Experiencing Marine Reserves (EMR) Snorkelling Activity Standard Operating Procedures (SOP) Manual

October 2026

This manual is made up of SOPs for snorkelling from the Mountains to Sea Conservation Trust (MTSCT) Safety Management System. EMR standard operating procedures (SOP) - October 2026, replaces September 2025. Go to our website for Our Safety Management Plan (SMP) version 15 2026 and for additional policies and H & S forms.

www.mountainstosea.org.nz/health-and-safety

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Most up to date links can be found in the Drive or the H&S Roadmap

Section One: Health and Safety responsibilities

Refer to coordinator handbook and job descriptions for background information and detailed role descriptions.

Programme and Regional Coordinator responsibilities

The programme and regional coordinators are responsible for ensuring the effective implementation of the SMS within the Experiencing Marine Reserves (snorkelling) programme or other programmes of The Trust such as WBC, including:

- ☐ Take reasonable care of their own health and safety,
- ☐ Take reasonable care that what they do or don't do doesn't adversely affect the health and safety of others,
- ☐ Cooperate with any reasonable policies or procedures the business or undertaking has in place on how to work in a safe and healthy way, and
- ☐ Comply with any reasonable instruction given by the business or undertaking so that they can comply with HSWA and the regulations.
- ☐ Encouraging everyone to take a personal responsibility for safety.
- ☐ Ensuring that a strong focus is retained on hazard management out in the field.
- ☐ Ensuring that supervisors perform relevant safety tasks and complete safety processes (including hazard identification, intentions, equipment checks, incident reporting and so on).
- ☐ Ensuring that safety is discussed pre-, post- (and regularly during longer) programme(s).
- ☐ Monitoring and supporting staff to operate at/above 'current good practice' standard in the field, and giving feedback where appropriate.
- ☐ Ensuring that safety performance is a part of annual review and regular appraisal processes.
- ☐ Coordinating staff training & professional development for volunteers.
- ☐ Providing adequate support and resources so that safety systems and standards are maintained and improved.
- ☐ Adhere to all safety management policies and procedures.
- ☐ Take such care as is reasonable and in accordance with sound professional practice.
- ☐ Take full responsibility for safety management, and take any action required to ensure the level of risk is kept at an appropriate level.
- ☐ Take all practicable steps to identify, assess and manage hazards.
- ☐ Report any unsafe work conditions, practices or equipment as soon as it is practicable.
- ☐ Report all incidents to the Co-Director marine lead as soon as practical, and formally in writing (via the incident form) within five (5) days of incident occurrence.

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- [ ] Assist in the investigation and incidents with the objective of introducing measures to prevent recurrence.
- [ ] Ensuring overlapping duties of care have been discussed and recorded

Volunteer responsibilities

Take reasonable care of their own health and safety,

- [ ] Take reasonable care that what they do or don't do doesn't adversely affect the health and safety of others,
- [ ] Cooperate with any reasonable policies or procedures the business or undertaking has in place on how to work in a safe and healthy way, and
- [ ] Comply with any reasonable instruction given by the business or undertaking so that they can comply with HSWA and the regulations.
- [ ] Adhere to our Code of Conduct

Refer to our website www.mountainstosea.org.nz for governance (trustee) roles

1.1 EMR Coordinator Training Checklist

2026 EMR Induction Checklist.pdf

1.2 EMR Coordinator Endorsement Criteria - training record

2026 EMR Training Record Template

1.3 Health & Safety

The Mountains to Sea Conservation Trust takes all reasonably practicable steps to ensure the safety of all we associate with.

Our Safety Management System was last reviewed in September 2026. The latest policy and individual relevant parts of the policy are on our www.mountainstosea.org.nz/health-and-safety

Most up to date links can be found in the Drive or the H&S Roadmap

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1.4 Paperwork

Refer also to our Privacy Statement, Record keeping Policy and Privacy Guidelines

- ☐ It's Important to have H & S paperwork samples from every region
- ☐ Include paperwork from the day of incident with incident report as supporting documentation via activity log
- ☐ All H & S documentation should be uploaded to activity log or kept as a hard copy file by the coordinator or regional manager
- ☐ Event registrations are either kept in the event folder or as hard copies by the coordinator or regional manager
- ☐ Regional coordinators/managers to share 'free lessons' to team via meetings and online regional reporting (Regional coordinators/managers are cc'ed into free lesson and incident emails via H & S dashboard)
- ☐ Regional coordinators are responsible for collating H & S forms and including examples to the regional reports (digital or paper copies) from all programme coordinators and hold for 5 years

1.5 Policy and procedure

Policy Documents

Complaints policy
Refer to our complaints policy on our website. Health and safety feedback and/or comments can also be submitted via our website

Communication
Safety information is provided to participants via our programme website www.emr.org.nz, programme itineraries; site specific RAMS, emergency procedures, permission forms and school agreements. On the day of the snorkel safety information is communicated in the form of briefings with regards to the different roles on the day, all participants, supervisors and shore watch positions for example. Businesses that work together will likely share health and safety duties in relation to the same matter. These are known as overlapping duties. Overlapping duties of care will be communicated via our school provider contracts, event plans and MOU's. More information about overlapping duties can be found at http://www.worksafe.govt.nz/worksafe/hswa/understanding-hswa/overlapping-duties

Additional things to note

- ➢ Pregnant coordinators should seek a snorkel instructor assistant when leading field delivery.
- ➢ Coordinators must not be responsible for dependants during safety sensitive tasks

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➢ EMR provides the specialised first aid kit, and the school also carries a kit. Refer to equipment SOP

Section 2 EMR Snorkelling SOP

2.0 Procedure – prior to snorkelling

Refer to coordinator role description.

Coordinators will provide the school/group with the most recent version of the EMR snorkelling guidelines and SOP. The EMR SOP will be applied to the site, participants and/or event. Site specific RAS will be developed for the site and back up sites. Itineraries will be developed for schools/groups and include:

Itinerary template

2026 MTS Full Programme Itinerary Template

2.1 Safety Considerations and weather calls (dynamic hazards)

2026 EMR Snorkel Pre-site Assessment.pdf
2026 MTS Crew Pre-site Assessment.pdf
2026 EMR Advanced Snorkel Pre-site Assessment.pdf

Sensible assessment of environmental conditions, clear instruction and adequate supervision are the keys to EMR's snorkel risk management. We base our decisions on the safety of the sea conditions. On some occasions sea conditions may be safe, but rain showers may occur, in these cases the school will be advised and they will decide the appropriate action and or preparation. **Dynamic hazards (such as swell and boat traffic) will be captured on the day via the pre-snorkel site assessment**. Weather assessment is recorded on the pre-site assessment form.

2.2 The snorkel site

EMR uses a range of snorkel sites including local unprotected marine areas and marine reserves around New Zealand. Snorkelling in the open water environment involves the

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dangers of changing weather, surface conditions, currents and tides. The EMR Coordinator will establish safe operational parameters and boundaries for environmental conditions for each snorkel site.

2026 EMR Snorkel Pre-site Assessment.pdf

EMR will ensure that:

- The best weather forecasting service available will be used to assess the snorkel site;
- Information on current and tide patterns and local indicators will be assessed, and taken into consideration for snorkel sites where these may present a risk;
- Coordinators will alert groups about how and when to relocate, postpone or cancel a trip due to environmental/safety concerns.
- Site specific RAS (RAMS) are written for the site

The snorkel site and route is defined by landmarks and distances from shore and the use of a dive flag to alert other water users. In some cases marker buoys may also be used.

The area for snorkelling will be well defined for students, adults and helpers, with a dive flag to follow and warn any passing boats. Areas where there may be large tidal flows, strong currents, large waves, poor visibility or numerous power boats should be avoided. Snorkelling will not take place where there is a current Tsunami warning or notice of faecal contamination, making it unsafe to swim.

2.3 Standard Operating Procedures – Snorkelling activity

Snorkel Briefings

2026 EMR School Snorkel Briefing.pdf
2026 EMR Snorkel Day Briefing.pdf
2026 EMR Night Snorkel Briefing.pdf

Leadership and Authority

All EMR snorkel excursions must be led by a suitably trained and endorsed EMR coordinator. In unforeseen circumstances, a suitably experienced and trained person may substitute with appropriate permission from the Mountains to Sea Conservation Trust (top management). When multiple coordinators are involved in school deliveries or events, there will always be a designated snorkel lead or event controller with overall responsibility.

