



Risk Assessment			
Risk Assessment for the activity of	Artificial Whitewater Courses	Date	13/09/23
Unit/Faculty/Directorate	Southampton University Canoe Club	Assessor	Connor McFarlane (President) Ayla Kuloglu (President) Edward Charleton (Safety Secretary) Abigail Whitehead (Kit Secretary)
Line Manager/Supervisor		Signed off	
Reviewed by SQEP:	Euan Donovan-Hill	Comments:	British Canoeing Level 1 coach with 7 years of experience, WWSR and 2 day first aid

Trips that take place on artificial white water courses (for clarity this does not include the river Tryweryn, which is covered by our river trips risk assessment).

Activities that take place include coaching, practice of skills such as bracing and rolling, paddling on graded river features, practising paddling technique and swimming ability.

Dates may be added as the year progresses and these will be communicated to members, which may take place on any white water course in the UK. Paddlers will only be allowed to paddle courses which they possess an appropriate level of skill and experience for in the opinion of the committee.

Provisional dates to include scheduled trips on:

Nene Whitewater Centre: 04/11/23

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Numbers / Groups: On courses where the course operator provides safety staff and/or the course is a loop with a pool at the bottom (eg. Cardiff) , each group taken on the course will have 1 SQEP leader (equivalent to top end of river trip intermediate) per every three novices, and at least one person present with WWSR or equivalent to provide safety cover.

Where a course does not have additional safety staff provided and/or continues into a natural river (eg. Nene under normal circumstances), bank cover safety will be organised, where the person on bank has the relevant rescue qualifications e.g WWSR, groups on this type of course must then have 1 SQEP per group. Intermediate paddlers may form self-sufficient peer paddling groups and look after each other. All ratio's may be disregarded for events where comprehensive safety is provided by the organisers (eg. NSR).

Where a leader holds a recognised British Canoeing qualification and is operating in remit for that qualification, they may operate on a ration line with their qualification up to grade 2(3) as recommended in the British Canoeing Guidance. Due consideration should be given to the relative experience levels of group members and conditions on the day when this arrangement is used.

Where mixed craft are being used, the group leader should additionally have demonstrated competence in rescuing the other craft in use.

We define a Beginner as someone who is relatively new to white water, who may not always be able to control where they position their kayak or perceive hazards. They frequently swim and require close supervision.

An intermediate is anyone who can accurately control their kayak on white water. At the bottom end of this category, they may still swim however will be able to assist with their own rescue. At the top end of this category, any swims will be rare with a reliable roll, they will hold WWSR or equivalent experience and will be able to assist with rescues mid-course. All intermediates must be capable of performing a deep-water rescue at the bottom of the course.

We may contract out the leadership of river groups to external companies, in which case their risk assessment and insurance will take precedence for the group. However, we will exercise due diligence by asking to see their risk assessment to confirm that appropriate risk control measures are in place.

Medical history recorded when membership is paid. Any changes to medical history are recorded once change has been notified.

All coaches will be asked to read the risk assessment and the current acting safety secretary will remind them not to act outside of its remit.

Guidance/standards/Reference documents:

This risk assessment was written using guidance from:

1. SUSU
2. <http://www.hse.gov.uk/Risk/faq.html>
3. <https://www.britishcanoeing.org.uk/uploads/documents/British-Canoeing-Environmental-Definitions-Deployment-Guidance-for-Instructors-Coaches-Leaders-Apr18-v1-1.pdf>



Checks Schedule:

All kit will be checked twice a year in the club inventories. Any damage is reported, and kit is repaired or replaced before it is used again. The Kit secretary is responsible for ensuring the inventories are carried out.

Before any novice gets onto the course, the committee present check that kit is worn and fitted correctly and is suitable for purpose.

Safety kits and shelters taken on courses are checked after each use and maintained by the safety secretary. Each leader running a group will be offered a safety kit and group shelter to take in their kayak whilst on the course, but at least two safety kits and shelters will be taken by groups on the course.

Annual Safety Talk is given at the beginning of each academic year. Attendance, or an induction with a SQEP committee member covering the same content, is compulsory for all members. Attention is drawn to whitewater safety procedures within this talk. No member is allowed on any trips unless they have attended the safety talk.

