

# Cyclone Rona

February 11, 1999

## Evacuation of Caravonica and Lake Placid Report

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## **Acknowledgments**

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## **1. Introduction**

On Thursday February 11, 1999 Tropical Cyclone Rona made landfall between 10pm and midnight. The eye of the cyclone passed between Cape Tribulation and Port Douglas – centred over the mouth of the Daintree River. The central pressure at landfall was 970-975 hPa, maximum wind gusts were recorded between 160 and 170km/h which put Rona in the category of a marginally severe Category 3 cyclone.

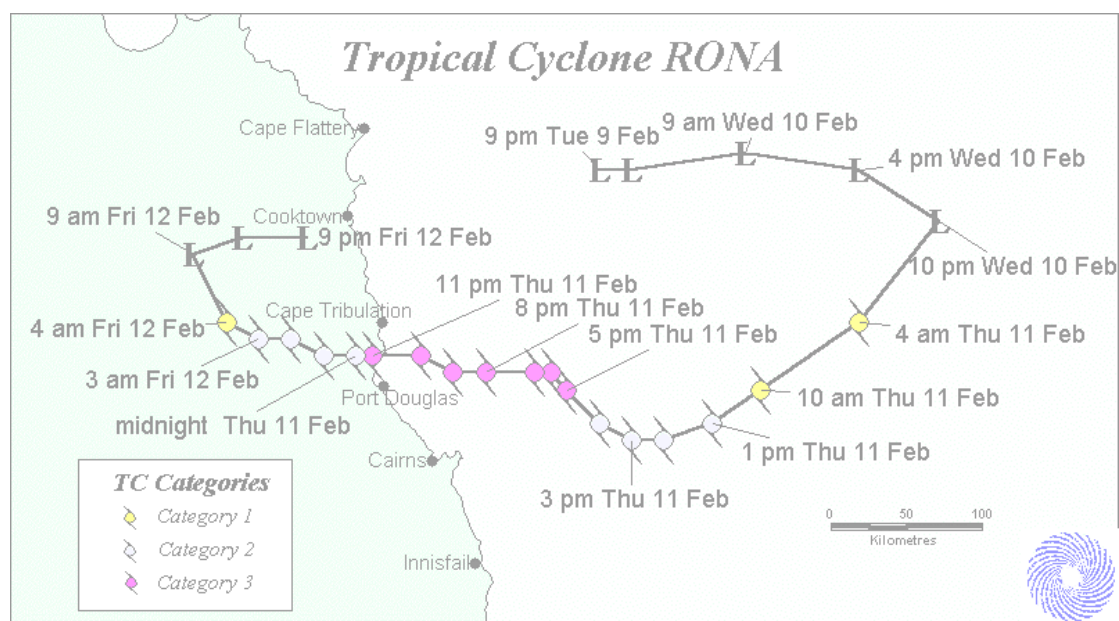


Figure 1.1

Torrential rains were associated with this system and extensive flooding occurred in the Barron, Johnson, Tully and Herbert Rivers and most other rivers and streams between Cairns and Ingham. Major flooding developed very quickly in the Barron and Johnson Rivers overnight on Thursday February 11 and early in the morning of Friday February 12. A preliminary flood warning for all coastal rivers and streams from Cairns to Townsville was issued at 10.30am Thursday February 11.

The first specific warning for the Barron River was issued at 1.25pm Thursday February 11, about ten hours prior to Rona's landfall. Subsequent updated warning messages were issued three hourly until after the peak river height of 8.65 metres at Kamerunga at 8am Friday February 12. The flooding experienced in the Barron River was the highest since a series of major floods in the late 1970's and resulted in major flooding of the Barron River delta.

River height stations for monitoring and recording water levels are located in the Barron River catchment at Tinaroo Dam, Mareeba, Myola and Kamerunga. Rain gauges, recording rainfall have also been placed throughout the catchment.

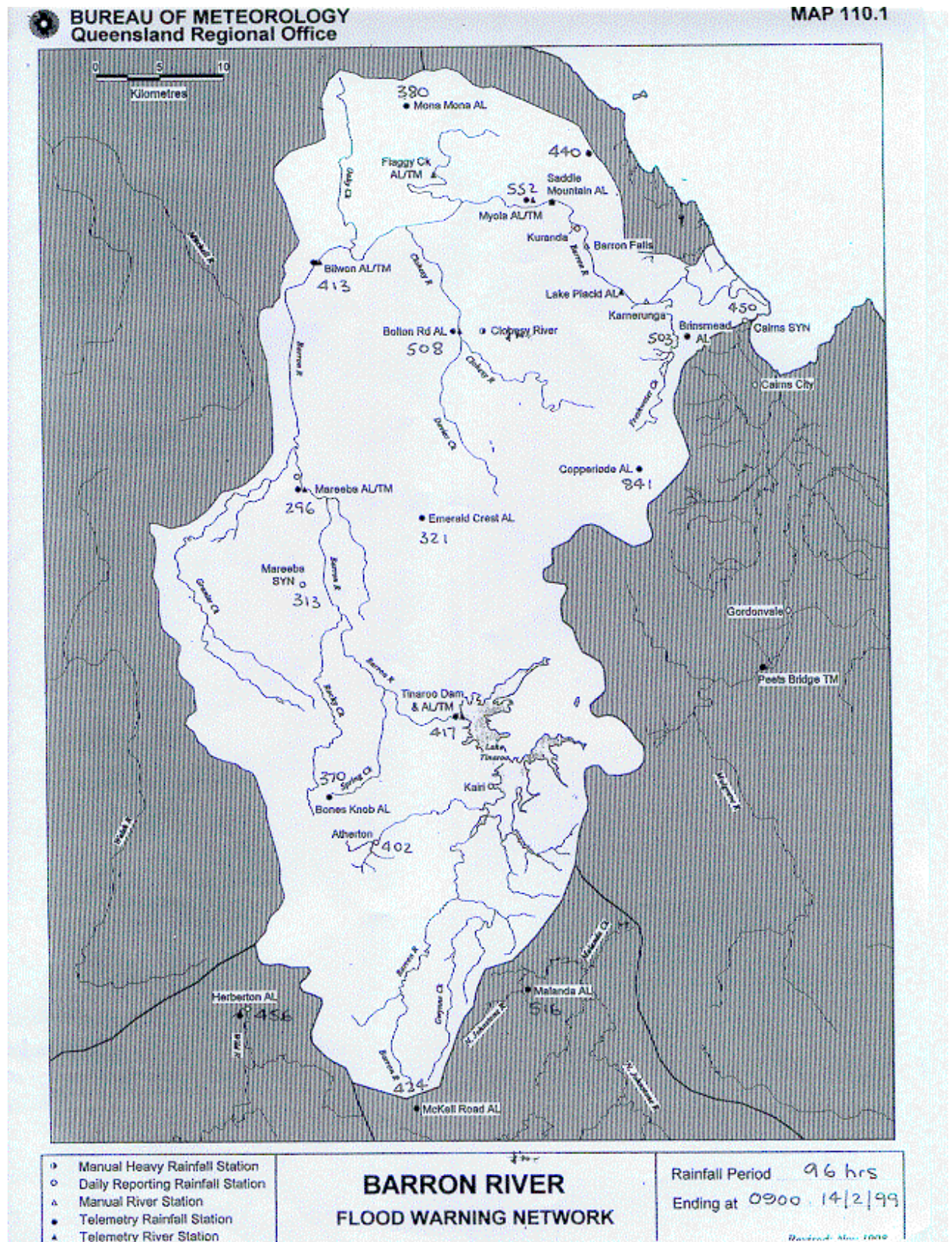


Figure 1.2

Throughout the critical period the Bureau of Meteorology's flood warning centre was staffed 24 hours per day and close telephone contact was maintained with the Cairns City Council Counter Disaster Committee's Emergency Operations Centre, which had been activated in response to the Cyclone Rona threat. Bureau of Meteorology officers gave many live to air interviews with local radio stations to provide the public with up to date warnings and information.

Given the various rainfall and river height readings that were being relayed to the Flood Warning Centre predictions of possible maximum river heights ranged from 9.4m to 9.6m. The Cairns City Council's engineer considered that at this level the Barron River levee would be breached and this would result in a 1.4 to 1.6 inundation through Lake Placid. (Fortunately the predicted levels were not reached.)

At approximately 1am on Friday February 12, acting on the best information and advice available, the Cairns City Council Counter Disaster Committee prepared to activate the emergency evacuation sub-plan<sup>1</sup> – this was officially activated at 3am. The Disaster District Coordinator was consulted and the Queensland Police Service, State Emergency Services and Army personnel were briefed and prepared to assist in the voluntary evacuation of a clearly defined vulnerable area that included much of the suburbs of Caravonica and Lake Placid.

Evacuation warning advice messages were broadcast over local radio and door knocking in the area was commenced soon after 3am. Residents were advised to evacuate the area by 5am. After some initial confusion two evacuation centres were opened, one at Peace Lutheran School and the other at Smithfield State High School.

This was the first activation of the Cairns City Council's evacuation sub-plan and the process had not been previously tested. During the course of the exercise several issues in relation to the organisation and execution of the evacuation arose. This report details how the authorities effected the evacuation and how the residents of the evacuated area responded to the evacuation advice. It also considers the response of residents and the various response agencies.

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<sup>1</sup> This sub plan is an attachment to the Cairns City Council Counter Disaster Plan it is activated only in the event of an evacuation being considered necessary in order to ensure the safety and well being of the residential population. The Welfare sub plan would usually be activated at the same time.

## **2 Methodology**

Following the Barron delta flood threat associated with the impact of Cyclone Rona and the subsequent evacuation of Caravonica and Lake Placid residents ahead of the threatened flooding, the impacted community households were surveyed using a structured survey questionnaire. (Appendix B) One hundred and eighty three questionnaires were administered in late February 1999 using a drop off pick up technique. All effected households were approached and invited to participate in the study. In excess of 80% of households were willing and completed questionnaires, usually with additional comments.

## **3 Aim**

The specific aim of this study is to analyse the Caravonica and Lake Placid community response to the evacuation advice messages issued in the early hours of Friday February 12, 1999. Information relating to how they both received and responded to these warnings has been acquired directly from the people affected. How residents prepared for this event and the cyclone season generally has been considered. Residents have been asked to appraise and evaluate their own performance and ability to cope with the situation together with that of the authorities, particularly those responsible for issuing warnings and for the general organisation. In addition to completing a structured questionnaire residents have been given maximum opportunity to elaborate on or qualify their responses and to add any further comments. Interviews have also been conducted with key emergency management personnel and evacuation centre managers.

## **4 Study area**

The study area is confined to the area identified by Cairns City Council engineers as being at risk of inundation in the event of the Barron River peaking at forecast river heights. Participants in this study are households in the suburbs of Lake Placid and Caravonica that were advised to evacuate their premises in the early hours of Friday February 12, 1999. The area is adjacent to the original Cairns settlement site, which was abandoned late last century after being devastated by cyclone, related flooding. Residential development in these suburbs is relatively recent, the majority occurring within the last 15 years. Almost 84% of dwellings are built of masonry block and 77% are owner occupied. The area, although relatively new, is settled by residents that are longer term in the region – the average length of residence in current dwellings is about eight years while average length of residence in the region is 19 years. The average household size is three occupants and the district is locally considered to be a ‘good family area’.



## **5 Survey results and discussion**

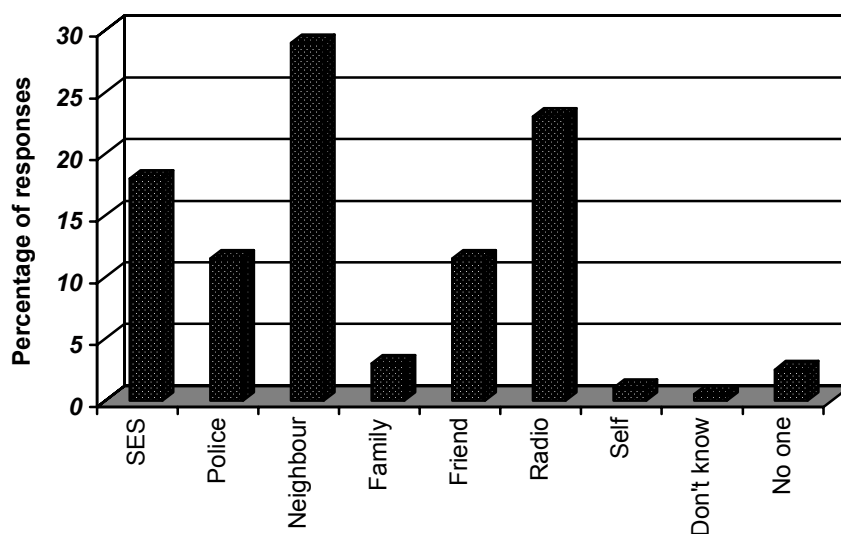
### **5.1 How residents first became aware that the area was to be evacuated**

Announcements that the Barron River was expected to flood areas of Lake Placid and Caravonica and that residents were advised to evacuate by 5am were made on local radio stations from 3am on Friday February 12, 1999.

During the period that Cyclone Rona had been threatening the coast residents regularly tuned into the radio for warning updates however, as the cyclone made landfall before midnight, many residents went to bed confident that the danger had passed. Most residents did not set alarms to wake up to listen to further messages – despite the fact that flood warning messages continued to be issued. Notwithstanding this a number of residents received evacuation advice messages either directly from the radio or were contacted by friends and relatives who had heard radio messages. The Police, Army and State Emergency Services (SES) personnel commenced doorknocking in the area at approximately 3am and continued through until 5am.

Less than a quarter of the residents personally heard the broadcast messages. Almost 30% were advised by neighbours – often these were residents who had themselves been awoken by Emergency Services personnel and asked to inform others in order to speed up the process.

### **Who advised residents to evacuate from their homes on Friday February 12 (Question 1)**



	Frequency	Percent	Cumulative percent
SES	36	18.0	18.0
Police	23	11.5	29.5
Neighbour	58	29.0	58.5
Family	6	3.0	61.5
Friend	23	11.5	73.0
Radio	46	23.0	96.0
Self	2	1.0	97.0
Don't know	1	0.5	97.5
No one	5	2.5	100.0
Total	200	100.0	

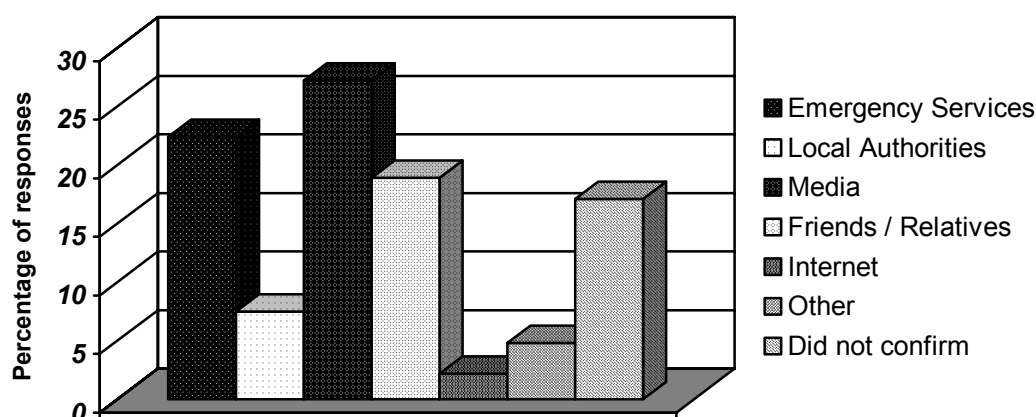
Figure 5.1.1

N = 200 because some respondents cited 2 or three sources of information many said that they had had a call from friends and relatives

## 5.2 Confirmation of evacuation advice messages

Approximately 83% of residents confirmed the evacuation advice messages, usually by listening to the radio or with the emergency services officers that were doorknocking throughout the neighbourhood.

### Where residents confirmed evacuation advice messages (Question 28)



	Frequency	Percent	Cumulative percentage
Emergency Services	51	22.4	22.4
Local Authorities	17	7.5	29.8
Media	62	27.2	57.0
Friends / Relatives	43	18.9	75.9
Internet	5	2.2	78.1
Other	11	4.8	82.9
Did not confirm	39	17.1	100.0
Total	228	100.0	

Figure 5.2.1

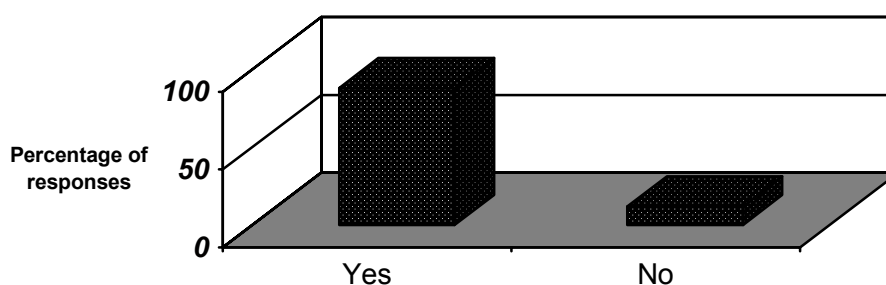
## 5.3 Did every one evacuate

Only 12% of the residents in the threatened area did not evacuate, a few of these chose not to leave others were simply left behind. At least two households slept through the door knock and were not advised by neighbours, friends or family. One of

these was an elderly lady with medical problems – it is likely she was medicated and slept soundly. Prior to the cyclone season people who consider themselves to have special needs were given the opportunity to be placed on a council register that would ensure their needs were catered for in the event of evacuation. Residents, such as this lady may not consider themselves to have ‘special needs’. Others that did not leave generally cited their reason for not evacuating as a perception that they were safer in their own homes.