The EMR coordinator, snorkel leader, or event controller makes the final safety call on whether events or school deliveries proceed. Staff running any activity have the authority to

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cease an activity for any safety reason. According to our new wellbeing policy and psychological safety, contractors and coordinators are empowered to modify or cancel a session for safety reasons without management pushback.

- Coordinators and contractors are empowered and expected to modify or cancel sessions based on safety judgement (also referred to as no blame fatigue)
- This decision will be supported by management without question.
- MTSCT (as the PCBU) retains responsibility for the operational and reputational consequences of cancellations — not the coordinator or contractor.

Pre-Trip Planning and Assessment

The EMR coordinator or snorkel leader undertakes a pre-site assessment, which includes identifying and managing medical conditions and weak or non-swimmers. They must also obtain up-to-date weather reports before field trips commence.

Snorkel leaders and coordinators will make recommendations to the teacher or group leader in charge, and decisions will be made cautiously. On some occasions, an alternative snorkel location may be sought or pre-planned instead of postponing or canceling the excursion. When additional procedures are needed, refer to the pre-site assessment SOP.

Important reminder: *Collect and note the lead teacher's after-hours contact number on the itinerary.*

Medical Conditions and Risk Management

Participants must disclose medical conditions to the snorkel leader or EMR coordinator, especially epilepsy, diabetes, heart conditions, or asthma. These conditions require discussion regarding the management of possible increased risk.

Assessment and discussion are recorded on the EMR pre-site assessment form and may result in increased supervision, limiting the extent of participation (depth and distance), extra precautions, or in some cases, withdrawal from the activity if safety is compromised.

Participant Briefing and Preparation

The EMR leader or coordinator will conduct a snorkel briefing (refer to snorkel briefing SOP). Always refer to your briefing checklist for the activity, even when you know it by heart. Confirm that participants can understand English.

During the briefing, the EMR leader or coordinator will explain the safest entry and exit points and the proposed route for snorkeling. They will also ensure all snorkel gear is fit for purpose, including gear participants bring themselves.

Equipment Requirements

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Wetsuits are required for all student participants (if there is reasonable justification for an individual to not wear one (e.g. allergy to neoprene), mitigation strategies must be in place and the decision recorded on the pre-site assessment). All novice students or those in year 8 and below should wear wetsuits with no weight belts, unless accompanied by their parent or guardian or they have received specialized training beforehand.

Body boards are used by EMR as buoyancy aids and for additional visibility. There should be one body board per buddy group for year 8 and below. At least one body board must be carried by the snorkeling group for year 9 and above.

Grading and Assessment

All snorkelers are automatically treated as grade Whai by default unless grading has been undertaken. Grading may occur for adventure snorkel days, advanced snorkel tours, and the annual Poor Knights trip.

The EMR leader or coordinator must conduct a shallow water assessment of all participants and supervisors before the excursion begins.

Supervisor Responsibilities

Supervisors assist and supervise students in the water and are expected to be confident swimmers, fit and healthy, and free from the influence of drugs or alcohol. Supervisor forms must be completed. However, in cases of wet weather or rushed circumstances, a video declaration can be used.

Supervisors must remain within 50 meters and within audio and visual distance of the EMR snorkel leader to allow communication of any hazards, minor incidents requiring first aid, or more serious medical emergencies.

Students must stay in immediate proximity of each other and their designated adult buddy supervisor (one arm's length away). The "one up, one down" rule applies for duck diving. Supervisors must ensure they can safely manage the situation and notify the EMR coordinator if immediate rescue is required. Snorkel skills such as snorkel clearing, buddy system, and signals should be demonstrated prior to duck diving.

Tools such as cameras or waterproof phones should be stowed away (hands-free) to allow complete focus on supervision. Priority is supervision when you are responsible for a buddy group.

All supervisors must check in and out with the on-shore safety observer.

In-Water Management

During the snorkel excursion, there must be a minimum of one EMR coordinator or snorkel instructor leading in-water with the ability to safely supervise participants. Control of the

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group is maintained by positioning at the front to overview the entire group, using a dive flag for participants to follow, and a whistle to keep the group's attention.

The snorkel guide must ensure they can be easily identified by the dive flag and/or yellow vest (from December 2016) and shall remain within 50 meters of the group to enable timely response in case of an emergency. The 50-meter distance rule may be modified (greater or less) at the discretion of the EMR coordinator based on the type of environment or conditions. Any modification of this distance rule is recorded in the pre-site assessment. The rule does not apply to supervisors returning to shore with buddy groups who have notified the EMR coordinator or snorkel leader.

The EMR coordinator or snorkel leader will continually identify and manage hazards during the snorkeling activity.

The EMR snorkel leader may identify a suitable adult supervisor or snorkel assistant to follow at the back of the group or lead the group back to shore if the EMR snorkel leader or coordinator has to respond to a first aid or emergency situation. The identified assistant must be available and within audio and visual distance of the snorkeling group.

Always maintain group cohesion, especially when returning to shore while snorkeling.

Weather and Emergency Procedures

Coordinators must keep watch for signs of storms. Know to evacuate to a safe place if there are visible or audible signs of an electrical storm, or storm cells within 30 kilometers on radar.

If caught in an unexpected thunderstorm, immediately and calmly evacuate from the water.

Important Reminders

- Accidents are most likely to occur at the end of the day. Keep procedures tight right to the end.
- It's not what you know, it's what you can show. Record everything on the pre-site assessment, training records, etc.
- Volunteer terms are acknowledged and signed at each community snorkel day event. In lieu of online volunteer registration, supervision forms can be used for a one-off casual volunteer.

2.5 Definitions

Participant

A person who takes part in EMR activities and is not staff.

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Supervisor (casual volunteer or volunteer staff)

Person or persons responsible for supervising a student buddy group, assisting group to exercise snorkel skills and following instructions of the EMR snorkel leader/instructor. Supporting the snorkel activity, by taking responsibility for others within the activity. The role of 'supervisors' is to assist and supervise the student's in-water and are expected to be confident swimmers, fit and healthy and free from the influence of drugs or alcohol.

Staff identification and control – in field (including volunteers)

The safety audit standard for Adventure Activities defines staff as a person or persons responsible for leading, guiding, instructing, supervising or supporting an activity, or otherwise taking responsibility for others within the activity.

Identify as a hazard any person who is unable to perform safety tasks as required to fulfil the responsibilities of their role.

Do not permit a staff member to undertake any safety related tasks if they are impaired and therefore may be a hazard to themselves or to any person on the activity. Impairment could be due to factors such as alcohol, drugs, injury or fatigue.

Staff Definitions

Staff/Volunteer type	Role	Implementation Method and duties	Control and induction process
EMR coordinator/snorkel leader/event controller	Overall snorkel activity management and in-water leadership. Snorkel instructor is fit and healthy and free from the influence of drugs or alcohol.	All EMR coordinators are appropriately trained by MTSCT with relevant qualifications. Competent in implementation of all programme SOP's and emergency procedures.	All snorkel activities are assigned an EMR coordinator to lead the activity. Staff appraisal, evaluation and monitoring carried out by the National coordinator or Programme Director (MTSCT).
EMR long term volunteer or intern (provided by EMR) 'Volunteer staff'	Assist EMR coordinator with delivery of activity, including supervision of the student's in-water	Volunteer form signed. Detailed safety briefings. In some cases speciality training is carried out	Observe skill set under close supervision of EMR coordinator/snorkel guide. Can lead snorkel under

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	and other 'supervisors'. Expected to be confident snorkelers/swimmers, fit and healthy and free from the influence of drugs or alcohol.	(especially when EMR providing the majority of in-water supervision) including the emergency procedure. Has read all programme SOP's and emergency procedures.	supervision of the EMR coordinator
EMR volunteer snorkel guide (provided by EMR) 'Volunteer staff'	Assist EMR coordinator with delivery of activity, including supervision of the student's in-water. Expected to be confident snorkelers/swimmers, fit and healthy and free from the influence of drugs or alcohol.	Volunteer form signed. Detailed safety briefings. In some cases speciality training is carried out (especially when EMR providing the majority of in-water supervision) including the emergency procedure and Quick reference SOP	Observe skill set under close supervision of EMR coordinator/snorkel leader. Experience in snorkel guiding is gained by assisting an experienced guide or coordinator before guiding on own
Supervisors (provided by school or group) 'Casual Volunteer' This volunteer does not work with EMR on an ongoing or regular basis	The role of 'supervisors' is to assist and supervise the student's in-water and are expected to be confident swimmers, fit and healthy and free from the influence of drugs or alcohol.	Role described in school agreements, schools information such as itinerary. Role described during briefing on the day and via the supervisor checklist. Separate safety briefing for 'supervisors' after group briefing. Refer Quick reference SOP. Must take reasonable care of their own health and safety and	Acceptance of role. Tick on pre site assessment form that briefing given as per checklist. Supervisor form complete. Competency checked in shallow water. Wears 'supervisor' rash shirt

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		safety of others. Comply with instructions given by EMR snorkel leader	
Land observer 'spotter'	Provide effective lookout for surface activities and hazards. Access to medical information and communication devices. Check the number of groups in water. Signal to EMR Coordinator/Snorkel leader if a group member drifted away from the main group.	Perform visual scanning of the surface of the dive site Separate safety briefing for 'spotter' after group briefing as per checklist including the emergency procedure.	Acceptance of role. Tick on pre site assessment form that briefing given as per checklist. Complete EMR In and Out of water form.
Vessel operator (safety watch)	Provide effective lookout for in-water activities and hazards.	Can identify dive and relevant maritime signals. Has good visual scanning skills. Can identify entry and exit hazards including those related to propellers.	In some instances propellers will need to be on then disengaged at the last second, such as when manoeuvring the boat to collect divers in difficult conditions or emergency scenarios. Brief participants on these scenarios and emphasise the importance of the use of signals for when to approach or leave the boat.

