CANOEING SPORTS SAFETY MANAGEMENT PLAN

FOR

FOOTSCRAY CANOE CLUB INC

INTRODUCTION

1. Canoeing, especially marathon and flat water canoeing, is a fairly low risk and injury free sport. However, without the proper precautions and training paddlers could find themselves in difficult and potentially life threatening circumstances. This Canoeing Sports Safety Management Plan (CSSMP) highlights those things that can go wrong and what can be done to lessen or prevent the problem and reduce the consequences.

SCOPE

2. This plan applies to all members of the Footscray Canoe Club (FCC) and is to be used as guidance in all Club and individual paddling activities. However, due to the fairly large scope of paddling activities it may not address every circumstance, so paddlers need to practice vigilance and safety awareness at all times.

DEFINITIONS

3. The definitions of unusual terms used in this plan are detailed below:

a. **Hypothermia** – A decrease in the core body temperature that impairs normal muscular and cerebral functions. It occurs when the body loses heat faster than it is replaced. Symptoms begin when the core body temperature drops below 35 degrees Celsius. Hypothermia is a threat when water temperatures are below 15.5 degrees Celsius, or air temperatures are below 10 degrees Celsius. Hypothermia can lead to death if corrective measures are not taken.

b. **Loss of Control** – The point or condition, at which a paddler may be in danger.

c. **Stopper** – A standing wave in flowing water where the surface water around the 'stopper' flows in a downward direction.

ARGUMENT

4. This plan addresses the most common 'loss of control' points, the likely causes for loss of control, the possible consequences, and the controls that can (and should) be used to lessen or prevent the problem, or at least reduce the consequences. Some of these controls are embedded into Club By-Laws, but all paddlers need to be aware of these good practices and endeavour to follow them wherever possible.

LOSS OF CONTROL

5. Although there may be some conjecture over the loss of control point for canoeing, the Club has agreed that for our purposes the loss of control point for canoeing will be when *the paddler is unable to paddle due to;*

a. *capsize or sinking,*

b. *injury,*

c. *a medical condition,*

d. *extremes of temperature,*

e. *rough conditions (or inability to avoid approaching rough conditions),*

f. *broken equipment,*

g. *loss of direction,*

h. *lack of drinking water, or*

i. *tiredness.*

6. While the paddler is able to paddle and stay on top of the water, through proper training and preparedness they should be able to remain relatively safe. Of the loss of control conditions, the most common by far is capsizing. Balance and paddling technique are deemed to be the most important paddling skills required.

CAUSE AND CONSEQUENCES

7. The causes that can lead to a loss of control and the potential consequences are depicted in Annex A. Causes will not always lead to a loss of control, and the most common consequences of a loss of control is the paddler getting wet and swimming to shore or effecting a self rescue.

RISK ASSESSMENT

8. In order to determine risk, the Club will use the risk assessment matrix in Annex B. This matrix is based on the Australian Standard AS/NZS 4360, and a similar one is used by Parks Victoria in safety risk assessments for water activity based events. The aim is to identify high risk activities and implement safety and management controls to reduce these risks to an acceptable level. Anything below (or at) a safety risk level of 4 is considered to be acceptable. Risk levels above that will require positive action from the Club and Club members.

INITIAL RISK ASSESSMENT

9. It would be virtually impossible to adequately assess any (and all) combinations of causes, loss of control and consequences without applying the safety and management controls. Risks could fall anywhere between 1 and 25. Therefore for simplicity an initial risk assessment has not been conducted. Instead, FCC has automatically incorporated pre and post controls, most of which are common sense measures anyway.

CONTROL MEASURES

10. In Annex A, for each of the causes listed, a corresponding pre-control has been listed against it. Similarly, for each of the loss of control condition listed, a corresponding post-control has also been listed in Annex A. Most of these controls are basic and common sense for someone with paddling experience, however they may not be as obvious to beginners or when a new canoeing discipline is undertaken.

