



# OFFICE OF THE STATE CORONER

## FINDINGS OF INQUEST

**CITATION:** Inquest into the death of Georgina HATZIDIMITRIADIS

**TITLE OF COURT:** Coroner's Court

**JURISDICTION:** Cairns

**FILE NO(s):** COR: 000004257081

**DELIVERED ON:** 3 November 2011

**DELIVERED AT:** Cairns

**HEARING DATE(s):** 18/08/2010; 04/03/2011; 28 – 30/03/2011

**FINDINGS OF:** Kevin Priestly, Coroner

**CATCHWORDS:** CORONERS: Inquest Adventure tourism - white water sports rafting - two person inflatable rafts - Russell River - 2 guides and 11 rafters - capsize and entrapment - drowning - limited understanding of English - limited paddling proficiency

**REPRESENTATION:**

Counsel Assisting:

Mr Dean Morzone

Foaming Fury

Mr Habib Mellick Jnr,  
Mellick Smith & Associates

## **Background**

Georgina Hatzidimitriadis was 51 years of age and although born in Australia, lived for many years in Greece. On 18 July 2008, she travelled to Australia to visit her son Demetris Hatzidimitriadis, aged 30 years, who lived in Sydney. Her nephew, Dimitrios Eremeidis, a Greek national aged 33 years accompanied her to Australia. The three travelled to Cairns for a 10 day stay on 28 July 2008. They booked to participate in a sports rafting trip on the Russell River with Foaming Fury on 30 July 2008.

The Russell River is situated at the base of Mt Bartle Frere and access is gained via Babinda, south of Cairns. There is a car park adjacent to a swimming hole on the river known as Golden Hole. The section of the Russell River used by Foaming Fury for sports rafting tours comprises a total of 12 rapids which are named and graded (on a scale of 1 to 6 with 6 having the greatest degree of difficulty), in the order of descent, as follows:

- Leichhardt's (2)
- Basalt Gap (2)
- Pin Ball (2)
- Blind Treat (3)
- Three Ways including the route Rauren Hophia (3)
- Waterfall (3)
- Rollercoaster (4)
- Three Stooges; (2)
- Sluice (2); and
- Triffords (2).

The degree of difficulty for rafting can vary depending in river levels. A copy of the map of the lower section of the rapids is extracted from the Foaming Fury Operations Manual and included as Attachment A.

Sunmanor Pty Ltd trades as Foaming Fury and is one of three white water rafting companies operating in the greater Cairns area. It had conducted white water tours for over 18 years at different locations in the region. Mr Peter Francis is a director and twice represented Australia in world white water slalom championships. He has been a river guide since 1986. In recent years, his role involves overall management of the company. During the hearing, Mr Francis gave evidence outlining his early involvement in establishing the sports rafting operations on the Russell River. He has an intimate knowledge of the rapids over which the tour is conducted. Mr Alan Carrette is the general manager, having been in the employ of Foaming Fury for over 10 years. He started as a river guide and trip leader before moving into a management position.

Foaming Fury uses 2 person inflatable sports rafts on the Russell River.

## **The Narrative**

Mr Dean Priest, Senior River Guide, and Ms Lisa Morris, River Guide, were rostered to conduct the rafting tour on the Russel River on 30 July 2008. Ms Morris arrived at the Foaming Fury base at about 7am and departed in the company bus to collect rafters from their accommodation around Cairns as well as at Port Douglas. Mr Priest started work around 8am, preparing the necessary paperwork and equipment for the day ahead. The tour group comprised 11 customers with 2 guides. Ms Morris returned with the customers to the company base where shoes were hired to those in need of more appropriate footwear. The tour group reboarded the bus and started their journey to the Russell River. While Ms Morris drove, Mr Priest briefed the group on the day's activities. There was a stop at Gordonvale for people to buy morning tea.

Mr Priest also distributed liability release and medical questionnaires which the rafters completed. Mr Priest says he explained to passengers the obligation to disclose any medical conditions or disabilities that might affect their safety on the rafting tour.

The group arrived at the destination, known as Golden Hole, at about 10.30am. Mr Priest walked to the river and checked the water level while Ms Morris started to unload equipment from the trailer. Foaming Fury uses a mark known as the "double guide mark" on the top of a rock within the river to assess the level and flow of the water. Mr Priest saw the level was an inch below the double guide mark, indicating a lower level within the ideal operating range. Mr Priest returned to the two group at the car park and assisted Ms Morris in unloading.

The group started 1.9 km rainforest walk to the point of entry on the river, share carrying all of the necessary equipment. Ms Morris led the way while Mr Priest followed at the end of a single file with 11 customers between them. After about 45 minutes, the group arrived at the entry point.

Mr Priest and Ms Morris started inflating the two-person sports rafts using a handmade pump. All seven craft were inflated and were checked, appearing to be in good order. While the last raft was being inflated, Mr Priest asked the rafters to start putting on their safety equipment. Mr Priest checked each rafter's helmet and life jacket to ensure that it was correctly fitted. Mr Priest then started a safety talk explaining the signals used on the River.

The participants were paired as follows:

- Mr Priest (solo)
- Michael Huth (24 yrs; German) and Sandra Braun (21 yrs: German)
- Roland Schwarz (20yrs: France) and Clair Panciatici (18yrs: France)
- Mr Eremeidis and Mrs Hatzidimitriadis
- Mr Demitris Hatzidimitriadis and Katherine Ford (22 yrs: Canada)
- Colin Thompson (54 yrs: New South Wales) and Gai Thompson (50 yrs: New South Wales)
- Denise Goudy (48yrs: Victoria) and Ms Morris

Mr Priest gave a comprehensive briefing and demonstration about how to paddle and steer the rafts. He sat in raft while demonstrating various techniques.