Please note: Adult participants that do not have a specific supervisory role are not staff; they are participants or adult observers.

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Participant Identification and ratios

Participant type	Description	Implementation Method	Control
Schools	School children aged 5 -18.	Risk disclosure. Permission and medical forms collected by school and declaration of RAMS understanding and medical management completed on the day.	1:2 (with a maximum ratio of 1:4 for year 8 and below, adapt ratio to conditions, age, skills of students and/or supervisors). For year 9 students and above, the EMR ratio recommendation is 1:4 (with a maximum of 1:6). Assessment of supervisors via separate supervisor briefing and observational assessment in shallow water.
Children	Organised tour for children.	Risk disclosure. Permission and medical forms collected.	1:2 ratio recommendation, assessment of supervisors via separate supervisor briefing and observational assessment in shallow water.
Adults	Different ages and abilities.	Risk disclosure. Permission and medical forms collected.	For non-school related adult snorkelling activities EMR has a maximum ratio of 1:12 (i.e. 1 instructor and 12 participants, dependant on age, conditions,

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			experience of the participants).
Private tours		Risk disclosure. Permission and medical forms collected.	For non-school related adult snorkelling activities EMR has a maximum ratio of 1:12 (i.e. 1 instructor and 12 participants, dependant on age, conditions, experience of the participants).
Members of the public – snorkel days		Risk disclosure. Permission and medical forms collected.	Ratio is a maximum of 1:6 (1:4 snorkel guide to child ratio and 1:6 snorkel guide to adult or mixed group with a maximum of 4 children (under the age of 13). Maximum amount in the water is 60 at any one time.
Professionals	Guided corporate tours	Risk disclosure. Permission and medical forms collected.	For non-school related adult snorkelling activities EMR has a maximum ratio of 1:12 (i.e. 1 instructor and 12 participants, dependant on age, conditions, experience of the participants).

Site ID (example)

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Site Type	Activity	Ancillary (vessel or safety kayak) support	Control
Sheltered waters or lagoon	Snorkelling with a school group or specific group	No	Participant snorkel leader is able to control entire group
Areas with current or known specific hazards.	Snorkelling with members of the public at Community Guided Snorkel Day event	Yes	Detailed event plan or RAMS to control hazards
Remote site	Snorkelling with a school group or specific group	Yes	Detailed snorkel plan (including emergency plan) for the site
Sites with significant boat traffic	Snorkelling with a school group or specific group	No	Briefed on hazard, rigid dive flag and body boards for extra visibility. Whistle to manage group and allow for quick re-grouping. Consider anchoring dive flag in addition to flag with the group

2.6 Clarity of roles or overlapping duties

On occasions EMR uses a chartered boat for snorkel excursions. The EMR snorkel leader needs to be confident that any safety tasks delegated to the chartered boat operator will be performed to good practice, and that the EMR snorkel leader and boat operator are clear on who is responsible for performing which safety roles. The chartered boat operator needs to be confident that dive good practice is followed by the EMR snorkel leader — where the EMR snorkel leader is within scope of the adventure activity audits this confidence may be supported by them having been audited and being on the WorkSafe register for adventure activity providers. Overlapping duties are also covered by the EMR /School Responsibility Agreement. Whenever you share responsibilities with another operator, you need to be clear on who is responsible for what.

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Events involving multiple organisations in safety sensitive roles (snorkelling, Kayaking, SUP) requires all parties to sign the event plan to acknowledge their responsibilities.

2.7 Supervision structures

The level and style of supervision typically required for an activity. More than 'ratio' of skilled and experienced leaders to participants for any given activity. Supervision needs vary according to age and ability of the participants (including fitness, health or other needs), the activity involved, the environmental conditions, and the competence of leaders and assistants.

For a competent and motivated group of young adults or adults who have good access to emergency communications and have demonstrated they are compliant to safety rules, reliable and able to look after themselves, a single leader might be appropriate. In this case you need to be confident in the participants' abilities to manage emergency situations if the single leader is incapacitated or busy/distracted. When there is more than one leader, clearly defined roles and responsibilities should be delegated. This is particularly important when using assistant leaders, accompanying teachers (who are not the activity leader), student leaders or parent helpers.

Plan with everyone's needs in mind. Supervision needs will change if participants have any special needs, behavioural or health needs. An effective supervision structure for a large group should allow for the person in charge to be free from directly leading participants so they can have an overview of the whole group. The number of leaders should take into account requirements during a rescue or emergency, not just when things are going smoothly. In an emergency, responders have to focus on their roles; there still need to be leaders available to manage the other participants (e.g. when managing a group swimming, at least one person will be needed to watch the other participants if someone needs rescuing). In many activities there are often high-risk difficult spots or 'cruxes' (e.g. when a tramper is negotiating a steep section of track).

Often each 'crux' requires direct one on one or greater supervision. One way you can manage 'cruxes' is by staging participants in 'safe zones' away from the risk until you are ready to focus on them one at a time. For example, if lighting a stove is a 'crux' then don't have three inexperienced people lighting stoves all at once, but have them go one at a time so they can be directly supervised by someone who can intervene if need be. This example could also apply during a difficult entry point for snorkelling or the stream. Ensure that, any changes in the supervision structure between the 'event' and 'free time' are documented (itinerary) and understood by the whole leadership team (e.g. school and organisation). Ensure that the supervision structure has taken into consideration issues around impairment such as driver fatigue, sudden illness or injury.

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For our programmes and events, supervision needs vary according to age and ability of the participants (including fitness, health or other needs), the activity involved, the environmental conditions, and the competence of leaders and supervisors .
The type of supervision you require must be documented Part 1 RAS (marine and freshwater), this still mentions a ratio aim but more focused on describing the supervision you require for the activity. For example some groups with challenging behaviours may require you to ask for additional teacher supervision, a challenging environment may require more lead coordinators in water, younger students going snorkelling may require experienced and additional supervisors .

Assess the level of risk that participants or staff will make errors leading to serious harm and the risk presented by other hazards of the dive site. Factors to take into account when assessing the level of risk include:

- Size, type and location of the snorkelling site;
- Number of participants;
- Number of teachers;
- The competence of supervisors/participants, the likelihood that they will follow instructions and their acceptance of responsibility for managing hazards;
- The number and competence of staff;
- The general hazards of the snorkel activity and the site;
- Communication and language considerations.
- Overlapping duties of care and recommendations from partner schools and organisations

During school and/or public community event delivery (when you have not previously met the group)- Treat everyone as if they are new to snorkelling/swimming until assessed. Use flotation (our wetsuits and boards) . Make everyone snorkel as a practice to check gear fits and assess ability in shallow water (shallow water assessment).

Supervision levels may also need to be increased during a trip, for instance if participants show a lower level of competence or confidence than was originally planned for and are no longer safe under the previously agreed level of supervision. Ensure that guides and instructors conduct on-going risk assessment and know what to consider and when to move to higher levels of supervision.

Techniques for increasing supervision levels include:

- Staying closer to the participant;
- Modifying ratio (see below);
- Instructing the participant to stay in a particular position relative to the guide or instructor, or another more able participant;
- Stopping and re-grouping more frequently;
- Reducing the boundaries of a snorkel site;

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- ➢ Separating participants into different groups if they are likely to encourage each other to behave unsafely;
- ➢ Ability grouping participants.

