

KEY EVENTS

- 1.1 On Saturday, 22 February 2003, a party of three kayakers put onto the Waikaia River, Northern Southland, at the Canton Bridge. The time was 1430 hours New Zealand Daylight time (NZDT).
- 1.2 The next two and a half hours of their river trip were uneventful. They followed what can be considered a standard river-running protocol, bank-scouting (*See Glossary for explanation*) whatever they could not see from their boats. At times, depending on both the difficulty and potential consequences in the rapids it was either just one of the party bank-scouting or all three members of the party. When it was just one of the party bank-scouting, he would communicate to the others that the rapid was fine to run, and which particular line to run. The rapids encountered ranged from class III to class V (*See Glossary for explanation*). The members of the party portaged (*See Glossary for explanation*) three or four rapids each.
- 1.3 At the rapid where the accident was to happen, Kayaker 1 eddy hopped (*See Glossary for explanation*) his way down to some slack water in front of a boulder and climbed onto the top of the boulder, carrying his kayak and paddle with him. The boulder had a relatively flat top on which it was easy to perch his kayak. From this point he had good vision of the next drop (*See Glossary for explanation*) and signalled the line (*See Glossary for explanation*) back up river to Kayaker 3. Kayaker 1 then signalled Kayaker 3 down to run the drop and also spoke the line to him. Kayaker 3 ran the line cleanly and eddied out on river right (*See Glossary for explanation*).
- 1.4 Kayaker 2 then paddled down to Kayaker 1 – who was still stationed on the rock, and checked the line with him. Upon entering the drop, Kayaker 2 was back-looped (*See Glossary for explanation*) in the first recirculating hydraulic (*See Glossary for explanation*). He was then washed up against the front of the long boulder on the left at the bottom of the drop. Unable to right himself, kayaker 2 wet exited (*See Glossary for explanation*) and began swimming himself and his equipment towards the river left bank.
- 1.5 Kayaker 3 ferry glided (*See Glossary for explanation*) across to Kayaker 2 on River left and gave him assistance getting into an eddy by barging him with the bow of his boat. The eddy, however was not suitable for getting out of the river and Kayaker 2 let go of his boat and then swam/bounced the short distance down into the next eddy and threw his paddle onto the bank. He then managed to get out of the water.

- 1.6** Kayaker 3 paddled back up into the eddy above where Kayaker 2 got out of the water and attached a carabiner to the rope end of his throw bag (*See Glossary for explanation*). He then gave the bag end, as well as a sling from his pocket to Kayaker 2. Kayaker 3 paddled back up stream with the rope in his mouth and had a few attempts at attaching the carabiner and line to the bow of the empty kayak – which was now being held vertically against the overhanging cliff by a combination of current and rock. When this method of extracting the empty kayak failed, Kayaker 3 gave the rope and carabiner to Kayaker 2 and paddled back up towards the wedged kayak, intending to nudge it out with the bow of his own kayak. As Kayaker 3 approached the kayak it came free and Kayaker 3 barged it down to Kayaker 2 at the bottom of the first eddy. He then eddied out in the second eddy, got out of his boat and went back up to Kayaker 2 in order to assist with emptying the boat out of water.
- 1.7** As Kayaker 3 and Kayaker 2 emptied the kayak on the rock between the two eddies they noticed Kayaker 1’s absence. Kayaker 3 suggested that they wait where they were under the reasoning that Kayaker 1 knew where they were and would be proceeding to that point. (Note: this line of reasoning was also based on past experience – in similar situations Kayaker 1 had always quickly made his way, in a prudent manner, to the incident site.) They blew their whistles and kept an eye out in the trees for Kayaker 1. They could see that Kayaker 1 was no longer on top of the boulder where they last saw him.
- 1.8** After approximately 5 minutes had passed with no sign of Kayaker 1, Kayaker 3 paddled back up stream a short distance and then ferry glided across to the river right bank. After getting out of his boat and pulling it to safety he scrambled up the rocks, spotted Kayaker 1 and yelled out “Hang on, I’ll be back in a second.”
- 1.9** Kayaker 1 was vertically pinned (*See Glossary for explanation*) in his kayak in a very narrow slot – 3 metres towards river right of where he had been scouting and signalling from. Kayaker 1’s boat was wedged in the slot at an attitude of around sixty degrees beneath the horizontal plane. He was leaning back and Kayaker 3 believed him to be in a position where he could grab breaths as necessary – by tilting his head up and raising his mouth out of the water. In commenting on the draft report, the Coroner advised that Kayaker 3 had stated in his sworn statement to the Police that Kayaker 1 was conscious and moving.
- 1.10** Kayaker 3 then ran back to his kayak and signalled for Kayaker 2 to paddle across – with Kayaker 3’ throw bag, carabiner and sling. He then stood in the water so as to grab the Bow of Kayaker 2’s boat as he entered the eddy. Once Kayaker 2 had arrived in the eddy, Kayaker 3 grabbed his remaining pieces of rescue kit and asked Kayaker 2 to follow. Kayaker 2 did so after grabbing his own rescue kit.

