

EMR Site specific RAMS and emergency procedure (Risk register and hazard ID) EOTC Risk Assessment Form (RAF) (EMR SOP Manual September 2021)

PART 2 Risk index: L = Low, M = Medium, H = High, E = Extreme

Hazard/Risk	Potential Harm	Risk Rating? How serious is this?	Controls	Residual risk after controls	Responsibility of EMR	Responsibility of School/group
A situation or thing with the potential to cause death, injury or illness			How can it be prevented? First try to e)liminate, then m)inimise the risk			
People:						
Existing medical conditions	Incident, injury, death	H	<ul style="list-style-type: none"> m) school collects medical conditions and informs EMR snorkel leader m) collect supervisor medical conditions via supervisor form m) Precautions taken for pre-existing medical conditions such as increased supervision, boundary restrictions and specialised equipment such as personal floatation device. 	M	Pre-site assessment and supervisor forms complete Initiate any precautions required	Collect medical conditions – disclose to EMR
<i>Separation (missing person)</i>	Incident, injury, death	H	<ul style="list-style-type: none"> m) Boundaries, snorkel route and entry and exit points made clear. Snorkel leader to keep control of the group by using a dive flag for participants to follow and whistle to keep groups attention. Snorkel leader may identify a suitable supervisor/assistant to follow at the back of the group. m) Students to stay in immediate proximity of designated adult buddy (one arm's length away). m) Supervisors keep head count of buddy group m) Parents, supervisors and teachers to comply with instructors directions while in water. Adult observer based on shore, ready to attend to any emergencies, with first aid, emergency plan, medical records, medication and cell phone (or location known of nearest land line). m) Number check before and after snorkel via check in & out form m) Snorkel leader will emphasise that groups must stay with the main group and FOLLOW snorkel leaders 	M	Clear boundaries and control of the group	Cooperate with any policies or procedures of EMR Check in and out form complete

Inexperience (including non-swimmers)	Incident, injury, death	M	<ul style="list-style-type: none"> m) Experience, skills and training of snorkel leader. m) General swimming ability of students checked via pre-site assessment and briefings m) Adult and supervisors medical conditions checked via supervisor forms m) Non-swimmers identified to snorkel leader m) Wetsuit worn m) Use of body board for floatation m) Adjustments made to ratio, limiting depth and distance, using snorkel buoyancy vest 	L	<p>EMR uses experience and qualified snorkel leaders. Supervisor forms</p>	<p>Must advise/identify non-swimmers Appropriate supervisors provided by school</p>
Inadequate supervision (ratio's)	Missing person Minor incident	M	<ul style="list-style-type: none"> m) Students recommended above age of five (1:1 ratio recommended for students age five). m) Adequate supervision ensured by adult 'supervisors' provided by school or EMR. Ratio for snorkelling 1:2 (1:4 max) ratio for year 8 and below (or 1:4 (1:6 max) for year 9 and above). Maximum of 24 participants. m) Stay close – remain within 50m and within audio and visual distance of the EMR snorkel leader to communicate any hazards, minor incident requiring first aid or medical or more serious incident 	L	<p>Ensure supervision adhered to Control of group in water</p>	<p>Provide suitable supervisors comply with EMR instructors directions while in water</p>
Inappropriate behaviour or fitness	Incident or Injury	M	<ul style="list-style-type: none"> m) Clear discipline guidelines given to students and adults before snorkel and identification of potential hazards, as part of the snorkel briefing m) The role of adult 'supervisors' is to assist and supervise the students in-water and are expected to follow instructions, be confident swimmers, fit and healthy and free from the influence of drugs or alcohol. m) Student behaviour issues discussed via pre-site assessment m) Screening participants and supervisors in shallow water 	L	<p>Conduct a clear briefing on expectations Pre-site assessment forms to capture behaviour issues</p>	<p>Identify and discuss management for behaviour issues and provide appropriate support for students with special needs</p>