Pre-Controls

11. The most important pre-controls are pre-screening, training and experience in all aspects of canoeing.

12. **Pre-screening.** Pre-screening is necessary to make sure that paddlers have the necessary skills, health and physical abilities to undertake canoeing in general and the particular type of canoeing activity planned. Pre-screening should address the following as a minimum:

a. Ability to swim – all paddlers must be able to swim. (*This is not a Paddle Australia requirement, but it is considered essential by the FCC.*)

b. No medical condition that could suddenly or quickly render a paddler incapable of paddling or retaining balance, unless a medical practitioner's clearance can be obtained by the paddler for the condition, and additional controls put in place to cope with any medical event, eg always wear a non-inflating type, Personal Floatation Device or life jacket (PFD), only paddle doubles or with someone else, etc.

c. No physical or mental condition that would inhibit a paddler's ability to save themselves, unless a clearance from an appropriate medical practitioner or advisor is obtained by the paddler and additional controls put in place to cope with the inability, eg always wear a non-inflating type PFD, only paddle doubles, only paddle on calm days and close to shore etc.

d. All paddlers must wear a PFD at all times while paddling (*a Victoria Maritime requirement*).

13. Training. Training is essential for all paddlers and especially beginners. Beginners need training and coaching to learn how to paddle safely and without injury and also on how to look after and check their equipment. They also need to learn how to identify and avoid dangerous situations. More experienced paddlers also need to train regularly to maintain their skill and fitness levels.

14. Initial Training. Initial training needs to address:

a. Paddling technique,

b. Safety equipment requirements and checks,

c. Water way rules,

d. Boat and paddle handling, cleaning and maintenance,

e. Boat entry and exit,

f. Steering,

g. Capsize and recovery,

h. What to do if experiencing paddling difficulties,

i. Protection from the elements,

j. Reading weather and water conditions, eg don't going paddling if there are thunderstorms close by or predicted,

k. Planning for paddling outing,

l. Hazard identification and on-going vigilance, eg broken glass in grass, cyclists going past the club, fish hooks on the pontoon, sharp rocks, barnacles, fishermen, rowers and other water way users,

m. Club constitution and By-Laws, and

n. Membership and insurance requirements (all club paddlers must be registered and insured with Paddle Australia).

15. Pre-checks. Before going paddling a paddler should:

a. Let someone know where they are going and for how long;

b. Plan their paddling excursion, taking into account, water and weather conditions, expected duration, possible withdrawal points, and personal needs;

c. Make sure that their paddling skill and fitness level is adequate for the paddling conditions to be encountered, (A paddler should never embark on a demanding paddling excursion unless they have properly trained and prepared themselves for the likely conditions to be encountered.);

d. Make sure that the boat has floatation and that it and all other equipment is serviceable;

e. Make sure they wear their PFD at all times when on the water.

f. Make sure that they have the appropriate clothing and protection against heat, sun and cold;

g. Make sure they have enough food and water for the excursion;

h. Take a repair kit if appropriate;

i. Paddle with others wherever possible unless it is safe not to; and

j. Stretch and warm up before commencing, and stretch/cool down post paddle.

16. Application of Training and Experience. Once the paddler has received this pre-screening and initial training, it is really up to the paddler to implement this training and gradually increase their paddling skills and knowledge.

Post-Controls

17. For the purposes of this CSSMP, the loss of control point is when a paddler is unable to continue to paddle for some reason. Depending on the reason for the loss of control, a paddler can do a number of things to eliminate or reduce any risks. All of these actions should have been addressed through previous training and experience. The following points address some of the most probable actions to take due to a loss of control condition.

18. Capsize. Capsize is the most common loss of control conditions, and one that is often encountered by beginners. If you capsize:

a. Stay with the boat and paddle unless it is not safe to do so;

b. Seek assistance if needed;

CAUTION

You could be crushed by your water-logged boat if you got trapped between it and some obstacle in flowing water.

c. If in flowing water stay on the upstream side of your boat and swim with your feet up near the surface.