Some 'guidance' below

Group type	Supervision structure example	Paperwork (briefings for all situations)
Whanau snorkel	Led by 2 endorsed coordinators, mixed ages, adopt community snorkel day ratios (participants know each other, check in and out to be completed, run like a school guided snorkel, experienced members of whanau as supervisors Separate briefing for supervisors	Pre- site completed Check in and out Event registration form Supervisor form (if not a volunteer online form complete Event plan
Science snorkel (school)	A supervisor must be in direct supervision of groups (dedicated to watching the activity take place) undertaking science snorkels. Participants must have participated in training. Extra equipment may be required (add to itinerary) . School ratio applied Additional equipment (gloves and hammer) and increased briefing required Separate briefing for supervisors	Pre- site completed Check in and out Supervisor forms Itinerary or Event plan
Night snorkel	Endorsed coordinator familiar with night snorkel location. Night snorkel experience and leads without a group themselves . Use community snorkel day ratio, run like a school group tour Spotter should be crew or experienced volunteer Separate briefing for supervisors . Kayak for safety watch	Check in and out form Registration forms (online or on day) Volunteer online form or Supervisor forms Event plan
Corporate tour (12 people)	Dependant on experience of group and location.	Pre- site completed or

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	Endorsed coordinator lead only. Additional volunteer for support Buddy system used within group	Advanced pre-site completed Permission form collected Itinerary
School Holiday programme	Use school programme ratio, supervisors supplied by MTS or mixture , experienced level of supervision for these, as supervisors come from MTS All have their experience level pre vetted by the event lead (pre registration collected via Eventbrite)	Pre- site completed Permission form collected by MTS Volunteer online form or supervisor form (once off) Event plan
Community Snorkel Day	MTS team are based in the tent as event controllers and endorsed coordinators are also in water as snorkel guides (with oversight and observation of other groups in water) Rate snorkel guides Separate briefing for supervisors/snorkel guides	Pre- site completed Registration forms Volunteer online form or supervisor form (once off) Volunteer sign in sheet Event plan
Poor Knights annual trip	1:2 or 1:4 respective to swimming capability and experience of supervisor Students are buddied up with their guardian, if the guardian is not deemed appropriate as supervisor, EMR coordinator is buddied up to go with them. We have a roving EMR coordinator on photography duty that is also looking out for groups but not supervising themselves. Pre planned buddy pairing and customised water check in and out. Direct in water supervision by EMR, Indirect supervision from Dive Tutukaka (safety look out) Everyone to follow advised snorkel route and boundary (advised once on site) . Each group has a boogie board (unless graded haku). Whistles for all supervisors (clearly identified by red rash shirts)	Pre- site completed Event registration (acceptance to be a supervisor or not) Event plan
Youth group	Ratio same as school groups, mix of provided and MTS volunteers	Pre- site completed Check in and out

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		Volunteer online form or supervisor form (once off) Volunteer Itinerary
Advanced snorkel	1:6, working in buddy pairs for trained participants. 1 EMR endorsed coordinator to 6 trained divers	Advanced pre-site completed
School snorkel	EMR endorsed coordinator to lead (ideally without having a group themselves) Some sites may stimulate that the lead is to have no participants as part of Part A RAS. Body boards are used by EMR as buoyancy aids and for additional visibility. There should be 1 body board per buddy group for year 8 and below. At least 1 body board must be carried by the snorkelling group for year 9 and above.	Pre site completed Check in and out Supervisor forms Itinerary

2.8 Ratio and group size (*in conjunction with supervision structures*)

The maximum group/participant size is 24 to one endorsed coordinator, more groups can be in water managed under another coordinator but this must be coordinated on the day

A guided snorkel day can also be max of 24 per endorsed coordinator, this number can be increased if more endorsed coordinators

When managing community snorkel days where groups are guided by snorkel guides on their own tours, the absolute max is 60 participants in water with kayak safety watch - event controller manages this on the day and must know the total in water at all times

School groups

Based on experience and optimum safety EMR has an adult supervisor: student/participant ratio recommendation of 1:2 (with a maximum ratio of 1:4 for year 8 and below, adapt the ratio to conditions, age, skills of students and/or supervisors). For year 9 students and above, the EMR ratio recommendation is 1:4 (with a maximum of 1:6). For groups larger than 60 in one day, two coordinators or 1 coordinator with a suitably trained and experienced assistant must deliver.

EMR recommends groups of 16 students in the water per rotation. This amount may be increased to 20 students depending on extra adult supervisors and assistants, snorkel instructors, sea conditions and with agreement from the school/group. The absolute

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maximum number of participants is 24, while maintaining an adequate participant to supervisor structure.

Note: If an adult is not suitable for a 'supervisor' role, then that adult will become a 'participant' and be buddied up with an appropriate group not exceeding the maximum ratio for that year group. For example an adult that is not competent supervising a group, may be buddied up with another group, so the group may end up with 1 competent supervision adult, 1 adult participant and 3 student participants as a maximum.

Community Guided Snorkel Days

For EMR Community Guided Snorkel Days, the ratio is a maximum of 1:6 (1:4 snorkel guide 'supervisor' to child ratio and 1:6 snorkel guide to adult or mixed groups with a maximum of four children (under the age of 13). The number of snorkelers in the water is recorded in the registration tent. A minimum of one coordinator will have an in water guide role to scan delivery of the event in water and provide constant assessment of event dynamics (checking performance of volunteer guides, snorkel route etc). Four-year-olds may participate with an accompanying parent/guardian, with no other participants in the group.

Groups

For non-school related adult snorkelling activities EMR has a maximum ratio of 1:12 (i.e. 1 instructor and 12 participants, depending on age, conditions, experience of the participants). Document supervision structure in RAS, event plan or itinerary.

Pool sessions

For pool sessions there must always be 1 EMR snorkel leader or adult supervisor in water and 1 adult 'spotter' on poolside (with the view of all students) at all times for year 8 and below, the number of adults in the pool should be increased for year 0 – 1. All public pools should have a shore based lifeguard. Participant equipment should be checked after each use to ensure the equipment is fit for purpose. When hiring equipment, check that it is fit for purpose before use.

Refer to appendix for activity specific SOPs for Advanced snorkelling, Night snorkelling and River drift snorkelling

2.9 Shore observer 'spotter'

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For standard delivery, there must always be someone on the lookout from shore for any client group, if possible wearing a high visibility vest. This person must be ready and equipped to handle any emergency and complete the EMR Check In and Out form. It is preferable that this person has a first aid qualification.

2.10 Kayak safety watch

Use kayaks for safety watch for community snorkel days events, whereby the groups a split - guided tours with the snorkel guide (supervisor) and night snorkels
School snorkels are unlikely to be required as the groups are kept tight and already have sufficient supervision
If a safety kayak is deemed necessary for the event, its listed as required in event plan or itinerary

New form here:

2026 EMR Kayak Safety Watch Form.pdf

2.11 Field communication

Safety information is provided to participants via our programme website www.mountainstosea.org.nz, programme itineraries; site specific RAS, emergency procedures, permission forms and school agreements. On the day of the snorkel safety information is communicated in the form of briefings with regards to the different roles on the day, all participants, supervisors and shore watch positions for example. Safety information is communicated to potential participants and other parties via our programme website.

Cell phone reception checked via pre site assessment form. Google calendar provides information on the whereabouts of the team, with detail in the itineraries. VHF radio to be used for areas with no or little mobile coverage.

2.12 Equipment

Snorkel leader clothing & equipment

- ☐ Watch
- ☐ Whistle
- ☐ Yellow ‘snorkel leader vest’
- ☐ Dive flag

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- ☐ Suitable wetsuit, mask, snorkel and fins
- ☐ Weight belt (with appropriate buoyancy for activity)

Standard group equipment

- ☐ Wetsuits, Masks, snorkels and fins
- ☐ Buoyancy aids (body boards)
- ☐ On site cell phone (fully charged)
- ☐ Tarpaulin (emergency shelter)
- ☐ Supervisor rash shirts

Shore equipment

- ☐ Beach box/backpack (Refer to full equipment lists)
- ☐ Cell phone or other emergency communication device
- ☐ First aid contents
- ☐ De-fog

Additional equipment for remote or colder waters

Refer to equipment SOP

2.13 Adventure Snorkel Days

Experiencing Marine Reserves has branched into running "Adventure Snorkel Days". These events are where we explore offshore islands with the help of an external operator where we snorkel directly off the vessel. As participants are often very confident in the water we needed a new way of categorising participants to suit ability levels. There are also occasions where we may work with advanced snorkelers or the Poor Knights annual competition trip where we have experienced snorkelers.