This evacuation was officially a voluntary movement however very few residents were aware that they were not actually required to leave their premises, that is, that they had a choice. It appears that the Police and State Emergency Services personnel that were alerting and informing residents were also unaware that residents could decide to stay in their homes –This issue is discussed below.

### Did residents evacuate their homes in the early hours of February 12. (Question 3)



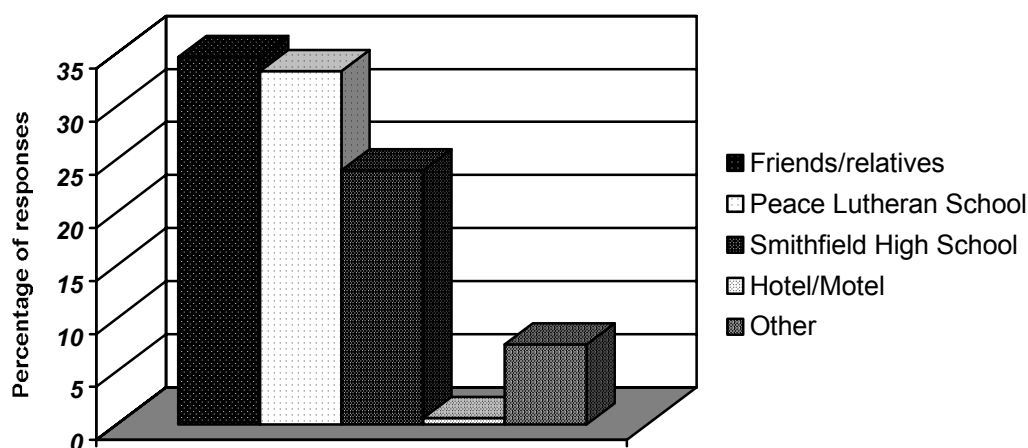
	Frequency	Percent	Cumulative Percent
Yes	154	88.0	88.0
No	21	12.0	100.0
Total	175	100	

Figure 5.3.1

#### 5.4 Where residents evacuated to

Residents were advised to go to the homes of friends or relatives who live in safer (more elevated) areas or to go to one of the two nominated evacuation centres - Peace Lutheran School, which is south of the Barron River, or Smithfield High School in a more northerly suburb. Most of the residents that elected to go to Peace Lutheran School were from Lake Placid while residents that went to Smithfield High School were more likely to be from Caravonica. It is interesting that residents that chose to go to Peace Lutheran School had to cross the swollen Barron River (albeit safely – the main bridge was not in danger flooding).

### Where residents evacuated to (Question 4)



	Frequency	Percent	Cumulative Percent
Friends/relatives	55	34.6	34.6
Peace Lutheran School	53	33.3	67.9
Smithfield High School	38	23.9	91.8
Hotel/Motel	1	0.6	92.5
Other	12	7.5	100.0
Total	159	100.0	

Figure 5.4.1

A relatively high proportion of evacuees went to the nominated evacuation centres. This is very likely because of the time that the evacuation advice messages were issued - 3am, and the speed with which people were advised to leave – within 2 hours, together with the almost total lack of planning, community wide, for such an event. It can be expected that in a prepared community somewhere in the vicinity of 80% of the residents will go to friends and relatives or find alternative accommodation and 20% will use the evacuation centres. Approximately 35% of residents went to the homes of friends and relatives, very often this was to the friend or relative that had called to inform them of the evacuation or who they had called to confirm the message. The ‘plan’ to go there was made at that time. Residents that went elsewhere (the ‘other’ category) went to local shopping centres and service stations or just to higher ground. They usually indicate that they spent their time just waiting in their cars.

#### 5.5 How residents left the area

Residents were generally able to leave the area in their own vehicles. Few people in these suburbs are dependent on public transport. In the questionnaire this question was poorly structured in that the aim was to find out whether people left the area in their own vehicles, with others, or needed assistance from emergency services. Fortunately residents volunteered this information eg. “....own car”: “....daughter came and got me in her car” etc. Only one resident, who was confined to a wheel chair, required the assistance of Emergency Services to leave the area.

	Frequency	Percentage	Cumulative percentage
Own cars	148	97.4	97.4
With friends/neighbours/family	2	1.3	98.7
Bike/Motorbike	1	0.7	99.3
Other (Emergency Services)	1	0.7	100.0
Total	152	100.0	

Table 5.5.1

### 5.6 How residents prepared their homes before they left

Residents were given very little time to prepare their homes and pack up and leave for either one of the nominated evacuation centres or to friends and relatives. Many residents commented about the insistence of police and other emergency workers that they leave the area as soon as possible, those that suggested they would like to stay and attempt to protect their properties were most often dissuaded (often with threats of arrest !!). Almost universally there was no prior planning for possible flooding although cyclone related preparedness activities had been carried out in varying degrees and usually well into the cyclone warning period. Commonly residents only had time to elevate a few items, turn off the electricity and lock and secure their premises. (Appendix A.2)

### 5.7 Who was at home

Given that this evacuation was effected between the hours of 3am and 5am most families were at home, with all usual members of the household being present. Some households had guests and visitors that had been staying during the cyclone threat period. There were no families that indicated concern that they could not account for or contact family members. This contrasts with the Townsville floods of 1998 when the water rose rapidly and family members were stranded at work or away from their homes and were difficult to contact.

### 5.8 What residents took with them

Residents indicate that they tended to grab what they could at the last minute – usually bedding, clothes, food and necessary items for children. Some people stated that they had remembered to take important documents others, particularly on interview, admitted that they had forgotten about such things. What they took with them was certainly adequate and appropriate for the few hours that they were away from their homes however had the evacuation been for an extended period they would probably have found themselves with inadequate resources. There is a need for community hazard awareness campaigns to focus on appropriate preparedness activities and strategies for households so that in future events residents will be better equipped to protect themselves and their properties and minimise their losses. It is interesting that a majority of evacuees stated that they had taken food with them, however one of the most frequent comments about conditions at the evacuation centres was the lack of food – that they had to wait several hours for cups of tea and snacks!

### 5.9 Advice about what to bring and what to leave behind

The majority of residents did not recall being advised to take, or to leave, anything in particular. Where advice was given it was sometimes contradictory, particularly in relation to pets. Once again this illustrates the need for residents to be aware and prepared at both the individual and household level and not depend on the advice, and assistance, of others. (Appendix A.4)

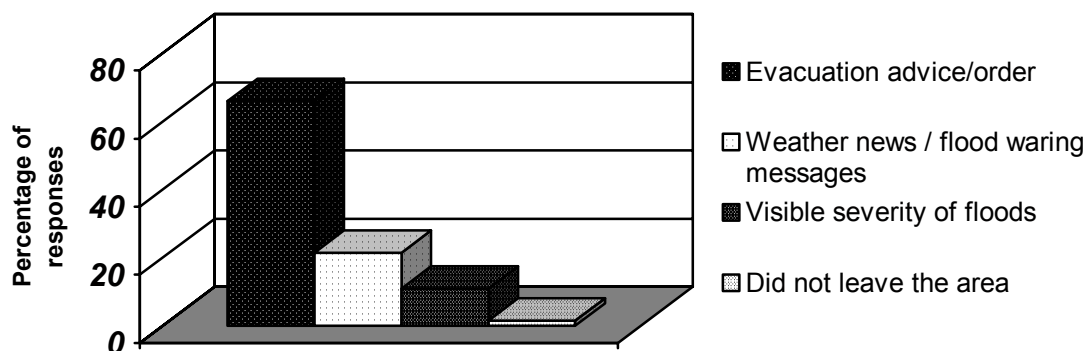
### 5.10 Pets

Because this evacuation advice was issued for a flood related threat residents were allowed to take their pets with them. Had the risk been cyclone related they would have had to leave them behind, or make alternative arrangements, as pets are not permitted inside the secured centres. Most of the evacuated residents have pets and a large proportion of these took them, particularly the dogs. Other animals at the centres included cats, rats and mice, a wallaby, snakes, fish, and all kinds of aviary birds. (Appendix A.5) This is an issue that will need to be addressed, aside from health related issues one of the most frequent comments about conditions at the evacuation centres related to pets – particularly noise and smell levels.

### 5.11 Why people left the area

It must be emphasised here that most people left the area because they believed they had no choice, despite this many respondents indicated that they had confirmed the evacuation order with the weather news and flood warning messages being reported by the media before they left. Several residents commented that they could hear the river and this encouraged them to leave, others commented on the fact that it was night time and they could not actually see the river themselves so they had to rely on the judgement of the authorities. Most respondents that did not leave the threatened area did not respond to this question.

**What convinced residents to leave the area  
(Question 12)**



	Frequency	Percent	Cumulative percent
Evacuation advice/order	132	66.0	66.0
Weather news / flood warning messages	43	21.5	87.5
Visible severity of floods	22	11.0	98.5
Did not leave the area	3	1.5	100.0
Total	200	100	

Figure 5.11.1

### 5.12 Experience at evacuation Centres

The Cairns City Council's evacuation sub-plan was revised in the weeks prior to Cyclone Rona and was barely in an operational form. When it was activated on Friday February 12 the evacuation centres were not prepared. The principals of Smithfield High School and the head teacher of Peace Lutheran School were only very recently aware that their school's were even nominated evacuation centres. Both schools were poorly resourced for the influx of large numbers of people and support was not generally available to them early in the evacuation period. Both centres experienced communications difficulties and power outages. Power problems were rapidly resolved with Far North Queensland Electricity Board (FNQEB) restoring power as a matter of urgency. Despite these difficulties both centres functioned adequately. Mr Gallagher and Mr Spanagle and are both experienced 'people' managers and met this challenge admirably. Several hundred people in each centre were organised, made comfortable and kept entertained. Most residents appear to have appreciated the difficulties and were generally cooperative, many made the most of the situation and took the opportunity to meet neighbours and make new friends. A full list of comments from people in the evacuation centres appears in the Appendix A.7. Comments frequently relate to food and pets. Many evacuees complained about the lack of catering facilities in the centres. Food and snacks were provided after some time however if residents had been better prepared and more self-sufficient the pressure would not have been so great. This is an area that should be addressed in future community awareness education campaigns. Pets have been previously discussed.

### 5.13 Residents return home

Residents generally returned home within a few hours, particularly when it was day light and they could see the river themselves. Police had set up roadblocks and prevented people going back into the evacuated area until about 9am. Evacuation centres officially closed at 10am although some people stayed on a little longer. Many at the evacuation centres indicated that they had spent much of their time sitting in their cars (either with their pets or to avoid other peoples pets), these people returned home as soon as possible. Many others stated that they left the evacuation centres and went Smithfield Shopping Centre when it opened. Residents that went to stay with friends and relatives tended to stay a little longer, some, aware that the threat had passed and that their properties were safe and undamaged, even waited until Sunday to return.

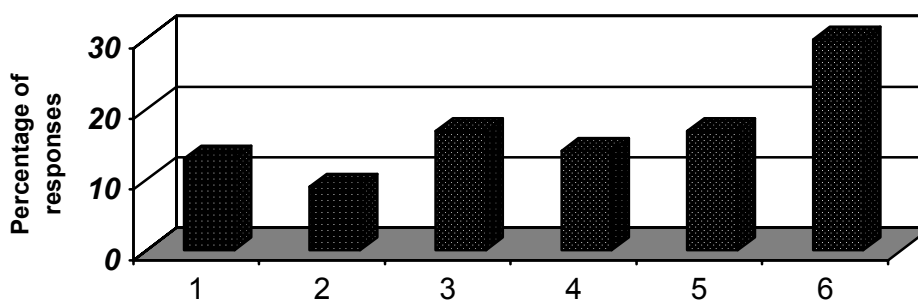
	Frequency	Percent	Cumulative percent
5am	1	0.7	0.7
5.30am	1	0.7	1.4
6am	2	1.4	2.8
7am	2	1.4	4.2
7.30am	2	1.4	5.6
8am	2	1.4	6.9
8.30am	2	1.4	8.3
9am	8	5.6	13.9
9.30am	8	5.6	19.4
10am	31	21.5	41.0
10.30am	9	6.3	47.2
11am	14	9.7	56.9
11.30am	7	4.9	61.8
12MD	20	13.9	75.7
1pm	7	4.9	80.6
1.30pm	1	0.7	81.3
2pm	3	2.1	83.3
3pm	2	1.4	84.7
4pm	2	1.4	86.1
5pm	3	2.1	88.2
6pm	2	1.4	89.6
Saturday evening	10	6.9	96.5
Sunday	5	3.5	100.0
Total	144	100.0	

Table 5.13.1

#### 5.14 Residents levels of concern that flood waters might reach their homes

Residents were asked to rate their level of concern that the floodwaters might reach their home. This question asks people to identify and quantify their feelings of concern. Results should not be confused with those of a related but dissimilar question as to whether they thought floodwaters would reach their house

#### How concerned residents were that flood waters might reach their homes (Question 22)



	Frequency	Percent	Cumulative frequency
1, Very Concerned	23	13.0	13.0
2	16	9.0	22.0
3	30	16.9	39.0
4	25	14.1	53.1
5	30	16.9	70.1
6, Not concerned at all	53	29.9	100.0

Figure 5.14.1



### 5.15 Consideration to the possibility of flooding.

Residents were asked if they had ever considered that it was possible that their property was in an area that was likely to be effected by floods. Many were aware of the councils flood zoning – some disagreed (often strongly) with this. A strong belief was expressed that the mitigation efforts such as a retaining wall at the Caravan Park would contain the maximum possible riverine waters.

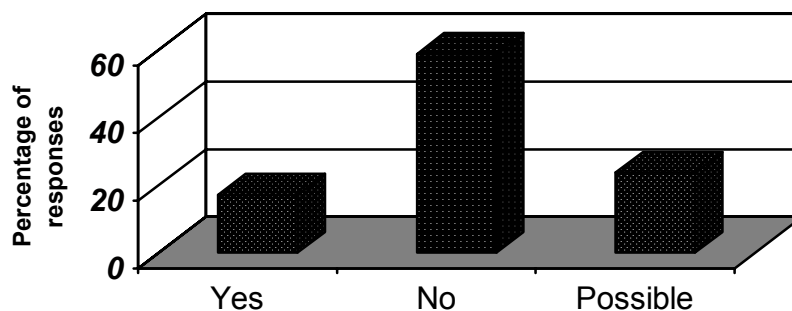


Figure 5.15.1

### 5.16 Expectation that flood waters would come into homes

When asked if they expected flood waters to have entered their homes during the period that they had been evacuated from the area the majority of residents indicated 'no' Most of those that responded that it was possible qualified this with 'but unlikely'.

#### Did residents expect flood waters would come into their homes (Question 15)



	Frequency	Percent	Cumulative percent
Yes	26	17.2	17.2
No	89	58.9	76.2
Possible	36	23.8	100.0
Total	151	100.0	

Figure 5.16.1

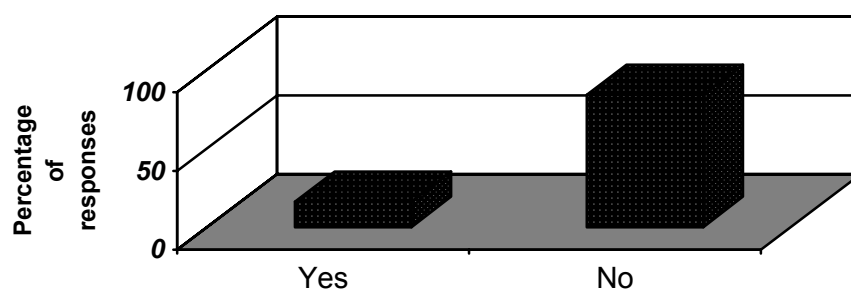
### 5.17 Flood related losses

Losses due to this event were minimal. Some residents describe damage to vegetation and financial loss due to missed days at work or loss of business. This is more likely to be attributable to the cyclone event rather than the evacuation. Some financial loss was experienced as a result of food spoiling during power outages.

### 5.18 Residents with 'special needs'

For a range of reasons some residents are more vulnerable than others in times of disaster. Such people are considered to have special needs that require special attention in order to promote their safety and well being during these times. Special needs can relate to physical, mental, social or economic disabilities. In this survey the proportion of households that identified as having members with special needs is relatively high at 16% and this has implications for emergency management planners. It is interesting that residents often stated 'we don't really have a special need but.....'. Some of the special needs cited included babies, intellectual handicap, medical conditions and stress disorders

### Anyone with special needs in the residence (Question 21)



	Frequency	Percentage	Cumulative percentage
Yes	27	16.0	16.0
No	142	84.0	100.0
Total	169	100.0	

Figure 5.18.1

### 5.19 Barron River concerns

Residents were asked whether they had any particular concerns about the Barron River flooding. This question was asked to canvass the possibility that there was a perception that the Barron Valley was at risk because of the possibility of Tinaroo Dam overflowing or even failing. During the period of flooding the media made some statements about possible problems associated with Tinaroo. This was a difficult question to structure because to mention Tinaroo directly would have introduced the idea that there was possible cause for concern. Only two survey responses mentioned the dam directly, most respondents indicated that they were not at all concerned. A few were worried about being isolated by flood waters rather than being inundated.