Panic, exhaustion, lack of confidence	Emotional trauma Incident, injury, death	M	m) No weight belts unless training given or student supervised by their parent m) One up one down rule to ensure supervision m) Snorkelers advised to hold up their hand on ascent to the surface m) Re-assurance from snorkel leader and/or supervisor	L	Snorkel leaders to keep control of the entire group during snorkel	Supervisors to notify snorkel leader if any issues Stay within audio and visual distance of the EMR snorkel leader
Cramp	Injury	L	m) Rapid clenching of fist is the signal. Relieved by stretching or massaging muscle. m) Re-assurance from snorkel leader and/or supervisor m) Supervisor may seek support and notify snorkel leader	L	Snorkel leaders to keep control of the entire group during snorkel	Supervisors to notify snorkel leader if any issues Stay within audio and visual distance of the EMR snorkel leader
Barotrauma	Injury	L	m) One up one down rule to ensure supervision m) Advice about equalisation m) Snorkelling in shallow water	L	Snorkel leaders to keep control of the entire group during snorkel	Supervisors to notify snorkel leader if any issues Stay within audio and visual distance of the EMR snorkel leader
Collision with another snorkeler	Injury	L	m) One up one down rule to ensure supervision m) Snorkelers advised to hold up their hand on ascent to the surface	L	Snorkel leaders to keep control of the entire group during snorkel	Supervisors to notify snorkel leader if any issues Stay within audio and visual distance of the EMR snorkel leader
Shallow water blackout	Injury, incident, death	E	m) No hyperventilating m) One up one down rule to ensure supervision m) Encourage relaxed breathing and time on surface	L	Snorkel leaders to keep control of the entire group during snorkel	Supervisors to notify snorkel leader if any issues Stay within audio and visual distance of the EMR snorkel leader. Comply with EMR instructors directions while in water
Unresponsive snorkeller	Incident, injury, death	E	m) Achieve positive buoyancy - refer to emergency preparedness and response	L	Snorkel leaders to keep control of the entire group during snorkel	Supervisors to notify snorkel leader
Drowning	Death	E	m) Observer (check in and out) based on shore m) Pre-existing medical conditions known m) Adequate supervisions and ratios m) Clear briefing to participants and supervisors	M	Snorkel leaders to keep control of the entire group during snorkel	Check in and out observer based on shore. Comply with EMR instructors directions while in water
Seasickness	Illness	M	e) Don't go on the boat m) stay away from fumes, look to horizon.	L	Charter to provide instructions	Advise participants of risk of seasickness

Lack of communication	Incident, injury, death	H	m) Communication device on beach at all times m) Non reception areas noted via pre-site assessment m) Language barriers identified m) VHF radio for known non reception areas	L	Check cell phone reception and understanding of instructions	Advise of non-English speaking participants
Heat exhaustion/hyperthermia/dehydration	Illness	H	m) Advised to get out of the wetsuit after snorkelling m) Participants advised to have own drinking water m) Avoid direct sun while in wetsuit m) Advise schools to bring gazebo for sun protection if possible	L	Adequate briefing. Care of self	Students encouraged to drink water. Minimise sun exposure.
Entrapment	Incident, injury, death	L	m) One up one down rule m) Snorkel leaders to wear weight belt to allow them to assist with entrapment should it ever occur	L	Wear weight belt	Follow one up one down rule
Over weighted snorkeler	Exhaustion, incident	H	m) No weight belts worn for year 8 and below unless specific training given or belt belongs to participant and they supervised by their parent m) Weight belt removed if struggling to reach surface m) Buoyancy checked	L	Check equipment fit for purpose	Comply with EMR instructors directions while in water
Impairment due to drugs and alcohol	Incident, injury	M	m) Refer to our drugs and alcohol policy m) Declaration and monitoring of staff and participants	L	Adhere to policy	Adhere to policy
Cardiac Arrest	Incident, injury, death	E	m) Medical conditions known m) Screening participants in water m) Emergency preparedness and location of nearest defibrillator	M	Snorkel leaders to keep control of the entire group during snorkel	Medical conditions declared/discussed
Disorderly people	Incident	L	m) refer to difficult people policy	L	Snorkel leaders to be aware of other users in area	
Bullying behaviour	Incident	L	m) refer to Child Protection Policy	L		Commitment to ensure we provide an experience free from bullying and harassment.

