MAJOR FLOODING

In addition to MODERATE FLOODING, extensive rural areas and/or urban areas are inundated. Properties and towns are likely to be isolated, buildings inundated and major rail and traffic routes closed.

Gympie and Maryborough, the two main centres in the Mary catchment, have a long history of flooding. Reports of major flooding prior to 1910 are available as far back as 1870.

The Bureau of Meteorology operates a flood warning system for the Mary River based on a rainfall and river height observations network. In consultation with Fraser Coast and Gympie Regional Councils, the Bureau issues predictions of flood heights for the Mary River at Gympie whenever it is expected to exceed 12 metres on the gauge boards adjacent to Kidd Street Bridge, and at Maryborough whenever it exceeds 5.0 metres on the the Portside gauge at Macalister Street. The objective is to provide between 21 to 27 hours warning for Gympie and 18 to 24 hours warning for Maryborough of flood heights above 12 and 5 metres respectively. These forecasts are updated up to six times per day throughout the flood event.

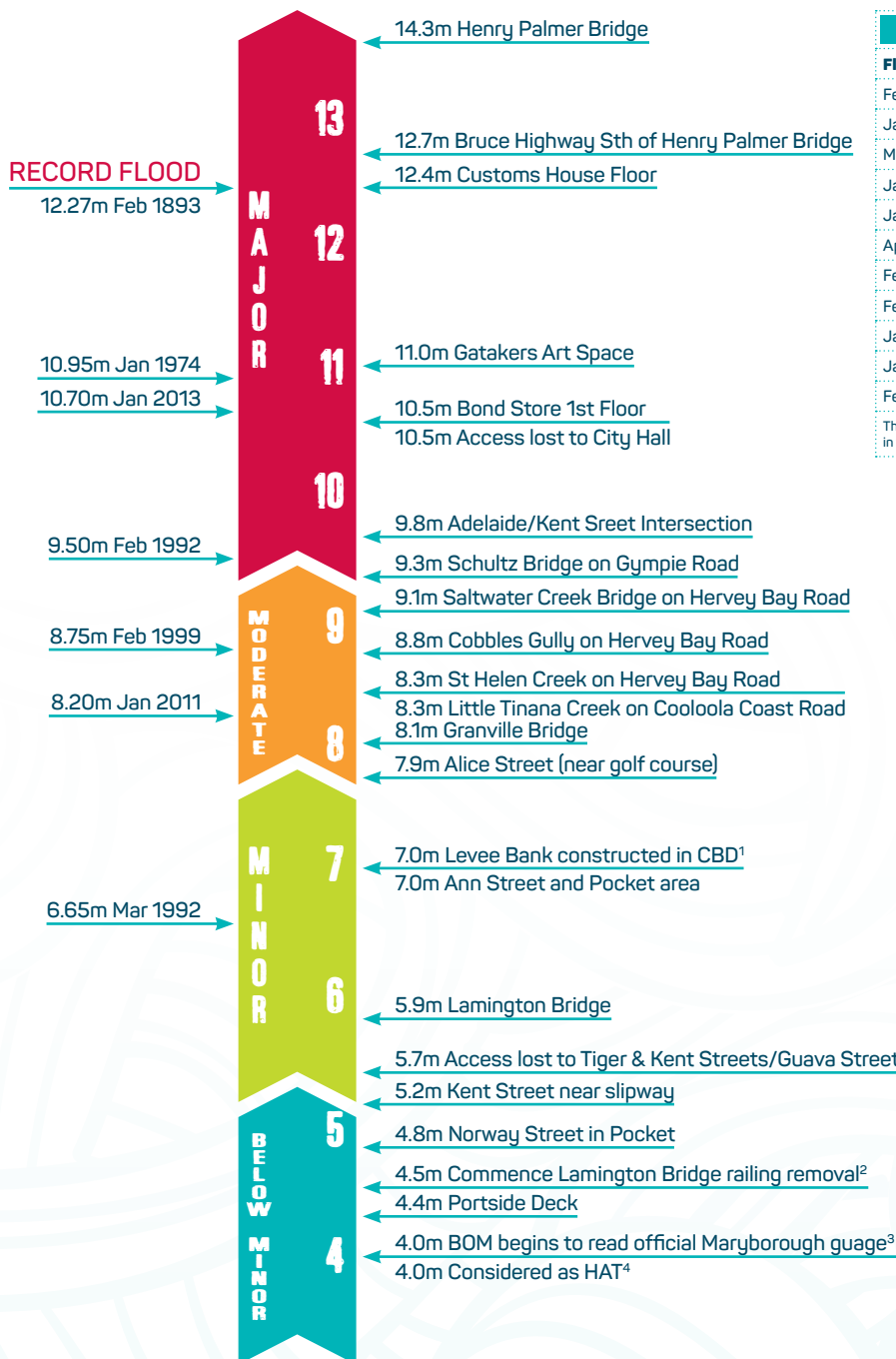


INUNDATION LEVELS

The following depicts the key inundation levels for Maryborough

HISTORICAL FLOODS

INUNDATION LEVELS



HISTORICAL FLOOD HEIGHTS				
Flood Event	Gympie	Miva	Tiaro	Maryborough
Feb 1893	25.45	23.08	21.95	12.27
Jan 1898	22.00	20.11	16.99	9.70
Mar 1955	21.44	21.84	20.75	11.23
Jan 1968	18.75	18.92	17.78	9.25
Jan 1974	20.73	20.80	20.62	10.95
Apr 1989	19.65	18.30	15.92	6.60
Feb 1992	21.40	20.45	18.60	9.50
Feb 1999	21.95	20.65	18.10	8.75
Jan 2011	19.45	19.80	17.10	8.20
Jan 2013	19.98	20.90	21.00	10.70
Feb 2013	18.55	17.76	16.50	8.10

This table summarises the flood history of the Mary River catchment in flood gauge heights. Source: Bureau of Meteorology.

NOTES

- 1 If peak is expected between 9-9.8 metres.
- 2 The written procedure identifies that the rails removal is to start at 4.5m to allow the staff 5 hours before the bridge becomes unsafe. This may change due to specific circumstances.