CAUTION

If you swim with your feet down in flowing water, even fairly slow flowing water, and you encounter a snag, you could be pulled under the snag even if you are wearing a PFD. With luck you will pop up on the other side, but you could get stuck under the snag. It is better to pull yourself over the top as quickly as you can.

d. If you are in flowing water, swim with your feet near the surface, and if you encounter any obstacles (eg snags) pull yourself over the top of them very quickly and keep your body and feet as near to the surface as you can;

e. If you are in rapids and get caught in a stopper, and you cannot reach the surface or get out of the stopper, you will have to swim down to get out of the circulatory current keeping you in the stopper;

f. Swim your boat (and paddle) to shore, or if appropriate (eg sea kayaks or when kayaking a long way from a safe re-entry point), prepare the boat for a deep water entry and re-enter boat;

g. When approaching the shore/bank to empty your boat, be wary of snags and sharp objects on the bottom;

h. When emptying your boat, be sure to let the water flow out of the boat before attempting to lift it out of the water; and

i. Make sure that your boat and paddling equipment is secure and serviceable before getting back into the boat.

19. Injury. If you are injured and unable to paddle, (or can only paddle with difficulty), rest, slow down or stop paddling and get off the water. You should seek assistance if necessary. Furthermore, if your injury was caused through paddling, you should seek advice on your paddling style or equipment to see if you can make appropriate changes to avoid a recurrence.

20. Medical Condition. If you have a medical condition that prevents you from paddling or makes it difficult to paddle, stop paddling immediately, or slow down and rest as soon as it is safe to do so. Seek assistance and get off the water as soon as possible. Seek medical advice before paddling again.

21. Extremes of Temperature. If it is getting too hot, drink more water, splash yourself, cover up or get out of the sun. If necessary, stop paddling and get off the water. Be wary of heat exhaustion and hyperthermia. If it is getting too cold, put on more warm clothing including your PFD, stay out of the wind as much as possible, or stop, get off the water and put on dry and warm clothing. Be wary of hypothermia, and if hypothermia is suspected, seek help immediately, try to get as warm as possible, keep moving and stay awake until your body temperature comes back to normal.

22. Rough Conditions. If conditions are too rough, or likely to get too rough, get out of the weather and off the water as soon as possible. Ensure your PFD is properly fitted. Seek assistance if needed, and stay together until everyone is out of the rough conditions. If you are caught out in bad conditions, and cannot take shelter, it may be safer to keep the boat head-on, or close to head-on, to any large waves to lessen the likelihood of capsize. If a thunderstorm is approaching get off the water as soon as possible.

23. Broken Equipment. If you break a paddle or any part of the boat or equipment, you will need to get off the water and carry out repairs. Seek assistance if needed.

24. Loss of Direction. If you are lost, stop and seek assistance if possible. You should also back track (where possible) until you get your bearings again, look for landmarks.

25. Tiredness. If you are tired, rest, slow down or if possible, stop and get off the water. Seek assistance if necessary. Keep warm if cold, and if hypothermia is suspected, seek help immediately, try to get as warm as possible, keep moving and do not sleep until body temperature returns to normal.

FINAL RISK ASSESSMENT

26. Pre-screening and initial training will reduce the likelihood of some loss of control conditions for novices. However, with the correct selection of canoe, water conditions, supervision and short paddling times, novice paddlers are only likely to ‘lose control’ due to capsize, and this is only likely to result in them getting wet and swimming to shore or getting help to recover and get back in their canoe. After one or two initial paddling sessions, most novice paddlers should know enough of the basics to continue and advance at their own pace with only occasional supervision, or as requested. As a new paddler gains further experience and skill, they will be able to incrementally extend their paddling duration, cope with more demanding conditions, and even try higher skill craft. A paddler should never embark on a demanding paddling excursion unless they have properly trained and prepared themselves for the conditions likely to be encountered.

27. Through pre-screening, training and pre-checks an experienced paddler will significantly reduce the likelihood of being unable to paddle due to any of the loss of control conditions identified at para 5. If for any unforeseen reason a paddler does lose control due to one of the conditions identified at para 5, then experience and understanding on how to cope with the situation should reduce the consequences to very minor or insignificant except for very rare occurrences. Capsize or broken equipment are still the most likely loss of control conditions for an experienced paddler, and in most cases the paddler is not likely to be in any serious danger.