Mr Priest also explained techniques rafters used to dislodge the rafts from rocks when they become stuck while remaining inside the raft. He also explained the use of safety ropes from throw bags and how to hold on to them. Rafters were shown what to do if they fell out of their boat, assuming the white water float position. This position involves lying back in the life jacket with your feet raised while facing downstream. Mr Priest demonstrated and explained how it's safer to bounce off rocks with your feet.

Finally, Mr Priest explained the system of rafting the rapids. The group would gather at the top of each set of rapids and together inspect the rapids from the shore. Mr Priest explained that he would show the rafters the path through the rapids. Ms Morris would then paddle the rapids to demonstrate how to paddle that section and eddy out at the bottom to take up a cover position. She would then be able to assist anyone who got into difficulty. Mr Priest would remain at the top of the rapids and call one boat at a time to enter. Only when he received the signal from Ms Morris, would he call another raft forward to enter the rapids. Mr Priest explained he may raft the rapids second if it was necessary to relocate to a better cover position.

Rafters were given about 15 minutes to familiarise themselves with the raft and practice paddling and steering of the rafts in a calm pool. Finally, Mr Priest asked everyone if they felt comfortable in steering their boats. Receiving an affirmative response from all rafters, Mr Priest started the group downstream towards the first rapids. It was about 12.30pm.

I have adopted the convention in rafting of referring to river right and river left when indicating a right or left from the perspective of a person facing downstream.

The first rapid was Leichhardt. While the balance of the group waited on a nearby rock with Mr Priest, Ms Morris and Ms Ford rafted down the rapids showing the preferred route. The rafters returned to their rafts and Mr Priest called them through, one at a time.

After Pinball and before Blind Treat (the third and fourth rapids), Ms Morris saw Mrs Hatzidimitriadis lose her paddle. Ms Morris was positioned on a rock and called instructions to Mr Eremeidis to back paddle to get the raft into a position to retrieve the paddle. Ms Morris repeatedly call 'back paddle' and gestured what she meant. She stated Mr Eremeidis had difficulty with a paddle, initially back paddling and then forward paddling. She formed the view that he did not appear to understand what she was saying or even grasp what she meant by her gestures. Both the Mrs Hatzidimitriadis and Mr Demetris Hatzidimitriadis yelled instructions in Greek. Mr Eremeidis and Mrs Hatzidimitriadis slowly washed downstream to the start of Blind Treat. Ms Morris retrieved the situation by having her passenger holdout her paddle and Mrs Hatzidimitriadis grabbed hold it. The pair was pulled closer to shore and the paddle returned.

Ms Morris states that Mr Priest had commenced his briefing to the other rafters about how to negotiate the next rapid. On conclusion of that briefing, Mr Priest asked her to go down to her cover spot. It's at this point that Ms Morris suggested to Mr Priest that Mr Demetris Hatzidimitriadis be pair up with Mrs Hatzidimitriadis and Mr Eremeidis with Ms Ford. Ms Morris reasoned that this would avoid two Greek rafters with limited English in the one raft. The suggestion was raised with Mrs Hatzidimitriadis but declined.

Ms Morris reports that Mrs Hatzidimitriadis and Mr Eremeidis rafted the next rapids, Blind Treat, without incident.

The group approached Three Ways, a category 3 rapid and the second most difficult to navigate. Mr Priest reports that all rafters appeared to be enjoying themselves and showed no signs of physical exhaustion. Some rafters were splashing each other with the paddle, laughing and generally having a good time. The group had been travelling about an hour to an hour and a half.

Three Ways is so named due to the three distinct channels. The channel to river left is known as 'Choker'. The channel in the middle is known as 'No Way' and consists of a series of sieves which pose a danger. These are opening in a rapid created by large rocks positioned on smaller ones, where the force of the water draws objects through and under the larger rocks. Debris tends to gather in the narrow section, adding to the danger of entrapment. The channel to the far right, and preferred route at this river level, is known as 'Rauren Hophia' (see Attachment B).

The rafts were beached on a small sandy section on river right, a short distance from the entry to the rapids. Mr Priest led the group downstream to a location adjacent to the rapids and briefed them on the preferred route and how it should be paddled. Mr Priest took up a position on a rock that protruded from river right in readiness to direct rafters through the entry point. He also explained how he would assist them to stay river right by taking hold of a paddle extended from a rafter when abeam of the rock and help to turn the raft to the right as it passed his rock.

On conclusion of the briefing, Ms Morris and Ms Goudy rafted the rapids without difficulty. Ms Morris then took up her cover position and signalled to Mr Priest she was ready. The balance of the group returned to their rafts.

The second raft, containing Michael Huth and Sandra Braun, followed down the rapids without difficulty. Mr Priest waited for the all clear signal from Ms Morris. While this was

happening, Mr and Mrs Thompson were seated in their raft, holding onto a tree branch to maintain their position beside a rock. Mr Thompson noticed another raft out in the middle of the fast flowing water, heading towards the rapids. It was Mr Eremeidis and Mrs Hatzidimitriadis. Mr Priest's attention was focused downstream, waiting for the signal from Ms Morris before calling forward another raft.

As to what happened next, there are varying accounts.

In his statement to police, Mr Priest reported seeing the raft with Mrs Hatzidimitriadis and Mr Eremeidis in midstream. Mrs Hatzidimitriadis was seated at the front and Mr Eremeidis was seated on the floor at the rear. They were drifting river left when they should have been river right. Mr Priest yelled, instructing them to paddle forward to his position downstream of them. He gestured with his hands to come to him. Mrs Hatzidimitriadis paddled forward. However, Mr Eremeidis paddled backwards, neutralising the efforts of Mrs Hatzidimitriadis. The raft drifted into the entry for Choker. Mr Priest threw a line to them which both grabbed. As Mrs Hatzidimitriadis and Mr Eremeidis drifted towards No Way, Mr Priest attempted to pull them towards him. They were unable to maintain hold of the rope. The raft was pushed onto a boulder and the water pressure on the off side caused it to capsize. Both fell into the water. Mr Priest saw them go through the chute known as No Way towards the sieves.