- 3 Readings will not appear on the BOM website until water level is above 4.0m.
- 4 HAT stands for the Highest Astronomical Tide, commonly referred to as the highest King Tide for the year.

DISCLAIMER

The above are indicative flood inundation levels for a typical flood referenced back to the official BOM Macalister Street manual gauge. As each flood is different, they should be used as a guide only.

MARY RIVER CATCHMENT

The Mary River catchment is located in the south east coastal area of Queensland and covers an area of over 7000 square kilometres. The headwaters of the Mary River are located in high rainfall areas around Maleny, Mapleton and Conondale Ranges. Average annual rainfalls in the Mary catchment range from around 2000mm in the headwaters to around 1200mm near Maryborough. At Gympie nearly 80% of floods have occurred between December and April. Heavy rainfall in the headwater areas is likely to cause major flooding in the Mary River at Gympie and Maryborough. Floods at Maryborough are typically caused by heavy rainfalls particularly over the upper catchment, but it is possible that very heavy rainfalls in the catchment below Gympie may cause appreciable rises in the lower reaches of the Mary River.



WARNINGS & BULLETINS

Interpreting Flood Warnings and River Height Bulletins

Flood Warnings and River Height Bulletins contain observed river heights for a selection of the river height monitoring locations. The time at which the river reading has been taken is given together with its tendency (e.g. rising, falling, steady or at its peak). The Flood Warnings may also contain predictions in the form of minor, moderate or major flooding for a period in the future. River Height Bulletins also give the height above or below the road/bridge or causeway for each river station located near a road crossing.

One of the simplest ways of understanding what the actual or predicted river height means is to compare the height given in the Warning or Bulletin with the height of previous floods at that location.

