

RISK ASSESSMENT MATRIX.

	<i>Severity of Outcome</i>		
<i>Probability of Accident.</i>	<i>Slightly harmful. (Low)</i>	<i>Harmful. (Medium)</i>	<i>Extremely harmful. (High)</i>
<i>Highly unlikely. (Low)</i>	Trivial Risk	Tolerable Risk	Moderate Risk
<i>Unlikely (Medium)</i>	Tolerable Risk	Moderate Risk	Substantial Risk
<i>Likely (High)</i>	Moderate Risk	Substantial Risk	Intolerable Risk

RISKS AND ACTIONS.

RISK LEVEL	ACTION AND TIMESCALE
Trivial	No action required.
Tolerable	No additional controls are required. Consideration may be given to a more effective solution or improvement.
Moderate	Efforts should be made to reduce the risk. Risk reduction measures should be implemented within a defined period. Where the moderate risk is associated with harmful/serious consequences further assessment may be necessary to establish more precisely the likelihood of harm as a basis for determining the need for improved control measures.
Substantial	The activity should not be started until the risk has been reduced. Considerable resources may have to be allocated to reduce the risk. Where the risk involves activity already in progress, urgent action should be taken.
Intolerable	Activity should not be started or continued until the risk has been reduced. If it is not possible to reduce risk even with unlimited resources activity has to remain prohibited.

Acknowledgment: Risk assessment matrix and Risks and Actions matrix – from Henley Open Events Long Distance Races. Hazards, Possible outcomes, planned action to control, boat risk – 2003 South Coast Championships, Christchurch R. C. Upper Thames Small Boats. Oxford Academicals Rowing Club Risk assessment.

RISK (Possible hazard)	Possible Outcome. (Risks involved)	Probability H/M/L	Severity H/M/L	Risk Level	Planned Action to Control. (Preventative Action.)	Person(s) Responsible
ON THE SEA.						
Rough sea conditions.	Sinking/Swamping/ Exhaustion/capsize*.	Medium	Medium	Moderate	Junior/Novice competence chart to be considered before outing. Dangers hi-lighted as part of the induction process and on the Water Safety Notice-board. Condition of boat to be checked before outing – in particular heel-restraints & bailers. Risk assessment before outing – if in doubt – don't go out.	Coach CWSA/Rowing Captain/Coach Crew Coach
Other water users (including other crews/scullers)	Collision/sinking/ swamping/capsize*. Skeletal and soft tissue injury or knocked unconscious.	Medium	Medium	Moderate	Junior/Novice competence chart to be considered before outing. Dangers hi-lighted as part of the induction process and on the Water Safety Notice-board. Condition of boat to be checked before outing – in particular heel-restraints, bailers and bow balls on sculls. Risk assessment before outing – if in doubt – don't go out. Rowers taught to stay with boat. Checked and stocked First Aid kit available.	Coach CWSA/Rowing Captain/Coach Crew Coach Coach/CWSA CWSA
Capsize*	Immersion, feet caught, hypothermia, hit by blade, drowning.	Low	Medium	Tolerable	Junior/Novice competence chart to be considered before outing. Dangers hi-lighted as part of the induction process and on the Water Safety Notice-board. Capsize drill & swim test.	Coach CWSA/Rowing Captain/Coach CWSA

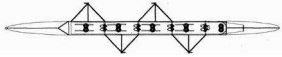
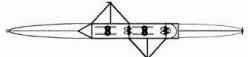
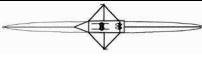
RISK (Possible hazard)	Possible Outcome. (Risks involved)	Probability H/M/L	Severity H/M/L	Risk Level	Planned Action to Control. (Preventative Action.)	Person(s) Responsible
On the sea cont...						
Over-exertion (illness/injury in boat).	Pulled muscles, Hyperventilating, Cramp, Hypothermia.	Low	Low	Trivial	Dangers hi-lighted as part of the induction process and on the Water Safety Notice-board. Rowers to warm-up, warm-down and stretch. Checked and stocked First Aid kit available.	CWSA/Rowing Captain/Coach Coach/Crew CWSA
Running aground.	Damage to boat, injury to person.	Medium	Low	Tolerable	Checked and stocked First Aid kit available.	CWSA
Launching/recovery	Swamping/capsize.	Medium	Medium	Moderate	Rowers taught to stay with boat.	Coach/CWSA
BOATING LAKE						
Capsize*	Immersion, feet caught, hypothermia, hit by blade, drowning, and infection.	Medium	Low	Tolerable	Capsize drill & swim test. Coach to carry throw-line. Safety Bag with First-Aid kit and Exposure Blankets to be taken to Lake. Beginners to have line ashore attached to boat. Crew to shower after immersion.	CWSA. Coach. Crew.
Other Water Users/Other Club boats.	Collision/sinking/ swamping/capsize*.	Low	Low	Trivial	Coach to carry throw-line. Crew to shower after immersion.	Coach. Crew.
ONSHORE/LAND						
Promenade and sea wall.	Fall and/or injury when passing boats and equipment/jumping over wall and/or whilst being loaded/unloaded from boat trailers. Items obstructing path.	Low	Low	Trivial	All crews to be instructed on proper lifting technique.	Coach