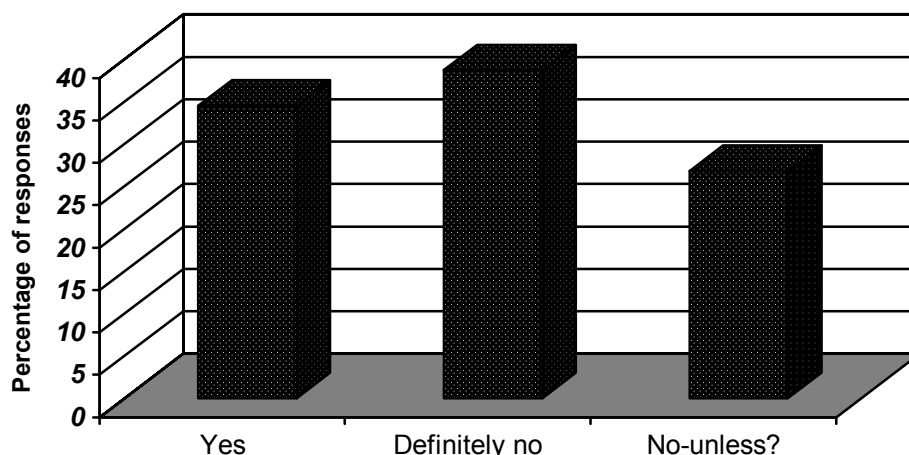
### 5.20 Concern about leaving homes

Residents overwhelmingly expressed concern about leaving their properties unattended, risking 'looting' and break-in's. Many stated that they felt they would have been in a better position to protect their belongings from any floodwaters if they had been allowed to remain at home elevating what was in danger rather than being required to evacuate. People were generally rushed when leaving the area and it was a dark rainy night. Very few had given any prior consideration to the threat of flooding and had no planned strategies for protecting their property. Only five people in the area have any prior experience of evacuation therefore there is no history or experience to draw from for example of what to expect or how to prepare. Again this is an issue that needs to be addressed in community awareness campaigns.

### 5.21 Would people evacuate again

When asked if they would be prepared to evacuate again the majority of residents said 'no' however a significant proportion of these negative responses were qualified with 'if's', for example "...if I thought it necessary".

**Would residents evacuate again  
(Question 27)**



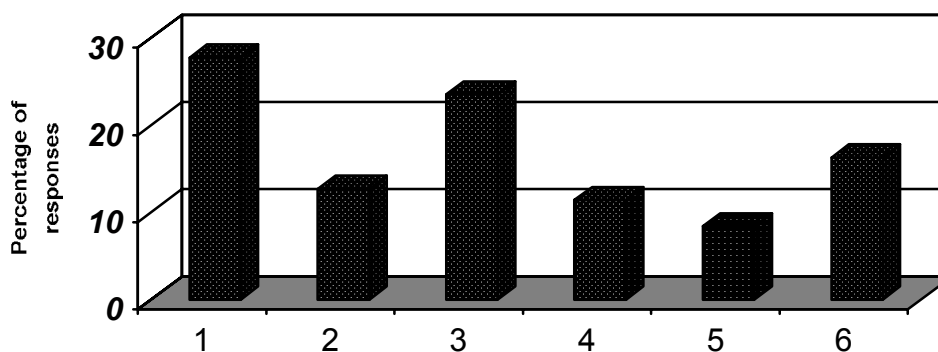
	Frequency	Percent	Cumulative percent
Yes	58	34.5	34.5
Definitely no	65	38.7	73.2
No-unless?	45	26.8	100.0
Total	168	100.0	

Figure 5.21.1

It is interesting to note here that most of the qualified responses referred to the judgements or actions of others, for example "...if the authorities told me to" "...no, only if given official advice" "...yes, if the authorities advise us to", "...no unless police or emergency crew recommend it" "...yes, only if advised/ordered to leave by SES, Police" "...yes, only if told to do so". These responses describe a shift in focus from previous surveys where responses to similar questions were qualified with statements that indicated residents would rely on their own judgements and evaluation of the situation, for example "...yes, if I thought it was necessary" "...no, unless it looked serious to me".

### 5.22 How well residents felt warnings and evacuation processes were handled by authorities

#### How well the residents felt the warning and evacuation process was handled by the authorities (Question 29)



	Frequency	Percentage	Cumulative percentage
1, Very well	46	27.7	27.7
2	21	12.7	40.4
3	39	23.5	63.9
4	19	11.4	75.3
5	14	8.4	83.7
6, Not well at all	27	16.3	100.0

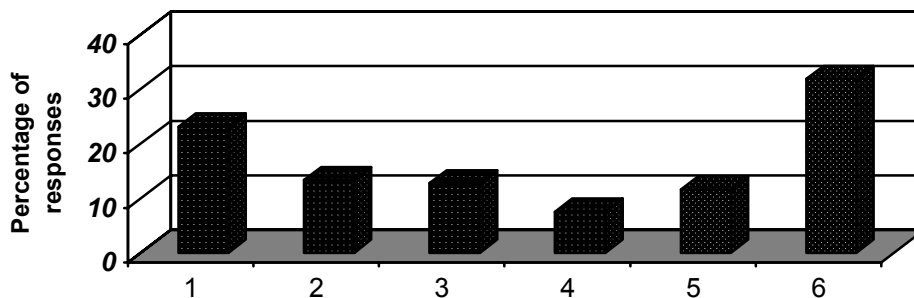
Figure 5.22.1

Almost 64% of the residents were more positive than negative in their evaluation of how they considered authorities to have handled the evacuation process. Some responses that were annotated noted what they consider to have been the ‘heavy handedness’ of the Police and Emergency Services that were doorknocking and evacuating the area. Many respondents question the decision that an evacuation was necessary.

5.23 How much information did residents feel they received so that they could make a good decision about whether to evacuate or not

Several respondents were quick to point out that they did not believe they were in a position to make a decision, that is, that they were compelled to evacuate and really had no choice. Despite this, on interview residents generally indicated that they were able to access information.

**How much information residents received so that they could make a decision about evacuating (Question 29)**

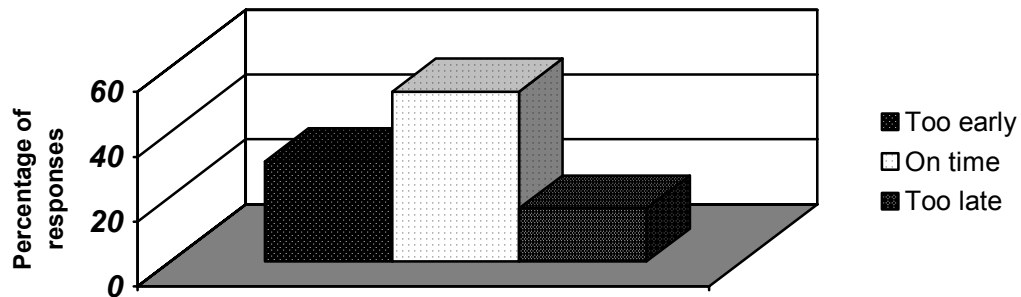


	Frequency	Percentage	Cumulative percentage
1, Enough	40	23.1	23.1
2	23	13.3	36.4
3	22	12.7	49.1
4	13	7.5	56.6
5	20	11.6	68.2
6, Not enough	55	31.8	100.0

Figure 5.23.1

5.24 Timeliness of evacuation advice messages.

**How timely were evacuation advice messages  
(Question 31)**



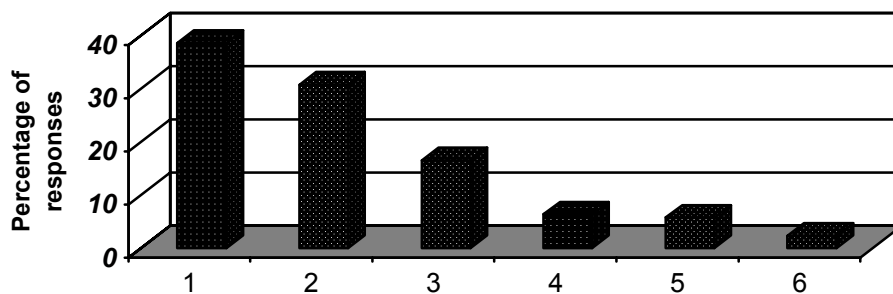
	Frequency	Percentage	Cumulative percentage
Too early	49	31.0	31.0
On time	83	52.5	83.5
Too late	26	16.5	100.0
Total	158	100.0	

Figure 5.24.1

Just over half the residents considered that the warnings and evacuation advice messages were timely. Those that considered them to be too late were often critical of the lack of time they had to prepare their properties.

5.25 How well residents felt they were prepared for this cyclone (NB this questions asks about cyclone preparation and not for the flood evacuation)

**How well prepared residents felt they were for  
this cyclone (Question 37)**



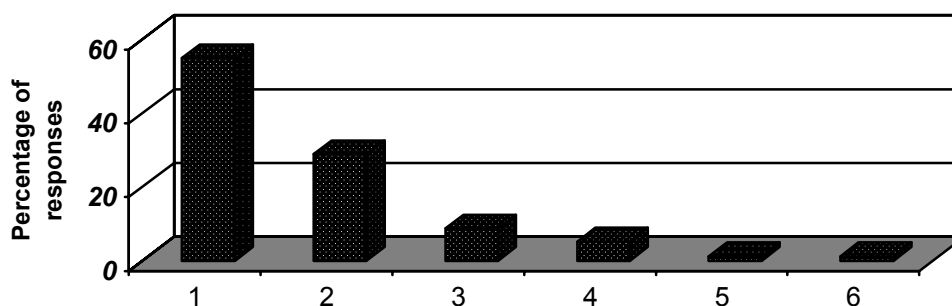
	Frequency	Percentage	Cumulative percentage
1, Very well	68	38.6	38.6
2	54	30.7	69.3
3	29	16.5	85.8
4	11	6.3	92.0
5	10	5.7	97.7
6, Not well prepared at all	4	2.3	100.0

Figure 5.25.1

The majority of respondents believed that, at both a household and an individual level, they were well prepared. This is consistent with responses in another Cyclone Rona post disaster report – The Mossman/Port Douglas Warnings Report. The warning period for this event was short. It was less than 24 hours after the cyclone formed and was named that Rona made landfall and Lake Placid and Caravonica were being evacuated ahead of forecast cyclone related flooding. Much of the household preparation was carried out well into the warning period, local press reported panic buying in supermarkets and stores and there were long queues at service stations with people buying petrol and gas into the evening of Thursday February 11. (Appendix C) Very little seasonal preparation had been carried out despite weeks of media reports suggesting that a very active cyclone season was expected. Households were generally adequately prepared for the storm they experienced, however they would not have been if Rona had been more severe. The fact that so many residents left so much preparation until well into the warning is cause for concern.

5.26 How well residents coped with the situation

**How well residents rated they were able to cope with the situation (Question 39)**



	Frequency	Percentage	Cumulative percentage
1, Very well	95	54.9	54.9
2	50	28.9	83.8
3	15	8.7	92.5
4	9	5.2	97.7
5	2	1.2	98.8
6, not well at all	2	1.2	100.0

Figure 5.26.1

Very few residents were not confident that they had coped with the situation, the vast majority considered that they had coped well.

### 5.27 The worst thing about the event

For many Caravonica and Lake Placid residents the worst thing about this event was the inconvenience of the extended period of time that they were without electricity and the isolation from Cairns City. During cyclones people generally expect power outages and tolerate it for short periods but become very critical as time goes on. Blackouts during this event were lengthy although generally shorter than has been the case in previous events because of the aggressive clearance of vegetation around above ground power lines that FNQEB has carried out over the past two years. Roads into the Northern Beaches townships and Cairns City reopened when floodwaters began to recede mid-Saturday afternoon (February 13). Caravonica and Lake Placid residents had had access to Smithfield shopping centre for all but a few hours of the whole cyclone/flood period and were generally able to purchase food and supplies as necessary. Medical facilities were accessible but not hospital and this was a cause of concern for some.

Many residents admit that their lack of preparation for such an event was one of the worst things about this event, this is an interesting comment from people who, earlier in the questionnaire, had generally considered themselves to have been well prepared

Some respondents describe feelings of worry, fear, concern and even helplessness. A full list of responses can be found in Appendix A. 11

### 5.28 Comments

One of the main advantages of employing a 'drop off pick up' method of surveying is that respondents have time to complete the questionnaire and consider what extra comments they would like to add at their leisure. In this instance residents added extensive comments and had obviously given much thought to the matter. A full list of comments is included in Appendix A.12. Several of the residents comments reflect concerns about what effect this exercise will have on their land values, they are already angry that the area has been recently zoned as being flood prone. This concern is understandable in that there is a strong belief in the community that the area is not flood prone and that in an extreme event the mitigation measures that have already been taken, particularly the retaining wall at the caravan park, will be adequate to prevent inundation of the residential areas. This perception of being protected should be addressed in a non-threatening way at a community level. Comments about the media were generally positive although there were a few accusations of over sensationalising. Most people seem to appreciate the local radio commentators (perhaps a familiar voice is comforting !) and talk back and live to air interviews are popular. The disorganisation of the evacuation process, particularly at the evacuation centres was criticised, but seems to have been tolerated on this occasion



## **6 Conclusion**

The evacuation of households in Lake Placid and Caravonica in the early morning hours of Friday February 12 1999 was in response to a real threat. It was a major inconvenience to many families but it was not an unnecessary exercise. The fact that predicted possible maximum river heights were not reached and the area was not inundated with floodwaters was fortunate, but certainly not a foregone conclusion. The evacuation advice was officially for a voluntary movement of people out of an area considered to be at risk to one of relative safety.

Most residents left the area when advised to evacuate, usually after confirming the advice message with at least one other source. Some residents describe attempts to telephone the Cairns City Council's Emergency Operations Centre or the Police for information and were generally unsuccessful. Confirmation was usually secured from Emergency Services personnel actively working in the effected area or via broadcast radio messages.

Most residents, and it would appear, emergency services personnel were unaware that this was not an enforced evacuation. Residents often describe the 'heavy handedness' of authorities in effecting the evacuation - often with threats of arrest and promises that emergency services would not be able to rescue stranded residents later. On interview residents frequently expressed anger at this attitude and in the questionnaire responses negative references to the evacuation process were often written in capital letters and/or underlined.

After some initial official confusion as to where evacuees should be directed, residents were given the choice of two evacuation centres. Both are well known locally and residents were generally familiar as to how to get there. There was some confusion over where people should park, where they should assemble and what they should do once they arrived at the centres. Fifty seven percent of the areas evacuees went to one or other of the centres. This is a higher proportion of the community than would usually be expected to utilise the official facilities. This can probably be attributed to the fact that the evacuation was advised in the very early hours of the morning and the community generally had made no contingency plans for such an event and had not identified any alternative strategies. In a prepared community a greater proportion of the community would be expected to go to friends and relatives.

Lake Placid and Caravonica are two of Cairns outer suburbs, approximately 20 kilometres north of the Central Business District. The majority of residences are owner occupied and the area is predominantly a 'family' area. Until relatively recently this community has been poorly serviced by public transport so the majority of households have secured their own means of transport, only one of the households surveyed did not have at least one available motor vehicle.

Residents were generally poorly prepared for an evacuation and, given the relatively high proportion of households that self identified as having members with 'special needs', this is alarming. It indicates a perception of flood related risk to be low. When advised to evacuate, most homes had no electrical power and residents had to quickly gather up what they thought they would need in the dark and in the pouring rain. Most

were aware that belongings left behind were not well protected from rising flood waters and that the supplies they took with them were poorly considered and not adequate for a long period away from their homes. Interview and questionnaire responses indicate strongly that there is an underlying confidence throughout the community that the area will not be effected by flooding. Many residents stated that they would have preferred to stay in their own homes had they been allowed to and felt that it would have been perfectly safe for them to do so. Most residents interviewed are aware of the areas flood history but believe that this has been successfully mitigated against particularly with the retaining wall built at the Caravan Park. Residents are aware that the Cairns City Council considers the area to be flood prone and many express intense anger at this (particularly as the area was declared flood prone after they had purchased their properties and many believe that their real estate value has been compromised).

Residents were advised that they could safely return home by mid-morning on Saturday February 13, most had been away for less than six hours. Few were surprised to find that their properties had not been inundated. Residents were concerned that they had left their properties unguarded, most being afraid of looting and theft.

Given that on this occasion flooding did not eventuate and most had considered the evacuation exercise to have been unnecessary many residents expressed a reluctance to willingly evacuate again in the future. A relatively high proportion however, indicated that they are prepared to consider/accept the judgement of authorities of the necessity to evacuate in future events. This is a significant paradigm shift since past post disaster studies when residents generally indicated that they would rely upon their own evaluation of the situation before accepting the advice of others. This may be due to the fact that, in the past, residents have not been confident that the Cairns City Council has had an effective disaster management plan nor the ability to activate emergency procedures, such as an evacuation. Many were concerned that no evacuation centres had been identified. The activation of the evacuation sub-plan clearly demonstrated to the Cairns public that effective emergency management planning is well developed and in the pre 1998-9 Cyclone season awareness campaigns some of the nominated evacuation centres were publicly identified. It is likely that this has raised public confidence in the ability of the authorities to both identify and manage crises.

Tropical Cyclone and Flood warning messages were issued throughout the period the Cyclone Rona threatened the area. Most residents were aware of cyclone advice messages and many ensured that they kept themselves up to date with the latest advice. Between official advice messages many residents kept them selves informed via the electronic media and particularly appreciated live-to-air interviews. It is apparent that flood warning advice messages were often not considered to be as urgent as cyclone warning messages and many residents stated that they found them confusing, particularly in relation to predicted river heights.

The evacuation of the Caravonica/Lake Placid communities was the first time that the Cairns City Council's Counter Disaster Plan Evacuation sub-plan has been activated. To ensure the smooth running of an evacuation the Counter Disaster Welfare sub-plan should be activated concurrently. The welfare plan provides contingency planning for

the management and care of people effected by a crisis situation, in this instance it would have provided the organisation, management and provision of services at the evacuation centres. On this occasion, the previously untested plan, appears to have been unable to fulfil many of these functions. Centres were generally disorganised with registration of evacuees occurring either very late or not at all. Refreshments were minimal and information services were lacking. Some evacuees were highly critical of this situation while others made the best of things – confident that they would not be there long. This is a situation that will probably not be tolerated with good humour again. Because this evacuation was in response to a flood threat (rather than cyclone threat) evacuees were advised to bring pets to the evacuation centres with them. This was considered preferable to leaving them unattended at home. Literally hundreds of pets arrived at the centres creating noise, smell and potentially health problems. Many evacuees complained about other people's pets, some stayed in their cars to keep away from them. It is clearly not appropriate for animals to be included in mass gatherings of this kind.