Competence Requirements:

All committee members and coaches have the responsibility of completing all checks scheduled competently

Leaders are responsible for adhering to this risk assessment within their groups.

Those running and helping to run the trips have had suitable kayaking experience to assess the quality of kit.

White Water Safety and Rescue (WWSR) or equivalent possessed by all people leading novices. Record is kept by the club. Safety secretary holds responsibility to ensure this list is regularly updated.

In order for a member to lead novices on an artificial course, they must be approved by the committee- as a guide they will hold WWSR, any swim will be an incredibly rare occurrence, and they will be capable of coaching three novices down the course with due regard to other users.

Risk Assessments Linked:

Where an external contractor is used to run a group on a trip, the management of the group falls under their operational procedures, risk assessments and insurance. However, we will conduct due diligence when appointing to include ensuring their risk assessments are suitable and they hold the appropriate qualifications.

Where we are taking part in an organised event such as NSR or equivalent, the event organisers will have their own risk assessment and safety management plan in place.

In the event that we are required to provide our own bankside safety on an artificial course, we will ensure that all safety personnel are appropriately trained in water safety and rescue techniques. We will engage only WWSR (White Water Safety and Rescue) trained individuals who are qualified to provide bankside safety support on artificial courses. All bankside safety personnel will have demonstrated competence in throwline use and other rescue techniques, and will be equipped with the necessary safety equipment, including throwlines and personal protective equipment.



PART A										
(1) Risk identification			(2) Risk assessment				(3) Risk management			
Hazard	Potential Consequences	Who might be harmed (user; those nearby; those in the vicinity; members of the public)	Inherent			Control measures (use the risk hierarchy)	Residual			Further controls (use the risk hierarchy)
			L	I	S		L	I	S	
Transmission/ Contraction of Covid 19	Members contracting COVID-19 and falling ill	Everyone	3	2	6	<p>All members should be aware of the current COVID-19 guidelines laid out by the government and we expect them to abide by these.</p> <p>If a member is displaying symptoms or have tested positive for COVID-19, they will be asked not to attend.</p>	2	2	4	

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Overexertion whilst paddling	Overheating, Hyperthermia and Dehydration	The Paddler	3	4	12	<p>Experienced kayakers are trained to look for common signs of discomfort in other paddlers</p> <p>Club members are encouraged to take water with them in boats and communicate if they are beginning to feel too hot</p> <p>Paddlers will be informed on the location of facility changing rooms/shelter if they wish to get sheltered or changed.</p> <p>Club members are advised on what the weather/water conditions are like before leaving for the trip, and to therefore pack appropriately</p> <p>River leaders are advised to carry additional fluids for anyone suffering from overheating.</p>	2	3	6	<p>First aiders will be present in river groups to help mitigate and prevent the onset of hyperthermia.</p> <p>Welfare secretary to have attended SUSU training to be better equipped help the people affected in the aftermath.</p>
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Capsizing	<p>Head injuries as a result of hitting blocks, the bottom of the course or other debris underwater</p> <p>Bumps, cuts, grazes and other injuries from blocks or other debris</p>	The Paddler	3	4	12	<p>Members must attend the annual safety talk and be briefed before entering the water at the beginning of a trip, if there are reasonable levels of confidence in the paddlers abilities then they will be allowed to paddle.</p> <p>Ensure that PPE such as buoyancy aids and helmets are always worn when paddling</p> <p>Paddlers are advised to tuck forward when capsizing to help mitigate injury</p> <p>There will be a first aid trained person in every river group, and at least two first aiders on a trip, who are trained in recognising the symptoms of a concussion.</p>	2	2	4	
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<p>Capsizing resulting in swimming</p>	<p>Harm from exiting a boat unintentionally, cuts on feet from sharp objects on the course when climbing up the sides after a swim.</p>	<p>The Paddler</p>	<p>3</p>	<p>2</p>	<p>6</p>	<p>Make reasonable endeavours to ensure that appropriate footwear is worn throughout the sessions in and out of the boat.</p> <p>Advise paddlers to be aware of where they put their hands when climbing up the side</p> <p>Discussing safe swimming with members and how to safely exit a capsized boat, to ensure that no injuries are sustained, or water ingested.</p> <p>On courses where safety cover is provided, paddlers are to look out for assistance and instructions from water watchers for safe places to exit the course.</p>	<p>2</p>	<p>2</p>	<p>4</p>	
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<p>Capsizing resulting in swimming</p>	<p>Hypothermia</p>	<p>The Paddler</p>	<p>3</p>	<p>4</p>	<p>12</p>	<p>Experienced kayakers are trained to look for common signs of hypothermia in other paddlers</p> <p>Warm up exercises can be conducted or cold paddlers can be placed in survival bags/shelters to prevent the onset of hypothermia.</p> <p>Paddlers will be informed on the location of facility changing rooms/shelter if they wish to get sheltered or changed.</p> <p>Club members are advised on what the weather/water conditions are like before leaving for the trip, and encouraged to bring thermals with them</p> <p>Members are encouraged to communicate if they are beginning to feel cold</p>	<p>2</p>	<p>3</p>	<p>6</p>	<p>First aiders will be present in river groups to help mitigate and prevent the onset of hypothermia.</p> <p>Welfare secretary to have attended SUSU training to be better equipped help the people affected in the aftermath.</p>
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			L	I	S		L	I	S	
			k	e	a		k	e	a	
			i	m	p		i	m	p	
			h	o	o		h	o	o	
			d	d	e		d	d	e	
Capsizing resulting in swimming	Psychological harm	All paddlers, but particularly novice paddlers	3	2	6	<p>Paddlers are encouraged to rest post swim to ensure they are okay, and reassurance is given by leaders as needed.</p> <p>Changing rooms and shelter to be pointed out in case paddlers wish to get off the course.</p>	3	2	6	<p>Welfare secretary to have attended SUSU training to be better equipped help the swimmer in the aftermath.</p> <p>Action plan to be put in place for checking in on the mental wellbeing of the paddler/anyone affected, especially if an injury has occurred.</p>



