## **Queen Mary Sailing Club: Risk Assessment Main**

last updated: 23/3/2024

Ross Malloy (Assistant Manager & Sailing Principal) & Tony Bishop (Club Secretary)

All risks are further minimised by the supervision structure within the daily running of Queen Mary, as per the *QM Standard Operating Procedures*, *QMSC Club Byelaws* and other policies. The term 'staff' below is a generic term for all levels of shore-based and on-water staff, volunteers and helpers. (Abbreviations used: AMS (Assistant Manager Sailing), SUP (stand-up paddleboarding), NGB (National Governing Body), PBL2 (Powerboat Level 2), SOP (Standard Operating Procedure)

All the latest public documents can be found on the QMSC website – http://www.queenmary.org.uk/club-documents.aspx

All risks associated with the various types of abuse of children and vulnerable adults are controlled by the QM 'Safeguarding and Child Protection (and Vulnerable Adults)

Policy' and the Club Welfare Officer is the Assistant Manager Sailing, Ross Malloy.

Health and Safety Policy Statement: "It is the policy of Queen Mary Sailing Club that the health and safety of all staff and persons on site, including those afloat and undertaking RYA Training, is paramount and the content of the SOPs (Standard Operating Procedures) and other documents clearly demonstrates our commitment to this."

QMSC RISK CHART	Consequences				
Likelihood	Insignificant	Minor	Moderate	Major	Catastrophic
Almost Certain	MODERATE	HIGH	HIGH	EXTREME	EXTREME
Likely	LOW	MODERATE	HIGH	HIGH	EXTREME
Moderate	LOW	LOW	MODERATE	HIGH	HIGH
Unlikely	LOW	LOW	MODERATE	HIGH	HIGH
Rare	LOW	LOW	MODERATE	HIGH	HIGH

#### **Risks Afloat**

HAZARD	RISK TO	CONTROLLED BY.	FURTHER ACTION	Risk Category
Water (drowning)	All	Observation and Safety Boat response in line with Club Safety Policy	Display of policy in clubhouse and on QMSC website	HIGH
	All	Personal floatation device (PFD) to be worn at all times whilst sailing or in a powerboat. PFD or harness to be worn at all times whilst windsurfing by those afloat (under-18s windsurfing may not wear a harness without a PFD). PFD to be worn at all times by those close to the water's edge or on pontoons	Signage on bank, visual monitoring of water users by QMSC staff. Included within club byelaws which all water users adhere by.	
P	Students	Safety cover provided by Instructors in line with NGB guidelines and Standard Operating Procedures. All students to be a minimum of 'water confident'.	Radio communication between Lead Instructor and Duty Officer/QM office.	
	Persons racing	Safety cover on the water during racing	Radio communication between Safety Helms/Crews, Duty Officer & Race Officer	
	Under 18s	QM POLICY: Persons under 18 must be accompanied by a responsible adult onsite when not under direct instruction from QM staff. This means that parents cannot leave the premises whilst their under-18s are at QM unless they have appointed another responsible person (not a member of staff) over 18 to take loco parentis.	The Duty Officer has the authority to bring anyone off the water should they feel it unsafe for that person to be on the water	

Entrapment	Users of QM dinghies	Observation and Safety Boat response in line with Club Safety Policy. Masthead floatation must be used (as detailed in "Masthead Floatation Policy and Entrapment Advice" document (aka MHF Policy) unless persons are specifically exempted to do so by the Assistant Manager Sailing)	QMSC quick-release harnesses to be available for use on trapeze boats. Display of latest MHF Policy on display in the clubhouse and available on QMSC website	HIGH
	Students	All doublehander dinghies to be fitted with 40L masthead float. All singlehander dinghies on taster sessions, RYA Level 1-2 and RYA Stage 1-3 courses to be fitted with 9L masthead float.	Observation and swift response to capsizes from RYA qualified instructor. Powerboats to carry a safety knife. When Instructor teaching from dinghy/board – instructor to carry a safety knife on person.	
	Club Members in own boats	Observation and Safety Boat response in line with Club Safety Policy	Masthead floatation available to borrow from QM	
	All water users	Powerboat drivers, or their crew, are ready to enter the water to assist with the righting of an inverted boat in the event of an entrapment.	Powerboat drivers, or their crew must not put themselves at risk by going underneath, rather by standing on top of the boat and righting it promptly in the normal way,	
	SUP and Mega SUP	Entrapment is extremely unlikely with SUP's. However all students need to be briefed on what to do in the event of a capsize. Staff should also have read relevant SOP's to know what actions to be taken.	Instructors must keep constant awareness of all individuals afloat. If on the Mega Sup, the instructor must be ready to call apon assistance if required under Code Red	
	Sit on top kayakers	Entrapment is extremely unlikely with a sit on top kayak due to no ropes or cockpit. However all students briefed on what to do in the event of	QM Kayak instructors to maintain a constant awareness of all kayakers and include in the session briefing the actions to be taken in the event of surfacing under a kayak:  Simply to 'push up and to the side'	