Categorisation Levels - *Whai | Haku | Mako*

Whai – Stingray – Standard experience level to novice.
This is our default category. ALL EMR participants come under this category unless grading undertaken and standard EMR SOP and snorkel day procedure apply.

Haku – Kingfish – Experienced snorkelers

Criteria

- ➢ Experience can be verified by EMR coordinator

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- To have shown strong confidence in the water
- Attended an EMR snorkel day experience or snorkel day before
- Both participants and supervisor experienced snorkelers
- Participants must have their grade noted against their name on the Check In/Out Form in the medical and grade info section

Mako – Shark – Experienced to advanced snorkelers/freedivers

Criteria

- Be over the age of 15
- Attended an EMR snorkel day experience or snorkel day before
- Can provide evidence of experience to EMR coordinator
- To have shown strong confidence in the water
- Participants must have their grade noted against their name on the Check In/Out Form in the medical and grade info
- Participants must check in and out with the designated check in/out person, stay within boundaries and return upon sounding the boat horn.
- Participants must have a snorkel buddy and observe the one up/ one down rule
- Participants do not need to take a board or be directly supervised by a snorkel guide/supervisor
- In all cases above a minimum of 1 EMR coordinator/instructor is roving in water with an accessible board and within audible distance from the boat/group.

2.14 Shallow Water Assessment - Guidance for coordinators



Shallow Water Assessment

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Shallow water assessment takes place before every snorkel in the shallows. It's a time to take a breath and check everyone is good before heading off on a snorkel tour.

Supervisors work with their buddy groups to ensure they can breath through snorkel and are relaxed in the water. For younger groups they do this by lying over the front of the board, for older groups, 1 hand on the board.

This is where supervisors are instructed to help adjust mask straps and ensure all gear is fitted before the snorkel tour starts.

Coordinators assess the supervisors and make sure appropriately buddied up, some changes might happen here - some supervisors might be switched to being participants only. Ensure a strong ratio with competent supervisors. Reserve the right to advise a non-confident swimming adult to stay behind.

If you have spare supervisors - ensure they take a board with them so they can support the other supervisors by splitting groups up if needed, such as if a buddy gets cold and has to go in early.

Sometimes there might be participants that stay in the shallows only - set a boundary for shallow water area, anyone staying in shallows must be supervised by a competent supervisor and check in and out/safety watch person from shore.

Add an asterix to the check in and out form if a participant and supervisor is staying in the shallows.

2.13 Special events and ancillary service (e.g. transport)

For events such as the Community Guided Snorkel Days (see appendix) or snorkelling at remote locations, detailed snorkel or event plans are to be completed. These plans should take into careful consideration the use of vessels for transport and or supervision. The snorkel or event plan must be developed specific to that site and the use of the ancillary service, if deemed appropriate for that site. Particular attention must be paid to the hazard of boat propellers and around the communication between the skipper and participants in the water, communications around staying clear of engine propellers and the vessel. During a supervising role, lanyards must be worn at all times.

All skippers must adhere to the responsibilities identified on the Maritime NZ Website and including but not limited to:

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- ☐ Every boat has to have the right sized lifejacket for each person on board, and for boats under 6 metres they have to be worn unless the skipper decides that the risk is very low at the time;
- ☐ Get a marine weather forecast before you head out and listen for regular updates while you are out;
- ☐ Carry at least two means of communicating distress on you, and for boats under 6 metres, these need to withstand immersion;
- ☐ Leave details of your trip and boat with a responsible person ashore, detailing where you are going, how many people you have on board, and when you expect to return;
- ☐ If you have a VHF radio, make a trip report and stay in contact with Maritime Radio, or the local Coast Guard or marine radio service;
- ☐ Avoid alcohol – alcohol impairs judgement and the ability to survive in an emergency.

Any use of an ancillary service must be included in participant safety briefings and site information Part 1 RAS.. The role and responsibility of the vessel must be made clear during briefings and checklists.

The dangers of diving around powered craft are primarily related to injuries caused by being hit by a boat or a boat's propeller. Ensure dive boats use signals, lookouts and other systems to indicate that divers are in the water as per MNZ rule 91, including using light signals at night.

Do not assume others will see or understand signals. Ensure the dive look-out understands that they play a crucial role in managing the dangers of other users at the dive site and actively attracts their attention when required. Be particularly aware of users who may not understand dive signals such as jet skiers and other recreational craft.

Consider the visibility of signals when choosing the dive site, the position of the boat, vessel or platform and of participants in the water— consider using support stays in signal flags.

Ensure there are procedures in place to manage this risk and that they include the preference for propellers to be disengaged when divers are entering or exiting the water or otherwise near the propeller area.

Ensure that procedures include:

a. Master of a vessels having a clear visual of the propeller area and snorkel entry and exit route, or using one designated person to watch this area and communicate to

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the snorkelers, including using signals for when divers are clear to approach or leave the boat on-board crew having designated responsibilities on who is able to signal divers to approach or leave the boat, the dive team knowing who this is, and this person having direct communication with the skipper — for smaller craft this may be the skipper themselves emphasise the importance of these systems during staff training and participant briefings.

In some instances propellers will need to be on then disengaged at the last second, such as when manoeuvring the boat to collect divers in difficult conditions or emergency scenarios. Brief participants on these scenarios and emphasise the importance of the use of signals for when to approach or leave the boat.

Clearing anchors can require a diver in the water managing the anchor while the propeller is on. This can involve a high risk of injury. Do not use participants to carry out this task. Ideally do not do this with staff either. The preferred method is to drop the anchor (commercial boats are required to carry a spare) and move away while staff manage the situation under water.

2.14 Post activity

Post activity notes recorded on pre-site assessment form and logged via the activity log within 5 days of activity . Relevant free lessons are shared with Poutokomanawa/co-director (marine lead).

Section 3 - Emergency preparedness and response plans

3.1 Introduction

This section sets out how we prepare for and respond to an emergency. The purpose of our structured emergency preparedness and response plan is to:

- ☐ Preserve life and property, and prevent further loss in an emergency situation;
- ☐ Provide guidance, so we know what to do in an emergency situation.

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3.2 Emergency policies

- ☐ Potential emergency situations will be identified;
- ☐ Responsibilities and procedures to be followed in an emergency will be identified;
- ☐ Contractors/coordinators are involved in the development of emergency procedures;
- ☐ Adequate first aid supplies are available to all employees and participants;
- ☐ All staff receive training and information in relevant emergency procedures;
- ☐ In the event of an emergency, top management is to be informed as soon as practicable;
- ☐ Top management has sole authority for communication with the media.

3.3 Responding to emergencies

Emergency Response Guides have been developed for the following emergency situations

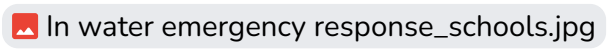
In the field (land based)

In the event of an emergency the following generally will happen

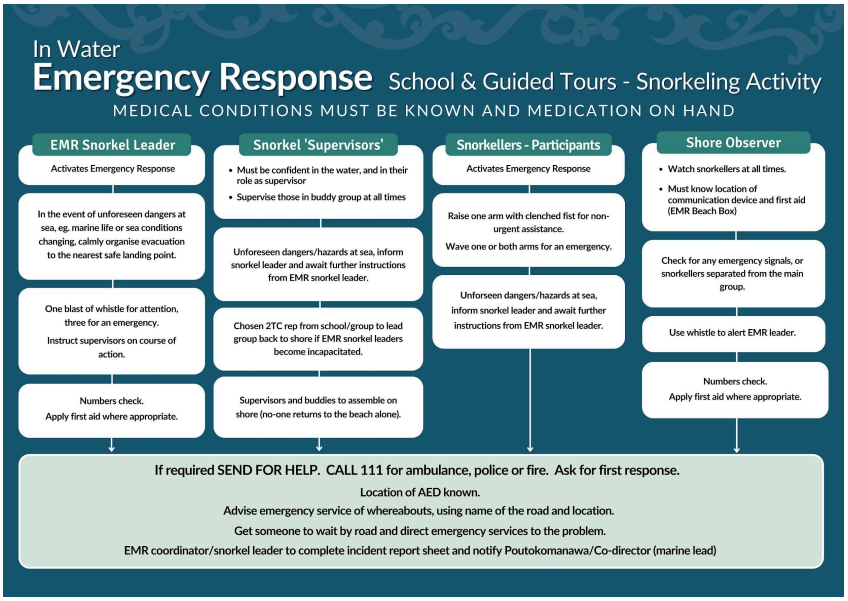
- ☐ Prevention of harm to all persons on site;
- ☐ Raise the alarm (notify all other persons on site);
- ☐ Contact emergency services on 111;
- ☐ Do not put yourself or anyone else at any unnecessary risk;
- ☐ Evacuate from building or area;
- ☐ Assemble all personnel immediately at a designated meeting point;
- ☐ Check all persons are accounted for;
- ☐ Contact the Department of Conservation, other relevant land manager or owner.