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			L i k e l i h o o d	I m p a c i t	S c o r e		L i k e l i h o o d	I m p a c i t	S c o r e	
Live Baiting - Rescue by Intentional Full Body Immersion into water	Hypothermia, Injury from hitting sub-surface objects, entrapment, drowning, head injury, shock, broken bones, collision with casualty	The Rescuer The Resuee	2	5	10	Livebaiting will only be attempted after non immersion rescues have been exhausted or if a livebait is the only viable method of rescue. Only persons with white water safety and rescue should attempt a full body immersion rescue to prevent injury to themselves and the paddler. Normal paddling PPE must be worn (helmet, WW buoyancy aid)	1	5	5	Welfare secretary to have attended SUSU training to be better equipped help the rescuee or the rescuer in the aftermath. First aiders will be present in river groups to deal with any injuries as a result of a live bait



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			L i k e i h o d	I m p a c t	S o r e		L i k e i h o d	I m p a c t	S o r e	
Seal Launching (Entering the water from a height)	Various impact injuries	The Person Seal Launching Those in vicinity of the paddler	3	4	12	Seal launch spots to be chosen such that there are no blocks underneath which are likely to cause the kayak to overturn while entering the water or cause injury Paddlers are advised that if there is no line of sight available, then they must get assistance with spotting their landing from another paddler Paddlers are taught good bracing technique to reduce risk of shoulder dislocation on impact with the water.	2	3	6	First aiders will be present in river groups to deal with any injuries as a result of a collision with rocks or another paddler



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			L i k e l i h o o d	I m p a c t	S c o r e		L i k e l i h o o d	I m p a c t	S c o r e	
Attempting to prevent a capsize	Shoulder injuries and dislocations	The Paddler	2	3	6	<p>Correct technique and hazards taught during initial pool sessions</p> <p>All members are to point out to a paddler if they identify a bad high brace so technique can be rectified.</p> <p>At least one first aider who knows how to deal with a dislocation will be present on the trip. Triangular bandages in first aid kits.</p> <p>Previous history of relevant injuries (I.e. past dislocations) to be established by leaders/committee before kayaking.</p>	1	3	3	