	ultihull ilors	ending up underneath the kayak.  Catamaran students to use MHF and the importance of carrying a safety knife (to be able to cut trampoline) to be reinforced by instructors. All cat sailors recommended to carry a safety knife as per "Masthead Floatation Policy and Entrapment Advice"	Staff trained to understand how to use the boat's safety knife to cut out the trampoline of an inverted catamaran if a person is believed to be entrapped	
and	nd ingfoilers	Freesailors: Observation and safety response in line with Club Safety Policy  Students on courses: Instructors to brief students on the risk of entrapment under the wing or board and how to free themselves from entrapment.	Observation and swift response to entrapments from RYA qualified instructor. Powerboats to carry a safety knife and instructors to be prepared to cut through wings if necessary.	HIGH
Wit		Entrapment is unlikely with windsurfers but the risk is increased with the use of a harness. Windsurfers learning to use a harness should be briefed on how to unhook the harness and what to do if they find themselves hooked in when in the water (run hand downwards from torso to unhook the harness). Students to be briefed that, if they find themselves under the sail, they should run their hands along the boom to find the edge of the sail and pull themselves free. Instructors to read 'Windsurf Instruction' SOPs and to brief this to their students	Staff trained to deliver safety information to their students. Instructors must keep constant awareness of all individuals afloat. Instructors trained in use of safety knife aboard powerboats to cut through a sail. Instructors to carry a safety knife on them when instructing without a powerboat.	

Injury From Propellers or being struck by a powerboat	All water users  All water users	KILL CORDS MUST BE WORN AT ALL TIMES, TIGHT AROUND THE TOP OF THE LEG BEFORE ENGAGING FORWARD OR REVERSE GEAR. THERE ARE NO EXCEPTIONS TO THIS RULE. Killcord lanyards (the red spirally bit) should be checked regularly for wear, with worn ones removed from use. Solid plastic killcords with no inner core may not be used. Helms to drive inline with Powerboat Level 2 guidelines.  Drivers to always switch off the engine [unless in an extreme emergency situation]: a) before recovering people who are in the water or who have any part of their body in the water; b) When going alongside any	Promotion of the powerboat driving standards in SOPs and staff training. Ongoing visual checks by Duty Officer. Any new staff to be fully briefed on these rules before operating a powerboat at QM  Promotion of the powerboat driving standards in SOPs and staff training. Ongoing visual checks by Duty Officer. Any new staff to be fully briefied on these rules before operating a powerboat at QM	HIGH
	Dinghy sailors being towed	windsurfer, paddleboarder or winger. Keep the engine as far away as possible from people at all times  Whilst it is strongly advised not to perform alongside tows on dinghies with crew onboard, this may be necessary at times (so long as the crew are	Keeping alongside tows restricted in this way should significantly reduce the risk of someone falling between the two boats and going into the propeller.	
		positioned inboard and it is safe to do so).		