Ms Morris saw the raft capsize but nothing else. It was difficult from her position at the foot of the rapids to see what led up to that event.

Mr Eremeidis gave an initial statement to police and a number of days later, provided another more comprehensive statement to NSW police prior to his return to Greece.

In his first statement, Mr Eremeidis stated that as the raft approached the rapids, Mrs Hatzidimitriadis 'leaned towards her right and fell into the water'. He later stated, "The kayak lifted as she fell in the water and she was dragged toward the wrong passage". Mr Eremeidis stated that Mrs Hatzidimitriadis appeared unconscious in the water and recalls seeing her immersed and wedged between rocks. He also became wedged but was flushed out. The balance of his account is truncated, suggesting that serious language difficulties were experienced to obtaining his statement.

In the second statement, Mr Eremeidis sought to correct and clarify matters in his first statement. He stated:

"18. ....Based on previous instructions from the male guide, Georgina and I commenced to steer our kayak through the narrow passage that they instructed us to go through and where the male guide was standing. I have the impression that we slightly diverted before reaching the appropriate narrow passage. At one point in the journey which appeared not to distant from the male guide, my aunt fell into the water towards the right side of the kayak. Everything happened very fast. I got surprised and scared when this occurred because she was handling and steering the kayak. I called her name but she didn't respond. I don't know whether she had her senses or whether she was dizzy or whether the front section of the kayak slid over one of the rocks. There were small and large rocks around the area under and on top of the water. I didn't see her moving her hands or legs while she was in the water. Then the strong current dragged the kayak from the back towards the wrong passage and the kayak hit the rock.

19. As she was falling in the water, the male guide saw her and threw out a rope which I grabbed. Holding the rope I jumped into the water and I was dragged by the current, deeper than my aunt. I could see my aunt to the right above me wedged sideways between the rocks fully immersed under the water."

This account suggests that Georgina fell into the water before contact with a rock. He also suggests that her fall into the water occurred about the same time as Mr Priest threw a rope to them.

Mr Demitris Hatzidimitriadis saw the raft enter the rapids and then heard three short whistle blasts. Realising that something was wrong, he got out of his raft and ran downstream along the bank to see what was happening. He did not see the capsized.

Michael Huth reported to police seeing 'the Greek couple' going down the wrong entry point to the rapids, the guide extending a paddle towards them and a rope being thrown but could not see if they grabbed it or how they capsized. Sandra Braun reported a similar account.

Roland Schwartz and Claire Panciatici was the second raft down the rapids and only saw the aftermath.

Katherine Ford was waiting in the raft with Mr Demitris Hatzidimitriadis and recalls Mrs Hatzidimitriadis and Mr Eremeidis going the wrong way on entering the rapids, Mr Priest attempting to reach them with his paddle, and telling them to grab his paddle. She recalls Mr Eremeidis stressing out and unable to grab the paddle or the rope that was thrown. She saw the raft flipping over but was unable to offer any more detail.

Mr Thompson gave an account similar to the other witnesses to the extent that Mr Priest yelled back paddle, a rope being thrown towards the raft and the rafters being told to grab hold of the rope and hang on. He didn't see the capsized. Mrs Thompson gave a similar account.

Ms Goudy, who was with Ms Morris, did not see the raft capsized but saw some of the events that led up to it. Her account is similar to the others.

I had the opportunity to hear the evidence of Mr Priest and consider it more reliable. Mr Eremeidis was clearly in an anxious state prior to capsized and has suffered significantly with the loss of his Aunt. It is clear from his statements that he remained significantly affected by the death at the time of they were made.

*I find that the raft drifted downstream and onto a rock. The side contacting the rock lifted and with the pressure of the water on the offside and possibly, a shift in weight of crew away from the rock, the raft capsized.*

When the raft capsized, Mrs Hatzidimitriadis and Mr Eremeidis were washed downstream in No Way towards the sieves. Mr Priest quickly moved downstream to a position nearer the sieves and gave three quick bursts on his whistle to alert Ms Morris to the need for assistance. Mr Priest saw the raft exit No Way as well as two paddles. Mr Eremeidis came out through an opening between two large rocks, yelling for help. Mr Priest did not see Mrs Hatzidimitriadis. He dived into the river and swam to a rock in the middle. On attempting to scale the rock, he slipped, falling into the water and was washed downstream to river left. On climbing out, Mr Priest made his way upstream and re-entered at an eddy near Choker. He managed to get himself between two large rocks amongst the sieves and located Mrs Hatzidimitriadis pinned underwater with helmet on and life vest attached. A number of minutes had passed. Mr Eremeidis positioned himself on a rock midstream and above Mrs Hatzidimitriadis' position. Ms Morris was positioned on river left. Mr Priest arranged for a line to be strung between Mr Eremeidis and Ms Morris. Mr Priest used this rope to support himself into position immediately upstream of where Mrs Hatzidimitriadis was entrapped.

Mr Priest described what occurred as follows:

"53. With this line stretched out across the river, I traversed myself out across the rope to Georgina. I could see that Georgina was pinned underneath the raging water. Georgina was

sort of wedged in between a submerged rock and a large one above her. I placed my feet on the submerged rock and put the rope around the back of my neck so I could use my hands. I was at this stage standing in waist deep water.