- 1.11** When Kayaker 3 arrived at the boulders facing Kayaker 1, he threw his throw bag and landed the line over Kayaker 1's left shoulder. At the time Kayaker 3 felt that he had gained eye contact with Kayaker 1 and that Kayaker 1 grabbed the line, however in retrospect is not sure. Kayaker 3 pulled on the line and found that there was no give – the bag must have been stuck between the boat and the side of the slot. Kayaker 2 noticed upon arriving that Kayaker 1 was already blue in the face. In commenting on the draft report, the Coroner stated that Kayaker 2 said that the line was wrapped around Kayaker 1's hand and that for Kayaker 1 to have got the line he must have been conscious.
- 1.12** Kayaker 3 gave the end of the rope to Kayaker 2 and proceeded onto the top of the boulder on Kayaker 1's right. En route he realised that the boulder was too high and too steep to be able to safely reach Kayaker 1 by himself so yelled at Kayaker 2 to also come around. They met half way and Kayaker 3 took the end of the rope back and proceeded to directly above Kayaker 1 and tried pulling on the rope again. He was joined by Kayaker 2 where they both pulled upwards on the rope, however with no success.
- 1.13** Kayaker 2 climbed down the side of the boulder, using the rope to hang on to. Kayaker 3 secured the rope using a waist belay position (*See Glossary for explanation*). Kayaker 2 was then able to use footholds on the two boulders either side of the slot in which Kayaker 1 was pinned in order to establish a position directly above Kayaker 1. In this position Kayaker 2's ankles were at the height of Kayaker 1's shoulders. Note that Kayaker 1's spray deck (*See Glossary for explanation*) was still on.
- 1.14** Kayaker 2 grabbed onto the shoulder straps of Kayaker 1's PFD (*See Glossary for explanation*) and tried pulling him up – but to no avail. At this point, Kayaker 2 stated that Kayaker 1 was unconscious. Kayaker 3 at this stage noticed that Kayaker 1's hands were blue and yelled for Kayaker 2 to deliver "mouth to mouth." Kayaker 2 gave Kayaker 1 five breaths, but was unsure of their effectiveness. He then asked Kayaker 3 for a carabiner and the free end of the rope. Kayaker 3 slid a carabiner and sling down the rope to Kayaker 2 and then swung the free end of the rope to him.
- 1.15** Using the carabiner, Kayaker 2 attached the rope to the left shoulder strap on Kayaker 1's PFD. Both Kayaker 2 and Kayaker 3 pulled hard, yet with no success. The PFD (*see paragraph 2.23 for further discussion*) eventually came up above Kayaker 1's head – meaning that it was now time to attempt another method of extracting Kayaker 1. Kayaker 2 moved the carabiner and free end of the rope from Kayaker 1's PFD to the stern grab loop of the boat. Again, Kayaker 3 and Kayaker 2 both pulled hard, and from a variety of angles. Still no success. Next, Kayaker 2 put a sling around Kayaker 1's chest, they continued to pull, but with no change. At some point in time during these

repeated attempts at extracting Kayaker 1, Kayaker 2 gave him another five breaths through “mouth to mouth”.