The table below summarises the flood history of the Mary River catchment - it contains the flood gauge heights of the more significant floods. All heights are in metres on flood gauges.

Flood Event	Kenilworth Br	Imbil	Cooran	Gympie	Miva	Tiaro	Maryborough
Feb 1893	-	-	10.69	25.45	23.08	21.95	12.27
Jan 1898	-	-	10.34	22.00	20.11	16.99	9.7
Mar 1955	13.67	11.73	8.66	21.44	21.84	20.75	11.23
Jan 1968	11.28	6.50	8.81	18.75	18.92	17.78	9.25
Feb 1974	12.00	9.75	9.58	20.73	20.80	20.62	10.95
Apr 1989	12.06	8.80	9.15	19.65	18.30	15.95	6.60
Feb 1992	9.80	8.90	10.25	21.40	20.45	18.60	9.50
Feb 1999	11.90	10.70	9.65	21.95	20.65	18.10	8.75
Jan 2011	-	8.20	10.22	19.45	19.80	17.10	8.20
Jan 2013	-	10.8	10.42	19.98	20.90	21.00	10.70
Feb 2013	-	-	10.22	18.55	17.76	16.50	8.10
Feb 2015	-	-	8.95	25.45	15.30	12.30	-

Each flood is different and is determined by the conditions before during and after. however as a general guide to assist in planning, the following times can be used.

Location (approximate time till flooding occurs)	
Gympie to Maryborough	29 to 45 hours
Miva to Maryborough	27 to 28 hours
Home Park to Maryborough	16 hours
Tiaro to Maryborough	10 to 16 hours
Barrage to Maryborough	6 to 7 hours

MANUAL DEPTH GAUGES

FLOOD GAUGES

Fraser Coast Regional Council has approximately 60 manual staff gauges strategically placed throughout the city and suburbs to provide a means of reference for local residents to ensure they understand the implications and risks of a Maryborough flood and alert them so they can prepare accordingly. These flood gauges are configured to the MacAlister Street manual gauges.



Manual staff gauge Granville Boat Ramp



Manual staff gauge Queens Park

ROAD HEIGHT MARKER

Some other staff gauges belong to Department of Transport and Main Roads and these can be seen on the 'state' roads and usually refer to height of water above the road at a particular point in the road. Remember here 'If it's flooded forget it'.

Indicate the depth of water over the road. Remember never drive through floodwater. If its flooded forget it. Have another plan. Go to www.qld.gov.au/floodwater safety

IF IT'S FLOODED FORGET IT.



m	m	m
2	4	6
1.8	3.8	5.8
1.6	3.6	5.6
1.4	3.4	5.4
1.2	3.2	5.2
1	3	5
0.8	2.8	4.8
0.6	2.6	4.6
0.4	2.4	4.4
0.2	2.2	4.2

AUTOMATIC GAUGES (ALERT)

Fraser Coast Regional Council continues to install a number of new ALERT (Automatic Local Evaluation in Real Time) gauges

Fraser Coast Regional Council continues to install a number of new ALERT (Automatic Local Evaluation in Real Time) gauges which has given Council the capacity to monitor a much wider area of the Mary River system allowing for real time monitoring of river and the inflow from the various creek levels. The gauges are strategically placed to provide the best information for the Bureau of Meteorology to make a considered forecast.

ALERT gauges give automatic readings back to the Bureau of Meteorology and give real time readings on water levels. Council has 15 ALERT gauges recording heights on the Mary River and its tributaries, and on the Burrum and Cherwell Rivers to our north.

Information from the ALERT gauges can be accessed at any time by logging on to www.bom.gov.au. Use search facility for 'river heights data Queensland'. Click on 'Queensland Rainfall & River Height Data', then 'Moolooah, Maroochy, Noosa, Mary'. Locate Mary River and select the ALERT gauge you require at the locations along the Mary River from the headwaters to Maryborough.