54. I placed the rope behind my head so I could use my arms and stand up. I reached in the water and grabbed Georgina by her life jacket and tried to physically pull her out, but there was just way too much pressure. So then I felt down for her head and tried to lift her head out of the water, but again there was too much pressure. In trying that I think I pulled her helmet off. I cannot remember the helmet floating off down the river.

55. I tried to re-position my feet and I thought that I'd try from another angle. But, when I moved my feet, I slipped and got sucked in to where Georgina was. When it sucked me down, it pulled the rope off the back of my neck and because of that I fell backwards becoming entrapped with Georgina, by what we (river guides) call a foot entrapment. My right foot was actually stuck also in the sieve, and I was pulled underwater for about 10 seconds. I was flailing in the water and had to use all my strength to push myself off the rock to get out of this situation. I did this and I was jettisoned out towards 'river left' initially and then the current started dragging me around to the opposite bank, 'river right'. I started swimming with the current and I later came out onto the bank of the river on the right hand side."

Mr Priest made a further, similar attempt to extricate Mrs Hatzidimitriadis. During the same period, Mr Demitris Hatzidimitriadis got onto the same rock as Mr Eremeidis and using a paddle as a lever, tried to free Mrs Hatzidimitriadis. Mr Priest devised a new approach. He tied two throw lines together, attached one end to the ankle of Mrs Hatzidimitriadis, passing the other end back to Mr Thompson and other rafters who managed to pull Mrs Hatzidimitriadis free. She was washed downstream to where Ms Morris was able to retrieve onto a raft.

Mr Priest swam back to river right and ran down to assist Mr Morris in getting Mrs Hatzidimitriadis ashore. At this stage, Mrs Hatzidimitriadis was lifeless and not breathing. CPR was commenced and periodic checks showed no pulse and no breathing. Mr Priest needed to secure the safety of other customers. So Ms Ford took over assisting Ms Morris with CPR while Mr Priest returned to ensure the others were safe. He then ran to his boat, retrieved the communications box and using a satellite telephone, called foaming fury (2.30pm). He reported on the situation and the need for an immediate medical evacuation. Foaming Fury alerted emergency services with a call to QAS via 000. Mr Priest handed the satellite telephone to a customer to monitor in the event of a call.

The initial plan was to arrange a helicopter evacuation. However, when it became apparent that a helicopter evacuation was not available, Mr Francis telephoned Mr Priest and instructed him to relocate Mrs Hatzidimitriadis to an evacuation track. Mrs Hatzidimitriadis was placed back onto a raft and while cardiac compressions continued, the group relocated to the evacuation track. The transfer took a few minutes. Expired air resuscitation was immediately resumed.

The response of emergency services was hampered by poor coordination and communication.

Shortly after 2.30pm, Constables Ah Shay and Seymour of Innisfail Police were tasked by Police Communications to respond to the incident by attending Golden Hole.

Babinda QAS was tasked to attend Golden Hole about 2.38pm. Innisfail QAS was also tasked to attend at 2.43pm. A few minutes later Mr Alan Carrette, Manager from Foaming Fury, departs Forming Fury's Cairns base for the Russell River.

At about 2.55pm, Advanced Care Paramedics Justin Cairns and Stephen Willmot from Babinda, responding in different vehicles, arrive at the car park finding no-one there to meet them as advised by their Communications Centre. Both started to walk up the track alongside the river.

In the mean time, Innisfail police (Constables Ah Shay and Seymour) and QAS Advanced Care Paramedic David George arrived at the car park. They were initially at a loss to know which way to head. No-one was found in the immediate area. Eventually, the group headed up the rainforest track in search of a patient.

What follows involves a considerable degree of confusion notwithstanding the best efforts of police and QAS officers to locate the patient.

Mr Carrette arrives at the Russell River (3.45pm) and runs up the Rainforest Track to the evacuation track. He comes across the police officers and leads them to the scene, arriving at 4.12pm. QAS officers are led to the scene shortly afterwards.

QAS officers take over the resuscitation efforts, inserting a laryngeal airway and administering adrenaline on three occasions. Their efforts prove futile and Mrs Hatzidimitriadis was pronounced deceased at 4.25pm.

The elapsed time since the initial call for help from Mr Priest to Foaming Fury was about 1 hour and 40 minutes. The elapsed time from arrival of QAS at Golden Hole to the scene was about an hour and 15 minutes. Mr Carrette was able to travel from the car park to the scene in about 27 minutes.

### **Post Mortem Findings**

On 1 August 2008, Dr Paull Botterill performed an autopsy including internal examination and concluded that Georgina died due to drowning. His findings included congestion of the lungs, fluid within the stomach, multiple broken ribs consistent with resuscitation, and grazes and bruises over trunk, upper and lower limbs. Dr Botterill also found moderate coronary artery disease raising the possibility of a coronary artery spasm or seizure which he could not completely exclude based on the post mortem findings alone.

Whether Mrs Hatzidimitriadis suffered a coronary artery spasm or seizure of some kind is a matter for me to determine having regard to the post mortem findings as well as the circumstances surrounding the capsizing.

I have carefully reviewed the findings and opinions of Dr Botterill. His findings are entirely consistent with the circumstances of her entrapment and efforts to extricate and revive Mrs Hatzidimitriadis.

Given my findings about the circumstances of the capsizing; I accept the conclusion of Dr Botterill as to her likely cause of death.

*I find that Mrs Hatzidimitriadis died due to drowning.*

### **Required Findings:**

S.45 of the Coroners Act 2003 requires me to make findings at the conclusion of the investigation about the following matters:

- (a) who the deceased person is;
- (b) how the person died;
- (c) when the person died;
- (d) where the person died; and
- (e) what caused the person to die.



