

5x5 Matrix		CONSEQUENCE						
		C1-Minor	C2-Moderate	C3-Serious	C4-Major	C5-Catastrophic		
	L5-Almost Certain	Medium 11	High 16	Extreme 20	Extreme 23	Extreme 25		
۵	L4-Likely	Low 7	Medium 12	High 17	Extreme 21	Extreme 24		
ГІКЕГІНООІ	L3-Possible	Low 4	Medium 9	Medium 13	High 18	Extreme 22		
	L2-Unlikely	Low 2	Low 5	Medium 10	Medium 14	High 19		
	L1-Rare	Low 1	Low 3	Low 6	Low 8	Medium 15		

RISK ASSESSMENT AND CONTROL

Extreme category – must be controlled before race can commence.

High category must be controlled during event organisation stage.

If not possible to obtain a medium to low risk prior to event commencement, then advice/input is to be sought from the event committee or applicable external technical expertise.

RISK MATRIX DEFINITIONS

CONSEQUENCE of an event	Type of Potential Event (Incidents)		
occurring	Injury Harm	Environmental Damage	
	Fatality or significant permanent	Major impact (immediate and/or serious long	L5-Almo
C5-Catastrophic	disability (Life threatening event).	term harm), high potential for adverse publicity, potential EPA prosecution.	L4-Likel
C4-Major	Potential for permanent disability or life threatening event.	EPA reportable incident.	L3-Poss
C3-Serious	Injury requiring hospitalisation, but likely to make a full recovery.	Localised environmental impact.	L2-Unlik
C2-Moderate	Injury treated by Paramedics (not requiring hospitalisation).	Minor impact (immediate containment/control).	L1-Rare
C1-Minor	Injury treated by Event First Aiders.	Negligible impact.	

LIKELIHOOD	Frequency of an Event
L5-Almost Certain	Common or repeating occurrence, most likely
L4-Likely	Known to occur, or, "it has happened"
L3-Possible	Could occur
L2-Unlikely	Not likely to occur
L1-Rare	Practically impossible/rare occurrence



STEP NO	DETAILS	HAZARDS IDENTIFIED	CURRENT RISK LEVEL (E,H,M,L)	CONTROL MEASURES	RESIDUAL RISK LEVEL (M,L)
1.	Pre-event – Human				
1.1	Medical condition	There are no prerequisites for entering the race, but a participant's medical condition may affect their ability to safely participate in the race.	Medium 9	There is a statement within the entry form for the participants to declare themselves medically fit. If an incident occurs the emergency contact details that have been given for each craft and check point will be utilised to inform the Event Coordinator to call the ambulance and get medical equipment ready, rugs and clear crowd. Witness forms will be completed by First Aid Personnel.	Low 5
1.2	Ability to paddle	Paddlers under age 12 will have an adult/experienced escorting them within 50 metres.	Low 5	As a prerequisite all paddlers that have not yet had their 14 th birthday are expected to wear a life jacket. There is a 1 hour cut-off time for all participants at the first checkpoint. Paddlers will be instructed at race briefing what they are required to do to get help from safety crew or other paddlers. If a paddler requires assistance on the water they are to signal with their arm above their head to a safety craft. If a paddler sees someone else in distress/in need of assistance and there is no craft in immediate view, they are to stop and offer assistance and inform a	Low 3



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				safety craft when visible and safe to do so.	
1.3	Ability to swim	There is a prerequisite for all competitors to prove they have the ability to swim.	Low 5	The participants must prove they have the necessary swimming ability as part of the Swim/ Paddle Competency Self Assessment as part of the Online Entry Process. Refer 1.2	Low 3
1.4	Level of fitness	While there is a paddle competency requirement, the competitor's fitness will affect their ability to safely complete the course.	Low 5	Refer 1.1, 1.2 & 1.3	Low 3
1.5	Competitors not registered	While people may be on the starting list, they may not register on the morning making it more difficult to account for their presence on race day.	Low 4	 Paddlers require registration on the race day to receive their race number. This will ensure paddlers who do not register will be easily identified. A clear Registration Tent will be designated. To decrease confusion there will be no on the day entry. 	Low 2
1.6	Knowledge of Race	Knowledge of the race is important. The entrant must be cognitive of the	Low 7	Checkpoint officers will be given the updated list before leaving the start/meeting point. This will be used to tick off craft as they come through. Course description and map is presented on the event website and at	Low 4