Environment:						
Weather conditions	Sunburn, exposure, hypothermia	H	m) Up to date weather forecast, pre-site visit and on site assessment (if required). Sensible assessment of environmental conditions. Safe location of entry and exit points, depending on conditions m) Wetsuits worn m) Sunscreen available.	M	Check weather forecast. Care of self	Communication with EMR . School to provide sunscreen to participants
Unforeseen hazards (danger at sea)	Incident, injury, death	M	m) During the snorkel the EMR leader may continually identify and manage hazards, be alert for 1 blast of whistle for your attention, in the event of unforeseen dangers (e.g. marine life or conditions change, EMR leader to sound 3 whistle blasts and calmly organise evacuation to nearest safe landing point or re-group and make way back to assemble on shore (no one returns alone)	M	Continually identify and manage hazards	Comply with EMR instructors directions while in water
Changing or unexpected weather condition – hail or lighting storm	Incident, injury,	M	m) Up to date weather forecast, pre-site assessment Sensible assessment of environmental conditions. m) Halt activity if safety compromised	M	Sensible weather assessment	On land – activity leader to take charge
Current/water/tidal movement (including waves, tides and wind)	Participants swept to sea	H	m) Up to date weather forecast, pre-site visit and on site assessment Identification of potential hazards (waves, rocks, current etc.). m) Safe location of entry and exit points and boundaries depending on conditions m) Snorkel site and route defined by land marks and distances from shore m) Marker buoys may also be used at some sites m) Additional procedures such as throw lines and/or support vessels may be suitable for some sites m) Increased briefing and expectations.	M	Check tides and conditions suitable for site	comply with EMR instructors
Earthquake	Incident, injury	M	m) Refer to emergency procedures	M	Calmly organise group	On land – activity leader to take charge

Hazardous marine life – sharks	Bleeding, shock, death	M	m) No killing of marine life during EMR snorkels m) Snorkel locations chosen for suitability	L	Calmly organise group	Comply with EMR instructors
Hazardous marine life – orca	Incident	M	m) Calmly organise for group to come together and allow mammal passage, if deemed necessary, organise evacuation to the nearest safe landing point	L	Calmly organise group	Comply with EMR instructors
Hazardous marine life –seals	Incident	M	m) If a seal approaches you in water, avoid looking at it in the eye and move slowly away. if deemed necessary, organise evacuation to the nearest safe landing point. Don't gather together or be aggressive	L	Calmly organise group	Comply with EMR instructors
Hazardous marine life –stingrays	Puncture wounds, injury	H	m) Snorkelers advised to snorkel around stingrays and not over top in less than 2 metres of water Refer to snorkel guideline in SOP manual for treatment procedure	L	Brief on hazard	Comply with EMR instructions in water
Hazardous marine life – other (jellyfish, oysters, barnacles, urchins (kina spikes), scorpion fish, sea lice, moray eels, crabs)	Minor cuts, Stings, scrapes, bites	M	m) Most likely hazard for location covered in briefing e.g. oysters m) Specialised first aid for treatment of injuries caused by hazardous marine life. m) Do not touch m) Wear fins for sandy entry in known crab habitat m) Avoid removing fins and walking on a shallow rocky reef known as kina habitat	L	Site checked and monitored EMR team are all first aiders	School first aid kit and first aiders
Unidentified/ unexplained	Skin reaction, swelling, abrasions	M	m) collect information surrounding reactions to seawater prior m) wearing wetsuit to cover bare skin m) communication with supervisor regarding possible reaction.	L	Site checked and monitored EMR team are all first aiders.	School to ensure they have provided medical information
Bee/wasp sting	Allergic reaction or anaphylaxis	E	m) Participants with anaphylaxis identified via pre-site assessment	M	Identified participants with anaphylaxis	School ensures has medication and medical action plans

Boats (propellers)	Injury or death from being hit by boat or propellers	E	<ul style="list-style-type: none"> m) Avoid heavy boat traffic areas m) Use of dive flag and float m) Remain within 50m and within audio and visual distance of the EMR snorkel leader, be alert for whistle blasts m) 1 whistle blast for groups attention. Group to stay close together giving boats easy passage through. Bright body boards will help boats identify snorkelers. Stay clear of glass bottom boat motor (at Leigh Marine Reserve) or any boat motor. 	M	Carries dive flag	Comply with EMR instructions in water
Jet skis	Collision or distraction	M	<ul style="list-style-type: none"> m) Snorkel site location m) Harbour master to be called for inappropriate use 	L	Carries dive flag	Comply with EMR instructions in water
Fishing lines and hooks/entanglement	Cut or entanglement	M	<ul style="list-style-type: none"> m) Knife to cut fishing line (not usually necessary in marine reserve). Look out for loose fish hooks. 	L	Wear knife	Supervisors to notify snorkel leader
Sharp rocks and slippery surfaces/pebbles	Injury/fall/slip	M	<ul style="list-style-type: none"> m) No running on rocks, clear boundaries and supervision when observing from shore or walking to changing rooms/toilets. m) Slippery surfaces identified during briefing. Best entry and exit points located m) instruct to take care on pebbly beaches 	L	Identification of hazards	Supervision for land activities
Broken glass	Injury	M	<ul style="list-style-type: none"> m) check site for broken glass/ hazards m) Pre warn groups of site specific hazard m) First aid kit on hand 	L	Advise groups of known hazard areas	Supervision for land activities
Cold water/exposure/temperature	Hypothermia	E	<ul style="list-style-type: none"> m) Weather forecasts used to establish weather conditions before activity and pre-site assessment on the day m) Participants advised to bring warm clothing for after snorkel m) Brief participants on danger of hypothermia and assure that it is OK to get out if shivering or tired (your snorkel buddy and adult buddy must accompany you back to shore). m) Appropriate wetsuits worn and duration in water for location 	H	Provides adequate wetsuit protection for conditions. Keep watch of the entire group during snorkel	Supervisors check their buddy group