28. From the Cause and Consequence model shown in Annex A, and after the pre and post controls have been applied, all of the Minor, Moderate, Major and Catastrophic consequences have been reduced to risk factors of between 2 and 5, because they will only rarely occur. That is, low risk (1-4) except for moderate risk (5) where multiple deaths may (rarely) be the consequence. Similarly, all of the Insignificant consequences have been rated between 1 and 5, with moderate risk (5) only likely to occur where the paddler’s skill level is very low for the craft and conditions. For example, a novice learning to paddle, a paddler learning to paddle a higher skilled craft like a K1, or a paddler learning to take on more demanding paddling conditions like white water.

29. The Cause and Consequence modelling and risk assessment have emphasised the need for paddler initial training and education, and the need to take great care:

a. with Novices;

b. whenever a paddler’s skill level does not match the craft or conditions; and

c. when large groups of paddlers are involved.

OUTCOMES FOR CLUB RULES

30. As a result of this CSSMP, the FCC needs to ensure that:

a. all Club members undergo an initial pre-screening check as described at para 12, and that all paddlers are made aware that they must wear a PFD at all times while canoeing;

b. novice or inexperienced/unskilled paddlers are identified and given initial training covering the requirements defined at para 14;

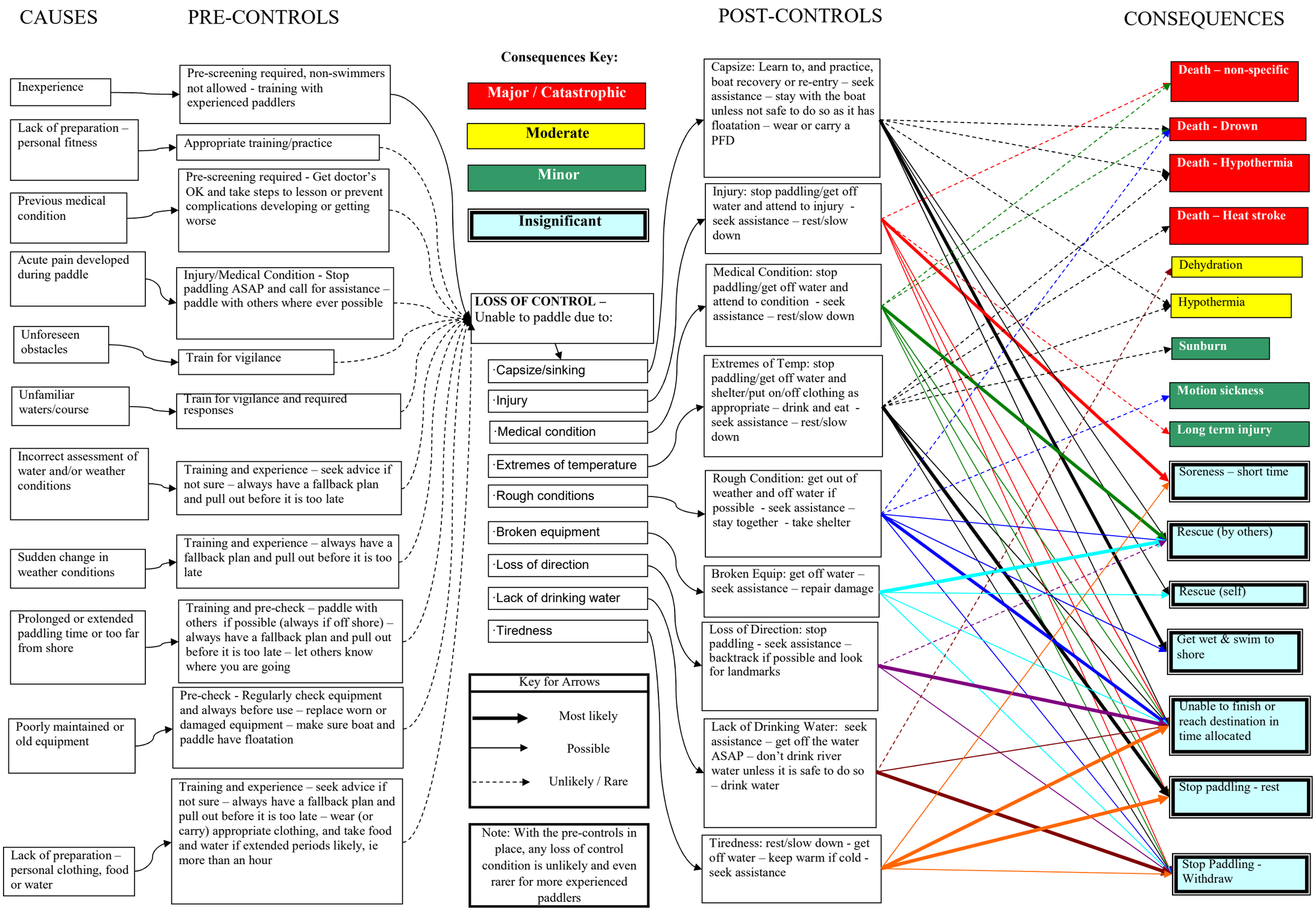
c. all Club paddlers are aware of the requirement to conduct pre-checks in accordance with para 15 before every paddle; and