While the evidence is sufficient to enable me to make findings about each of these matters, aspects as to 'how' Georgina died require further consideration.

### **Approach to Reviewing Management of the Risk of Entrapment**

The approach that I have taken to considering safety risk management in this matter is very similar to the approach that I took in the matter of an inquest into the death of Natasha Charlesworth, another white rafting fatality. However, that death involved a white water rafting tour using 8 person rafts on the Tully River with another operator.

Leg entrapment is a well recognised hazard to which all participants are exposed during the course of white water rafting on the Tully River. There have been a number of entrapment fatalities on the Tully River before and after this incident.

There are two requirements for an entrapment.

Firstly, capsize or other event that puts a rafter in the water while descending rapids. There are a number of considerations relevant to the risk of capsize, including:

- The technical difficulty of the rapid;
- The suitability of the raft;
- The quality of the operators procedures (including instruction to rafters) for rafting the rapids;
- The competency of the guide in following and supplementing the operators procedures;
- The ability and capacity of the rafters to understand and follow the instructions given by the guides.

Secondly, the rafter must be exposed to potential entrapment points before retrieval or reaching safety. There are a number of considerations relevant to this aspect, including:

- The physical setting and dynamics of the rapids;
- The number and degree of dispersal of rafters in the water across that setting;
- The existence of known or likely entrapment hazards;
- The prospect of rafters passing near to known or likely entrapment hazards from the point of flip over and before recovery;
- The number and strategic location of guides (cover positions) able to immediately assist in recovering the rafters.

Of the specific considerations listed above, there are only a few which an operator may influence with a view to reducing the risk of entrapment. They are:

1. Suitability and serviceability of the raft (which may influence the prospect of flip over);
2. Suitability and serviceability of the PFD (which may influence the prospect of immersion and entrapment);
3. Use of the white water float position (which may influence the proximity of lower limbs to entrapment points);
4. Operator guidance as to the strategies to safely manage the rafters through the rapids (which may influence the prospect of flip over as well as prospect of entrapment depending on the location of entrapment points);
5. Competency of the guide in implementing the strategies of the operator in safely managing the rafters through the rapids (which may influence the prospect of flip over);
6. Competency of the rafters reflected in their ability and capacity to understand and follow the instructions given by the guides (which may influence the prospect of flip over);
7. The system of cover provided at the rapids (which may influence the prospect of entrapment).

I will address points one to three separately.

Although the operator must accept the physical setting and hydrology of a particular set of rapids, a careful risk assessment should inform and underpin the strategies of the operator as to how to safely raft the rapids. The guides are then trained to follow the procedures that are developed from this process, supplementing them with their individual skill and judgement where necessary. However, in comparison with the use of the larger guided rafts, here there is greater reliance on the skills developed by the rafters and their capacity to follow instructions of the guides. These are matters that are ultimately for the operator to risk manage through its procedures. Therefore, points 4, 5, 6 and 7 will be addressed together under the heading Operator Guidance.

In the event that a rafter becomes entrapped, the goal becomes one of minimising harm.

It seems to me there are a number of components to harm minimisation. The first is recognition that the person is missing. The second is implementation of an effective search strategy. The third is the use of effective extrication techniques. The fourth is a capacity for immediate resuscitation and advanced medical assistance. Finally, there is medical evacuation to a hospital.

I will, for the sake of convenience, address some of the matters relevant to harm minimisation now.

Mrs Hatzidimitriadis was noticed missing immediately and located relatively quickly. There is also no issue about the quality of the first aid administered to her. However, her extrication and access to advanced medical assistance requires further consideration and will be addressed later.

## **Management of the Risk of Entrapment**

### The Raft

The 2 person inflatable sports raft used was a model KSB-116 Achilles. It was manufactured of 80% Dupont Hypalon, a durable vinyl. It has adjustable thwarts (backrests) and weighs about 21kg. The length is 3.5m and width is 94cms. There are five buoyancy chambers, one on the floor, two thwart tubes and one on either side of the craft. There are four self draining holes, two in the fore and two in the aft sections. The rafts comply with Australian and international standards. The rafts are deflated and 'share' carried to the starting point of the tour where they are inflated in readiness for the trip. Rafters are provided with kayak paddles. The person seated at the rear normally steers the raft. These rafts were specifically designed for use in white water rafting. The raft was in good serviceable condition.

*I find that the sports raft was of a design appropriate for use on the Russell River and in good serviceable condition.*

### The PFD

I have the benefit of a report from Sgt Matherson, Queensland Police Service. He reports that life jacket that Mrs Hatzidimitriadis wore was in good serviceable condition, correctly fitted and appropriate for use in a white water rafting. I have reviewed the detail about how he arrives at that conclusion and accept his view.

*I find that the PFD that Mrs Hatzidimitriadis wore was of an appropriate design, in good serviceable condition and correctly fitted.*

### The White-water Float Position

Given the experience of Mr Eremeidis and Mr Priest in becoming momentarily entrapped, it appears that the nature of the rapid through No Way renders assumption of the white water position either difficult to maintain or of negligible effect as a control measure for the risk of leg entrapment at this location.

In the circumstances, it is unnecessary for me to consider and make a finding about the adequacy of instruction on this point.

### The Guides

Mr Priest was 33 years of age and there had a 12 months experience as a River guide. He commenced in the employ of Foaming Fury in January 2008. In June 2008 he was graded a Level 4/5 Guide under the International Rafting Federation system of accreditation. Mr Priest had conducted at least 40 day tours on the Russell River. Ms Morris was 26 years of age and had eight months experience with Foaming Fury prior to this incident. She was a Level Four river guide with the company, subsequently obtaining formal certification as a level 4/5 River Guide on 28 August, 2008. She had completed to 28 trips down the Russell River. Both guides held First Aid Certificates and had completed refresher courses in CPR.