In the water

Emergency response procedure – schools and guided tours

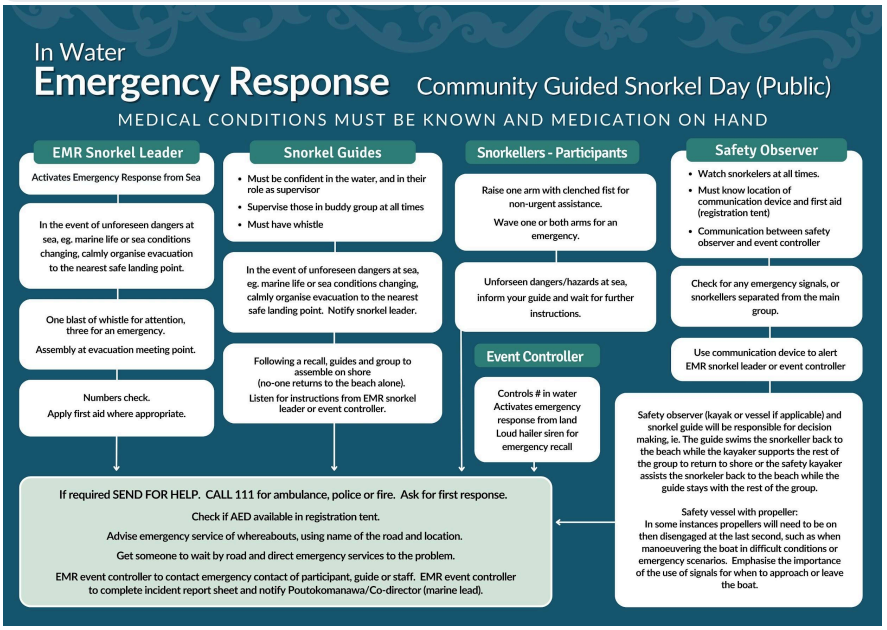

In water emergency response_schools.jpg

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Emergency response procedure - community guided snorkel day

In water emergency response - snorkel days .jpg



Site specific emergency procedures

Any additional site specific emergency procedures for an activity are included with the RAMs (RAF) Part A and field trip briefings for the activity.

2026 EMR Site Information - Risk Assessment and Supervision RAS Part 1 - Templat...

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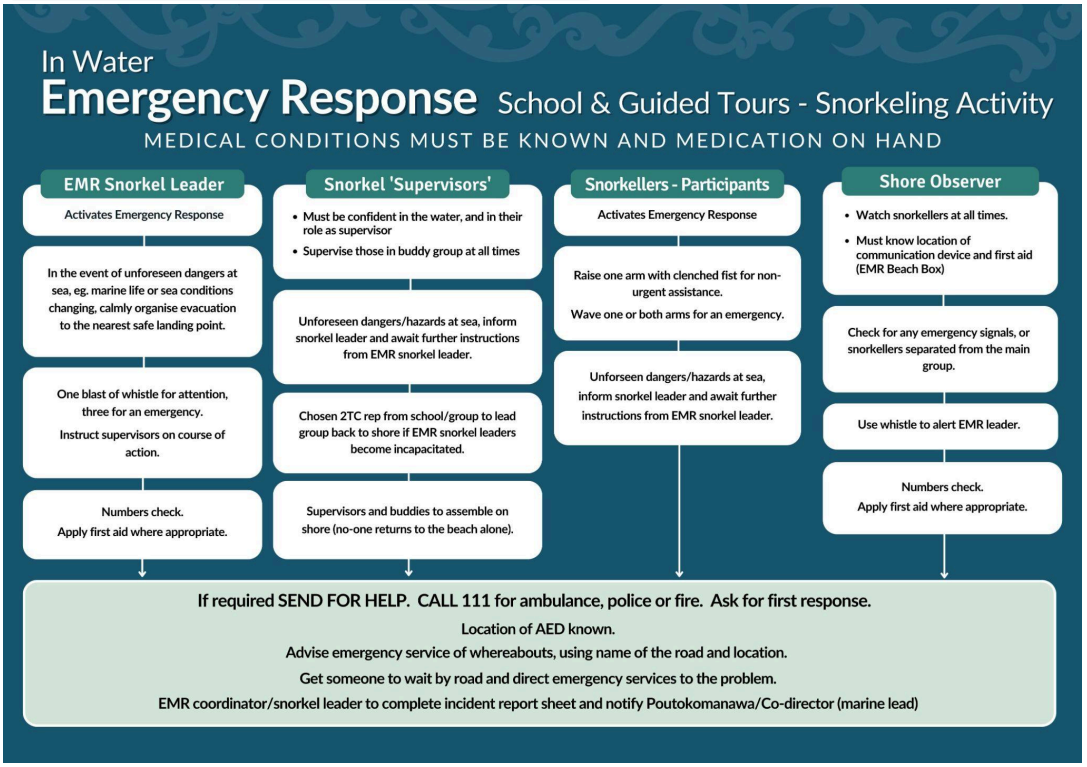
3.4 Emergency Procedures - refer to emergency section in SMP

2026 MTS Emergency Procedures.pdf

Emergency 'In water' procedure

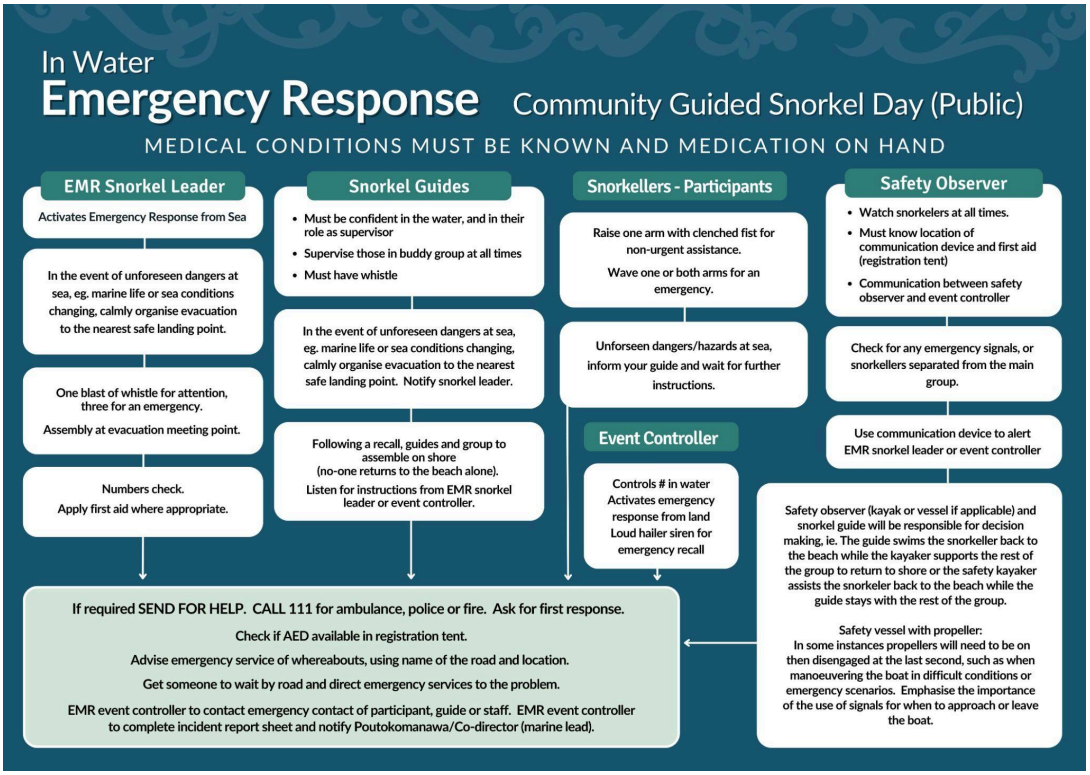
As outlined in the following diagrams

In water emergency response_schools.jpg



In water emergency response - snorkel days .jpg

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Appendix 1 | Snorkelling SOP's

1.1 Equipment

Every time a piece of gear or equipment is used, it is inspected. Repair occurs either immediately on site or through a suitable repair facility. Faults and repairs are documented in the equipment register. If any piece of gear or equipment is no longer able to be used, it is disposed of. Any hire equipment is also checked that it is fit for purpose.