d. all Club members are aware of the basic safety guidance outlined in paragraphs 17 to 25.

Annexes:

A. Cause and Consequence Model
B. FCC Safety Risk Assessment matrix.

CAUSE AND CONSEQUENCE MODEL FOR CANOEING



FCC SAFETY RISK ASSESSMENT MATRIX

1. The Safety Risk Assessment Matrix at Table 1 has been adapted from AS/NZS 4360 and is similar to the matrix used by Parks Victoria in Event Applications. However, although FCC have adapted this matrix model, FCC still believe that some discretion is still needed when applying this matrix across all canoeing environments and skill levels. For example, an inexperienced novice paddler is 'almost certainly' likely to capsize as first, especially if they tried to paddle a K1. However, knowing that capsize is almost a certainty, you can prepare for this by:

a. Having an experienced paddler overseeing the training and acting as a safety boat for the novice paddler;

b. Making sure that the novice is correctly attired and wearing a PFD;

c. Selecting a warm and calm day;

d. Selecting a sheltered spot, free from wind waves and with good and easy bank access for self recovery;

e. Staying close to the bank;

f. Restricting the training time to a minimum so as not to exhaust the novice; and

g. Coaching the novice on what to do in the event of a capsize.

2. By the effective application of pre and post controls and preplanning the likelihood is still going to be an 'almost certainty', but the consequence will be 'insignificant' with virtually no risk to the paddler. Rather than argue a case for a different risk assessment matrix, FCC has decided to accept the fact where novices, higher skill craft or more demanding paddling conditions are concerned a high level of risk is always likely to be present. Consequently, more preplanning, precaution and practice will be needed until the 'loss of control' condition no longer becomes a certainty. Similarly, where large groups of paddlers are concerned greater thought will need to be applied to rescue services and resources as well as fallback plans.

		Consequence				
		Insignificant No effect	**Minor** Medical treatment	**Moderate** Hospitalisation	**Major** Single death/ multiple injuries	**Catastrophic** Multiple deaths
Likelihood	x	1	2	3	4	5
Almost Certain Event expected to occur due to low paddler skill level for the craft or conditions to be encountered.	5	**Moderate** 5	**Significant** 10	**High** 15	**High** 20	**High** 25
Likely Event may occur reasonably often	4	**Low** 4	**Moderate** 8	**Significant** 12	**High** 16	**High** 20
Moderate Event may occasionally occur	3	**Low** 3	**Moderate** 6	**Moderate** 9	**Significant** 12	**High** 15
Unlikely Event unlikely to occur	2	**Low** 2	**Low** 4	**Moderate** 6	**Moderate** 8	**Significant** 10
Rare Event occurs only in exceptional circumstances	1	**Low** 1	**Low** 2	**Low** 3	**Low** 4	**Moderate** 5

Table 1 – Safety Risk Assessment Matrix adopted by FCC