## **7 Recommendations**

- Flood warning advice messages are generally not clearly understood, particularly where reference is made to river heights. It would be useful if they included reference to local landmarks or remembered events in recent history.
- Communication lines between the Emergency Operations Centre and field officers should be improved. This would help avoid confusion such as that which occurred when Emergency Services officers and Police enforced a voluntary evacuation.
- The Cairns City Council Counter Disaster Plan Welfare sub-plan should be reviewed by all agencies involved in the provision of services covered under this plan. All agencies should be aware of their roles and responsibilities and have demonstrated a capacity to carry them out in time of emergency.
- A public awareness campaign focussed on the flood hazard in flood prone areas should be carried out prior to the next cyclone season. The potentially effected communities should be provided with historical information, topographical and drainage information and recent research findings. Advice and information on appropriate preparedness activities should be offered.
- Information to the public must be regularly updated. Consideration should be given to including more 'live-to-interviews' by Bureau of Meteorology and Emergency Services officers as a means of getting informed, timely information into the community.

**APPENDIX A.1**

**QUESTION 2**

Information residents were given when advised to evacuate on Friday February 12

area had to evacuate
Caravonica and Lake Placid residents were likely to be evacuated early Friday morning
said we had to evacuate by 5am - listen to radio
listen to radio - then told to evacuate Lake Placid by 5am Friday
The river would rise 4 metres over the new bridge!
What shelters to go to
To leave by 5am that morning as flooding would probably occur
news from radio
told us that she heard on the radio that a large flood was going to occur and we had to be out of the house by 5am
to be out by 5am because the area was flooding
radio was advising to evacuate before high tide at 5am
Radio was advising to evacuate before 4.30am, police - evacuate to relatives or Smithfield High School
flee, flee
to evacuate our homes and get to the shelter at Smithfield
Barron River is rising, evacuation is ordered
all Caravonica and Lake Placid residents are to evacuate
These 2 SES persons told me I had 15mins to dress take change of clothing and to go to the Smithfield shopping centre
Had to evacuate by 5am because of flood waters expected
had to be out of area by 5am or be flooded
to evacuate immediately as the river was rising rapidly
That the river was going to rise to 9m and Lake Placid would flood
river had risen to shop and road would be cut (wrong)
I was told to get out - but I didn't know how, or where to go, I was unaware how much flooding
To evacuate by 5AM. To go to Peace Lutheran School or Redlynch School
Move out in 20 mins. Put foot down - state law - peaceful or.....
not a lot, just to go and make it quick
Lake Placid residents are being evacuated - the Barron river may flood - they had heard it on the radio
floods were expected
We listened to the radio, they told us to go to Smithfield High or Peace Lutheran
The Barron was going to break its banks
They're evacuating this area you have to leave
possibility of widespread flooding
evacuate to High school immediately
Lake Placid was being advised to evacuate by local radio hot FM
Residents had to evacuate by 5am
cyclone approaching
get out before 5am
that we had to evacuate as they were expecting the Barron river to come up extremely high
we had to evacuate to a local school by 5am because of rising flood waters
residents of the Caravonica lake placid area to evacuate by 5am to Peace Lutheran
to evacuate and take bedding
river rising over banks, causing flooding
that the flood level was expected to rise this far and to evacuate as a precaution
to evacuate to Peace Lutheran School or Smithfield High School by 5am

told we had 1 hour to evacuate to Peace Lutheran School or Smithfield High School
to evacuate river may rise
imminent large river rise - all persons to evacuate
get out now this is instructions from police
Lake Placid was going to flood, the Barron was going to break its banks
the water was rising
to be at Peace Lutheran School or Smithfield High School by 5am
water was rising rapidly and we were likely to be flooded and stranded
nothing
we may be stranded for a while if we do not leave now
heard at 3am that we had to be out of the area by 5am and go to Redlynch State School, Peace Lutheran School or Smithfield High School
that there is a very strong possibility that the Barron River will flood into houses
that local radio station was advising Lake Placid residents to leave homes because of the possibility of floods
we wanted to stay - recommended to leave as river might be 4-5 days before it goes down
very little, were also told we would be arrested if we didn't leave
the river was flooding - we had to be out by 5am
to evacuate before 5am
to put everything up off the floor and to get out
Emergency services wanted us to evacuate by 5pm. (?am) we were to proceed to the Peace Lutheran School
evacuate - be out in one hour
was out of area at time
I rang the number advised (on the radio) -told to grab the kids cat and bird and leave. They were unsure if water was going to rise to knee level or roof level
flood levels were 1 in 50 year severity
to evacuate
they asked that we get what was necessary and be out of the area by 5am
that we had to be out by 5am
We had to get out as the river was in flood. By 5am
to evacuate as the river was rising with possible flooding expected
anticipated flooding of Barron River and to evacuate by 5am to either designated centre
get out, we're going to flood
be out by 5am
the river was expected to flood and that we had to evacuate
be out by 5am it is 4am now
Evacuation time and shelters
none
I was awake at 5 am and heard a knock. I went around with my torch but found no one so went back to bed. Later I thought I'd better go up to Smithfield (other neighbours still here fixed my freezer)
The floodwater had reached the local shop. This was misinformation, confirmed on evacuation
to evacuate by 5am
go by 5am and tune 4ca
evacuate by 5am expecting the river to rise and cause flooding in our area
to be out by 5am
get dressed and go now, river expected to rise another 2m, told by police I would be removed by force if I did not go
I was got out of bed to man the kitchen that they were going to use
the area could flood
I self evacuated the night before
evacuate by 5am - wall of water coming down the Barron
heard on radio that we had to evacuate by 5am

That the Barron river would flood up Impey St
we were told to evacuate before 5am because of water / tide
that it was announced on the radio Lake Placid residents had to be out by 5am
7m flood expected down Barron
nothing
to evacuate by 5am
that the Barron River would flood parts of Caravonica and Lake Placid
that the river levels were to rise and it was expected that Lake Placid may well flood
evacuate before 5.30am
they heard on the radio Caravonica and Lake placid residents were asked to evacuate
water levels were raising at an alarming rate and we should leave soon
the SES would evacuate us by 5am
be out by 5am or you'd be arrested
river coming up very fast - every one had to leave
10 mins to leave, told us where to go. Told us to take essentials
got to evacuate now
evacuate the place is going under
evacuate to Peace Lutheran School /Smithfield High School - leave house by 5am
told the river was rising, supposed to be out of house by 5am
radio and I rang the council hot line - SES staff advised flooding expected
residents of this area were to go to Redlynch School or Peace Lutheran School than Smithfield High School by 5am
we are to evacuate immediately, the river is rising
to leave before 5am
that the river was imminent to flood
To start evacuation procedure as level of river was rising. No one sure how high waters would be
we were told that we had to be out by 5am because the water would be higher than 1979
to evacuate immediately, it was an emergency the river was rising fast
get out, river going to flood, they did not know the details
the Barron river was rising rapidly, take your family members to nearest shelter
to leave before 5am
we just had to get out
It's a go' Caravonica is a go !!' (emergency centre phone call)
to evacuate before 5am only
we have to evacuate by 5am to Peace Lutheran School or Redlynch school because the Barron River will be peaking early in the morning
decision made to evacuate because of rising river levels
anticipated flood levels after 5.30am would peak above level of '77 flood
had to leave by a certain time as it was possible would inundate our house
that the Barron was expected to break its banks on the high tide at approx 10am
that the water was rising quickly we had to evacuate in 10 mins
that they were going to evacuate
a deluge of water was expected from the tablelands and the Barron would possibly flood
strong possibility of area at risk to rising flood waters
to go to Smithfield High School
river rising and must evacuate
to lift everything off the floors and to be out of the area by 5am
evacuate
we had half hour to get out before flood arrives
nothing
to evacuate the area by 5am to Smithfield High School
probable flooding

Caravonica is going to be flooded
residents of Lake Placid and Caravonica had to leave
that we were to put everything up as high as we could as they were not sure how much water was coming down
FNQEB and police were knocking on doors and where the evacuation areas were
evacuate
advised and told to ring info number1
not at home at time of cyclone
to evacuate due to rising waters and peak time of the Barron River
just evacuate due to possible flooding
car drove up the street with siren (did not know what siren was for)
nothing
to evacuate immediately
that flood waters were rising and we could be flooded
to go to Peace Lutheran College at 5am
we noticed someone come and talk to our neighbour and asked him what was going on he said we needed to evacuate to Peace Lutheran College
evacuate to Peace Lutheran College
bulletin was heard on radio 4ca at 4am that we had until 5am to evacuate to nearby schools
we had to be evacuated by 5am
we were told that Caravonica was under threat of flooding from the Barron River
left Thursday afternoon
that flooding was expected and that we were to go to either PLC or SHS
the river level had raised considerably in Mareeba, possibly of heavy flooding along Barron
the river was rising
To evacuate / danger of Barron River breaking bank. To go to PLC /SHS
that there was a high possibility that the river would overflow and flood Lake Placid
to evacuate
that we had to evacuate by 5.30am
one hour to evacuate
must evacuate
told we had to evacuate and go to Peace Lutheran School or Smithfield High School by 5am



## APPENDIX A.2

### QUESTION 6.

How residents prepared their homes before they left.

turned switches off, elevated small items
grabbed essential items
Electrical appliances. Up high, gas bottle off
prepared house for cyclone, cleared outside furniture, taped windows
locked doors and windows, no time for much else
locked doors and windows,
tried to lift things up, turned power off
packed up as much as possible, removed all low items as possible
didn't have time, put valuables on beds and cupboards
turned power off and raised things left behind off the floor
elevated everything up about 40cm from floor
2 story house, and as a result of hearing warnings over the radio at approx 3am had time to bring some personal items from downstairs, but not furniture
moved most gear and furniture upstairs
turn all power points off and pull out all plugs
I had all electrical appliances up off the floor except fridges and turned off all power points
packed essentials, turned off gas and electricity at box and locked up
locked it up
left house as is
towels under doors etc.- but was hard as no electricity - to make hurried exit
switched mains power and water off, place smaller electrical items, valued items high and then locked windows and doors
Not much time 20 mins. Told to go straight away – was going to disconnect pool pumps and pipes
turned off all electricity which was really all we had time to do
walked in circles for 20 mins - packed a bag and left
put all electrical goods in the roof, turned off power closed windows and doors and stuffed cushions by the doors
locked up and left
picked up all small vulnerable things, put them on the table, bed - books paper etc. tried to improvise sandbags for the front door
food, warm clothing, dog, tried to put everything up high
home already prepared
lifted valuables from floor
we turned off power points
elevated our belongings, chained boat trailer down (except boat)
turned off mains power, locked up
we put belongings from lower cupboards up on to higher benches
elevated valuables and locked up
lifted valuables to bench tops
stacked all personal belongings to higher ground
secured as much as possible
1closed all internal and external openings and turned power off
moved furniture onto bench tops, closed and locked doors and windows
move lower things to higher place within the house
Locked
put computer etc, on a table with metal legs, lifted TV and video onto lounge chairs
power switched off and house locked
we locked it up and left

put as many things as practical up as high as possible, switched off power points and locked house
closed all windows and doors and placed all low lying items up high
locked doors
no time just told to get out
put personal things up high - did not have much time
no need
Put everything up high and put personal things (photo's, files etc) in the car. Turned off switches and unplugged them
Windows had been taped. We put precious items wrapped in plastic, in top drawers and upper shelves of wardrobes
packed some valuables in roof of shed, stacked others on beds, tables etc
I took the portrait of the children off the wall and put it in the car. No time to do much else
I opened all the French doors to allow flooding through
just locked doors and windows
the best we could
Moved as much as possible to higher shelves etc.
Turned off power at main. Put boards over some windows and locked up
locked up, very little flood preparation
Placed household goods from floor level to on top of beds and tables. Turned power off
unplugged stereo, TV etc, put drawers on top of wardrobes with personal valuables
placed lower items up high, placed towels around doors, turned off power
Closed all doors and windows. Placed towels at the bottom of all doors
authorities didn't give early warning, no time for preparations
Most articles in high cupboards and on benches. Locked up and mains power off Clothing camp swag LPG equip food ice esky xxxx
locked doors and windows as usual (and advised by police when I rang 000)
all perishables books etc were raised from floor level to tables etc.
put objects of value up high
gas off, power off, everything unplugged
all valuables, ie photo's wall hangings lower drawers etc into roof area
Locked door and prayed. It was dark. No power
just locked doors and windows
put everything up high
cyclone preparation only as I didn't believe flooding was the problem at that stage (Thursday night)
lifted beds onto chairs, valuables on beds or higher up in cupboards, lifted curtains
turned off power it was off at 11am) put up some of the more valuable items and locked up securely
we moved expensive electrical gear to higher positions
put items up high
moved furniture off ground level, packed personal items into cases and put in high cupboards, unplugged all electrical items
put contents up as high as time permitted
lock the home up
located as much gear as possible to elevated locations
taped windows lifted white goods and furniture up and put linen and clothes in plastic bags in cupboards, turned off gas, water, power
stacked all the furniture up high
taped windows, pot plants in laundry, lock door and windows
turned off all power points, put all valuables up high (house was already cyclone prepared)
put everything up high and packed our belongings and food in car
took everything off verandah and taped windows (night before) locked up
Electrical items eg. TV PC, video, stereo all in the loft
Put valuables and electricals up high eg. TV, stereo, video
Lifted 'special' furniture items as high as possible, locked doors and windows, left key with neighbour who

WAS staying on higher ground (Jade Cres) - she was later moved on by police
locked all doors put some things up higher then left
Valuable papers etc.
ensured motor bikes / cars were removed and fully locked the house
did as much as possible in short time given
put all we could up about 1 metre above the floor
no time to prepare we were told we had to leave immediately
lifted fridge and freezer off carport floor onto bricks
we felt we didn't have time to do anything as it was dark and couldn't see 'rising waters'
unplugged everything, put expensive stuff on higher ground or in the car
took jewellery, bag, photo albums
Lifted things off floor. Removed lower drawers and shoes, pulled all plugs out, locked house
lifted furniture off floor, switched off power, (already off)
lifted as much as possible above floor level (onto beds, tables, chairs etc) Locked up turned off electricity
put as much furniture as possible on benches and tables
didn't prepare at all we were told at 4.30am to be out in 10mins
lifted any valuables off the ground and placed higher
nothing x 5
lifted some things up onto bunk beds, unplugged electrical equipment, turned off gas
never
lifted low items as high as possible
lifted everything off the floors
lifted some things high, turned off power
put everything up
IN GREAT HASTE
lifted all items off floor, stored electrical items in high places
Put items up on tables etc.
diddly squat
put fridge, freezer, washing machine up as much as we could we packed up high
no we have a high set house and we had already cyclone proofed outside
switch off power, placed flood boards in door opening lock up
put electrical on table
filled cars with some possessions, had other electrical things on beds
no, no time
nothing prepared due to full insurance cover
we put the belongings that were valuable to us in the ceiling (manhole)
we didn't
locked up, took precious items and pets
put valuables up
we put all furniture above floor level where possible and kept power off at mains,
NO, DUE TO ADVISED URGENCY
put all electricals and drawers of clothes etc. up as high as we could
lifted up everything possible in 1 hour
we took our important papers, photo's, food and clothing, we left the house the way it was
we didn't, the radio indicated the flood level was 2 m higher than 1977 which would put level about top 0of windows
one adult stayed with house
got our important documents - put some things up off floor
was prepared for cyclone (husband stayed at home)
everything was set up for immediate evacuation
locked it up to stop burglars

**APPENDIX A.3**

QUESTION 7

What residents took with them when they evacuated.