Staff may only use clothing and equipment that are fit for purpose. Whenever possible, programme t-shirts are worn and coordinators are responsible for having all the equipment they need to perform the operations of their contracts, such as wetsuits, mask, snorkel, fins and a dive knife.

Participants

Participants are aware of the clothing and equipment required and are suitably clothed and/or equipped for the activity. This is apparent on permission letters as part of the EMR manual and SOP.

2026 MTS School Permission Form

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Coordinators check for appropriate equipment before programme commencement, such as wetsuits, as it is a requirement that all students wear wetsuits for snorkel activities in open water. Staff have the authority to refuse to accept the participant in the activity if they are inadequately clothed and/or equipped.

Activity equipment lists

Activity equipment lists for each programme are included in each programme role description.

Can be found here

1.2 Briefings

2026 EMR Snorkel Day Briefing.pdf
2026 EMR School Snorkel Briefing.pdf

1.3 Supervisor Checklist

EMR Adult Supervisor Graphic.pdf

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1.4 Check In & Out Form

2026 EMR Check in and out.pdf

1.5 Parent and supervisor form

2026 EMR Supervisor Form.pdf

1.6 Student Permission

2026 MTS School Permission Form

1.7 Quick Field Checklist

EMR Coordinator In-Field Quick Checklist

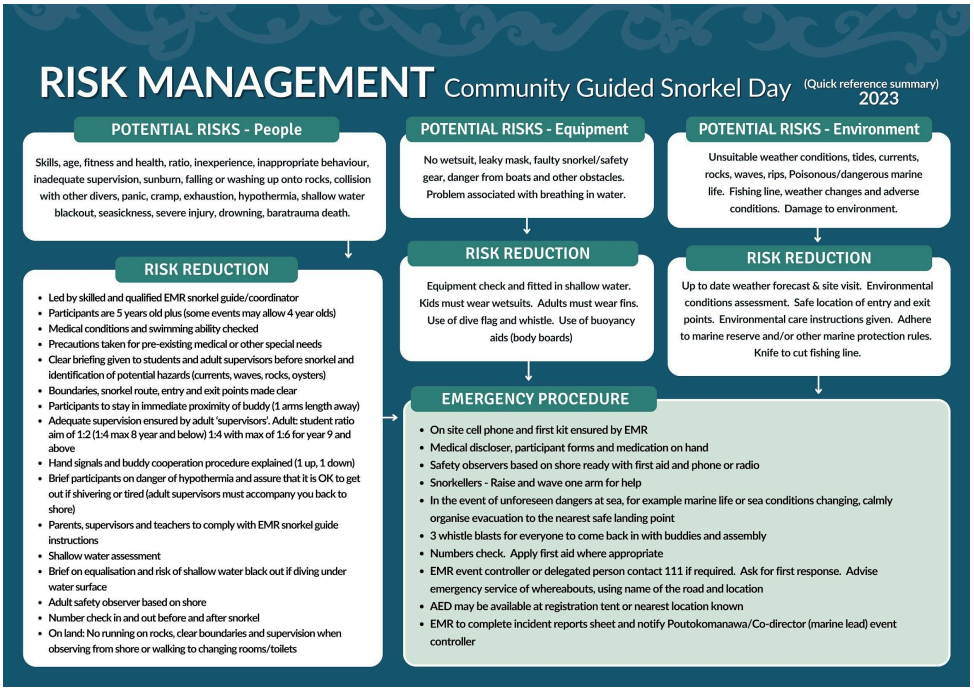
- ☐ Site specific RAS and Itinerary available online or hardcopy
- ☐ Check you have all the gear required and fit for purpose
- ☐ Complete pre snorkel operation risk assessment form (includes water quality and weather assessment)
- ☐ Complete participant, supervisor and shore observer briefings

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- ☐ Seek completion of participant and supervisor form and any volunteer forms complete
- ☐ Ensure adequate ratio
- ☐ Supervision structure includes team, supervisors and participants in relation to environment. Ratio is 1:2 supervisor to participant (with a maximum ratio of 1:4 for year 8 and below, adapt ratio to conditions, age, skills of students and/or supervisors).
- ☐ For year 9 students and above, the EMR ratio recommendation is 1:4 (with a maximum of 1:6).
- ☐ EMR check in and out form complete
- ☐ Screen your supervisors and volunteers competence in shallow water
- ☐ Ensure all student participants have appropriate equipment (e.g. wearing wetsuits)
- ☐ Ensure all adult supervisors have appropriate equipment and check equipment of those providing their own
- ☐ Maintain control of the group throughout snorkel
- ☐ Check off on EMR Check in and out form
- ☐ Complete post activity review on end of pre snorkel risk assessment form

1.8 Quick reference RAMS Diagram for community events

Risk management quick reference_snorkel days.jpg



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1.9 Pre Site Assessment - Pre snorkel operation risk assessment form

2026 EMR Snorkel Pre-site Assessment.pdf
2026 EMR Advanced Snorkel Pre-site Assessment.pdf
2026 MTS Crew Pre-site Assessment.pdf

1.10 Water Quality

2026 MTSCT Water Quality Assessment Policy.pdf

Document ALL decisions regarding weather or water quality on a pre site assessment form

1.11 Sanitisation Policy

2026 MTSCT Sanitisation Policy.pdf

Appendix 2 | Safety position statements

Gazebo

Gazebos supplied by MTS MUST be pegged down no matter what the wind conditions (except indoors). Max wind for erected gazebos is 20 knots, consider tying down the gazebo (to cars, trailers or water filled containers) in winds over 15 knots. Erected gazebos MUST not be left unmanned at any time(someone in the general area, that is able to respond).

Full Face Masks

We do not allow the use of full face masks as of 2017/18 season, due to possible H & S risk (mask can be hard to remove when full with water).

Formal Procedure for Antihistamine Administration

Our team may carry over the counter antihistamine for personal first aid items. Coordinators do not administer any medication without specific written permission. We must ensure that we have captured information and increase identification of participants with known allergies and anaphylaxis via our pre-site assessment forms and/or other forms. Find out if there is an 'action plan for anaphylaxis' in place as part of our notes for medical/swimming management.

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Sharks

Any shark larger than 1.8 m (about the size of a human) should be considered potentially dangerous, any observation of any shark that size should prompt an orderly immediate evacuation of the water, as per EMR evacuation protocol.

Appendix 3 | Snorkel day roles

Refer to Community Guided Snorkel/Kayak/SUP Day event plan template

2026 MTS Event Plan Template

Community Guided Snorkel Day Roles

2026 EMR Snorkel Day - How to.pdf

Role of Experiencing Marine Reserves programme provider

Provide overall management, snorkel leadership and equipment for the event. On the morning of the event, all guides (volunteers) must be fully briefed separately from event participants. Rating procedure for volunteers. Event controller to screen competency with support from experienced guides. Volunteer staff must have signed the volunteer form.

Participants must first register (once registered, we are looking after them, so tell them not to go far, a waiting list might be required). Participants read the laminated blown up RAMs sheet and disclose any medical conditions on the registration form. The family name of the group will go onto a whiteboard next to the designated guide name (with a in water and out water column) along with guide name on the registration form, so that the registration people and event controller knows when a guide is available and number of participants in the water at all times).

Assigned guide to help get group ready and fitted into equipment (if things are really busy, don't worry about completing gear hire information, just make sure guide knows to tell group to return gear as soon as back) Any medical info or swimming ability (or any information of relevance) info is passed on the designated guide. Guide also asks discreetly.

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Management notes for medical conditions recorded on back of registration form or via online registration planning notes

Instructions for care of the gear are given by the guide, i.e. no sitting on rocks, no squeezing on gear, no throwing gear and gear must be returned to gear tent as soon as guided snorkel finished for others to use. When things get very busy the name of the guide may also be written on the participant's hand.

Snorkel guide notifies the registration team once ready to enter the water and a time is written on the board. Guides check back in with the tent and confirm the total number of people that are back when they come back in. Gear is given back to tent and ticked off as returned on registration tent and gear ticked off as returned.

Make sure you plan to give your guides and safety watch people etc. a break.