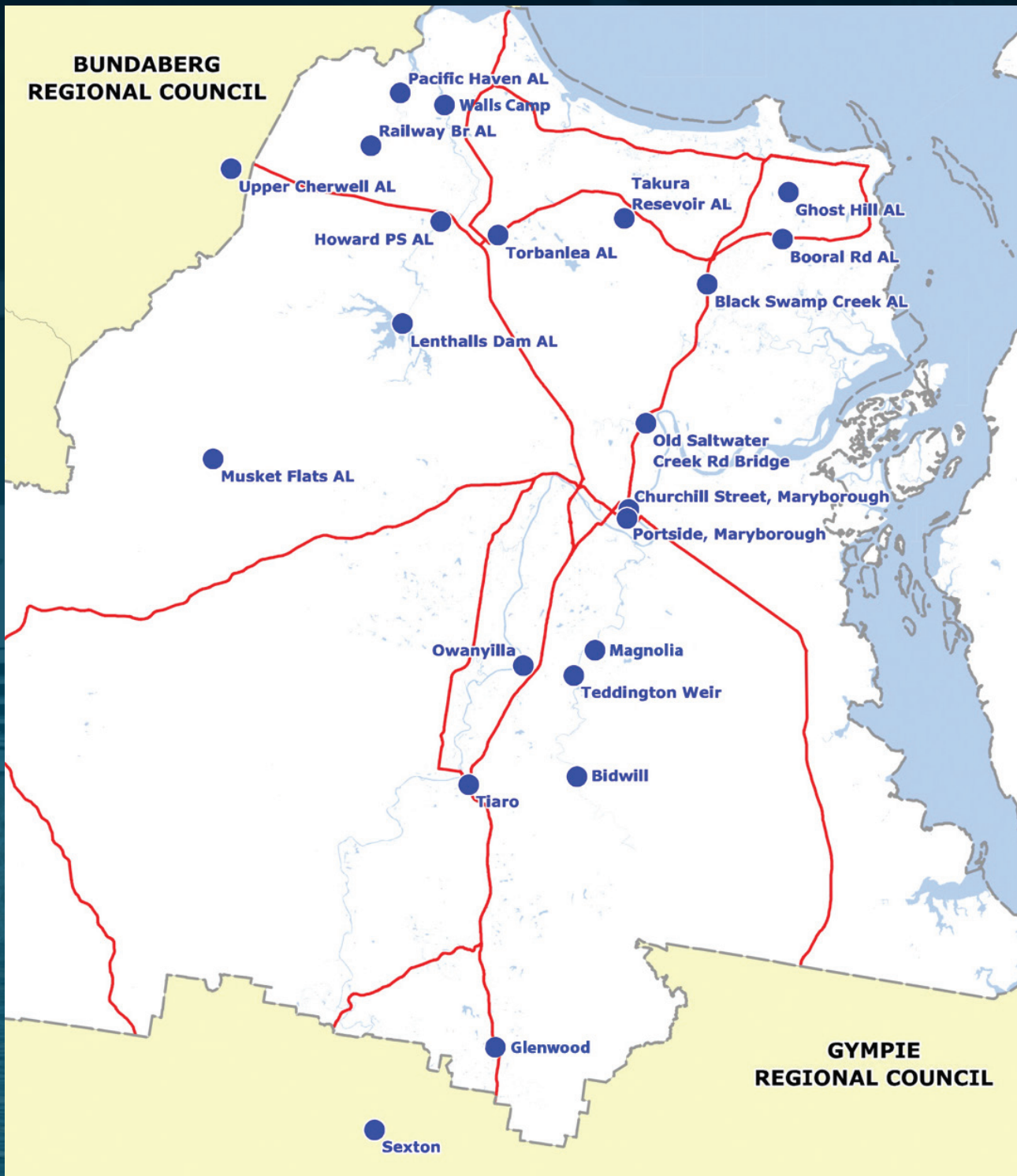
ALERT gauges have also been installed along Tinana Creek that can impact on the flood height of the Mary River almost on the doorstep of Maryborough.