personal clothing
blankets, food, clothing, first aid kit
photo albums, clothes, not much
food, dry clothes, water, gas stove, gas light, documents anything of value
valuables and pets, no clothing
personal papers, dogs
bedding, food, gas cookware, water lighter photo's, radio, clothing
a lot, personal and job
blankets, jumpers, groceries, caged birds
clothes, food, cooking equipment, water
dogs files, clothes
pets, some clothing some food, personal documentation
drink, spare clothing and important documents
clothing, valuables, food for baby, pets
clothes and food
a change of clothes some food and water bottles, My pillow and quilt, Battery radio and torch & spare batteries
clothes, important papers, animals
photos, marriage and birth certificates
food, water, clothes
Personal items, torch. I knew I could walk home if Barron River came up near house
tent, tarps, cooking utensils, gas light/stove, first aid kit, picnic set, esky food, bedding, backpacks with 2 days clothing and toiletries, personal papers, photos, 8litres water
nothing no time
Portable cots, spare clothes for kids, food (tinned) drinks and a box of toys
clothes for up to 3 days, private phone book, jewellery
documents pets and family
clothes and money
jewellery, papers, passport, floppy discs
food blankets torches clothes
nil
some clothes a radio, medical supplies, dog
dogs files, clothes
radio, drinks, a snack
beer, cigarettes
food clothes dog
food clothing camping gear cooking gear torches supplies for 2-3 days
cyclone kit
bedding, food, pets
personal items (photo's legal documents)
clothing and bed clothing. The kids took things to do books etc.
change of clothes, medication, insurance documents
cats, irreplaceable items easy to carry, electronic goods, clothes, personal items (eg photos etc) coffee plunger cups milk
clothes
Gen set and cars
cyclone kit medication, rug, pillows, library books, clothes
food, clothes, photos, dogs

clothing, small amount of food, valuables
family, clothes guinea pig
clothes, tools, nappies, photos, medications and important documents
some clothes all photo's negatives and slides TV camera, some paperwork, tea, coffee etc, first aid kit
Clothes and important documents eg. Insurance policy
clothes
family, pets, some food
warm clothes, food and drinks, torch radio and batteries, dog
radio, torch, blankets, pillows, shoes, clothes
Personal things, pillows blankets, water, food, radio, torch
overnight bags
clothes, food, water, bedding and some valuables
3 pet birds, photo albums, some clothing , food
dog food, water, medication, personal papers, fresh fruit, tin food
change of clothes, blankets, pillows, tinned food/milk, first aid, photo albums and a few sentimental items, pets, children
clothes, photographs, private papers
2 towels, toothbrushes. Torches, batteries and 1 tin cat food. Book of financial affairs (records) and some photos
a suitcase with personal effects and papers
food and water 2 changes of clothes blanket pillows torches and mobile phone raincoats
3 changes of clothes for each of us, passports, birth certificates, hard to replace papers, esky with drinks
clothes, baby items, photo albums, food
as much gear as we could fit into 3 cars eg, clothes, bedding, personal papers, photos
small valuables / documents food camping gear
enough to live on for 5-7 days if necessary
biscuits, apples, book
My handbag with all my money and usual stuff in it. My valuables as the police advised. Didn't think of taking insurance papers or anything. Took medication.
some food and clothing
photo's clothes food bedding
pets food water clothes torches, radio, mobile phone
food drinks pillows torches
dog clothes, toiletries
clothes dog bird
change of clothes and torch
food, water, clothes, torch
clothes few valuables
clothes, towels, food, water, bedding, camping equipment medication, vehicles
animals, clothes and food for 3 days, and a gas stove
clothes, food, gas light, dog, toiletries,
pets, food, radio, torch, clothes
Bare essentials. One small suitcase with few clothes, nappies and babies items, torch, mobile phone, one blanket and 2 pillows for children few cans of food and water
food medicines (we had children ill) clothes, wills, blankets, identification, dog
valuables and some food
valuables
Enough for 1 week - pre - prepared cyclone box food, drink, gas stove, torches, lamp, pet food, first aid, clothes, toiletries, utensils, pets generator, important documents eg. Insurance legal certificates marriage, birth etc house details and some bedding, footwear, money some photographs
personals for 2 days
3 cats enough food for 3 cats and 4 people for 2 weeks - clothes, photo negatives and most precious books
bedding, frozen and cold food in esky, tinned food and clothes jewellery, precious photos and documents

food clothes personal items
children, dog, essentials
change of clothes some food
clothes documents photos blankets
clothes money and food
clothes, important documents, little first aid, photo album, food, torches, candles, battery op radio, gas cylinder and cooker, fresh water bottles
personal items, wallet, bank book etc, 2 additional sets of clothing
food clothes 1 box of photo's pillows and toys for kids
dog
motor bikes, vehicles dogs and change of clothes
clothes
valuables, paperwork, bank books, machine, blankets, 3 days clothes each, computers, photos, food, water etc.etc
4 cans baked beans, 1 can soup, water 5 cups and spoons, change of clothes and jewellery, 2 aviaries birds, mouse and dog
bag of clothes and important papers
a few snacks, clothing drinks, fruits
most of my clothes and food supply
first aid kit, money , clothes, food, knitting, books, etc. sleeping bags and pillows
jewellery, kids, hubby, money, some clothes
water and snack
Change of clothes umbrella, radio, torch. Food for breakfast
clothing personal effects, dog
heaps, food for several days, some documents, torches, chairs (folding) some clothes, sleeping bags
As many valuables and things that we could carry in the van, photo's paintings, electronic equipment, clothes etc.
some clothes and personal possessions and some tinned food
food and animals
nothing
change of clothing, important documents, photo albums, shoes, bedding, some food and jewellery, also children's toys
clothes, tin food, milk, bread, candles
file with important papers, some valuables
spare clothes, toothbrush, dog, food for breakfast
food, clothes, pets, blankets, cyclone kits, gas stove, gas bottle
food, clothing etc,
dog, food and supplies, torch, medical equip, water, clothes
change of clothes dogs radio
spare clothes
meat and icecreams
cyclone kit prepared, pets, kid, blankets, pillows, tent, camping gear
food, blankets, dog
dog medication for me and my wife, personal papers
dog and esky
photo's personal files, TV stereo camera
bedding, hot water coffee
pillows blankets cat and cat food
documents, cash, TV, computer, dog, food etc
a few personal belongings and pets
photo's clothes, CD's, jewellery, dog cat food
children, pets and essential requirements
food, child, dogs, pillows, clothes and a gas bottle (and first aid)

bag with clothes and radio
personal papers, photo's, clothing some food, radio, torch
cat, clothing, pillows, and sleeping bags and photo and documents
wallet, change of clothes, pet cats
clothing, rain coats
clothes, food, important documents
kids, grandmother, clothing, food
some food, bedding, change of clothes, dog
nothing
food, clothes'
food, blankets, pillow, radio, torch
kids, dog, radio
photographs, jewellery, some clothing and some food a container of water and the dog

**APPENDIX A.4**

QUESTIONS 8 & 9

What residents were advised to bring with them and leave behind when they evacuated

<b>advised to bring</b>
No x 99
Forget
Clothing etc.
food and clothing x 3
our valuables
small bag of clothing
don't know
yes, a change of clothes, blankets, pillow, food, water
clothes, food water
pets
clothes, tin food, bread, milk
radio advised what to take
bedding
food x 3
no pets
only items that may be necessary to make life easier for a few days
no, should have taken food
warm clothes
Personal items
change of clothes, food
just change of clothes, blankets, personal items
Essential items eg. Clothing food
don't recall x 4
Yes, when I rang 000 for info the police advised me to take my valuables
Extra clothing, sleeping material etc.
just animals
read cyclone book, talked to a survivor of cyclone Tracy
not directly however some prior knowledge through TV radio, booklets
council said to take a snack and valuables and pillows for kids and toys to amuse them
clothes at least
food, water pets
Yes x 3
Valuables
cyclone booklet had some guidelines
no, police advised us to leave everything and go
pets
Yes, when I rang 000 for info the police advised me to take my valuables
pillows, blankets, pets
cyclone kit and documents in water proof bag
What advice, who from?
no, however we were advised to collect and keep containers of water - but we left these behind
a radio
neighbour advised us to take clothes
radio bulletins advised, clothing food, emergency supplies



<b>advised to leave</b>
No x 141
Forget
Non essentials
Don't know
Can't remember
Children and pets
Everything
The animals
Dog

**APPENDIX A.5**

QUESTION 10

What pets residents have

2 dogs X 13
None X 30
2 cats X 2
1 dog X 25
1 cat, 1 dog X 10
1 cat, X 14
1 dog, 1 budgie X 2
2 lorikeets
3 birds, 2 dogs 2 cats
1 dog, 1 cat 1 bird fish
guinea pig
fish, bird
2 cats, pet rat
2 dogs 1 cat
2 budgies
1 cat, 1 snake
1 dog 1 cat 1 budgie
birds, fish
3 cats
birds dogs
dogs, cat, fish
3 birds
guinea pigs, birds, cats
1 budgie
1 dog 1 bird
1 dog, 2 cats, 2 birds
fish
cat bird
3 birds,
2 dogs, 1 cat, 2 parrots
2 dogs, 1 cat, 2 birds
2 dogs, lots of parrots
2 dogs
16 baby metallic starlings, 2 ducks, 1 chook
dog, birds
2 cats 1 dog
dog, bird
dog, cat 2 birds
2 dogs, 1 cat bird
2 dogs 1 cat
3 cats 9 fish
fish and mice
2 cats, fish tank
1 dog budgie
dog, pet wallaby
birds, fish, mouse dog
birds

2 dogs, 2 cats, fish
dog, cat, birds, guineas pigs, fish, hermit crabs
2 cats 1 dog
2 cats
a puppy
bantams, guinea pigs
2 cats 2 dogs
2 dogs 1 cat
dogs, cats, chooks, ducks, birds, fish, guinea pigs
dogs
a bird
cats, budgerigars
2 dogs, 2 cats, 1 rat
2 dogs 2 cats
1 dog 2 cats
2 dogs 1 cat
dog, fish, guinea pig
dog, tropical fish

**APPENDIX A.6**

**QUESTION 11**

What residents did with pets when they evacuated

took to shelter X 14
left at home X14
took with us X 36
took budgies left fish
left a cat took dog to shelter
took to friends with us
took to shelter, snake secured in pillow case in hand bag
took, to relatives
left them outside
left them in the car for a while the sat in bus shelter near Smithfield high because it was hot in the car
nothing, not necessary for a short departure only
tied up in boat (floating vessel)
took dog to shelter left budgie up high
we took the cat in a cat cage and the dog with us The bird we left behind on a high shelf
left bird took dog
we left him untied in the back yard, he would have gone to higher ground if necessary
in cage in van
left birds, took dogs
I tried to put her in the car but she got away, I was trying to catch her when the police came and told me to leave immediately
dog came with us cat and fish stayed home
we put him inside the house on top of 2 crates (about 4.5 ft off the floor)
took the dogs and left the cats and birds with food in the house
locked the cat in the upstairs part of the house, took the dog to shelter
left behind in laundry so she could climb higher if needed
Left him in the house. There is a cat door in the triple locked security screen door
placed in smaller cages and put in the s/wagon
took dogs to shelter with me left cat in house, birds were hung under patio ceiling
put them into travelling boxes and took to shelter with us
put him in pet carrier and took him with us in the car (to shelter)
left them outside I had nothing to transport them in
left them in the yard
took to a friends place
took dogs (to shelter) put birds inside
dog and old cat came to shelter with me young cat ran away
took dog left cat outside so we could check on him and take him later if necessary
taken the dogs and bird to shelter
took our 16year old dog with us and left her in the car
in the car
she stayed
took cats left fish with food and air till electricity ran out
took them with us to shelter
put fish tank high left fish food and water in case of shortage cats have access to garage and high spots to shelter
took dog, left wallaby as I knew here was bound to be lots of dogs there
took all to shelter except fish
they were allowed to roam (at first)
left him outside with food and water on washing machine

took them with us
put the cats in a cat box and put the dog on a lead and kept them with us
put them in the shed
took dogs left cats
left the cat and food and water took the dog
took with food and bedding
took the cat with us
left him unlocked in the yard at first, came back and took him to the shelter later
took the 2 cats we could find, birds in large aviary were likely to be ok
stayed
left cats took dog
nothing
left cat outside left dogs in their kennels
advised to leave gate open to enable them to find higher ground
left fish and pigs to fend for themselves
took dog with us

**APPENDIX A.7.**

Question 13.  
Experiences at evacuation centres.

It was a mixed kind of feeling when you didn't know how long you were going to be there
boredom, darkness
not enough info given, no one seemed to know what was going on
they were not prepared to take in people, no lighting, elderly were not looked after NO RADIO no advice for people
we sat and waited with the other folk, we were served meals and were quite comfortable
not adequate for cyclonic conditions, too many glass windows, ?in a low area
headmaster couldn't prepare enough because too short notice
Smithfield High School, only there half an hour before principal started locking rooms up. 4CA advised we could
not too bad
disorganised, no one in authority present, slept in car away from noise, dogs etc
no power, no lighting or emergency personnel to direct us - we waited in car till daylight then joined neighbours for a social morning
Shell then High school disgusted - dog smell, barking and cats, women crying. Left (and went to ) shopping centre due to smell
Unorganised, seemed to be no one in charge. Two urns of hot water. Coke machine not working
place was very clean, coffee and tea provided after a short time, staff told us as much as they were being told
Cold, wet, dark, dogs barking incessantly. No one knew what we should do or where to go. My son took ill taken to hospital by army truck
OK for emergency short stay only
shelter, seats, tea, coffee provided
everyone wondering what to do now
not much didn't stay long
Many people and animals relative calm. We had food with us and played cards/board games for a couple of hours
It was disorganised, we weren't told of any buildings that would be opened. Everybody just stayed around vehicles
confusion, lack of information, volunteer workers were very helpful with food and coffee
lots of people grateful for coffee and tea
Stayed in the car the whole time. I suffer from a social phobia and anxiety and depression as couldn't go into a group of people
ok
Very wet, the only dry place was on top of tables. Too many dogs not supervised - not a place we'll go back to even if ordered to next time.
very comfortable, got to meet some more neighbours
Not good, no one to advise you what is happening or when to go home. Sat in car as more comfortable
calm and orderly
very comfortable, no panic and staff from the college kept us up to date
OK, I wished there was someone in charge to answer questions that people were wanting to know. The coffee was great when finally came
very well organised, staff know what they are doing
no direction, no information, no food, pretty much no help whatsoever
Stayed in the car most of the time because of the cat. Got 2 cups of coffee each and used the toilets. Went to shopping centre at 8am
eventually left and found a quieter spot when daylight
initially not well organised but improved as time passed

it was ok
piss poor, (left went to friends)
ok, centre needs more prep time, supplies, equip
boring
boring, After a bit I drove up to the campus shopping village and very slowly drove around listening to my usual Radio National programs
terrible
not prepared for us - appreciated cup of tea at <b>7.30 am</b>
busy
slept in car outside
basic and wet but the tea and coffee was hot
didn't know what was going to happen but to listen to the radio
There was no one that seemed to know what procedures to follow, where to go, how long etc. There was one classroom open at first, no facilities ie. Tea and coffee etc until much later. No advises or updates. Don't really know what we expected
very nice helpful people
We gather at about 5.30am till 6.30 and no organisation. The cup of tea was hot and light. Some lady came to see if we were all right. Then saw a SES men and we were home again at 10am and nobody knew who came or gone
everyone there coped great under the circumstances
crowded, generally a sober mood
ok everyone was in good spirits
quite cheerful (lots of friends) a little anxious
Friendly atmosphere, no panicking etc.
I stayed mostly in my car on my own - did not mingle with others when I had to use the toilets kindly, given coffee, sausage rolls etc
very calm and well organised
Made comfortable at SHS and were well looked after. Chairs, info updates, drink and food
bewilderment to arrive in the dark not knowing the water level, no SES personnel to tell us anything, not knowing if the water was through our house and if we had lost everything
not too bad as snacks, tea and coffee were supplied and they even played a very funny Mr Bean video
bored, worried, concerned about belongings
pretty slack thank goodness for the principal
wet, stayed in car as too many people and pets
Area we were told to go to wasn't large enough. Started raining. Just went to another area and sat on stairs, which had roof overhead. No one from SES or disaster services was there, no facilities provided. Coffee would have been great. However SES arrived with coffee at 6.30am disappointed, no drinks available for 2.5 hours and no food was made available
stayed for approx 2 hours - coffee and tea available and were advised that we may have to stay till 3 or 4 pm
there were a lot of people getting impatient because they weren't sure what was going on and how bad the flooding was
ok
Noisy people, animals and kids everywhere. Not enough room to sit or have the update report on the weather
The head principal was excellent he made sure everyone was ok. He made coffee and tea non stop and hot and cold food
calm and relaxed
Smithfield High School very well organised by principal
very good
what evacuation centres/
waited outside
probably overcrowded/ noisy / people just keeping to their own group/ disorganised
poor, unorganised, drunken louts, nil communication, every one smoking

boring
unorganised
ok, but at 5am in the morning we were a bit scared and just wanted to go home
we stayed near our vehicle to avoid the noise and get some rest
we received a lot of mixed info
just somewhere to shelter
there was no panic everyone was just in waiting mode
friendly and supportive as a community
It was ok some sort of food needs to be organised in future, also seating
boring
experience was good
Amicable, saw many of our neighbours there good to know them better. We were happy to be there
chaos - got there and didn't know if we were at the right place



**APPENDIX A.8**

**QUESTION 23**

Had residents considered the possibility of flooding in their area

Yes x 83
No x 43
Yes, but checked flood levels before purchase and were ok
I don't believe property's would flood if river system was kept clear and rubbish removed
Yes and no, it hadn't happened since we bought the house
Not our house, possibility of flooding of lawn at bottom of driveway
We were aware of flood zoning
Yes, we consider large areas of Cairns flood prone
Not really
Although we live opposite the lake we were assured of no flooding
Not possible
Yes, but only the access road not the house
Maybe
I always thought that if we went under so would half of Cairns
The levels are rising all around the world, we shouldn't think that Cairns is an exception
Possible
Ultra improbable
Never
Not as it is a level 6 surge zone
Yes, advised to build to meet council rules
Very remote
Not really we asked around before we bought and they said Lake Placid hadn't flooded
Not really after the work done by civil engineers to alleviate
Previously advised by council that property could be affected by 1 in 100 years flood. Property was listed at the time 'flood prone'
a little
Yes, viewed Barron Delta flood maps prior to purchase. Flooding is always possible on the coastal belt
To my surprise my house was flooded to 6 inches in 1977 when a huge accumulation of water on the Tableland was met with a king tide. Surprised because I'd checked with the council before building there
Yes, we have experienced flooding before building on the land. The improved banking has negated this possibility
Yes, but so is all of Cairns
Property on edge of but 2m above flood plain
Yes, but so is about 50% of Cairns properties
Yes, but talked to council before we purchased and other residents, seemed very unlikely
Yes, but only due to the flooding of roads
Yes, council has this area as flood prone
We knew Lake Placid is supposed to be on a flood plain but don't believe flood waters would reach our home
no, not really
Yes, I have knowledge of my property's height above sea level, past flood levels and anti flooding work done in this area since cyclone Peter
Council said it was flood prone but we knew a lot of other houses would go before ours
Was told by council 9 years ago the Barron never floods
no, after 25 years no water has ever come near us
Never, I was surprised
Remotely possible
no, I bought here instead of Lake Placid