Risk of crew being ejected from a powerboat	Powerboat crew, students	Helms to communicate to crew when changing gears, speed or direction.  Helm to ensure all crew are appropriately seated with 2 solid handholds	Anyone driving a powerboat at QM has been authorised by the Duty Officer and read/signed the appropriate documents inline with QM SOPs  Man Overboard Recovery drills to be introduced at displacement speed, inline with the Powerboat Instruction SOPs	HIGH
Collision with barges and/or dredgers	All	Diagrams and simple written information on Daily Information Board in Foyer. Duty Officer and other Staff to watch for breaches of rules. Infringements to be notified to the Assistant Manager Sailing for referral to Council	Members, hirers and Day Sailors should be advised on good practice and/or made aware of QMSC Byelaws. Guidelines to be incorporated into Open SI's for Open Meeting sailors.	MODERATE
Collision with other water users	All	Relevant IRPCS to be followed by free sailors at all times. Responsibility to other water users outlined in the Safety Policy.  Instructors to manage the safety of beginner sessions.	Duty Officer to manage safety of all water users and remove those considered a danger to others where necessary	MODERATE
Cold and Hypothermia	Students	Adequate briefing and provision of wetsuit	Instructors to monitor group/individuals for signs of cold. Duty Officer to take into consideration water temperature and ability of students	MODERATE
	Staff	Use of qualified, experienced, trained staff	Senior Instructor supervision and monitoring of well being	
	Hirers	Adequate briefing and provision of wetsuit	Observation and Safety Boat response in line with Club Safety Policy	

	All	Wetsuit or dry suit to be worn by all dinghy sailors and windsurfers, from 1 October to 31 March, as per Club Bye Laws	Observation and Safety Boat response in line with Club Safety Policy. Water temperature to be monitored, with temperature displayed on Daily Information Board in Foyer. Foil blankets in Safety Barrels	
Heat and Hyperthermia	Students and staff	Regular breaks for rehydration and shade. Encouragement from Instructors/Senior Instructors for groups to rehydrate	Senior Instructor supervision	MODERATE
Lightning strike	All water users	Students to be removed from the water (when an electrical storm is in close proximity) and taken inside the Clubhouse until the storm has passed. Sailability to be brought ashore as soon as it is clear an electrical storm is forecast to pass over QMSC.	Free-sailors should be removed from the water (when an electrical storm appears to be in very close proximity) only if absolutely necessary and there is no risk to the staff going afloat to do it	MODERATE

Sunburn	Students and staff	Instructors should 'recommend' to adults and 'strongly recommend' to children that they apply a high-factor sun cream before of sessions, and frequently throughout the day. Instructors to build in regular shade opportunities in periods of strong sunlight	Sun cream is provided by QM for those who do not have their own (especially Juniors) and is kept in the office. Information sent out within course confirmation letters of importance of providing own suncream/sunhats. Information & advice included in parents briefing at beginning of junior holiday courses.	LOW
Cut Feet	All	Suitable footwear should be worn by students and staff when operating ashore or afloat (some windsurfers, wingers, kayakers, SUPers may prefer bare feet when afloat). For participation in sailing, windsurfing & wingsurfing trainers, windsurf/dinghy shoes/boots are OK whereas Crocs, flip-flops, sandals etc. are not)	Instructor briefings for students. Care to avoid mussel shell beaches in low water conditions where feasible.	LOW
Trapped body parts between boat and pontoon	All	Students to be briefed by Instructors to prevent	Any trip hazards on pontoons (or damage to pontoons) to be dealt with as soon as they are discovered.  Pontoons to be regularly swept of guano	LOW
Windsurfers, wingers, kayakers and SUPers injuring themselves by falling off the kit into shallow water	All	Students/hirers/other windsurfers to be cautioned, as far as is reasonably possible, by instructors/hire assistants/staff that the water by the shore is shallow very close to the shore  Safety Briefings outlining hazards to be given to all new members, day sailors and hire before going afloat.	The discipline specific SOPs to highlight any specific hazards for Instructors to be made aware of and include in session briefings	LOW