At the bottom of the Mary River listing on the Bureau of Meteorology website you will see sites such as Magnolia, Bidwill and Teddington Weir.



Portside Flood Monitor, Macalister Street, Maryborough

ALERT AND RAIN MONITORS ACROSS THE FRASER COAST



FLOOD CAMERAS

Council continues to install new monitoring cameras in all areas of the Fraser Coast.

Views from these cameras can be seen on Council disaster dashboard – disaster.frasercoast.qld.gov.au



Saltwater Creek Bridge



Teddington Weir floodway



Burum River Bridge



Lamington Bridge

PREPARATION

WHAT WILL HAPPEN?

The Bureau of Meteorology will issue a flood watch or similar advice of possible flooding if flood-producing rain is expected in the near future. General weather forecasts may also refer to flood-producing rain.

A flood warning is issued when flooding is occurring or expected to occur in a particular area. When flash flooding is expected, a severe weather warning is issued.

There will be warnings through broadcast media, Council disaster dashboard, or directly within communities through the Community Co-ordination Committee's, street announcements and door knocking of areas likely to be affected.

The Standard Emergency Warning System (SEWS) may be used in flood events where life threatening flood waters may occur. The SEWS is a high pitched warning siren sound that can be published on Television, Radio and social media platforms. Text message Emergency Alerts (EA) may be generated from the State Disaster Coordination Centre in extreme cases where there is likely to be dangerous flash or riverine flooding. Emergency Alerts via text message and fix line recording are often the last line of defence in warning the public and only used in rare circumstances. Residents can also sign up to receive individual flood gauge notifications through the disaster dashboard found on Council's website.

A tropical cyclone or tropical low which passes over the Fraser Coast area from the north may cause flash flooding. If the system travels southwards it can affect the Mary River catchment and the prospects of a flood in the coming days.

Drains, creeks or waterways that have had little or no water flow in previous months may fill rapidly with fast-flowing water, which can spread throughout Maryborough and surrounds. The height of the water may not have been seen in the same location before.

You may not be able to get in or out of your house or street if it is affected by flooding. Make alternative arrangements until the waters have subsided – don't even contemplate driving through flooded roadways.

WHAT SHOULD I DO?

Check the information on the Bureau of Meteorology and local emergency services websites and listen for flooding information. Check the Council disaster dashboard disaster.frasercoast.qld.gov.au

If you are, or think you may be in danger of flooding unplug electrical equipment such as TVs and computers to avoid damage caused by power surges. Move household items to a higher place (eg on a bed or table or upstairs). This is especially important for electrical items, chemicals and perishable food, which can all be wrapped in plastic bags then stored in higher places.

Keep refrigerator and freezer closed so food will stay cool without power for several hours.

Switch off power at the switchboard, gas and the main water valve.

Secure loose items around the property including rubbish bins, garden tools, sports equipment, outdoor furniture etc. Move as much as possible to higher ground and sink any outdoor furniture in your pool.

Sandbag areas at risk from flooding where possible. This includes drains inside the house to help prevent sewerage overflows. Boil tap water in case of contamination.

The Local SES often run sandbagging days and would assist with the supply of sand bags which can be filled.

If you are in an area affected by flooding, and you are unable to move to higher storey and/or feel unsafe, follow your household emergency plan and move to your pre-arranged safer location. Take your household emergency kit. Whatever you do don't leave it till the last minute to leave.

NEVER DRIVE, WALK, SWIM OR PLAY IN FLOODWATERS.

Hazards could exist below the surface which you can't see, regardless of how well you know the area. The water could also be contaminated.

PREPARATION CONT.

ROAD CLOSURES

The Queensland Government under the auspices of the Department of Transport and Main Roads have a traffic/travel/road closed website which can be viewed on www.131940.qld.gov.au. Viewing this site will allow you to make informed decisions on travel choices that are available, particularly as cyclonic events can be widespread and affect many geographical locations across the State. Traffic information is also displayed on Council's disaster dashboard.