After I bought the lace yes
Yes, low lying area
no, as I flew over this area in 1979 floods
From cyclone tide surge map, we only had indication that we were 5 mt above high tide no facts have been disclosed to how high we are
Possibly
of course
Originally checked with water resources about situation of our property

**APPENDIX A.9**

**QUESTION 24**

Any particular concerns about the Barron River flooding.

river rises rapidly after heavy rain
No x 60
it seems that it doesn't happen often
no, last flood didn't make it to our house
yes, only being unable to get to work
no, we rent, I don't think we would buy in Lake Placid unless very high up
it is always possible it might flood the area
the Barron will flood but not in my area
no, just that better hydrological data could be calculated
yes there is only one access road out of lake placid
not enough pre flood preparation of Barron River flood plain
yes, because dredging by contract was stopped about 15 years ago
no, location of property
yes, water from the tablelands and tides
yes, possibility of isolation
No. It would have to be a very, very, very huge amount of water to actually flood all of Lake Placid and get to our house
no, too high on hill
isolation, Freshwater bridge and Capt. Cook Hwy
yes, we consider that a combination of a king tide and massive rainfall in the Barron catchment area COULD cause flooding in Lake Placid
not really up this end but shed at other end
no, because of the historical facts of this land not going under
yes, heard that maybe a 1 in 100 year flood may occur
no, shit happens how can it be stopped
Not really except the access road. The river has flooded in the past but it is unlikely to flood again for 50 years each year we use more water out of the catchment area
yes, not controlled enough during flood times
it was flooding but not here
yes, rivers change course - there are a lot of residences on the flood plain
yes
no, we're too high
not now
no, trusted the wall at the caravan park
no, experience with Rona
yes, would cause my house to flood too severely if it broke bank
I believe the river will flood over any previous level it's a matter of when
Yes, have seen photos of 1979 floods
No. I built here in an elevated position knowing river level potential both historically and personal over the past 30 years
yes but not our house, too high up
If the Barron river flooded on to lake placid road, most of Cairns and low areas would be under water before Valmadre St. near Barron gorge would be rarely, I am on a rise higher than average for area
yes, being cut off unable to get out if Lake Placid rd. flooded
no, but they should increase the height of the wall at the caravan park
no, I think it would have to be 1 in100 year
yes,
Yes, only if the dam couldn't cope

not in the personal loss sense
Level of Tinaroo dam. Stupid to have the dam 98% full before the wet season
we were advised a wall of water was descending from the tablelands and were no sure of the impact
No, floor slab level 1.5m above '79 flood. The stone wall at L Placid caravan park was built to stop this possibility
Yes, only in extreme weather eg. 1 in 100 years
yes, if the Barron flooded, how much of Cairns was going to be under
now - yes
it's a possibility
yes, combination of overflowing Tinaroo Dam, high tide and storm surge Also Copperlode dam height
not any more, Lake Placid, it would take a lot of water and circumstances
no, its big enough
insurance doesn't cover flood damage
no more than any other 'wet'
Not after 1977, which I don't think likely to happen again and wasn't so awful
not really The highest flood in about 20 years have been contained by Lake Placid rd except for the previously unbanked section by the caravan park
yes, has flooded before
no, even tho it was expected to rise a lot higher our house is further from the banks and therefore a LOT of water would be needed to flood us
No, almighty God kept us, he can do it again
we have lived in this house since 1974 we did not get flooded in 1977 or 1979 floods
yes, there are too many developments in the old (skyrail) flood plain and more planned which makes flooding more likely
yes, it will always flood and if the flood plains are developed, or built up the water levels will have to rise
Yes, ? Rain depression and unusually high tides
Yes, during storm surge we have water coming up from high tide and down from Kuranda etc. It has nowhere to go but over surrounding area
yes, radio reports indicated it was a possibility
None check local maps etc.
yes, lack of under highway drainage
not really
maybe, I know its possible but rare
no, it was a risk we knew about when buying the house
No really, not much you can do about it. I really expect more
yes, home being affected, I'm higher and we would have been under
yes, yes if all the variables are high eg, Tinaroo, cyclonic conditions, high tides etc
not where I am, I am above all known flood records
not really if this was a once off, hopefully we will be ok in the future
council should have been more organised and if this was nearly as bad as 1979 flood why are we still got flood plan on rates if water did not reach this far
yes, this is the 2nd time in 9 years it has flooded
always possible that flood may occur 100 flood line
yes, river is very effected by rainwater on the tableland
yes
no, 1977 flood came into property 150mm in carport, sub division behind since built a 1m lower flood gates installed and drainage
not really, because our house, like rest of street, is well built up on an embankment and it would take the worst flood ever to reach it
no, I believe that the powers that be panicked and perhaps a little bit cheesed off that nothing happened
no, more concerned with new development (no precision maps for drainage)

Yes, flood model still used by council is out of date. Recent removal of dirt from grassy knoll left great quantity of earth on flood plain
Yes,. If the river rose to such an extent our house was flooded and we were unable to evacuate the area
previous flooding occurred in 1977 or 79 through Lake Placid and Caravonica
Yes, with extra development going on drainage and natural waterways could be altered and cause unexpected flooding. Cairns city council has an outdated and ineffective computer model for predicting flood levels
yes, in the future
yes, all low lying land
no '77 flood no flooding
no, that's a hell of a lot of water
Yes Now I have seen it this high It just makes you feel unsafe
No, this amount we have seen shows that this whole area can fill quite fast and drain to... Unless we have another
no, high area
yes
southern Caravonica and Lake Placid going under 1979, north Caravonica high and dry
yes, all the water comes down from the Tablelands
now I do I'd like to be aware that if the peak is 10mt then we are still safe, what height should we evacuate
yes, cut off roads into city
yes, based on history of previous floods and threat of tidal surge
Councils lack of fore thought, something should be done, barriers, proper drainage etc.
yes, how much rain does it take for the Barron River to flood and reach Caravonica
no, living rather high up
yes, even if it is only a maybe next time I would like more notice
Yes, because of low-lying area, maybe now not worried about being cut off. Past experience

**APPENDIX A.10**

**QUESTION 25**

Any particular concerns about leaving homes.

left unprotected - vandals - water damage
that it might get flooded out
No x 33
Looting x 2
Yes x 4
Yes, when the neighbourhood is gone the security of our house is main concern
No, as long as our family is safe and a few things of sentimental value, everything else is replaceable
Yes, break and entry and not enough time to prepare
Yes, security (theft) x 3
Vulnerability to theft, because the area was evacuated
Yes, at 4am in the rain and mud and dogs and tired
No, there was a lot of unnecessary confusion created by the storm surge we were supposed to expect
Yes, I felt unable to control the situation whilst being away. Staying would have been less nerve racking and I had thoughts, concerns of looters
Yes, replacement of lost furniture etc.
Robbery while gone
Yes, we may have been unable to return until local flooding subsided and possible looting or vandalism
Yes, don't know what's happening to it if you're not there
Yes, flood level would not reach houses left as directed
Yes, being on my own, I was unaware how close Barron River flooding to my home - In the dark and living on my own
Yes, looting, not being close enough to repair minor damage before massive damage occurs
Didn't want to leave If you stay at least you can put things up higher
of course, it was horrendous driving off and not knowing what we may come back to
Yes the unknown
Yes, why leave a secure location to go to a crowded uncomfortable and questionable secure location
Yes, worried about not getting back
Not really it had to be done
Yes, we needed to get my son to hospital. Were advised to go on Nth Beaches rd. which ended up being flooded
it must be only short lived
Yes, photos ,personal belongings
Continual rain, flood, unable to get to work
Yes, looters and lack of insurance
Yes, we could not return but friends were already in Lake Placid
Yes, other people had not evacuated. The possibility of vandals/thieves worried us
Just the inconvenience
Yes, property security as evacuation not complete and lack of police visible
No, we are on higher ground at lake placid but if it floods there is nothing we can do. Family's safety is first priority
Yes, furniture left behind
Yes how do you protect your belongings from damage and theft
Yes, I didn't have to leave I could have lasted for 2 weeks minimum
Yes, my cat and general anxiety
Did not want to go
Levy wall in front of caravan park is too low at kiosk end, half metre lower in fact than flood gates at entrance to park
Yes, it didn't make sense to be evacuating. Even a 12 m flood peak level would not have caused problems for our house at 12 Jade Cr

Yes, like all/most home owners I wouldn't like to come back home to face devastation - books photo's ruined, mud over everything, bird dead etc.
Yes, there was a real chance of losing almost everything
Yes, the uncertainty of damage that could be caused and not being kept updated
No, we had everything we need and we are on the side of a hill high above previous flood levels
No, in the end safety first
Yes, security and not knowing what was happening in Lake Placid
Yes, only that the house was an open invitation for robbers and vandals
Yes, not knowing what was happening while not at home - also looting
Yes, didn't know where to go at 4am plus didn't know if everything would here once returning
Yes, we had to try to elevate as many of our appliances and furniture as we could
Yes, fear of water damage and looters
No, you can replace objects, not a life
Yes, of course. We were worried about possible damage to our property, insurance does not cover flooding
Worried about water damage, concerned there could be vandalism and burglaries
Yes, but lives are irreplaceable
Yes, the possibility of vandalism or looting and not being able to protect our investment
Yes, didn't know what would happen, eg. Flooding robbery
Yes, would rather have stayed (after evacuating my children) and tried to prevent water coming in
Pilfering
No, I didn't expect anything bad to happen. There were the police with a road block on the corner when I left, stopping entry to the suburb, which is a quiet place anyhow
No, It is solidly built having cyclonic conditions in mind, we think the immediate hinterland gives some special cover
Looting and flooding
Yes, made sure it was secure in the event of burglary (never know who might be an opportunist)
Yes, but I trusted God to keep my house as in Psalm 91 God did in spite of the enormous volume of water
Yes, worried about looting / fire if we had left candles going in the urgency of leaving
Yes, looters and loss
Yes, I can't be there to deal with fixable problems
Yes, out of control, not able to look after a treasured home, fear of a break in
Yes, worries about the possibility of looting and I thought the emergency services may have come around to tell us to evacuate
Yes, losing valuables etc
Yes, that I didn't lock up
Only that I hadn't taken things I would have (ie. Personal items, photos) if I'd had more time
No, personal safety of family is more important
Yes, we had 3 teenagers came to the door at 4.30 with beer in hands and asked if we were moving out. Were they going to move in and take everything
Yes, inadequate policing and security
The security of it. Criminal element ie. Break and enter
Not really if it was going to flood we were as prepared as we could have been
a little, what damage, when would I get back
Yes, I would like to be in our own home so that I could see what was happening and try to prevent damage to personal property
Yes, I'd rather be there to fight it
Yes, we didn't really have time to prepare the house but this was mainly our fault as we were sleeping rather than listening to warnings on the radio
Yes, leaving it unattended
of course I was concerned that it would flood then I was concerned about theft
Yes, broken into and flood damage
Some although I have flood insurance cover, the experience of cleaning up after would be awful. It would

be nice to be able to stay longer to observe flood levels and move things as they required ie. Stay with folk higher in Jade Cres. Looters may be a fact of life in these situations, hopefully police, army etc would take care of these
Yes, still not really knowing what to come back to
Yes, worried about being cut off if we went to evacuation centre and some breaking in or not being able to get back if big Barron bridge went over
Yes, it is wide open to thieves the way things are at present
No, lives are more important
Yes, our house was flooded in 1977. We were able to lift everything up. This time being evacuated we could not do anything
Yes, theft of property and possibly to do something if it did inundate
Yes, I did think that if it did reach the floor of our house all out filing cabinets would be ruined by water
Yes, unknown damage, unknown reasons, lack of sleep already, concern about looting
Yes, great time for thieves, wouldn't you agree!!
Yes, no security with the whole area being evacuated
Yes, good opportunity for thieves
Yes, no reason
Yes, felt if levels rise would not be able to sandbag or protect house as much as much as would have liked against water coming in
Yes, possibility of being able to protect some belongings against water damage and looting
Yes, security
Yes, being flooded or robbed
Yes, water damage
Yes, it took 2 days to get our house back in order
Yes, because of people like that helping themselves to empty houses
No, as long as work vehicles and other cars - bike eg most expensive and family members are safe you can replace others
No, everyone was doing it
Yes, I was worried about people looting or just damaging it for fun. They did it to the house down the street when it was vacant
No, there was no mention of protection against looters, thank God, this is Australia not America
Floods and no power, concerns about my wife - invalid
Yes, people break in in
Yes, worried about possible damage and loss of possessions
No, only did as directed police and SES workers directed in my opinion the people in the best informants in this situation
Yes, looters and loss
No, once the high tide passed we were less concerned
Yes, because we were leaving everything we owned behind
Yes, to leave everything you own and to cross the Barron which is a threat
Security
Yes, loss of everything I own as it is uninsured - but not enough to ignore evacuation warnings
None apart from not knowing exactly what was happening and not being able to see it happening
No, except for the property wasn't ours only the contents inside
No, going on previous flood heights
Not really
We are situated on particularly high ground
No, husband stayed back
Yes, didn't know what would happen, eg. Flooding robbery
Yes, pilfering x 2
Yes, only what would happen to the animals
Yes, apart from possible flooding and leaving our dog behind. Break and entry - Two young males were seen in our driveway by neighbours who came back for medication
Yes, told to go to Peace Lutheran School which was the OTHER side of the Barron



**APPENDIX A.11**

Question 38

The worst thing about this event

Having to leave suddenly leaving everything and difficulty in getting out of the area by vehicle due to flooding on roads. Fear of severe loss caused by water entering house
Not knowing where the cyclone was going to cross
Nothing x2
being woken up in the middle of the night, sense of panic instilled by media
having to evacuate
the evacuation was unexpected and a little frightening at first, but we soon realised our house was safe
Loss of power, inconvenience. Natural disasters have a way of bringing people together (community spirit) x 3
the time given to evacuate and the school not prepared
lack of access out of the area, too many poor roads and low bridges and Govt/councils not willing to take action to make real decision not a political one
Being cut off from work, the loss of power and damage to our roof from the wind as well as the uncertainty of further damage to property and the family. We had no access to the hospitals because of roads flooding were unable to collect wages from city
other neighbours who had to be woken because no-one came door to door as stated on radio at 3am There was apparently someone at 0450 - 10 minutes before the supposed flood time
it happened at night, if we hadn't set alarm for 3am update we would have been in trouble, shelters should be known prior to a cyclone - too many lives at risk
how quickly the cyclone developed and lack of forward planning for development of flood prone road access
every body else's paranoia
nothing, it should be taken into account so that we will measure up to the next one (with help from another Mulgrave Council)
to leave our home without knowing how it gonna be when we come back, facing the possibility to loose everything
no power for 38 hours
being isolated from going to Smithfield to Cairns/Redlynch to Cairns due to flooding in both directions
It came far too close for comfort and immediate loss of power for majority and prolonged loss of power for some in isolated pockets. Our energy suppliers should be doing more to stop our brown outs/blackouts. Would it happen if they had competition. I say not
leaving home, maybe having a flooded home on returning
If it were not for my sister in law phoning we would not have known about flooding. She phoned at 4am, we were all in bed
loss of electrical services
We were evacuated when our house was not in any danger at all. If our house flooded Cairns would be under 20 ft water
The speed cyclone came in and developed. At work in am had no radio
conflicting reports on flood situation and whether we were allowed to return to our homes
moving out when no need
just the fear of the unknown - if all things were against us eg, tide, water flow ex Tinaroo and persistent rain we could have flooded
being evacuated
Only because it came up so quickly. We are unable to control the speed that cyclones develop and move so under the circumstances I think that all involved in organising evacuations and repairs to damage (power) did very well
The speed of the cyclone developing and the rain before the cyclone which caused the concern over the flood. We plan to be fully prepared all the time for the cyclone season
losing power on Friday

my husband was away I had to cope alone
my son was so ill
inaccurate estimations and Tinaroo should not ever be left full
the way it just moved in on Cairns so quickly, Not enough time to prepare 100%
continual rain and flooding
evacuation so early in the morning with a 3 year old
no power for 38 hours
my husband still at work when I was trying to make final preparations
The uncertainty over how high the flood waters would rise as well as the mad rush to prepare for evacuation (and the mess afterwards)
unnecessary evacuation and the police preventing entry to residential Lake Placid even by foot when the roads were flooded
media reports and talk back shows
not sleeping in
being at evacuation centre and not knowing what was going on
once getting to the evacuation centre, lack of info regarding the exact status of the situation with homes in Lake Placid - did not know if our home was flooded till late morning
decisions by SES seem to have been based on absolute worst case scenario and not based in fact
the attitude of police SES and council and lack of proper planning by authorities
no power
The SES council and police made the wrong decision on some residents behalf to evacuate
Everything happened when I thought the worst had passed and being subject to panic attacks leaves me wide open to hurt. I went into shock and kept calling for my cat
being forced to leave our home the decision should have been ours
That no one knocked on our door to evacuate us. What upset me is that one of us could have been old, frail or disabled. We feel it paramount that someone checks all houses
Advice on reasons for evacuation and risks broadcast clearly, regularly and authoritatively on radio. Who said to evacuate ,why?
Having to evacuate to where we went. We should have been able to make our own decision about staying put if we wanted to
The speed in which the cyclone came in, and later a whisper that 2 SES workers had tried to break open the flood gates at the Lake Placid van park to allow vehicles out (unknowingly) They were stopped and the top gates opened. They should have been made aware of the function of the floodgates by the officer in charge of this area
The cyclone and subsequence flooding happened very fast. I think we should have been informed about possible flooding earlier so families could get organised and moved out earlier during day light
Was not prepared to leave ie. Did not take dry food
evacuating at 4.30 am and having no power on
woken up at 3am, neighbours yelling 'get out quick'
evacuating for the flood
Out of date weather reports. Can anything be done to close the 2 hour gap in between update reports
knowing that the problem was much larger than need be, due to the fact that Tinaroo Dam was almost at its maximum capacity BEFORE the rain started
not being able to get back home
the worry of losing all ones possessions
Due to the unusual speed and movement of the cyclone we didn't have enough time. We were still at work at 1600hrs
fear of losing everything in my house
The thought of not being able to evacuate then one of my kids drowning or for that matter anyone being caught and drowning and the cows and horses floating down the river out to sea. Basically the possibility of loss of a precious life and that a cyclone is unpredictable
the uncertainty
not having the time nor the capacity to prepare the house for flooding