*I find that the guides were appropriately qualified to conduct the tour. However, whether they were sufficiently supported in guidance from the operator will be later addressed.*

### Operator Guidance

It was well known to the Foaming Fury guides that No Way should be avoided due to the existence of sieves. The plan was to remain river right by taking Rauren Hophia to descend Three Ways. It also appears that the documented procedures of Foaming Fury assumed that the guides would exercise tight control of the group and that all rafters had the capacity to understand and comply with the instructions of the guide's instructions.

The Foaming Fury Operational Procedures relied on the guides initial instructional sessions and skills development while rafting for the rafters to attain a basic level of rafting proficiency.

However, it is evident from the narrative that the capsized and entrapment was the culmination of a number of factors.

Mrs Hatzidimitriadis and Mr Eremeidis were earlier identified as having difficulty paddling the raft. The likely explanation was that both had a limited understanding of English. The extent to which they understood the briefing and instructional session remains in serious doubt.

Why did Mrs Hatzidimitriadis and Mr Eremeidis paddle into midstream before Mr Priest was ready for them to enter the rapids? Mr Priest and Ms Morris expressly disavowed any suggestion that the pair were cavalier or reckless in their earlier behaviour. Retrospectively, Mr Priest and Ms Morris thought they didn't understand either the system or appreciate the danger of prematurely leaving the beach and moving to midstream.

When Mr Priest was yelling instructions to them at the top of the rapids, Mr Eremeidis was having difficulty understanding the instructions. He showed signs of anxiety and paddled backwards instead of forwards while Mrs Hatzidimitriadis was paddling forwards. He likely did not understand the instructions or partially understood them and lacked confidence in the guides strategy, preferring to try to back out of potential trouble.

The operator's procedures for navigating this set of rapids were basic. There was a preferred route at this water level, river right through Rauren Hophia. One boat at a time and only when called forward by the guide located river right at the top with a guide located at the bottom in a cover position.

Clearly, the prospect of rafters prematurely departing the beach and going midstream was not contemplated. The location of a guide at the top of the rapids with a safety focus downstream while the rapids are being navigated by another raft has little opportunity to detect such behaviour. Further, once a raft is midstream and headed towards the entry to No Way or Choker, a guide in the position of Mr Priest has little opportunity to intervene. While Mr Priest tried his utmost attempting to extend a paddle to them and then throwing a line to them, the nearer they approached the entry to the rapid, the stronger and more quickly were they drawn into it.

It appears from viewing the videotape taken the following day showing the rapids, there was a high risk of a raft capsizing through that channel in any event. If it didn't happen on contact with the rocks on entry to No Way, there was a significant risk of it happening during the descent or in the area of the sieves.

There is very limited opportunity to retrieve a situation like this. The best and most effective risk control would be reducing the risk of entering No Way. This means better group management between the beach and the rapid.

After this incident, Workplace Health and Safety conducted an investigation and provided me with a copy of its investigation file which was admitted into evidence. As a result of its investigation, Workplace Health and Safety issued a prohibition notice that prohibited Foaming Fury from rafting Three Ways. Rafters had to walk passed those rapids on the bank and re-enter the water at the bottom of the rapids. During external audits of the rafting operation on the Russell River, the continued portage of Three Ways was recommended.

Since this death, Foaming Fury has made changes to its procedures. It has significantly strengthened the requirement that rafters have a sufficient understanding of English to be able to understand the instructional session prior to rafting and instructions given on the river.

*I find that the following factors contributed to the rafts deviation into No Way and subsequent capsize:*

- *Mrs Hatzidimitriadis and Mr Eremeidis had limited understanding of English which limited their ability to understand the initial instructional session;*
- *Their limited understanding of English also limited their capacity to understand and benefit from the briefings provided prior to each set of rapids;*
- *As a consequence of the earlier points, Mrs Hatzidimitriadis and Mr Eremeidis did not attain the required level of proficiency to raft Three Way or fully understand the briefing;*
- *Finally, there limited understanding of English and the absence of tight group control created a situation where the paddled into midstream not appreciating the danger to which they were exposed.*

## **Ultimate Findings**

1. *Georgina Hatzidimitriadis died on 30 July 2008 on the Russell River near a location known as Golden Hole, Babinda due to drowning. She was participating in a sports rafting tour conducted by Foaming Fury and was under the supervision of two river guides. Mrs Hatzidimitriadis was accompanied by her nephew Mr Eremeidis on a two person inflatable sports raft. During their descent of rapids known as Three Ways, the raft overturned. Mrs Hatzidimitriadis was washed downstream and became entrapped underwater. She remained immersed for a period of about 10 minutes before she was extricated.*
2. *The sports raft was of a design appropriate for use on the Russell River and in good serviceable condition.*
3. *The PFD that Mrs Hatzidimitriadis wore was of an appropriate design, in good serviceable condition and correctly fitted.*

Findings of the inquest into the death of Georgina Hatzidimitriadis

4. *The guides were appropriately qualified to conduct the tour.*
5. *The following factors contributed to the rafts deviation into No Way rapids and subsequent capsizes:*
  - a. *Mrs Hatzidimitriadis and Mr Eremeidis had limited understanding of English which limited their ability to understand the initial instructional session;*
  - b. *Their limited understanding of English also limited their capacity to understand and benefit from the briefings provided prior to each set of rapids;*
  - c. *As a consequence of the earlier points, Mrs Hatzidimitriadis and Mr Eremeidis did not attain the required level of proficiency to raft Three Way or fully understand the briefing;*
  - d. *Finally, their limited understanding of English and the absence of tight group control created a situation where they paddled into midstream not appreciating the danger to which they were exposed.*

## **Preventative Recommendations**

Section 46 (2) of the Coroners Act empowers a Coroner, whenever appropriate, to comment on any thing connected with a death investigated at an inquest that relates to public health and safety as well as ways to prevent death from happening in similar circumstances in the future.