<p>Entrapment - Capsizing and not being able to roll up</p> <p>Not being able to get out of boat</p> <p>Getting stuck under water and not getting out</p>	<p>Entrapment resulting in Drowning</p>	<p>The Paddler</p>	<p>2</p>	<p>5</p>	<p>10</p>	<p>Ensure that all members have performed a spray-deck test before any other paddling to confirm they know how to and are able to safely exit their boat.</p> <p>Briefed on potential hazards such as what can cause entrapment- what to do in these situations, prior to going onto the water.</p> <p>Advised on how to rescue safely. Only experienced members trained to provide a rescue are encouraged to do so.</p> <p>The safety of Self (rescuer) and the group is to be ensured before conducting rescues.</p> <p>Members to be instructed to bang loudly on their boats if requiring a “hand of God” or T rescue</p> <p>Kit to be checked that it is appropriate for the paddler (boats of an appropriate size and are riverworthy)</p>	<p>1</p>	<p>5</p>	<p>5</p>	<p>Where any entrapment/recirculation is a more likely possibility, safety will be setup to reflect the feature/hazard.</p> <p>Novices to be staggered when paddling down features to avoid multiple rescues needing to be performed at one time</p> <p>Leaders will be encouraged to use signals to communicate when it is safe for a paddler to continue</p>
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<p>Ingesting or exposure to bacteria/viruses in river water (for clarity course water will sometimes be pumped from local rivers)</p>	<p>Contraction of Weil's disease, Leptospirosis, Hepatitis A and other waterborne diseases</p>	<p>The Paddler</p>	<p>3</p>	<p>3</p>	<p>9</p>	<p>Advise everyone to wash hands thoroughly after being on the water, or handling kit.</p> <p>Ask club members prior to paddling if they have any cuts, the club will provide plasters from the safety kits as needed which can be used to cover cuts.</p> <p>Members are advised to read up on various illnesses that can be caused because of submersion in water; discussed at the annual safety talk.</p> <p>Paddlers to be briefed on the symptoms of Weil's disease and Hepatitis A and the actions to take themselves if concerned.</p> <p>Illnesses contracted from paddling to be monitored and reported, collaborating with other water users, course management and the EPA to reduce risk of infectious spread if required.</p>	<p>2</p>	<p>3</p>	<p>6</p>	<p>Club members are advised to seek medical advice from 111 or a GP if they show symptoms and to disclose that they have been paddling</p>
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			L i k e l i h o o d	I m p a c t	S o r e		L i k e l i h o o d	I m p a c t	S o r e	
Carrying Boats	Injury to back and/or body	Person carrying boat and/or people around them	3	2	6	<p>Paddlers are advised to lift boats utilising safe manual handling techniques and carry them on their shoulders when carrying boats on their own. If they do not feel comfortable carrying boats on their own they are encouraged to carry them in pairs.</p> <p>People carrying boats are advised to be aware of their surroundings and anyone in an area where boats are carried are told to be aware of people carrying boats around them</p>	2	2	4	



<p>Using Rescue Equipment and throwlines</p>	<p>Rope can cause injury through rope burn when handled inappropriately.</p> <p>Rope can be snagged in water and if attached incorrectly can cause entrapment or death through drowning.</p>	<p>The Swimmer and Rescuer</p>	<p>3</p>	<p>3</p>	<p>9</p>	<p>Members must attend the annual safety talk which will cover how to accept a throwline</p> <p>In courses with provided safety cover, the course staff will perform throwline rescues. On courses without, It is ensured that only people who have been trained in the use of throwlines should attempt to use them.</p> <p>Club throwlines are stored unpacked and re packed before they are used on the water to ensure there are no snags.</p> <p>New members are taught how to accept a throwline in the water (by catching it, rolling onto back, and holding it over one shoulder).</p> <p>All rope users must never let the rope slide through their hands, it should always be passed from one hand to another.</p>	<p>2</p>	<p>2</p>	<p>4</p>	
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					<p>Rescuers must always put their own safety (and the rest of the group first). An appropriate rescue space must be chosen, and the immediate area downstream should be assessed.</p> <p>Rescuers should consider getting assistance with the holding of a line under tension.</p> <p>Ropes should never be wrapped around a hand to avoid entrapment.</p> <p>When throwlines are used it is also important that the areas around the throwline are clear from other people in order to avoid injury.</p> <p>Rescuers and swimmers should be ready to release the rope if the tension gets too great or the swimmer is being held underwater.</p> <p>Time permitting, rescuers should also ensure there are no metal items (e.g. Karabiners) that could hit a swimmer on the end</p>				
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Collision with rafts	Various impact injuries Potential for entrapment underneath	The Paddler	3	2	6	<p>Raft operators at courses will be SQEP under the risk management process of the course operator.</p> <p>Leaders to ensure that appropriate spacing with rafts is left at the top of the course when taking beginners down.</p> <p>All paddlers to be briefed to look up and downstream before leaving an eddy and always leave an eddy between themselves and a raft.</p> <p>Paddlers to be briefed on etiquette rules, rafts have both upstream, downstream and playing priority.</p> <p>If making contact with a raft from upstream, members will be advised to keep their upstream edge up as if it was a rock and lean into it.</p>	2	2	4	First aiders will be present on the trip to deal with any injuries as a result of a collision with rafts
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			L i k e l i h o d	I m p a c t	S o r e		L i k e l i h o d	I m p a c t	S o r e	
Collision with other paddlers	Various Impact Injuries	Both the paddler coming downstream and the paddler on the feature	4	2	8	<p>Club members will be informed that paddlers have downstream priority and to be aware of other paddlers when either exiting eddies or playing on a wave/feature.</p> <p>If there is someone playing on a feature, inform club members to attempt to eddie out and to avoid going down the feature if another paddler is on it, as not all members of the public follow course etiquette.</p>	3	2	6	First aiders will be present on the trip to deal with any injuries as a result of a collision with another paddler