being isolated for several days post along with no power
the fact that it didn't happen (thankfully) which generated ill feeling among residents towards the authorities particularly with regard to following comments
being evacuated at 3.30 in the morning without much information
damage by wind to my front fence
the stress and inconvenience of having to leave our home necessarily
threat of flood to house
worry of no insurance cover in event of flooding house
Bungle
Losing electricity, especially refrigeration, but everything. No TV, gas light hissing, just disruption to ordinary life, but you don't need a cyclone for that. I installed a convertible gas/electric freezer a couple of years ago and had a 2 burner gas cooker attached as well. I used it once this time to cook dinner
fear generalised by over zealous and emotionally concerned people
evacuating which was unnecessary
damage to other peoples property and no power but what can you do
not knowing for sure our area (Lake Placid) was not under any flooding, even tho predictions never occurred, were never really sure what was happening to our house, Waiting to go home was suspenseful
cyclones bring fear to the community
being woken up without power to see what was happening
getting woken up at 2.30am to go to work
getting up at 4.30, just inconvenience, but its nature - take what comes
In hindsight I realise that I wasn't and most residents are not aware of the risks of dangerous/life threatening floods taking place in this region
work entailed to restore furniture and effects to their proper place (unpack)
I feel that the decision-makers over reacted and then didn't have the manpower to carry out the evacuation. They should have been door knocking our area as soon as the decision was made. If our friend hadn't rung us we would have slept until 6am or later. I believe that they evacuated the wrong areas and should learn from the experience
I wasn't prepared the cyclone came so quickly / rushing around and stocking up on tinned food etc.
Daughter and 3 children with us due to cyclone. Grandson was very ill with virus, temp 40+. Husband unable to attend clients (could not get bread truck to bakery) Not knowing what was happening to our homes while at evacuation centre
not knowing what would happen from break and enter which we felt could happen when drunks wall the streets
The stupid media commentary - panic tactics used by both police and SES there was no factual info and only source of news, the radio churned out only clap trap with total disregard. Should not have been evacuated - knee jerk reaction
lack of power
that many people are too blasé and don't prepare (just in case) It should be considered good practice
waiting for the water to recede
having no power
missing the cricket due to electricity
I felt media really overplayed the incident. I am angry as there are residents who would like to sell their homes and I feel this area has been tared. A good majority of Cairns would go under before we would
the evacuation
not knowing if our house was under water for the few hours we were away
having no power for 2 days
stress, lack of sleep
having to leave our home
Loss of power in the end. Misrepresentation of flood levels. Initially seeing the actual water levels and later hearing what was said on the radio ie. Expect 9-12 m water Lake Placid -

didn't seem that way, more water on my land '97 cyclone Justin
being told to leave our house
the general uncertainty
Being first time evacuating not knowing what to take, council was no help and at that time most people are asleep. I went to bed when cyclone hit coast and by chance I was awake at 2.30am
blackout, had torches etc, but worried about not being able to use the nebuliser / inclined to panic under the circumstances
none really
not knowing for sure what the water was doing after we left our home
Being evacuated too early in the pitch darkness, not knowing where the water level was. No information given, police not allowing us back to Lake Placid in daylight to see if the water was near our house
council should have had sufficient information on levels along the Barron from Tinaroo to Power station to enable them to make better decision
being awoken by police sirens at 5.30am and being told to evacuate
I was not familiar with the potential flooding of the river. Not much info supplied beforehand regarding flooding only wind impact
Not knowing why we were being evacuated - ie no specifics given - knew there was a high tide due flood water from Tinaroo - advised concern that flood would be like 1977 - what was that like, therefore need specific info - where the water came to at that time etc.
Neighbours doing a runner every time there is a threat and not preparing a thing for the big event!! They're a bigger bloody threat than the flood
no electricity and being evacuated
no power for almost 2 days
availability of drinks and food at evacuation centre, people complaining about no power, sightseers
Had not prepared an evacuation kit - evacuation advice came while it was still dark outside and we were without power. Groping around in darkness to collect items and to lift possessions off floor
inconvenience of evacuation although obviously necessary
The air of panic, not enough information given - virtually just go immediately which created the feeling of panic
lost power early (Fri arvo)
no electricity and being evacuated
being woken from sleep after thinking most of the danger was over, trying to think what to take and waking the children
Too much media hype and not enough factual calm for people in general. Unnecessary panic from surprisingly mature adult members of society
sitting around
loss of power 18-20 hours
being evacuated so early in the morning, as we did not get much sleep during the night
thinking about water damage to our home
we were evacuated in the dark had I been able to assess the flood myself I would have stayed at home
loosing power for too long
speed of arrival
wind
overkill, it seemed to be more like a training exercise
palm frond fell off my favourite palm tree
No power lost all our food and lost the kids computer plus the kids were petrified of loosing their things. Plus knowing no insurance covers you for flooding from a river
some residents need transport and I think it could have been seen to better
they evacuated too early, no danger in our area when we were told to evacuate
cleaning up mess in garden and putting home back in order
personally I and my family were not prepared and when we were told to evacuate we

panicked and forgot essentials such as clothing and food
4ca tops, police low on info and no info at Smithfield High School people not organised at this venue
waking up so early
the flooding, no power for 17 hours
told to evacuate when we felt the need wasn't there, unorganised at Peace Lutheran College
being evacuated
being evacuated, loss of sleep
it happened on my birthday and power supply was lost early
lack of correct or official info on arrival at evacuation centre and the ease at which rumours could be spread
the fear of losing all material possessions
one minute the cyclone was out there the next it was on top of us along with the flooding, everything being so unpredictable
having to rush at the last minute to buy the essential survival gear
having been cut off
One of the cats urinated on the back seat of our new car !!!
inconvenience,
cyclone,
It moved very fast allowing little time for preparation. Also that I may have been flooded out
media
people complaining about having to evacuate their houses
being woken up at 4.30am
lack of information, school did not know we were coming SES workers asked if anyone had a genny in the car (last thing I would take)

## APPENDIX A.8

### Residents comments.

<p>Media blew everything out of proportion. Our land value has now been decreased due to media panic. John McKenzie and Tom Pyne have a lot to answer for. When purchasing this land we were NOT classed as flood prone, then council made us flood prone. This has just added to our land value going right down. Everyone who live here knows Holloways Beach, Machans Beach will go under before we do!</p>
<p>Any persons in a cyclone area should be able to support themselves for at least a week after, with the exception of course of the elderly etc. People in flood prone areas should be left alone if they are able to retreat to higher ground</p>
<p>I guess we were well prepared because we went through Justin a Cat 1 so when we heard Rona was a possible Cat 3 we figured get ready. Friends and neighbours informed us about the Barron flooding regularly</p>
<p>The school should show someone in control of the situation when you arrive, having lighting for people to see and a RADIO is a must. I had elderly people around me needing to know what was happening to their homes. It needed leadership. Very poorly done and no advice on the situation after the evacuation</p>
<p>Yes, this area will be known as a flood area - there was NO flood through any houses here. Just a brief road access flood, so a fall in our house values may occur due to communities perceptions. Secondly stating river heights eg. 8m, 9m, 10m, meant nothing to most people - what should have been stated was the flood damage height and relating it to the current river height! Third, it doesn't take a genius to calculate what height it would get to.</p>
<p>I have previously been in a situation where a river breaks its banks after high rainfall falling in a catchment area. After breaking its banks the water peaked within 15 minutes, stranding livestock and farming equipment and washing a 4wd off the road. I therefore don't think anyone can afford to be complacent or underestimate the danger associated with a situation as just witnessed with the Barron River during and after cyclone Rona. A respect for nature is paramount</p>
<p>the Barron river near the van park at Lake Placid needs its flood retention wall raised by half-1 metre and extended further down the road as well as the river flood plain between the banks north of the Barron Bridge need some clearing to allow flood waters to escape more easily</p>
<p>being surrounded by people that were really enjoying the event, most exciting thing for them cos they ain't got a life</p>
<p>Our river systems are sadly neglected, trees should not be planted in riverbeds and shallow sections should be dredged to try to contain some of the water. The stone wall at the lake could be much more substantial now that we know what's required. There could be a lot more preventative measures carried out to ease the load on emergency personnel and people concerned</p>
<p>received no info (about evacuation) because we were sleeping until our neighbour called, not our decision about evacuation because it was ordered</p>
<p>great job from the fellows FNQEB and SES Media - But sleep at the back of the house</p>
<p>Instead of spending money printing booklets about what to do in cyclones/floods. Keep that money available for food drops/medical supplies and for the clean up. Radio 4CA kept us all informed every minute of the way and I think without them it would have been more frightening. Plus the regions electrical equipment needs replacing because whenever r there is a storm/cyclone/flood/windgust we loose power. In this day and age we should be past these primitive happenings. And why is Ergon energy proposing to centralise their headquarters when the whole state of Australia is decentralised. Keep headquarters here where it belongs. Levy banks should be built from Lake Placid to sea at least a metre higher than what's there now</p>
<p>Most of our neighbours and us were all in bed at midnight. No radios were on after that time. Only reason we knew about evacuation was cars leaving homes and word of mouth</p>
<p>We recognise that much of the Lake Placid/Caravonica area is low lying and subject to flooding, but our house is on high ground above any possible flooding and the SES people should have taken this into account</p>
<p>Once the river goes over onto the road it would need huge amounts of water to flood ALL of Lake Placid. I think all of Cairns would be flooded before that happened.</p>

<p>In a real cyclone most people could not cope with the power cuts, roadblocks etc. This was proven by the complaining and non-preparedness for a cyclone eg. Panic buying food, batteries, fuel, and complaining about power. The evacuation centre would be inaccessible and dangerous</p>
<p>Friends supported me. Council easement drain in back of my property - this is blocked further down drain - so floods up in my yard (has been reported) mosquitoes prevalent. If another big flood comes I feel I will have bigger flooding problems because of build up of sand in riverbed. ??Use this to fill sandbags. Congratulate all workers - volunteers, Police, media FNQEB</p>
<p>At evacuation centre everyone should check in on arrival with family name and how many members are there. We had to fill out detailed info (eg DOB, next of kin etc) at 11am then told to go home at noon - flood was expected to peak at 8am! Horrified to learn later that at least 2 households near the river bank "slept through" the evacuation - could have disastrous consequences if waters had reached expectations. Community should be told to warn neighbours.- To our knowledge no one came with loud halers or banged on our door to tell us to evacuate we were 'lucky' to switch on the radio at 3am to hear the message - we rang 6 households - all were asleep</p>
<p>police did a good job</p>
<p>Some people stayed, we thought we had to evacuate. It was truly a harrowing experience - predominantly with 2 small children. Power cuts of course made it more difficult.</p>
<p>considering the unknown we appreciated the concern and realise a difficult decision had to be made by the authorities</p>
<p>Efforts should be made to identify low streets in all areas of Cairns shire and all people should be advised that they are living in a surge or flood area and given an evacuation plan telling them where to go for shelter ASAP The council or State / Federal Govt should fund the design of bomb shelter type buildings with proper cyclone shelters etc. to allow a safe refuge to go to before the event. The present system only caters for after the event except for flood evacuations. We were told to evacuate to an area lower than where our house is (quite stupid) I was in Darwin after Tracy and every house had a concrete bunker built for cyclone protection</p>
<p>A list of things to take for evacuations in the 'be prepared for cyclones' would be helpful. More publicity on the radio regarding rain in the Barron catchment area overnight would have helped</p>
<p>Without neighbours and friends help I would have been in trouble. I would like sandbags to be available on request at beginning of cyclone season. Being told by SES on phone that was not an option to make my own. Helpful SES - calming not too panicky. Monitoring of the Tinaroo Dam levels and an attempt to empty floodwaters before the event - there is always warning of rain. I had 2 cars here and needed a driver</p>
<p>Congratulations and thanks to the SES and army thanks to them my son made it to the hospital just in time. Thank you</p>
<p>we were never cut off by flooding from the north - people should have been given this option (of seeking alternative accommodation) at the evacuation time</p>
<p>Radio reports should be restricted to official reports only and not what someone thinks they may have got. Talk back radio (?) as everyone thinks they have got it worse and it only adds to confusion and misinformation. SES to do study on flood areas and know street names and locations</p>
<p>This family is lucky, we have 2 strong structures that would shelter us and would feel safe in any violent storm, but thousands of families don't. Shopping centres and schools should be made available for people as shelters as a 'safer' place for families than their homes and to be evacuated before power lines start falling and blocking roads. This needs to be addressed. They shouldn't have to find out where to go, It should be known</p>
<p>Could you imagine if the Barron river broke its banks at or near PLC with children and pets, probably 2000 people and near to 1000 cars. How would people get out? What measures were taken by the police to protect residences and personal property</p>
<p>I have lived in a cyclone area for a number of years. I was in Townsville for cyclone Althea in 1971. I had water saved, gas for cooking and tin food and eggs from my chooks</p>
<p>Incorrect reporting on the height of water; SES's lack of ability to read a tide chart; sightseers should be kept off the roads instead of evacuating people who don't need to be; power was lost before the cyclone was even close; The SES needs fresh blood, get rid of the old retired army officers</p>

Life is shit. I felt SES, Police did an exceptionally good job and got as many people out of potentially dangerous situation as possible. I had take my medication and was very drowsy and not with it
we were ordered by police to evacuate if we refused we would be arrested
Just a totally bizarre situation, As we weren't notified we packed some things in the car but by 11am the radio informed us that the shelters were closing
Advised that we would be arrested if we did not leave the area. Insufficient info provided via radio
We were led to believe via media that we HAD to leave - as far as I was concerned there was no decision to be made (by us). When we arrived at Peace Lutheran School no one knew where to go - all the evacuees were milling around the car park. Someone said we were to go to the food hall where there would be something to eat and drink- there wasn't and it took 2 hours before there was. There were dogs everywhere growling and snapping at everyone who went past - very dangerous indeed. Because there were so many people coming there were many rooms opened up to accommodate them so we were not all in one place if we had to move or be told any information. When people heard that Smithfield was open they took off to go there, this was when police/SES were saying to stay OFF the road. Lights aloud have been rigged up before we got there so that we could see where we were going as it was daylight was the first 'light' we saw. Organisation was poor but information was good when it started coming through. Red cross was the main stay
Well done 4ca But... just because John McKenzie signed off at midnight feeling the immediate danger had passed is no reason to put on layed back relaxing music... Hell! I nodded off; Thank you Smithfield High School - perhaps someone should tell the principal a bit sooner what's happening ... Police? SES? : 1 in 20 year flood I hope so
I've been through several cyclones here and in Darwin. This last one moved in very fast and SES (emergency services) were very well organised considering the limited time for preparation. All services worked exceptionally well
It is nice to know someone is looking out for our well being while asleep in our beds. Well done
Wife felt it was all worth it. The college felt much safer with our children and neighbours all together. Wife panicked because of the dark and not knowing where the water was. If the evacuation had waited another 2 hours for daylight people could have assessed the situation in daylight instead of fumbling around in the dark to a school not equipped for the people influx. There is high ground closer. Save people driving around in the pouring rain. We believe the college was not informed till 3-4 hours earlier of being the crisis centre
perhaps the media reports could be less sensationalised as they cause unnecessary fear and anxiety, especially amongst the elderly
yes, the fact that the Cook highway seems to act like a giant levee bank and holds back a lot of water
Police ordered us to leave the area. Future evacuation orders have to consider the stone wall and flood gate at Lake Placid caravan park. This was the entry point for the floodwaters in 1977. Although we returned to our house within an hour of evacuating we were watching the water level constantly. We would have simply walked away from our house up to our friends place if the river had flooded our property
More information in shelters re level of flood waters near our houses, if someone would have kept me up to date on the actual level of the flood eg. Had it crossed the road near the shop. State of emergency be declared sooner to perhaps authorise police etc. to get people off the roads. Majority of people I spoke to in the shelter had no tin food etc. at home including mothers x3 with no milk formula
I hope we never have to do this again. We do plan to sell up and move to the Tablelands in a few years
More information could have been given - we evacuated by 5am. But had not seen any emergency personnel at all. We went to the school but apart from a table with a hot water urn and instant coffee there was no help or directions - we felt sorry for anyone with young children there was no updated information regarding what was happening at any time and we made our own decision to return to our house
Couldn't find the SES phone no.. Rang the local police without getting an answer so dialled 000 for confirmation of evacuation order. We were given no information and no choice. Neighbour not well known to me. Should have had some identification if he was an SES