Injury to student within a QM run session	Students	Instructors to be trained and assessed to run the activity (through formal NGB Instructor qualifications or inhouse Instructor qualifications, inductions and ongoing staff training). QM DO to ensure appropriate ratios are maintained. Instructor to maintain constant awareness and group control. QM code of conduct to be available to all students prior to coming to QM with expectations of student behaviour.	Qualfications and ratios inline with QM SOPs and NGB/AALA guidelines (where appropriate). Duty Officer to oversee all activities on the day and be available for back up. Duty Officer to remove anybody from a session that deems to be unsafe to themselves or any other user of the club	LOW
Head Injuries	Students and hirers	QM POLICY: All junior beginner dinghy sailing students and all those in the 8-11 group must wear helmets when the rig is in place on the boat. Instructors may require students to wear helmets at other times and the DO or a SI can enforce the wearing of helmets at any time. Helmets must be worn by juniors participating in raft building & kayaking. Helmets should always be made available to students as some may wish to wear one even when the instructor does not feel it to be necessary		LOW

lub 1embers	Such boat owners typically: 1) have greater experience levels and; 2) are better positioned to avoid head injuries and make an informed choice	
	as to whether or not to wear a helmet	

All	Diagnosis of serious head	All head injuries reported to the Duty	
	injury, either immediate or	Officer. DO treats and assesses the	
	delayed	head injury. All patients leave with the	
		QM advice sheet for head injuries with	
		symptoms to look out for should the	
		condition deteriorate. Any doubt or	
		abnormal symptoms, precaution is	
		taken to recommend the patient seek	
		medical advice, or emergency services	
		called.	

Reservoir Inlet/Outlet (irregular movement of surface water)	All	Diagrams and simple written information on Daily Information Board in foyer indicating all to keep out. Duty Officer and other staff to watch for breaches of rules. Infringements to be notified to the Assistant Manager Sailing for referral to Council.  Safety Briefings outlining hazards to be given to all new members, day sailors and hire before going afloat.	Members, hirers and day sailors should be advised on good practice and/or made aware of QMSC Byelaws. Guidelines to be incorporated into Open Sailing Instructions for open meeting sailors.	LOW
Reservoir Outlet (risk of drowning)	All	Diagrams and simple written information on Daily Information Board in foyer indicating all to keep out. Duty Officer and other staff to watch for breaches of rules. Infringements to be notified to the Assistant Manager Sailing for referral to Council. SOP (Standard Operating Procedures) – Overview of Operating. All staff read. All persons to stay at least 20 meters away from Outlet. Risk of drowning.  Safety Briefings outlining hazards to be given to all new members, day sailors and hire before going afloat.	Members, hirers and day sailors should be advised on good practice and/or made aware of QMSC Byelaws. Guidelines to be incorporated into Open Sailing Instructions for open meeting sailors. Staff to brief students before going afloat on restrictions.	LOW
Being abandoned on the water when water has closed	All water users	All students counted in by instructor. Regular observation of water by DO and other staff, as per QM Safety Policy.  Off water time displayed on the Daily Information Board	At water close, the DO to ensure that the water has been cleared of all persons and equipment with a visual and/or actual sweep of the water made (visual: using binoculars; actual: driving around the perimeter of the water in a powerboat)	LOW

Blue Green Algae	All	Staff/Instructors to look for and report any signs of algae.	Water users to be kept away from blue green algae and boats, equipment and people to be washed where any contact is made	LOW
Weil's Disease	All	Cuts to be covered by waterproof plasters	Students encouraged to wash hands and shower	LOW
Slipping when boarding/alighting boats	QM staff, dinghy sailors, powerboat users	Boats to be pulled alongside before boarding/disembarking. Decks to be surveyed for hazards before boarding.	Caution advised within Dinghy Instruction and Powerboat SOPs	LOW

### **Risks Ashore**

HAZARD	RISK TO	CONTROLLED BY	FURTHER ACTION	
Slipping On Pontoons	All	Pontoons to be kept clean as far as is reasonably possible. Adequate control of students by instructors.	Caution advised within Club Bye Laws. Regular Inspection and maintenance of pontoons.	LOW
Slipping On Banks	All	Wet, sloping banks are inherently slippery when wet. Students to be cautioned by instructors/staff that the banks can be very slippery	Caution advised within Club Bye Laws. Appropriate shoes should be worn	MODERATE
Manual handling of boats and boards	Staff/ Students	Supervision/instruction in correct lifting techniques. Staff to stay uphill of dinghies launching down the bank	No lifting of boards and boats without sufficient numbers of people available. Instructional team to advise on this. Drag winches and platform hoists available to all (prior training needed before use)	LOW
Incurring sprains/strains when rigging kit e.g lifting masts, inflating boards and wings	Staff/Students	Instructor briefing on appropriate manual handling of equipment	Instructor safety briefings on sessions	LOW
Slipping on Internal Stairs	All	Non-slip edging to stairs in place.	Dripping wet clothing not permitted upstairs. Staff to monitor puddles and clear up/put signs up where appropriate	LOW