COMMUNITY CO-ORDINATION COMMITTEES

Fraser Coast Regional Council has fostered and supported community groups in outlying areas to form Community Coordination Committees (CCCs). There are now 17 of the groups throughout the Fraser Coast including two groups on Fraser Island. With support from Council the groups are the eyes and ears of their community in times of weather events or other incidents that require a community response. The CCCs receive first aid, evacuation centre and general disaster management training to support their communities in times of need. Council has direct lines of communication to the leaders of these groups which allows immediate response to any concerns. Most of the communities do become isolated by flood waters in times of protracted rainfall and being in direct contact with Councils Disaster Management team offers a safety net for the community. To get involved in one of these groups contact Councils disaster management team on 1300 79 49 29. Groups have been established at:

- Aldershot
- Bauple
- Boonooroo
- Burrum Heads
- Glenwood
- Granville
- Gundiah
- Happy Valley
- Howard
- Maaroom
- Orchid Beach
- Pacific Haven
- Poona
- River Heads
- The Pocket
- Tiaro



**IF IT'S FLOODED
FORGET IT.**

FLOOD HEIGHT MAP INDEX

5 metres	14	8 metres	20	11 metres	26
6 metres	16	9 metres	22	12 metres	28
7 metres	18	10 metres	24	13 metres	30

DISCLAIMER

Inundation maps are modelled using geographical data and may not be an exact representation of what an event may result in. The maps provided in this booklet are a guide only, and you should contact Council for detailed flood height mapping for your specific property on 1300 79 49 29.

Inundation levels are designed to provide an easy to understand method for the public to identify areas than may be affected by flooding. While every care is taken to ensure the accuracy of this data, Fraser Coast Regional Council makes no representations or 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, damage (including direct or consequential damages) and costs which you might incur as a result of the data.