- 1.16** Believing that things could not likely get any worse, they tried their method of last resort. With one end of the rope still attached to the sling around Kayaker 1's chest and Kayaker 2 holding on to the other end, Kayaker 2 began jumping up and down on the stern of Kayaker 1's Kayak. The back deck eventually submerged and both Kayaker 1 and his Kayak disappeared from view. Kayaker 2 ended up in the slot from which the kayak and Kayaker 1 had just been released. Kayaker 3, still on top of the Boulder above the slot was left holding onto a bight of rope with Kayaker 1 on one end and Kayaker 2 on the other.
- 1.17** Despite the powerful current, Kayaker 2 was able to maintain a grip on the rope and was able to make his way down the rope, hand over hand to a tree (i.e., a strainer) wedged in the next section of the current – around four metres from where he had entered the water. The tree extended onto the boulders either side of the narrow chute of water. The boulders on both sides of the chute were relatively undercut. Here he was able to get out of the water onto the river right side of the chute.
- 1.18** Around this time Kayaker 1 (who had continued to be unsighted since being pushed through the slot in his boat) became unattached from the sling around his chest. The rope that Kayaker 3 was holding now had no weight on it, so he proceeded quickly around to the rock onto which Kayaker 2 had managed to climb. Here Kayaker 3 held onto the feet of Kayaker 2 as Kayaker 2 searched underneath the rock for any sign of Kayaker 1. While this was happening, Kayaker 1's empty boat appeared from under the boulder on the river left side of the chute. The front-left side of the kayak was significantly dented.
- 1.19** When the now slack rope (which at one time had both Kayaker 1 and Kayaker 2 attached to it) was pulled from the water, it was discovered that the sling was no-longer attached to the carabiner. (This was because the sling had been wrapped around Kayaker 1's chest and the carabiner had passed through the bights at either end of the sling, as well the end of the rope to which it was attached. When Kayaker 1's body became free of the sling, the sling was then free to separate from the carabiner. At this stage Kayaker 1 had not been sighted for 5 – 10 minutes.
- 1.20** Kayaker 3 and Kayaker 2 looked in the river, where they could, but could not see Kayaker 1.
- 1.21** Knowing that there was a track further down river on river right, Kayaker 2 and Kayaker 3 decided that it was time to begin walking out. They went back to their boats, dragged them to higher ground and stashed all their non-essential equipment. As they bush-bashed their way down stream they kept an eye on the river for Kayaker 1's body. The terrain was difficult to move through and required much scrambling up and down the sides of the gorge in order to find the route of least resistance.

The track was not as marked on the map. They got to the swing bridge (approximately 2.8 km down river, grid reference NZMS 260 F43 012125) around nightfall.

- 1.22** Kayaker 2 and Kayaker 3 decided to stay close to the swing bridge in order to avoid getting lost. They sat and shivered until light came again and then set off for the point at which the river meets the road – where they had stashed dry clothes, food and water. They got changed, ate and drank, and flagged down a car, which took them to the closest occupied house with a phone.
- 1.23** A search and rescue helicopter found Kayaker 1's body that day (Sunday, 23 February) around 9:30 am, approximately 150 metres down river from the accident site.