Tsunami	Incident, injury, death	E	e) Advance warning of a tsunami e) No snorkelling if there is a confirmed warning for the area m) Be alert for 1 blast of whistle for your attention (3 blasts for emergency) in the event of unforeseen dangers calmly organise evacuation to nearest safe landing point or re-group and make way back to assemble on shore (no one returns alone)	M	Tsunami warning check	Comply with EMR instructions in water
Infection risk – microbes in water	Illness	M	e) No snorkelling in places where there is an official notice of faecal contamination or health warning not to swim m) Follow sanitisation policy	L	Water quality check as per policy	Comply with EMR instructions in water
Visibility	Incident	M	m) Poor visibility sites are avoided	L	Weather assessment and pre-site assessment	Comply with EMR instructions in water
Insect bites	Minor injury	L	m) Pre warn groups of site specific hazard. m) Carry repellent as part of beach box for known affected sites	L	Advise groups if known hazard	Supervision for land activities
COVID 19	Illness	H	m) refer to sanitisation policy m)refer to COVID Safety plan	M	COVID safety plan discussed at initial meeting and on the day	Work together to implement plan
Set net in snorkel area (specifically for Wellington where there is a ban)	Entanglement	M	m) call MPI and they will give instruction on what to do next	L	Have phone and MPI number on site	Comply with EMR instructions in water
Hazardous substances – dog or human poo	Incident	L	e) carry dog poo bags if in an area known to have a lot of dogs	L	Site checked and monitored	Comply with EMR instructors
Equipment:						
Leaky mask and or faulty snorkel or breathing water down snorkel	Panic or choking	M	m) Equipment checked and fitted in shallow water. m) Use of buoyancy aids (body boards). m) Use of personal floatation device. m) Maintenance of equipment	L	Equipment checked and fitted in shallow water	Can bring own if fit for purpose
No wetsuits or loss of safety gear	Hypothermia, incident or injury	L	m)keep hold of board during windy conditions m)appropriate wetsuits are worn for appropriate temperature and location	L	Check equipment fit for purpose	comply with EMR instructors
Skin reaction to wetsuit	Illness	L	m) equipment cleaned using EMR sanitisation policy m) Allergies to neoprene etc. known	L	sanitisation policy adhered to	comply with EMR instructors School to communicate medical conditions
Heavy equipment	Injury	H	m) operate out of equipment trailer to avoid heavy lifting when possible	M	Advise of heavy equipment	comply with EMR instructors

			m) maximise help of volunteers and advise of heavy equipment when multiple bins require relocation			
Hood entrapment or fall with fins	Incident or injury	H	e) don't wear hood m) method for putting on/off hood explained m) advised not to walk on land with fins	M	Cover in briefings	comply with EMR instructors
Gazebo escape	Collision	M	m) always pegged/weighted down if supplied by EMR m) tied down on windy conditions and not left unmanned	L	Follow EMR policy on use	Follow school policy on use
Trailer operation and hazard	Injury	H	m) care when opening and closing trailer (refer to trailer policy) m) care on placement of fingers m) care instructions to avoid participants or volunteers injury	M	Follow EMR policy on use	comply with EMR instructors
Saniwise in eyes	Injury	L	m) follow instructions on bottle	L	Follow EMR policy on use	
Full face mask	Entrapment	H	e)EMR does not allow them to be used under our supervision due to possible H & S risk. Mask can be hard to remove when full with water	L	Follow EMR policy on use	comply with EMR instructors
Skin caught in zipper	Injury	L	m) advise for care to be taken	L	Cover in briefings	comply with EMR instructors
Hand sanitiser causing static electricity burns	Injury	L	e) allow hand sanitiser to fully absorb into skin before continuing work	L	Cover when in use	Comply with EMR instructors

Refer to EMR SOP Manual – Refer to risk matrix calculation on website

Site-specific or dynamic hazards captured via pre-site assessment form. Risk rating may be variable to location

Site specific emergency consideration	Site specific procedures

Refer to Emergency procedures diagram