Manual Gauge near band hall



Gauge on side of Bond Store



Towards river near Excelsior Band Hall



Ululah from Cheapside Street

5 METRE FLOOD HEIGHT





6 METRE FLOOD HEIGHT





7 METRE FLOOD HEIGHT





8 METRE FLOOD HEIGHT





9 METRE FLOOD HEIGHT





10 METRE FLOOD HEIGHT





11 METRE FLOOD HEIGHT





12 METRE FLOOD HEIGHT

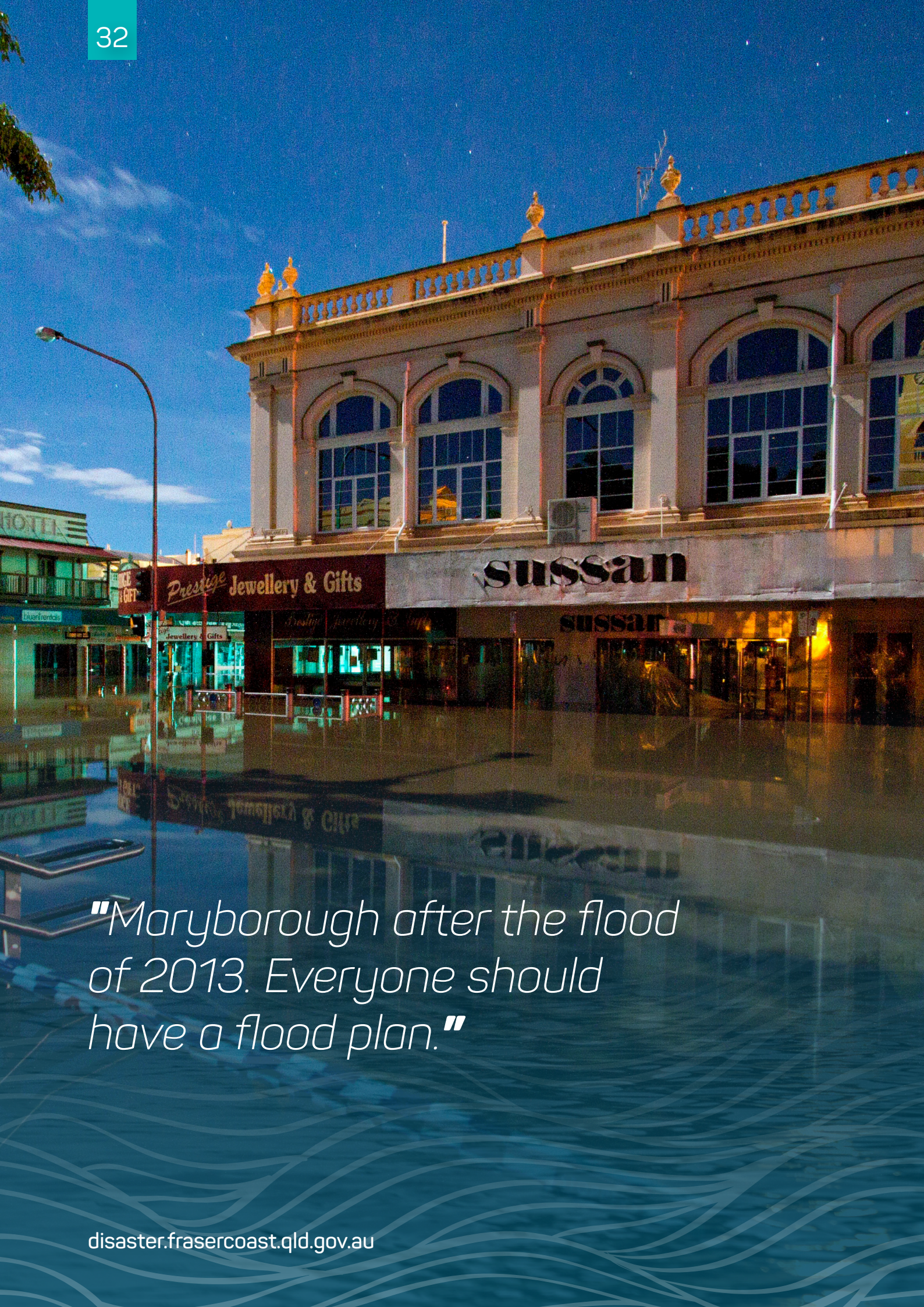




13 METRE FLOOD HEIGHT







"Maryborough after the flood of 2013. Everyone should have a flood plan."

HOUSEHOLD EMERGENCY PLAN

INUNDATION LEVEL

My house is in meter zone

HOUSEHOLD CONTACTS

Name	Mobile number	Email address

EMERGENCY CONTACTS

Nearby contact name	
Address	
Phone number	
Email address	
Out-of-town contact name	
Address	
Phone number	
Email address	

MEETING PLACE

Address	
Phone number	

PHONE NUMBERS

Council	
Electricity	
Doctor	
Hospital	
Veterinary practice	
Insurance provider	
Childcare provider	
Primary school	
High school	
Workplace	
Workplace	
Friend	
Friend	
Neighbour	
Neighbour	

MEDICAL INFORMATION

Medication	Who needs it and at what dosage?