KEY CONDITIONS

- 2.1** Kayaker 1 was 27 years old, fit, 1.92 metres tall and weighed 93 kilograms. He was a Captain in the British Army and had been kayaking for eleven years. He had been on whitewater kayaking expeditions to Norway (sponsored and including first descents), Turkey, Corsica, and the Alps. He held both the British Canoeing Union (BCU) 5 Star Inland award and the Inland Level 4 Coach award. During these trips Kayaker 1 had successfully negotiated numerous class V and class V+ rapids. Professionally, he had led trips on demanding water in Norway, the Alps, and Corsica. Video Footage of Kayaker 1 kayaking on class IV water showed him to be a relaxed paddler with lots of time on his hands. He had a vertical paddling style and strong boat placement skills.
- 2.2** Both Kayaker 2 and Kayaker 3 had previously paddled with Kayaker 1 on a variety of trips, however not both together. To the best of their combined knowledge Kayaker 1 had needed to wet-exit on just two occasions in the past six years. He had not previously been pinned in a way requiring ropes for extraction.
- 2.3** Kayaker 2 first began paddling in 1989 as a boy scout, however he didn't do a lot of whitewater paddling until at University in 1994. Although he has paddled with a few canoe clubs, the majority of his paddling has been done with friends. As well as numerous rivers in the UK, he has made 4 trips to the French Alps and 2 trips to the Austrian/Swiss/German Alps. During these trips Kayaker 2 has successfully paddled a variety of class IV and V rivers, including the Upper Oetz, Inn gorge, Durance gorge, Guardian Angel gorge, la Fresquiere, Biasse and Gyr.
- 2.4** Although the last whitewater rescue course that Kayaker 2 did was around 1998 he has been able to practice his rescues reasonably regularly through paddling with University Canoe Clubs. He also described himself as "fairly happy with rope work given that I ski/climb a bit and have done crevasse rescue courses and refreshers." Kayaker 2 had also spent an afternoon of "dry practice" of various rescue techniques, using *White Water Safety and Rescue*, by Franco Ferrero, before travelling out to New Zealand. He last sat a First Aid course refresher in UK autumn 2001, and it was still valid at the time of his trip to New Zealand.
- 2.5** Kayaker 3 began paddling around 1991, however didn't begin paddling whitewater until 1996 when he joined a local canoe club. He was mainly taught to paddle by (ex) slalom paddlers – who he continues to paddle with. As well as paddling most weekends in the UK, Kayaker 3 has usually made two paddling trips abroad each year – including trips to France, Austria, Germany, Switzerland, Corsica and Norway. His kayaking highlights have included many class IV and V rivers including

the middle, upper, and Venterach sections of the Oetz, all the gorges on the Inn, the Ula and Upper Sjoa, and the Vechio.

2.6 Kayaker 3 attended a Peak white water rescue course on the Tryweryn in Wales – he thinks in 2000.

2.7 Prior to the accident Kayaker 1, Kayaker 2 and Kayaker 3 had paddled the following rivers in New Zealand:

- Lower Matakītaki (class III+)
- Buller River (class III)
- Maruia Falls
- Upper Kakapotahi (*2) (class V)
- Wanganui (class IV-V)
- Styx (class IV+)
- Falls creek run on the Hollyford (class IV)
- Dogleg run on the Kawarau (class III)
- Citroen run on the Kawarau (class IV)
- Lower Shotover (*2) (class III+)

During these trips Kayaker 2 had wet-exited once on the Wanganui and Kayaker 3 had wet-exited once on the Citroen run on the Kawarau.

2.8 Prior to the accident Kayaker 1 was carrying no injuries. Kayaker 2 had a damaged toe, and Kayaker 3 had some damaged teeth. These injuries had no effect on their performance. None of the paddlers smoked or took recreational drugs.

2.9 The day prior to the accident Kayaker 1, Kayaker 3 and Kayaker 2 had all paddled the lower Shotover – getting off the river at 2pm. The trip had been incident free. That evening they all had a good two course meal in Queenstown. Kayaker 1 left the town Centre around 10pm for the 1-2 km walk back to their accommodation. He had not consumed any alcohol that evening. Kayaker 3 left around 2300 hours having had six (330ml) stubbies of beer over the evening. Kayaker 2 left around 0015 hours having also had six (330ml) stubbies of beer over the evening.

2.10 Kayaker 2 and Kayaker 3 assume that Kayaker 1 arose on the day of the accident between 0800 hours and 0830 hours and would have had cereal and toast for breakfast. They left Queenstown shortly after 1000 hours. In Waikaia they purchased sausage rolls, some lunch food and chocolate. They had lunch at around 1330 hours, at the end of the unsealed road one kilometre away from the Canton bridge. Their lunch consisted of 1 to 1_ sandwiches each and water.