Slipping on ramps	All	Grip tape applied to all metal ramps.	Standard of grip tape checked monthly	LOW
Fire	All	Fire alarm fitted, inspected and serviced. Weekly testing of alarm Fire extinguishers inspected and serviced regularly	Staff trained in fire drills – procedure in SOPs	LOW
Bomb Alert	All	Alarm signal	Staff trained in bomb alert procedure - procedure in SOPs	LOW
Icing on external stairs	All	Gritting and salting when required		LOW
Top box stairs	All	No access sign and gate kept closed	Only staff normally allowed access	LOW
Medical Ailments	Students	Refer to First aid trained staff	Completion of 'Health & Water- confidence Declaration' form for all QMSC students. All qualified Instructors to maintain a valid indate first aid qualification.	LOW

**Risks Associated with Use of Equipment** 

HAZARD	RISK TO	CONTROLLED BY.	FURTHER ACTION	Risk Category
Boat Hoists	All	Instruction in use and care of equipment given to users. Regular inspection and maintenance	Immediate reporting of faults with equipment isolation instructions to staff when faults reported. Procedure in SOPs	LOW
Drag Winch	All	Instruction in use and care of equipment given to users. Regular inspection and maintenance	Immediate reporting of faults with equipment isolation instructions to staff when faults reported. Procedure in SOPs	LOW
Boat Gantries	All	Instruction in use and care of equipment given to users. Regular inspection and maintenance.	Immediate reporting of faults with equipment isolation instructions to staff when faults reported.	LOW
Electrical equipment	All	Instruction in use and care of equipment given to users Annual PAT testing of equipment.	Regular maintenance of equipment and reporting of faults	LOW
Use of VDUs	Office Staff	Limiting usage, regular breaks and eye tests	Regular maintenance of equipment and reporting of faults	LOW

	Casual Office assistants	Limiting usage, regular breaks	Regular maintenance of equipment and reporting of faults	
Staff workstations	Office Staff	Training and advice to staff on appropriate considerations in body posture. Investigation of any reports of injury attributable to workstation posture.	Inspection of staff at their workstations	LOW
Cleaning machinery	Staff	Instruction in use and care of equipment given to users.	Regular maintenance of equipment and reporting of faults	LOW

### **Staff Risks During Maintenance**

HAZARD	RISK TO	CONTROLLED BY.	FURTHER ACTION	Risk Category
Manual Handling	Staff	Duty Officer or Club Bosun	Staff to only attempt lifts if adequate numbers present.	LOW
	Bosun	Training in use of lifting equipment for heavy engines	Staff to only attempt lifts if adequate numbers present.	
	Staff	Only 6 and 9.9 HP engines to be lifted – and lifted by winch and trolley only. Procedure in SOPs	Training in use of engine trolleys and engine winch.	
Chemicals	Staff	Trained or supervised use only	COSHH details to be provided to users	LOW
Repair Materials	Staff	Trained or supervised use only	COSHH details to be provided to users	LOW
Use of Power Tools	Staff	Trained or supervised use only	Staff training in use of tools by experienced member of staff	LOW

# Additional Risks in Relation to the Instruction and site use by Disabled Persons

HAZARD	RISK TO	CONTROLLED BY.	FURTHER ACTION	Risk Category
All risks with Disabled sailors on and off the water	QM Support Team and Sailors	Adequate briefing and inspection before going afloat. QM Duty Officer to take decisions as to where and when to sail and coordinate supervised sailing.	All QMS powerboat drivers to attend QMS Powerboat Refresher training annually.  All Powerboat drivers and crews, Ops Leads and Shore Leads, and Longboat &	LOW