EVACUATION PLAN

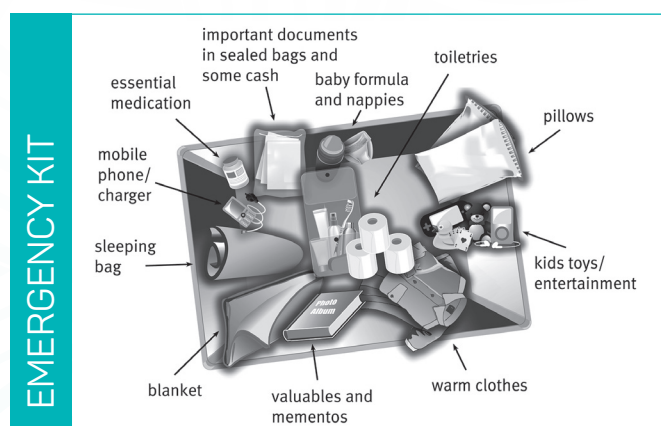
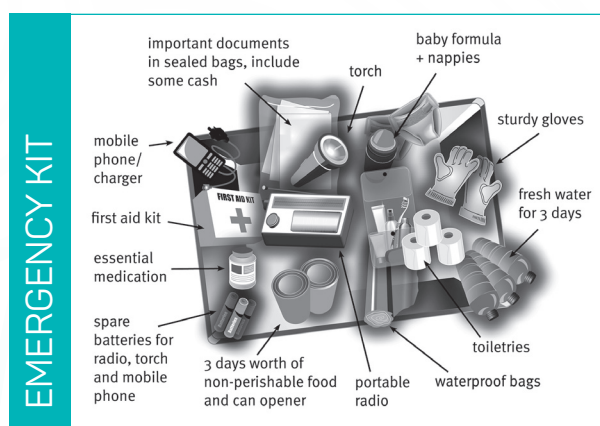
If you live in a flood prone area - try to find friends in higher places. Keep in contact with them during flood events and be prepared to move your family with their emergency/evacuation kits.

Don't forget to make arrangements for your pets. If you need to be evacuated by helicopter, domestic pets will not be taken. Exotic pets will not be accepted into evacuation centres.

When the possibility of flooding becomes imminent make sure you have checked the following:

1. Is your vehicle full of fuel?
2. Do you have essential medications for your family?
3. Have you packed important documents and valuables?
4. Have you turned off all the power, gas and water mains to your home?
5. Are your pets safe and secure with sufficient food and water?
6. Have you secured and locked your home?
7. Have you packed emergency water supplies?
8. Have you checked on neighbours if they are elderly or disabled?


KITS



IMPORTANT TELEPHONE NUMBERS & CONTACTS


EMERGENCY - POLICE/FIRE/AMBULANCE		000
State Emergency Service		132 500
Energy Queensland	Faults 24 hours	132 296
	Life Threatening Emergency	000
Police (non-life threatening)		4123 8111
Fire (non-life threatening)	Hervey Bay	4125 2133
	Maryborough	4190 4801
	Rural Fires (Area Office)	4190 4839
Ambulance (non-life threatening)		131 233
Hospitals	Hervey Bay Public Hospital	4325 6666
	Maryborough Base Hospital	4122 8222
	St Stephens Private Hervey Bay	4120 1200
Marine Rescue	Hervey Bay	4128 9666
	Sandy Straits	4129 8141
RACQ (road closures)		13 19 40
Fraser Coast Regional Council	General Enquiries	1300 79 49 29
	Water & Sewerage Emergency	1300 79 49 29
Bureau of Meteorology		www.bom.gov.au
Queensland Disaster Management		www.disaster.qld.gov.au
Council Website		www.frasercoast.qld.gov.au
BE ALERT AND LISTEN OUT FOR: <ul style="list-style-type: none"> • Standard Emergency Warning Signal (SEWS) siren sound at the beginning of serious warning on radio & TV. • Emergency Alert voice messages to your landline & your mobile telephone. • Sirens & loud-hailer announcements or door knocking may also be used by Emergency Services & Council. 		
Local Radio Stations: ABC FM 100.1 ABC AM 855 Triple M 103.5 FM HIT 101.9 FM FRASER COAST FM 107.5		

DISASTER DASHBOARD


 Opt-In Notifications



Emergency News
Published on 05/01/2021 13:09


2 
Active Centres
Published on 05/01/2021 13:09


6 
Road Conditions
Published on 05/01/2021 13:12


2 
Power Outages
Published on 05/01/2021 13:12


 Radar Loop

 River Heights


 Rainfall

 Storm Tide Hazard

 Regional Flood Maps

 Helpful Contacts

 Fire Danger Ratings

 Get Ready

OPT-IN for notifications NOW!
disaster.frasercoast.qld.gov.au



YOUR ONE STOP SHOP FOR DISASTER INFO