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Beach	Soft sand/broken glass/buried objects.	Low	Low	Trivial	Suitable shoes to be worn. Dangers to be hi-lighted as part of induction process.	Crew Coach/Rowing Captain/CWSA.
Road and Lane	Obstructions from parked cars/potential for traffic accident. Speeding Cars (Boy Racers)	Low	Medium	Tolerable	Dangers to be hi-lighted as part of induction process. High Visibility clothing to be worn at night. Juniors to be supervised.	Coach/Rowing Captain/CWSA. Crew. Coach
Appley Park & area in front of Clubhouse	Broken glass, obstructions. Other users.	Low	Low	Trivial	First Aid equipment available.	CWSA
Travel to training or competition.	Car/Minibus accident.	Low	Substantial	Medium	Appropriate license in place. Minibus drivers experienced and / or trained and tested. All passengers to wear seatbelts.	RSC Driver
Boat transport.	Trailer overturning.	Low	Substantial	Medium	Appropriate license in place. Experienced/trained drivers used to tow. Trailer Service and equipped. ARA Guidelines to be followed.	RSC/Driver Rowing Captain/RSC
Training and/or competing on unfamiliar water.	Local environmental conditions and unfamiliarity with hazards. Borrowed equipment being unsafe.	Low	Low	Trivial	Local information on navigation hazards to be obtained and crew briefed. Local weather report to be obtained. Equipment to be inspected for compliance with ARA Water Safety code.	Crew/Coach
CLUB/BOAT HOUSE						
Equipment stored in boat bays.	Trip hazard, collision with protruding riggers.	Low	Substantial	Medium	All boats to be properly racked. Only boats being rigged or repaired to be stored on trestles. First Aid equipment available. Weights to be stored away after use	Rowing Captain. CWSA Crew/Coaches, Rowing Captain.

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Clubhouse/Boathouse cont.. Equipment stored in boathouse cont..					– and NEVER left on bars and/or stands in boathouse.	
Lifting Boats	Back injury, muscular, skeletal or abrasion injury	Low	Medium	Tolerable	All crews to be instructed on proper lifting technique. Novice/Junior boats to be stored on easy access racks	Coaches Rowing Captain.
Ergometers	Overexertion	Low	Medium	Tolerable	Rowers to warm-up, warm-down and stretch. Coaches to advise on appropriate level of training.	Crew/Coach. Coach.
Weights	Back injury, pulled muscles, other soft tissue damage. Trapping, asphyxiation (Bench press) Heightened risk of major soft tissue or back injury on failure (back squat)	Low	Medium	Tolerable	Proper lifting technique to be taught. Rowers to warm-up, warm- down and stretch. Suitable clothing and non-slip foot wear. Only athletes approved by RSC to use weights; heavy lifts to be avoided until technique is satisfactory. Floor area to be kept clear, weights to be stored after use. Spotters to be present when lifting. First Aid Kit available.	Crew/Coach/ RSC. CWSA.
Circuits	Pulled muscles, over exertion (as above)	Low	Medium	Tolerable	Rowers to warm-up, warm-down and stretch. First Aid Kit available.	Crew/Coach CWSA.

CWSA = Club Water Safety Advisor. RSC = Rowing Sub Committee.

BOAT RISK ASSESSMENT.

Boat description and number in crew.	Diagram	Collision Risk	Capsize Risk	Sinking/Swamping Risk	Risk Level.
Coastal Coxed Four. C4+ 4 Rowing + Cox = 5.		Low – has coxswain so is steered. Fast.	Low – four blades so stable – main risk is equipment failure.	Medium – limited buoyancy will sink to rigger height.	Tolerable.
Coastal Coxless Pair/Double. C2-/C2x- Two rowing/sculling.		High – no coxswain steered by one of crew. One can pull the other round. Relatively slow.	Medium – one blade each side – high risk is equipment failure.	Medium - limited buoyancy.	Moderate.
Coastal Single Scull. C1x One Sculling.		Medium – no coxswain – steered by sculler. Relatively slow.	High – one scull each side and not very stable.	Low – very buoyant.	Tolerable.

NOTES:

- 1) Prepared assuming same level of skill present in each boat, plus where applicable reasonably trained coxswain.
- 2) Risk multiply for Novice/inexperienced crew and coxswains and in rougher conditions.

Dangers hi-lighted as part of the induction process and on the Water Safety Notice-board.