HRA TO BE REVIEWED BY RACE DIRECTOR PRIOR TO EVENT START



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		size, scope and nature of race. They must be aware of what they are getting themselves into.		Registration area The race briefing will outline the course, water and weather conditions. For kayaks and ski paddlers under the age of 12 need to have an escort paddler, (appox 1 escort of each 5 under 12 paddlers) i.e. experienced parent paddler or friend. This is for safety and guidance down the course. Safety craft will be briefed on the entirety of the course for all categories of the race. Safety craft will assist in navigating any paddlers that lose direction or start to deter to a dangerous area.	
1.7	Dehydration	Competitors must be made aware that they need to continue to re-hydrate themselves before/during and after the race.	Low 7	Participants will be responsible for their own nutrition and hydration. Registration on the website will state water is required before, during and after the race. PA announcements will be made on morning of the race.	Low 4
2.1	O BE REVIEWED BY RACE DIRECTOR PRIOR	There is some possibility of over- crowding on the riverbanks while launching and retrieving craft.	Medium 12	Designated craft launch area and grid start area are to be clearly shown on a map at registration, signage and announced at the race briefing. Only those on next starting grid will be allowed within start area.	Medium 9

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				Parents, coaches and marshal volunteer to supervise craft getting on to the water in the designated areas if required.	
2.2	Parking	Due to the amount of competitors and craft that need to be delivered to the riverbank, traffic flow needs to be considered. Although many people will be getting dropped off or arranging car shuffles.	Low 7	Designated unloading and loading area at Start/Finish Line.	Low 4
2.3	Hazards on course	Rocks, snags and overhanging branches and fishing lines may be around the race area.	High 16	Event staff to scope the start, registration and meeting point for any hazards. If any are identified try to decrease risk and or use white and red plastic tape to identify risk. Tape colour will draw participants and spectators attention to any hazards. Warnings of all possible hazards will be given at the event briefing on the day and if severe a volunteer will stay at the site to steer people away.	Medium 12
3.	Pre-event - Vehicle				
3.1	No safety equipment	The possibility that support craft may be ill equipped to handle any rescue requirements must be considered as it could have serious consequences.	High 17	There will be a Safety Craft and Escort Paddlers briefing outlining basic requirements of their role prior to the event day. This includes skipper's	Medium 13



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				certificate for driving an power craft on the river. First aid kit contents on power craft, Safety craft are registered and deemed sea worthy. This will be checked at the pre event briefing	
3.2	Congestion of craft	With the requirement to have several safety boats, there movements could cause collision with other safety craft.	Low 7	Safety craft will remain at least 20m from paddle craft unless performing a rescue. Safety craft will be spread evenly along the competing field. As noted earlier they will have a zone to manage. Refer 1.6	Low 4
3.3	Paddle Craft without PFD or buoyancy	Paddle WA Event rules require all craft to have positive buoyancy and all paddlers U12 paddlers are required to wear a Life Jacket during the race. Adult paddlers are advised to wear a Lifejacket if non swimmers or have any doubts of their fitness or health.	High 17	Boats will be inspected prior to start; Guppy craft have a design specification, which includes a rear bulkhead.	Medium 10
4.	Event - Human				
4.1		Most events are run from morning to lunch. Paddlers and safety personal need to protect themselves from the effects of the sun.	Low 7	Sun Smart message displayed at registration table. Sun screen available to all competitors, pump containers will be at registration.	Low 4



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				Sun Smart management information provided at race briefing.	
4.2	Effect of Exercise	Competitors need to be informed of the effects of exercise. Failure to do so could result in serious injury.	High 17	Reinforce what is outlined in race registration on fitness. Refer 1.1, 1.2, 1.6 and 3.1.	Medium 10
4.3	Dehydration	Each competitor will be aware of fluid intake and quantities required to prevent dehydration.	High 17	Refer 1.7, 4.2	Medium 10
4.4	Lost Paddler	Paddler failing to pass through a checkpoint is the pre cursor to a major emergency.	Medium 10	There will be safety craft spread out along fleet and will be told to look for any craft pulling out. Paddlers will be instructed to notify a safety craft if they pull out or do not wish to continue.	Low 6
4.5	Overcrowding	Overcrowding of craft on start line may cause collisions with other competitors or moored boats. Injury to people or damage to property likely.	Low 7	Competitors sent off in grids to reduce size of field on start line. Various classes of craft participating in event to be segregated at start to allow paddlers of similar speed to stay together.	Low 4
4.6	Lack of Containment of Competitors	Many events are held on enclosed water where at paddlers and official can be seen at the same time.	Low 7	In Open waters various classes of craft participating in the event to be segregated at start to allow paddlers of similar speed to stay together.	Low 4