		Sailability Ops Lead to be present and assess risks.  All QMS Support Team to attend QMS Ops Refresher training annually and Disability Awareness Training bi-annually.	Yeoman helms, to hold a current First Aid Certificate.  All Ops Leads, Shore Leads, Longboat, Yeoman and Hansa helms to hold a current Enhanced DBS certificate.	
Drowning: falling off pontoon	Disabled sailors/ students	QMS Support Team and visiting carers must supervise at all times. Ensure pontoon & approach are clean and clear before use. Personal Floatation Device (PFD) to be worn at all times when below the rim of reservoir (includes on pontoon)	All Sailability lifejackets to be inflated and checked annually. All Personal Flotation Devices (PFDs) to be inspected visually before use and fitted correctly. Each disabled participant to be assessed as to whether he/she should wear a buoyancy aid or lifejacket as per the QM Sailability Standard Operating Procedures (SOPs).	HIGH
Drowning: falling out of boat	Disabled sailors / students	PFDs or life jackets to be worn at all times in boat.  QMS Support Team to supervise disabled boat crews at all times from dedicated safety boat.	Observation from shore of craft sailing at all times.	
Drowning: swamping	Disabled sailors / students	PFDs or life jackets to be worn at all times in boat.  QMS Support Team to supervise disabled boat crews at all times from dedicated safety boat.	QMS Support Team briefed to check bungs before launch.	
Drowning: inversion	Disabled sailors / students	QMS Support Team briefed to engage locking devices on lifting / swinging keels &	Only dinghies not liable to inversion to be used for disabled sailors.	

Lifting disabled sailors: Injuries or complaints	QM Support Team	centreboards after launching. Sailability Ops Lead to confirm before first use.  Lifting disabled sailors manually is strongly discouraged. Any sailor who cannot self-transfer to a boat is requested to use a hoist.	Covered at QMS Support Team Ops Refresher and in Disability Awareness Training.	MODERATE
.Use of personal hoists: General	Non ambulant sailors	Hoists to be Inspected annually by insurer as part of site visit.  Personal hoist to be operated by a trained hoist operator, with supervised assistance from helpers. All assistance received to be checked by the hoist operator before raising the client.	Training to be provided for QMS Ops Leads by a trainer who has attended the RYA Sailability Train-the-Trainer personal hoisting course. QMS Ops Leads then to train selected QMS Support Team members.	MODERATE
Use of personal hoists: General	Non ambulant sailors	Hoists to be Inspected annually by insurer as part of site visit.  Personal hoist to be operated by a trained hoist operator, with supervised assistance from helpers. All assistance received to be checked by the hoist operator before raising the client.	Training to be provided for QMS Ops Leads by a trainer who has attended the RYA Sailability Train-the-Trainer personal hoisting course. QMS Ops Leads then to train selected QMS Support Team members.	MODERATE

Use of personal hoists: Slipping out of sling, or sling detaching from hoist.	Non-ambulant sailors	All slings inspected before start of season and start of day. Sling sizes marked up and selected correctly. Slings fitted correctly each use, all loops securely attached.	Sailors' personal sling loops/straps to be visually inspected (for wear and tear) before use.	HIGH.
Use of personal hoists: being hit by spreader bar.	Support Team & Sailors	Sling correctly adjusted to give head clearance.	Spreader bar fitted with foam padding, and restrained while being prepared for use.	MODERATE W
Becoming unstable or having e.g. seizure.Tendency to run or jump.	Disabled Students / Adults with learning difficulties	Registration forms completed before sailing with any need-to-know information. QMS Ops Lead and Support Team helms to be informed before going afloat of known risks. Carer / School Staff known to sailor to be in the boat. In the event of an incident, helm to remain in charge of boat and return to shore, radioing ahead.	Known runners/jumpers to be supervised at all times by their carer / school staff.	MODERATE
Head injuries	Disabled Students / Adults with learning difficulties	Decision as to whether each student should wear a helmet to be made by the carer.		MODERATE
Wheelchair falling backwards, running away down the sloping bank or falling off the pontoon.	Wheelchair users	QMS Support Team to be briefed on possibility and a suitable number of helpers to move and supervise persons in wheelchairs	Wheelchairs to keep to concrete paths where possible on upper level. Support team to hold wheelchairs or apply brakes at all times below the reservoir lip. Lap belts to be unclipped	HIGH.

	before reaching any unfenced part of	
	pontoon.	