- 2.11** Prior to each river trip in New Zealand, Kayaker 1 would study the 1:50,000 topomaps in much detail on his laptop computer, as well as check the weather. He also checked the flow on the Environment Southland flow phone (03 202 7891) either the evening before the trip or the morning of. On the drive up to the Canton bridge, the party stopped at the last point where the river meets the road (grid reference NZMS 260 F43 012125) and stashed dry clothes, food, chocolate, water, torches, and a bivy bag. As they continued up to the Canton bridge, the party attempted to spot key land features that would help them keep a track of how far through the trip they were and would be useful in the unlikely event of having to walk out of the gorge.
- 2.12** The rapid where the accident took place is unnamed and approximately 6.1 km down river of the put in and has a grid reference of NZMS 260 F43 019144. There was no organised food stop between the put in and the accident site – which the group approached around 1700 hours. Kayaker 2 and Kayaker 3 maintained their fluid intake over this time and both assume that Kayaker 1 did the same.
- 2.13** The weather forecast for the day for the day of the accident was for fine weather and for nearby locations to have a maximum air temperature between 16 and 19 degrees Centigrade. The skies were clear in the afternoon and the water temperature, as recorded at Piano flat was between 8° and 9° Centigrade.
- 2.14** The river flow increased significantly while the group was on it. At 1400 hours, the river flow at Piano flat was recorded as 9.4 cumecs (*See Glossary for explanation*). At 1800 hours, the river flow, as recorded at Piano flat had increased to 19.1 cumecs. This equates to an increase in river level at Piano flat from 838mm to 1093mm. Although this is a significant rise in river level, it remained within the levels recommended as suitable for kayaking (0750mm to 1300mm) according to *New Zealand Whitewater, 125 Great Kayaking Runs*, by Graham Charles. The river level as recorded at Piano flat peaked at 1245 mm (38 cumecs) at approximately 2030 hours that evening. Because the accident site is approximately 10.3 km up river of the Piano flat river gauge (grid reference NZMS 260 F43 982079), a reasonable hydrological estimate is that the flow at the accident site peaked within an hour of the accident. Neither Kayaker 2 nor Kayaker 3 noticed the rising river level. It is not known whether Kayaker 1 noticed it.
- 2.15** There had not been a lot of rain in Southland the day before. In the 24 hours to 1800 hours on 21 February, 6.4 mm fell in Invercargill, 5.6 mm fell in Gore, and 1.2 mm fell in Queenstown. It had snowed reasonably heavily on the Whitecomb (the area east of the Gavie Mountains) and on the Old Man and Old Woman ranges on 20 and 21 February and the increase in water flow on 22 February was due to snow melt. Beyond the steep nature of the land containing the headwaters of the Waikaia River,

it was quite reasonable not to expect any significant changes in river level on 22 February. There are no river gauges higher up the Waikaia than the one at Piano flat.