My following comments and observations of an introductory and conceptual nature are similar to those made in the matter of an inquest into the death of Natasha Charlesworth.

Before offering my comments, there are a number of important matters that must be acknowledged.

Firstly, every participant in white water rafting is interested in the thrill of rafting. That thrill comes from the perception of risk. The challenge for adventure tourism operators is to maximise the perception of risk within the boundaries of what most tourists are willing to accept while minimising the actual risk.

Secondly, the white water rafting started as a recreational pursuit and has developed into a major commercial venture. Its collective approach to the management of safety has progressed markedly over that period. Some of the early participants are now Senior Guides with over 20 years experience. They are highly skilled and have a wealth of experience on this and other rivers. Most appear to have travelled with their career in pursuit of experience.

Thirdly, the operators and guides are dealing with the vagaries of nature that is susceptible to change without much notice and this presents a challenge to planning.

In light of these matters, my comments are based on opportunities for improvement and should not be interpreted as deficiencies in the operator's management of safety.

I return to the earlier list of opportunities for intervention and risk control available to an operator, namely:

- Operator guidance as to the strategies to safely manage the rafters through the rapids;
- Competency of the guide in implementing the strategies of the operator in safely managing the rafters through the rapids;
- Competency of the rafters reflected in their ability and capacity to understand and follow the instructions given by the guides;
- The effectiveness of any system of cover provided at the rapids.

I also return to my observation that a careful risk assessment should inform and underpin the safest manner of rafting a set of rapids and the placement of cover. I then noted that guides

can be trained to follow the procedures that are developed from that process, supplemented by individual skill and judgement of guides where departure might be necessary.

I am of the view that there exists an opportunity to apply a formal and documented risk management approach that is specific to each set of rapids. This is best illustrated by a conceptual outline of a process that might be used and refined by an operator with contributions from senior guides.

The first stage is the process of hazard identification which should identify all potential sieves and like dangers to rafters. The hazard identification and relevant hydrology should be documented by way of mapping with explanatory notes to assist in training guides and demonstrating the application of the following steps.

The second stage is considering the potential locations for capsizes. It would be relatively easy to capture data about each of these aspects. There is probably a reasonably good body of information based on the experience of the senior guides about capsizes.

The third stage is the likely path of the rafters in the event of a capsize at a particular location and the prospect of them passing near entrapment points.

The fourth stage is to consider the opportunity to place cover at locations that might mitigate the prospect of rafters passing near entrapment points. The use of two guides limits the capacity to deploy cover in a manner other than one at the top directing traffic and one at the bottom to retrieve swimmers.

The fifth stage is to consider, in the absence of adequate cover (i.e. mitigation of risk to a definable and acceptable level), alternative strategies that might achieve the same outcome. This raises the issue of assessing paddling proficiency. If a particular paddler was struggling to meet a defined level of proficiency assessed as necessary to raft particular a rapid that pair should be walking around those rapids. How is that assessment made and against what criteria?

The outcome of this process should be a map showing:

- preferred paths through the rapids that minimise the risk of capsize or persons falling overboard;
- locations where there exists a risk of deviation and capsize as well as accompanying notes setting out strategies for mitigating that possibility;
- the likely paths of rafters in the event of capsize;
- the location of known entrapment points;
- the locations of cover positions with notes about their limitations in mitigating risk of entrapment;
- notes that discuss alternative strategies for mitigating risk to an acceptable level, for example, performance criteria for minimum levels of proficiency to be demonstrated before rafting that rapid and minimum levels of capacity on the part of rafters to respond to emergent instructions from guides.

How might this process reduce the risk of entrapment in a situation similar to that involving Mrs Hatzidimitriadis ?

A proactive application of this basic risk management process to Three Ways might result in the following considerations:

- There are three channels through Three Ways;
- Rauren Hophia is the preferred route as it affords a comparatively safer and more manageable route for rafters and guides;
- Query the level of proficiency required to raft Rauren Hophia in any event;
- There is a moderate risk of capsize if a raft was to enter Choker or No Way;

- Choker and No Way have entrapment points with no opportunity for a cover position to mitigate the risk of entrapment before the rafter has passed the potential entrapment points;
- The nature of the rapids in No Way is such that a PFD and the white water float position will not sufficiently mitigate the prospect of entrapment of themselves;
- The only remaining risk controls are a defined level of paddling proficiency required to safely raft the rapids, tight group control to avoid deviation and a demonstrable capacity on the part of the rafter to understand and respond to emergent instructions.

None of these considerations are apparent from the documented operational procedures or training material provided by way of guidance by Foaming Fury to the guides.

The present approach of minimal operator guidance places a heavy reliance on the judgement of the individual guides and misses the opportunity to cumulatively capture and build a body of corporate technical knowledge. The industry has grown sufficiently, whatever the economic climate, to develop and implement a more mature and systematic approach to safety risk management.

My recommendations for improvement are conceptual only. To progress them, commercial operators like Foaming Fury which have the rafting expertise will need the assistance of persons with structural and process expertise in safety risk management to facilitate the development of safe operating procedures. With time, the senior guides will gain the necessary expertise and continue the development process.