<p>member. Some indication given on local radio and TV channels (including the ABC so the areas which were evacuated could have been warned that evacuation was likely. Given out during the evening news</p>
<p>Why the decision to evacuate Lake Placid/Caravonica? If the floodwaters had reached predicted heights it is fairly obvious that the northern beaches and possibly parts of Cairns would have been well and truly inundated. Their predicament would have been a lot worse than this area. I wonder if the decision to evacuate was poor decision-making or politically motivated due to previous council attempts to construct a levee around Lake Placid, which was rejected by the residents.</p>
<p>I don't believe that it was ensured that everybody was evacuated. Sightseers all over the place, in a potential disaster area. Police doesn't have enough power (or couldn't be bothered) to move them on. WORST OF ALL authorities did not give enough early warning</p>
<p>More advice required re people w/out transport (3 adults next door) Advice re pets (people with 5 cats, 4 dogs!) Very lucky with minor road / tree blockages low wind and rain visibility good. Amazed that sewerage and water supply remained ok</p>
<p>as we are well situated up the hill it is practically been proven Tom Pyne should take off our house plans stamped FLOOD PRONE making it hard to sell</p>
<p>Yes, in 1977 I was awakened by a banging on my bedroom window by 3 or 4 young men from the neighbourhood (they're a bit older now but would be just as helpful). They not only told me about the flood, which had already surrounded my house - I was sitting in the middle of an enlarged Barron River - but they also came in and put my electric stove up on blocks and did any other very worthwhile tasks around the house. I really appreciated these kind actions and felt that this time it was what was really missing from the operation: the neighbourly support. I was 20 years younger then and might have been able to do such things for myself at a pinch, but not now. For such reasons and the fact that I and friends in another sub-division were not included in the evacuation at the beginning makes me feel that the operation wasn't terribly serious. The water was high in the river, but not as it was in 1977 and I feel the evacuation was more a dry-run (no pun intended) for a more serious event. Although I would evacuate ag</p>
<p>Although Lake Placid is low lying it is well drained and protected by the entry road. Excepting of section near the Valmadre residence which may allow water to enter - marginally - The suburban development, through the back door as it were. It is suggested that a constant raising of Lake Placid road through maintenance etc. would ensure the future against flooding from the river. Particularly where the Valmadre residence stands</p>
<p>At Peace Lutheran School lack of instruction/direction in the rain in the dark. Many people wandering about by torch light. Someone should have been at road/entrance to instruct. 4ca did a great job - thanks</p>
<p>I would like to say radio 4ca did an excellent job throughout the whole of cyclone Rona Were very informative and helpful. I also believe Cairns could do with underground power lines like Darwin (where I originate) cyclones being prevalent in our area. It would help during cyclones to have power. I feel Cairns is lacking in these modern times with power cuts occurring regularly - even without cyclones.</p>
<p>God is allowing catastrophes because of mans SIN We can expect more disasters particularly Cairns as it opens its doors to homosexuality, sexual abuse of young people etc. Our land reacts to mans sin as people forget our creator God</p>
<p>During the 1977 and 1979 floods no effort was made to evacuate. This flood did not even reach the 1979 flood level. Both times during these 77 and 79 floods we were advised that a peak of high water as high as 2m was going to come down the Barron Gorge. Both times it did not even raise the river. WHY DON'T THE PEOPLE IN CHARGE VIEW THE PAST RECORDS BEFORE MAKING RASH EVACUATION MOVES. The police should sign an authority to state who is responsible for your property if they remove you by threats of force</p>
<p>I didn't have the radio on so I didn't know about the cyclone till 9.30 that night</p>
<p>I'm glad someone has finally asked the residents!! Thank you The council continues to allow 'filling' to take place and expect drains to replace a flood plan. As the water backs up trying to get away in the drain residential areas upstream become more flood prone. Examples are Tjapukai theme park and skyrail - both involved substantial filling of the flood plain which causes a restriction to water flow even tho' there are drains. I believe that there are more developments planned near Caravonica school which involve a massive amount of fill again in the flood plain! Councils flood model has never been checked by a real flood, and this is cause for concern</p>

<p>Request for evacuation was reasonable based on predicted Barron River height of 9.2m. This did not occur residence in Impey St was 2m above the max flood level in vicinity (this flood) Hopefully river heights recorded during this flood will enable better predictions in the future, making evacuation orders more credible.</p>
<p>The whole community was kept up to date and had invaluable information via the John MacKenzie show. I thought it was EXCELLENT and if it had not been for that, people would have been much more worried and confused. We knew exactly what was happening until the threat was over. Once evacuated we didn't really know what was happening but generally we didn't feel the need to panic. Also, FNQEB did a great job!</p>
<p>The emergency services, army and probably people we didn't get to thank were wonderful with their consideration to us in getting Daniel to hospital. Great lot of folks. Thanks to all the selfless people who worked non stop (they must have had families and homes they were for concerned for too)</p>
<p>For those evacuated people. It was an amateurish incompetent operation. Why close the new bridge access in an emergency? (Freshwater bypass) If the river breaks over at Lake Placid, widespread flooding will have occurred between Smithfield and Cairns since the natural water course runs from behind Lake Placid caravan park following the lower contour of the hill to the north of Kamerunga road heading towards Smithfield. Provide a separate radio frequency for emergencies</p>
<p>Do not send SES into an area that is unknown to them. Make sure they have an understanding of the area they are in. Also to avoid confusion make sure the information emergency telephone lines can give you a street evacuation position ie from x street to y street and all in between to evacuate not if you think this water won't reach you then you should be ok as was the comment made to me on the telephone</p>
<p>That emergency services and volunteer organisations did an incredible job and radio personnel kept people together. A huge step towards perfecting emergency situation strategies</p>
<p>Prepare or panic. I chose prepare for the worst case, cut off for 2 weeks. The only thing I did not have was tranquillisers for the cats</p>
<p>we were not advised by SES when they were going door to door, neither were other neighbours</p>
<p>I feel there is too many southerners here now who just panic at the word cyclone. We have been through quite a few and know the process and when to worry</p>
<p>It was 3.30 in the morning, we have children and as I only have info from the radio, I was not about to debate my options. Better safe than sorry</p>
<p>no more cyclones please</p>
<p>Prepared for cyclone but not for flood. It was difficult to organise what to take in evacuation event and to prepare the house to leave it with no lights (even with torch and candles) I know when the power went off (with a bang) but was told it was deliberately turned off (??) If so could it not have been done after 5am or daylight. Appreciated police SES going house to house being very thorough about evacuating (tho' one lone resident slept through the whole affair</p>
<p>I think Lake Placid should have its flood rating removed. Since it was only placed here in early 90's</p>
<p>I think council should review flood ratings as it would have taken monstrous amounts of water to have affected our property and if the big Barron bridge had gone over the people in evacuation centre would not have been able to get back. Council said take a snack this would have hardly been appropriate if we were away from our house for more than a day. There should be a list to help guide in these situations</p>
<p>thanks</p>
<p>We left the Smithfield High School at 5.30am and went to friends til 1pm. Not enough people who were here in the flood in 1979 are still around to advise. Most people have no idea what the water did previously. Even the council allowed Kamerunga villas to be built on land that had a break of the river from the Barron running through it. It was much worse there than in Yurongi St. which only flooded because a local farmer dammed the break off river to protect his property</p>
<p>Since our house was flooded in 1977 there has been further development with land being built up. There was a rock wall built at the caravan park where the water came through in 1977 and there is now storm water drains. This time the water did not even cross Lake Placid Rd. The</p>

decision to evacuate was made too early. It should have been left until daylight so we could see what was happening and where the water level was
Wife and mother evacuated husband stayed behind to work at 6am FNQEB. We were advised that the river was going to flood by 9am and had to be out by 5am. Water levels at 6am were at least 2 m lower than the flood of 1977. Unless there were very large increases in the levels at Mareeba and Kuranda At that time it was not possible to flood in the way that the council was describing at the time
maybe if the information regarding the predicted water levels was more accurate we would never have had to evacuate our home
Most of the people evacuated went to Peace Lutheran School why? - The school is stuck between 2 rivers the Barron and Freshwater creek - they cancelled Redlynch school because it flooded. Did they have floaties and life jackets at Peace. What a joke
I had the impression I had no choice (about evacuating)
It was probably best to err on the side of caution and evacuate residents could perhaps specify certain areas which were exempt (eg homes well above flood levels in Lake Placid) I urge council to update its flood model and to put the onus on developers to ensure minimal impact - or block developments which put at risk homes on lower levels
1. The coverage of the cyclone with John McKenzie was well done and continually informative (although I am not a fan of his he did a good job) However! After he left at approx 12pm the following announcers were dismal. More training of radio staff in these matters might be a solution. Information from them was sketchy and unclear. 2. From discussions with friends who were also evacuated and used school facilities, we were told that these facilities were not ready to cope with early influx of people. If evacuations are ordered authorities should have these facilities ready. They should be stocked with food, drinks and emergency provisions of first aid, bedding etc. I would not expect food to be provided free however I would expect some Govt. subsidy would apply to make costs minimal. Other emergency supplies should be supplied free of charge from Govt. relief sources. 3. Insurance: all insurance companies should be enforced by the Govt. to cover flood areas with or without Govt. assistance. The companies are a .....
We asked if we could go to Redlynch to family but SAS said NO must go to Smithfield High
People constantly complaining about FNQEB and other services - expecting workers of these categories to work during the storm. Fear is a very normal thing to possess in this type of situation. There should be more emphasis on Radio stations to calm the people down instead of all the media talkback hype received from different stations by the local people in general. More direct fact and less bullshit putting it lightly after all any sort of panic is more dangerous than any kind of storm and will usually kill people before any type of disaster has a chance to take hold yes we all fear the cyclone winds and flood waters rising but panic is not the answer and there is too much drummed into the heads of the public in general.
I returned to the area approx 2 hours after evacuation and checked river height and decided to return home. The area was deserted and many of the houses did not appear secure. I realise that police and emergency services were stretched but it is obvious an evacuated area is open to opportunistic looters
We were not alerted in the morning very well, we could have easily slept through it, if it was not for our neighbours waking us. As our neighbours on the other side of us did sleep through it
A job well done Smithfield High School. No one went without food or drink, children helped serve food also 4ca coverage was excellent. All was kept informed in detail SES well done. Disappointed with some people they just worried about themselves, helped no one but complained a lot. I know this is human nature but in crisis all must pull together. Maybe in advertising materials point out how to work together in crisis even if not at any other time. We found that some people in our area complained that evacuation was too early BUT you cannot evacuate too early even if there is no flooding we cannot take chances on things we are not sure about. We have authorities planning and making sure about peoples well being. We must listen to them or it is a waste of time and money having these people trained. This cyclone was good learning for people who said it can't happen. We found that 80% of people had no food, clothing, towels, nothing but what they stood in and some had 2 and 3 children and nothing not even a toy
If I am to be evacuated I would prefer fig tree drive to a congested low-lying area. I can still see what's happening there

We were not given any reason for evacuation, eg. Was the river going to rise rapidly? We were just told to evacuate no reason given
Warnings and updates on radio gave ample time for all preparations evacuation may be a scare tactic but could understand reasoning. Smithfield High School did everything to make all people comfortable and certainly well fed. Cannot praise them enough. Congratulations to FNQEB for their efforts during this period
Insurance companies are ? They should be made to cover flooding and any damage. They like taking your money but don't like to help when you're devastated. I feel the SES did a great job. Plus the police. We have a great lot of neighbours too. I love Caravonica and don't want to leave. It was such a shock to think that all I had worked hard for could be lost and even with insurance it didn't matter. Something is not right in this situation and I feel something should be done about it. Even if you have top cover it does not matter, no flood insurance. Not fair
very poor information about cyclone - evacuation centres
Overall the info on the cyclone and floods were very well done. The support was good by the SES and police giving other avenues to evacuate to - such as other beach areas
At 4m we were told that Kalyan Close was safe at 4.45 police arrived and said to evacuate. In 1979 southern Caravonica and Lake Placid was completely flooded then Mulgrave shire approved residential zoning's which I feel was completely irresponsible as this was a known flood area and future loss and problems would arise and should I have bought and lost property etc. in that area I most certainly would have sued the shire council eg. Johnson shire Xmas 1998
We need an alert signal. When we turned the radio on at home they said that Caravonica and Lake Placid had been evacuated and we had just been told by a neighbour so that wasn't quite correct. The radio station only report what they have been told but we weren't the only ones still at home
Radio 4ca great job and definitely needed, the first we heard about Caravonica evacuating was by a personal phone call to us at 6.30 am. Then when the radio was turned on we heard all about it, we decided we weren't in danger and stayed at home, beside the radio said there were over 600 people at the school so we knew we were better off at home
If people are told to evacuate immediately to shelters ie. PLC these shelters need to be more organised
When the cyclone had passed, we also heard the Barron would rise 7mt est. I was under the impression our house was 5mt above normal high tide and the tide was 2mt higher, that in my mind put us well under water. We did not know if we would be evacuated and how. I watched the water rise all night until someone was running down the street to talk to the neighbour
I wondered at Peace Lutheran School as an evacuation site as it would have been cut by water from all sides
didn't think we had a choice about evacuating
We do not watch the news listen to the radio or read newspapers so we did not find out about the cyclone until Thursday when our children told us about it. The information were given to them at school
I'm not sure the right people are in charge
good stuff by authority well done
In future if the river is about to flood I'd like a definite early warning to allow for preparation to be made to my house and to have time to pack all essentials into the car in case of evacuation is required. I don't mind evacuating with 3 young kids I'd rather do it 10 times for nothing than get caught once
I was ordered to leave even tho I was in a high set house 3 metres above the road with a boat
I think the authorities got this one right having evacuation centres set up
Why evacuate to a place where there are no supplies. If we stayed at home we had our own food, water, power to last a week. Next time we are staying put

## APPENDIX B

### Survey Questionnaire

(This document has been reduced to include questions only – space for responses has been deleted)

February 1999

Dear Caravonica / Lake Placid resident,

Thank you for taking the time to complete this survey questionnaire. The results of this survey will be presented to local emergency managers and will be used for future evacuation planning.

As you are aware severe Tropical Cyclone Rona crossed the Far North Queensland coast just north of the Daintree river on the evening of Thursday February 11. The torrential rains that were associated with this cyclone caused flooding in all the regions river catchments including the Barron River delta and for a time it was considered likely that water level would rise and flood the residential areas of Caravonica and Lake Placid. Local emergency managers made the decision to evacuate the threatened areas in the early hours of Friday February 12. We would like to ask you a few questions about this evacuation.

Please circle the appropriate answer or write in the space provided.

1. Who advised you to evacuate from your residence on Friday February 12?
2. What information were you given (what were you told) ?
3. Did you evacuate from your residence in the early hours of Friday February 12?  
Yes (go to question 4.- leave question 18) No (Go to question 18)
4. Where did you evacuate to?
  - a) Friends or relatives  
Was this pre arranged (Had you made plans)
  - b) Public shelter  
Peace Lutheran School or Smithfield High School
  - c) Hotel / motel
  - d) Left the area altogether
  - e) Other (please specify)
5. How did you get there?
6. How did you prepare your home before you left?
7. What did you take with you? Why?
8. Were you advised to take any thing in particular with you with you?
9. Were you advised to leave anything in particular behind?
10. What pets do you have?
11. What did you do with them when you evacuated?
12. What convinced you to leave the area?
  - a) Evacuation advice / order
  - b) Weather news / flood warning messages
  - c) Severity of floods you could see / probability of your property flooding
  - d) Did not leave the area
13. If you went to one of the evacuation centres can you describe your experience there.
14. When did you return home
15. Did you expect that flood waters would come into your home?
16. How would you describe your losses due to this flood
17. What would you estimate your financial losses to be?
18. What were your reasons for **not evacuating**?
  - a) Perception of safety of home / location
  - b) Severity of floods you could see / probability of your property flooding
  - c) Job requirements
  - d) Weather news / flood warnings
  - e) Pets
  - f) Other (please specify)

19. Who was in the household at the time you were advised to evacuate?  
20. Did this include all the usual members of the household?  
21. Is there anyone in the house with special needs? (please specify)  
22. How concerned were you that the flood waters might reach your home?  
Very concerned 1 2 3 4 5 6 Not concerned  
23. Had you ever considered that it was possible that your property may be in an area that is likely to be effected by floods?  
24. Do you have any particular concerns about the Barron river flooding?
- 

Please explain

25. Did you have any particular concerns about leaving your home?

Please explain.

26. Have you ever been evacuated before? Yes No

If yes

Where?

When?

Why?

27. If another cyclone approached the coast would you evacuate? Yes No

Why

28. Did you try to confirm the flood warnings with:-

a) Emergency services

b) Local authorities

c) Media

d) Friends / relatives

e) Internet

f) Other (please specify)

g) Did not confirm warnings

29. How well do you feel that the warning and evacuation process was handled by the authorities?

Very well 1 2 3 4 5 6 Not well

30. How much information do you feel you received so that you could make a good decision about whether you should evacuate or not?

Enough 1 2 3 4 5 6 Not enough

31. Do you feel you were advised to evacuate

a) Too early?

b) Too late?

c) On time?

We would now like you to answer a few general questions about you and your family. The demographic questions are useful to us because it will enable us to determine whether this community is representative of the Cairns community generally.

If you do not wish to answer any of these questions please feel free to leave them unanswered

32. How many people normally live at this residence?

**Adults** 18 years and older ( ) **Infants** – new born to 2 years ( ) **Preschoolers** 3 years to 5 years ( ) **Primary Schoolers** – 6 years to 12 years ( ) **Secondary Schoolers** 13 years to 17 years ( )

33. What type of dwelling is this residence?

a) Block home

b) Queenslander (high set – low set)

c) Flat / unit

d) Mobile home or other

34. Is this residence?

a) Owned

b) Mortgaged

c) Rented

d) Other (please explain)

35. How long have you lived in this residence?

36. How long have you lived in the Cairns region?

37. How well prepared do you feel you were for this cyclone?

Very well prepared 1 2 3 4 5 6 Not well prepared at all

38. What would you say was the worst thing about this event?

39. How would you rate how you were able to cope with this situation?

Very well 1 2 3 4 5 6 Not well at all

40. Are there any further comments you would like to add?

**APPENDIX C**