- 2.16** The party were generally well equipped for their trip. Kayaker 1 and Kayaker 3 were paddling Dagger CFS's and Kayaker 2 was paddling an Eskimo Salto – both appropriate creek boats. All boats were hired and carried airbags. Each of their paddles were high quality fibre glass paddles and they were carrying two split-paddles within the party, as well as two first aid kits. Each paddler was also carrying a throw bag and a variety of carabiners, slings and prussiks (*See Glossary for explanation*).
- 2.17** It is not known when the dent in the side of Kayaker 1's kayak was sustained (*See paragraph 1.18*). The Dagger CFS is a very strong kayak. It may have happened when the kayak entered the slot in which Kayaker 1 was pinned – in which case the dent could have hindered Kayaker 1's exit from the kayak. The dent may also have happened when the kayak was submerged and full of water and Kayaker 1 was no longer in it. When the kayak was photographed three days later, there were no visible signs indicating that the kayak had been previously dented.
- 2.18** It cannot be known with certainty exactly how Kayaker 1 came to be in the slot in which he was pinned, however some possible reasons can be ruled out. His spray deck was on when Kayaker 3 and Kayaker 2 found him, this points to Kayaker 1 being initially in control when he seal-launched back into the river. This is also reinforced by Kayaker 1's paddle being found approximately 400 metres downstream three days later. This points to the fact that Kayaker 1 did not "leave his paddle behind" when he seal-launched in.
- 2.19** The view from where Kayaker 1's boat was perched shows some of the current continuing on down on river left and some going towards river right. Given the flows at the time of the accident, this flow going towards river right would have been strong and yet not obvious unless the time was taken to read the water. It is reasonable to assume that Kayaker 1 was more focused on getting to his paddling companions than on the flat piece of water into which he was to seal-launch. There would have been little time to respond once in the current heading towards the slot.
- 2.20** It is not known exactly why Kayaker 1 did not get out of his kayak when he entered the slot. When Kayaker 3 and Kayaker 2 found him, his spray deck was still on. Given the rock protrusions in the slot and the angle at which his kayak sat, it is not likely that he could have reached the pull-tag at the front of his spray-deck. It is not known if he could have pushed his spray deck off with his knees.

- 2.21** Conventional kayaking wisdom is that if you are pinned, have a secure supply of Oxygen and if there is further danger downstream – which there was in this case then don't make things any worse. Stay put and wait for assistance. It is possible that Kayaker 1 took this course of action, he grew cold and tired and then later was not able to extract himself when he wanted. This does not however adequately explain why he did not continue to keep his oxygen supply clear (*see paragraph 1.9*), and continue to breathe. Given his waterproof clothing, the fact that his spray deck remained sealed, the time elapsed before being found (best guess no more than 20 minutes) the temperature of the water (*See paragraph 2.13*), and that the pathologist was very strong in his conclusion that Kayaker 1 died through drowning (*See paragraph 2.24*), it does not appear as though hypothermia was a significant factor.
- 2.22** Given how far the kayak was submerged the force of the water, the rocky protrusions on the sides of the slot, and the bruises on Kayaker 1's anterior chest and abdominal walls (*See paragraph 2.24*), it is very possible that Kayaker 1 was winded when he dropped into the slot. This could have caused him to suck in water in his initial breaths or to simply cause him difficulty in breathing. The force of the current on his back would have been strong. He may have drowned very shortly after becoming wedged in the slot.
- 2.23** The fact that Kayaker 1's PFD was eventually pulled up over his head when Kayaker 3 and Kayaker 2 were attempting to extract him is in keeping with other's experiences. Kayaker 1's PFD was of a high quality and designed for paddling extreme water. It is unlikely that it would have come off had Kayaker 1 been conscious.
- 2.24** When the Pathologist Dr A.D. Pettigrew at Southland Hospital, carried out a post-mortem, he reported that the death was the result of asphyxia through drowning. He also noted bruises to the forehead, cheeks, around the eyes, anterior chest, abdominal walls, thighs, and lower legs. Because a biopsy was not carried out on the bruises, it is not possible to ascertain which bruises were sustained before Kayaker 1 died and which bruises were sustained afterwards.

CONTRIBUTING FACTORS

N.B. These are not listed in order of importance.