***I recommend that Foaming Fury review its operational procedures by conducting risk assessments of each set of rapids, identifying all hazards, selecting control measures appropriate to the unique attributes of each set of rapids that mitigates the risk to a defined acceptable level, and then periodically reviewing the control measures for their effectiveness. The hazards, risks and workings of the control measures should be shown as an overlay on current maps of the rapids. Explanatory notes about relevant strategies should accompany the maps. Safety critical strategies should be highlighted. These documented procedures should be incorporated into training and auditing programs.***

I turn to the issue of harm minimisation.

The extrication of Mrs Hatzidimitriadis took some time. Mr Priest made a number of attempts at a 'quick' extrication which failed before a co-ordinated group effort was successful. The briefings of the rafters did not appear to include the possibility that they might need to assist in extrication. I don't know whether the training that the guides who conduct this trip receive in using and organising members of the rafting group to assist with search and rescue activities. It must be recalled that Mr Priest was momentarily caught underwater during his extrication efforts. Clearly, guides will be exposed to higher risk of entrapment during extrication efforts. If a guide becomes entrapped, the other guide and the group's capacity to extricate him or her is limited.

There was also a component of fatigue. Mr Thompson had to stop Mr Priest after about 10 minutes of urgent effort at a quick extrication. Mr Thompson thought he needed to stop, rest and consider an alternative strategy. When extricated, efforts turned to CPR. Mr Priest has had to consider the safety of the others in the group. Again, Mr Priest and Ms Morris were reliant on a rafter to assist with CPR. Finally, there was a serious miscommunication between Mr Priest, Mr Francis and emergency services about arrangements to meet. Ambulance officers and Police officers were left to find their own way to an unknown location. However, that delay did not affect the outcome. I think it likely that the physical exhaustion of Mr Priest and the mental gymnastics required to juggle competing priorities affected this aspect of co-ordination.

***I recommend that Foaming Fury formally review the capacity of two guides to meet all of the needs, and potential needs in the event of an emergency, of a sports rafting group of this size. That review should take the form of a formal risk assessment using a number of different scenarios that might be encountered. Variables might include different participant profiles.***

This is the second inquest in a series of four inquests dealing with five deaths (two deaths occurred in the same rafting incident) during white water rafting in North Queensland. I directed that the hearings proceed separately for the purpose of determining the circumstances of each incident and the operator's management of the risk of entrapment. I directed that a joint hearing be convened on conclusion of the separate hearings to address the common issue of adequacy of current standards and regulations.

Therefore, in this matter, I defer considering recommendations relating to the adequacy of current standards and regulations of the white water rafting industry pending delivery of findings in the other hearings and the convening of the joint hearing.



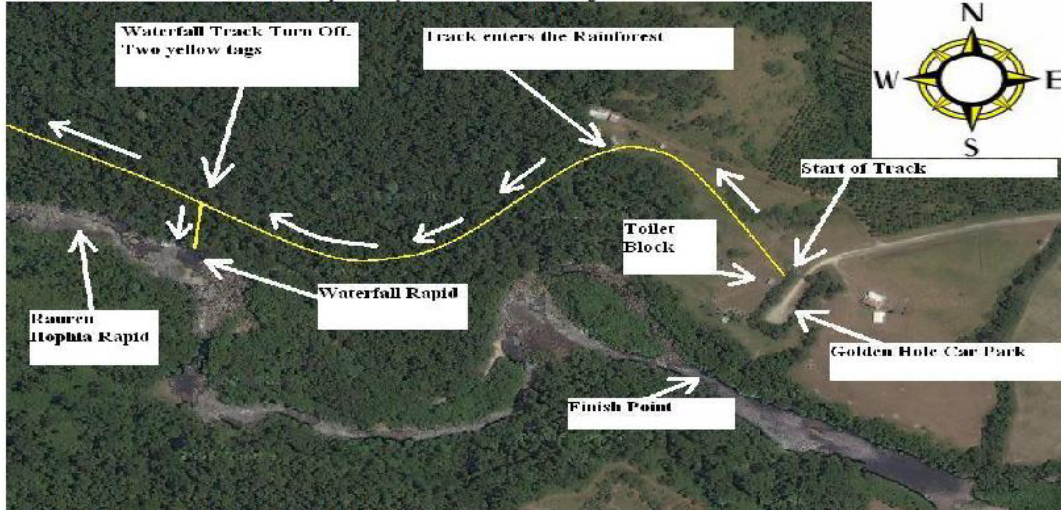
Attachment A



Russell River & Rainforest Access Track (Wooroonooran National Park)

This map was done by Foaming Fury in an attempt to increase the knowledge of the area we raft on and access to the rainforest track on the Russell River. (Updated April 2009)

To get to the Russell River rainforest track head in a North Westerly direction from the toilet block and walk up a small grassy hill. At the top of the hill head South West down a small slope which enters the rainforest. The track is about one metre wide. To get to the Waterfall Evacuation Track walk in along the track for about 10 minutes until you get to two trees both marked with yellow metals tags on both sides of the track. Turn left before passing these trees and follow this smaller track which is marked with aluminium tags towards the river (south). This track will take you to the base of the Waterfall Rapid. To get to our Start Point walk past the trees with the yellow tags and follow the track for another 25-30mins until the path takes you down to the wide rivers edge.



List of Waypoints for the Major Rapids on the Russell River

Put in Point	Rauren Hophia	Waterfall	Rollercoaster	Bottom of First Stooge	Slouse	Golden Hole
S 17° 26.782	S 17° 26.818	S 17° 26.838	S 17° 26.883	S 17° 26.950	S 17° 26.878	S 17° 26.906
E 145° 50.394	E 145° 50.782	E 145° 50.853	E 145° 50.867	E 145° 50.904	E 145° 51.061	E 145° 51.200

Map of Russell River – Lower Section of Rapids (extracted from Foaming Fury Operations Manual)

Attachment B