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4.7	Identification of Paddler	Not being able to identify paddlers could lead to the assumption the paddler is missing.	Medium 10	Refer 4.4 Large numbers on bibs to be worn by one competitor per craft. Inform paddlers to call out number if asked by safety craft, noted in safety briefing.	Low 6
5.	Event - Environment				
5.1	Sun exposure	Causing dehydration and sunburn.	Medium 11	Refer 4.1 and 4.3	Low 7
5.2	Cold	If conditions are rough and paddlers keep capsizing The competitors may become hypothermic.	High 16	Safety craft will have blankets on board, Refer 4.2	Medium 9
5.3	Heat	If it is a hot day competitors may suffer the effects of hyperthermia.	High 16	Refer 4.2	Medium 9
5.4	Submerged obstacles	If a craft should hit a submerged obstacle it could be damaged and sink. Could lead to competitor being in water for a period of time.	Low 4	Safety craft will be instructed to pick up any paddler in water. All competitors are advised to assist and will not be given a time penalty for their efforts. Submerged rocks and current will be pointed out at race briefing for the tricky parts of the course and competitors advised how to go down. Refer 5.2	Low 2



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5.5	Winds/Forecast	Strong winds and bad weather forecast can place paddlers in danger, from being swept up on rocks or hypothermia.	High 17	If wind or forecast is unfavourable the course may be changed. Possibility of changing course described in entry form. Refer 5.2	Medium 13
5.6	Current/waves	Strong currents may cause craft to collide or capsize.	High 16	This is explained in the race information on website, registration and race briefing. Refer 4.2 and 5.5	Medium 9
6.	Event - Vehicle				
6.1	Poor Skippers	If safety and support craft have bad skippers they could injure competitors whilst trying to help them.	High 17	Ensure all Skippers have license to drive and get a copy of the Skippers Ticket. Skippers will only be appointed if experienced in rescue, for example Surf Life Saving or Sea Rescue or Sport specific rescue crew. Information on how to supervise paddlers, extraction of paddler and craft from water, first aid kits and responsibilities of a skipper will be discussed at pre event brief and reinforced at race briefing.	Medium 13
6.2	Poor Paddlers	Poor paddlers can be a risk to	High 17	Refer 1.2	Medium 13

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		themselves.			
6.4	Capsize – Paddle Craft	Crafts capsize due to weather and wave conditions, fatigue or inexperienced paddlers.	High 17	Refer 4.2, 5.2 and 6.2	Medium 13
6.5	III prepared Craft		High 17	Inspection of all craft during registration unless in a team, then the craft inspection will be done at the check point.	Medium 10
		Any paddle craft not prepared sufficiently could lead to problems when on the water.		Refer 3.3 If not to standard, will not be able to paddle.	
6.6	Course Boundaries	Due to the length of the course and potential hazards, craft could find themselves in harms ways.	Low 7	Map provided with the entry form. Course defined during race briefing.	Low 4
6.7	Boat Congestion		Extreme 21	Refer 3.2 and 4.5.	Medium 14
		There will most likely be other pleasure and commercial craft on the river and they must be considered to avoid incidence that could lead to damage of property or injury.		Race briefing will include a warning to give way to pleasure craft and to stay to the right hand side of the river as best as possible.	
		Rowing craft cannot see where they are going		All rowing club in the area notified that we are racing. Event on Aquatic Council Calendar.	
6.8	Boat traffic on river	There will be other event craft on the river and they must be considered to avoid incidence that could lead to damage of property or injury.	Extreme 21	Refer 6.7.	Medium 14



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Post-event - Human					
7.1	Exhaustion/cramps	The possibilities of competitors over heating or becoming cold are a problem if the weather is very hot or wet and windy.	High 16	Each Check point will have towels/blankets with their 1st aid kit. Refer 5.2 and 5.3.	Medium 9
		Due to the strain on the body of such a demanding event cramps and/or exhaustion of competitors is a very real possibility.	High 16	Refer 4.2.	Medium 9