- 3.1** Although a party of three competent kayakers is generally considered adequate for “adventure” paddling, it is often riskier than a having four or five competent kayakers in the party. With four or five paddlers it is easier to avoid the situation of any one paddler becoming separated from the rest of the party.
- 3.2** Although at the time it would have seemed quite reasonable for Kayaker 1 to seal-launch back into the river when Kayaker 2 and Kayaker 3 appeared in need of assistance, this decision to do so was ultimately a contributing factor to his demise. He could have chosen to walk his boat 5 – 10 metres down stream over the rocks and seal launch into the pool on river right.
- 3.3** Although no one will ever know for sure, it is most likely that Kayaker 1 hurried through the action of seal-launching back into the river and failed to read the water accurately. Given Kayaker 1’s paddling skills and history, it is extremely unlikely that he would have misread the water if he had not been hurrying. Given that Kayaker 1 would have seen the rapid immediately below Kayaker 2 and Kayaker 3, and that it often takes more than one rescuer to get a swimmer, paddle and boat half-full of water to the side, it is likely that Kayaker 1 was wanting to get to his kayaking companions as quickly as possible.
- 3.4** Given that Kayaker 1 hadn’t eaten between his lunch at 1330 hours and the time of the accident (between 1700 hours and 1730 hours), it is most likely that his judgement would have been adversely affected. This is reinforced when the nature of both the rapids that he had paddled and the portages are considered.
- 3.5** Although not unsafe to paddle, the river was high and rising at the time of the accident. A river that has a flow of 30 cumecs say and rising is generally more “pushy” than a river at 30 cumecs and steady. This would have meant that Kayaker 1 would have struggled in his attempts to avoid entering the slot in which he was ultimately pinned.

CAUSE

Human Factor

<input type="checkbox"/> Failure to comply with regulations	<input type="checkbox"/> Drugs & Alcohol	<input type="checkbox"/> Overloading
<input type="checkbox"/> Failure to obtain ships position or course	<input type="checkbox"/> Fatigue	<input type="checkbox"/>
Misconduct/Negligence		
<input type="checkbox"/> Improper watchkeeping or lookout	<input type="checkbox"/> Physiological	<input type="checkbox"/> Error of judgement
<input type="checkbox"/> Lack of knowledge	<input type="checkbox"/> Ship Handling	<input type="checkbox"/> Other . . .

Environmental Factor

<input type="checkbox"/> Adverse weather hazard	<input type="checkbox"/> Debris	<input type="checkbox"/> Ice	<input type="checkbox"/> Navigation
<input type="checkbox"/> Adverse current	<input type="checkbox"/> Submerged object	<input type="checkbox"/> Lightning	<input type="checkbox"/> Other . . .

Technical Factor

<input type="checkbox"/> Structural failure	<input type="checkbox"/> Wear & tear	<input type="checkbox"/> Steering failure
<input type="checkbox"/> Mechanical failure firefighting/lifesaving	<input type="checkbox"/> Improper welding	<input type="checkbox"/> Inadequate
<input type="checkbox"/> Electrical failure	<input type="checkbox"/> Inadequate maintenance	<input type="checkbox"/> Insufficient fuel
<input type="checkbox"/> Corrosion	<input type="checkbox"/> Inadequate stability	<input type="checkbox"/> Other . . .

4.1 Kayaker 1 drowned on the Waikaia river when his kayak became caught in a very narrow slot and he was not able to get out of the kayak.

OPINIONS & RECOMMENDATIONS

5.1 This accident illustrates the fact that no matter how skilled and experienced a paddler is, a relatively small mistake at a relatively innocuous looking site can have tragic consequences.

5.2 It is recommended that under the direction of the New Zealand Maritime Safety Authority, this report be summarised into a more readable format and then circulated amongst the members of the New Zealand Recreational Canoeing Association, and the New Zealand Outdoor Instructors' association. The report should remind people of the following issues (*not in any order*):

- No matter how skilled or experienced a paddler is, a small mistake can be tragic.
- When adventure paddling always build in extra hours for the end of the day.
- Although it may be a perfectly fine day, and it may have been fine the previous day within 70km of the river, that does not mean it won't rise rapidly when on it.
- Keep up a regular intake of food and liquid throughout the trip.
- Although three is considered a safe number to have in a party, it can have serious limitations.
- If someone else is in need of assistance, do not rush. Choose a route that maximises the chances of getting to that person.
- If pinned, the conventional wisdom of "if you are stable and your head is out of the water...stay put – don't make things any worse by releasing your deck", does not always hold true.
- Always carry spare warm clothes and a torch on an adventure trip.
- Just because a track is marked on a map, it does not mean it exists.