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			L i k e l i h o o d	I m p a c t	S o r e		L i k e l i h o o d	I m p a c t	S o r e	
Poisonous Plant life on river bank	Paddlers may come in contact with poisonous plants such as hogweed on the riverside	The Paddler	2	2	4	If it is seen group leaders will inform paddlers to steer clear of it and use other parts of river bank	1	2	2	



PART B – Action Plan

Risk Assessment Action Plan

Part no.	Action to be taken, incl. Cost	By whom	Target date	Review date	Outcome at review date

Responsible manager's signature:

Print name: Edward John Charleton

Date:
13/09
/23

Responsible manager's signature:

Print name: Connor McFarlane

Date: 13/09/23





Assessment Guidance

1. Eliminate	Remove the hazard wherever possible which negates the need for further controls	If this is not possible then explain why	
2. Substitute	Replace the hazard with one less hazardous	If not possible then explain why	
3. Physical controls	Examples: enclosure, fume cupboard, glove box	Likely to still require admin controls as well	
4. Admin controls	Examples: training, supervision, signage		
5. Personal protection	Examples: respirators, safety specs, gloves	Last resort as it only protects the individual	

L I K E L I H O O D	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
	1	2	3	4	5	
	IMPACT					

Impact		Health & Safety
1	Trivial - insignificant	Very minor injuries e.g. slight bruising
2	Minor	Injuries or illness e.g. small cut or abrasion which require basic first aid treatment even in self-administered.
3	Moderate	Injuries or illness e.g. strain or sprain requiring first aid or medical support.



4	Major	Injuries or illness e.g. broken bone requiring medical support >24 hours and time off work >4 weeks.
5	Severe – extremely significant	Fatality or multiple serious injuries or illness requiring hospital admission or significant time off work.

Risk process

Identify the impact and likelihood using the tables above.
Identify the risk rating by multiplying the Impact by the likelihood using the coloured matrix.

If the risk is amber or red – identify control measures to reduce the risk to as low as is reasonably practicable.

If the residual risk is green, additional controls are not necessary.

If the residual risk is amber the activity can continue but you must identify and implement further controls to reduce the risk to as low as reasonably practicable.

If the residual risk is red **do not continue with the activity** until additional controls have been implemented and the risk is reduced.

Control measures should follow the risk hierarchy, where appropriate as per the pyramid above.

The cost of implementing control measures can be taken into account but should be proportional to the risk i.e. a control to reduce low risk may not need to be carried out if the cost is high but a control to manage high risk means that even at high cost the control would be necessary.

Likelihood	
1	Rare e.g. 1 in 100,000 chance or higher
2	Unlikely e.g. 1 in 10,000 chance or higher
3	Possible e.g. 1 in 1,000 chance or higher
4	Likely e.g. 1 in 100 chance or higher
5	Very Likely e.g. 1 in 10 chance or higher