Minimum requirements for event registration

Whether the event registration is on-line or via the registration form on the day - you must have collected and have access to:
Name
Medical information
Emergency contact
Risk disclosure

2026 EMR Snorkel Day Registration Form.pdf
2026 EMR Snorkel Day Briefing.pdf

Volunteer and leadership positions

Event leader (controller)

Activates emergency response, is in control with overall numbers in water on day and briefing volunteers and staff. Assigns snorkel guide to appropriate group. Prints the event plan and writes appropriate notes and names next to roles. Sets rules for the day, for example requesting all adults to also wear wetsuits, when assessed necessary by event controller (e.g. in colder waters)

Water based snorkel guides

Volunteer guides will each take a small group of the public (maximum 6), assisting them to snorkel and identify the fish they see. The groups will keep close to the shore on the whole and sessions will last about 20 minutes. Volunteer guides will do 2 - 3 sessions then take a

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break. A kayak or other safety watch might support the groups and a full briefing will be held before the event. You will need to be an experienced snorkeler i.e. comfortable in the marine environment and have the ability to look after the group, plus a basic knowledge of what you're likely to see in the way of fish and other marine life. Able to follow instructions, fit and healthy and free from the influence of drugs or alcohol.

Water based safety kayak support (if appropriate)

Volunteers to provide support to the snorkelling groups and guides from kayaks i.e. making sure snorkelers don't stray off from their groups or too far from the shore. Again, volunteer kayakers will do 2-3 sessions then take a break. If you don't have your own kayak, we can provide one. You will need to be an experienced kayaker. Able to follow instructions, fit and healthy and free from the influence of drugs or alcohol. **Kayak ability may be tested on the day of the event.**

2026 EMR Kayak Safety Watch Form.pdf

Land based volunteers

Land based volunteers will help to register and kit out the people attending, plus retrieve gear, talk to people about the reserve etc. Less special skills or experience is needed for this job, only to be able to follow instructions and free from the influence of drugs or alcohol.

Shore Watch

Watch snorkelers at all times. Checks for any emergency signals or a member of the group separated from the main group. Able to follow instructions and free from the influence of drugs or alcohol. See In water emergency response plan.

Volunteer Ratings

Senior guide

Proven capability (previous events or training attended) or adequate qualifications (dive master etc), experience and knowledge of area.

Assistant guide

Working with a senior guide, could have additional ratio or bring people back to shore

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Trainee guide

Working under direct supervision of a senior guide – no additional ratio

Land based

Assists in registration tent and helps gear, evaluation or shore based spotter.

Vessel operator (safety watch)

Provide effective lookout for in-water activities and hazards (via boat or kayak). Can identify dive and relevant maritime signals. Has good visual scanning skills. Able to follow instructions and free from the influence of drugs or alcohol. Can identify entry and exit hazards including those related to propellers. In some instances propellers will need to be on then disengaged at the last second, such as when manoeuvring the boat to collect divers in difficult conditions or emergency scenarios. Brief participants on these scenarios and emphasise the importance of the use of signals for when to approach or leave the boat. See emergency plan.

Note: There should always be someone on safety watch, whether it is the shore watch or the vessel operator. If the vessel operation is called away for any reason, a shore watch will take over. If the entry into the water is some distance from the registration tent, a check in and out person should be assigned close to the shore.

Refer to MTSCT Code of conduct
2026 MTS Code of Conduct - to sign.pdf
2026 MTS Volunteer Registration - Template

To be completed on the day and signed by volunteers (who have already completed volunteer form on-line).

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Appendix 4 | Snorkel Guidelines

The Experiencing Marine Reserves (EMR) programme is exactly what the name implies. It is about experiencing, first hand, the difference between local beaches and fully protected marine reserve areas. Snorkelling enables an insight into the marine world. Even standing in waist deep water looking about with a mask on is an experience!

EMR Snorkelling Objectives

- Experience marine life first hand
- Build water safety & confidence in the real environment
- Encourage snorkelling as a recreational and fun activity
- Instil caring attitudes and passion for the conservation of the ocean
- Encourage emotional connection to marine environment

Outline

The first part of the EMR programme is learning about the marine environment in the classroom (depending on extent of EMR programme participation). If possible, it is encouraged to practise snorkelling in the school pool with an EMR snorkel leader/coordinator, confident teacher or New Zealand Underwater Mini Dippers trainer.

The third stage is an introductory snorkel in shallow water at the local beach (dependant on extent of EMR programme participation). Your EMR coordinator will have already snorkelled at your local beach (or have previous experiences or confidence in the area) and will have identified any hazards or risks.

After your local investigation or snorkel, you will then experience a marine reserve (depending on extent of EMR programme participation).

The EMR Team

EMR is delivered by a team of passionate coordinators nationwide. EMR coordinators/ snorkel leaders offer guidance, direction and coordination of classroom exercises and field trips to the ocean. We also provide snorkel equipment, instruction, resources and snorkel risk management.

To find out more about our team of regional coordinators visit our website www.mountainstosea.org.nz/team

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Health and Safety

Experiencing Marine Reserves (EMR) is a programme of the Mountains to Sea Conservation Trust. We are a registered adventure activity. Regulation 6(1) of the Health and Safety at Work Act (Adventure Activities) Regulations 2016 (the Regulations). For confirmation of our registration go to www.worksafe.govt.nz

Training the snorks

('Snorks' term In memory of Koha Waetford)

Some background information for snorkelers.

Equipment

Wetsuits are essential for your safety and warmth. Please take care when fitting wetsuits, and ease the suit on – do not pull. Your mask should feel comfortable and water-tight. A good test is to place the mask on your face (without straps) and inhale gently through your nose. If the mask fits well it will cling to your face.

Your snorkel allows you to breathe while you are swimming on top of the water. A mask places a layer of air between your eyes and the water and allows you to see clearly. When using a mask objects appear to be larger and closer.

Snorkels have a soft mouthpiece with tags called spigots for you to grip with your teeth while breathing. The fins help us to propel ourselves through the water. Never walk with your fins on land, as this is a recipe for disaster. Remember to use de-fog rather than spit (unless it is your own mask) to stop your mask fogging up before entering the water.

Toothpaste should be used to clean off chemical residue on new masks before use. Your own gear should be maintained by rinsing in freshwater after use. For EMR gear refer to the EMR gear care and sanitisation policy on our website

Body boards are used by EMR as buoyancy aids and for additional visibility. There should be 1 body board per buddy group. Staff running any activity have the authority to cease an activity for any safety reason.

Sound

Sound travels much faster underwater than on land (4 times faster), and this increased speed makes the direction of the sound difficult to determine. This means that the snorkeler

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must be very aware of boats. Use of a dive flag helps your buddy group to be visible to boats.

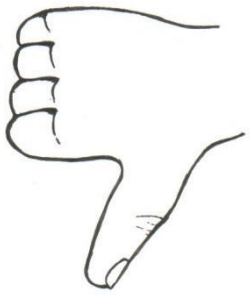
Movement

The best way to move through the water while snorkelling is to float face-down while breathing through your snorkel. Fin kicks should be slow, steady and even. Try not to thrash around, as you may scare the fish! Your hands are best by your side to conserve energy.

Temperature

An hour in the water is like a day in air of the same temperature! As we lose heat much faster in the water, it is very important to get out of the water if you begin to shiver.

Communication – hand signals!

<table>
<tr>
<td>
OK on the surface or from distance</td>
<td>
OK (checking your buddy)</td>
<td>
Distress Signal</td>
</tr>
<tr>
<td colspan="2">
Going Down</td>
<td>
Going Up</td>
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Buoyancy

When objects are placed in the water, they will usually sink or float. When a snorkeler is placed in water, the snorkeler will displace a volume of water equal to the volume of the

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person immersed. The upthrust is the force pushing us up. When the upthrust is greater than the mass of the object it will float and be positively buoyant (e.g., a wetsuit makes more volume and displaces more water).

When equal to the mass of the object, it will just float on the surface and will have neutral buoyancy (e.g., when a snorkel diver has no wetsuit). When less than the weight of the object, the snorkeler is said to have negative buoyancy and sinks (e.g. a snorkeler with no wetsuit and a weight belt).

When we wear a wetsuit, it makes us positively buoyant. Weight belts can be used to counter this effect (e.g., you put on a wetsuit in air on the surface and weigh 61 kg and when immersed in water you displace 64 litres of water, the volume and the mass of water displaced (upthrust) would be 64kg, so the snorkeler would float.

To counter this we add 3 kg of weight to make up the difference in air (61kg) and water (64kg), this would theoretically make the snorkeler neutrally buoyant. By using a wetsuit with a weight belt snorkelers are able to stay warm whilst enabling diving underwater to look around.
Wetsuits also protect us from abrasions and the sun. We aim to have neutral or slightly positive buoyancy so we can stay on the surface with minimal energy while also allowing you to snorkel dive easily. When buoyancy is neutral, the diver should float on the surface when the lungs are full of air, then slowly sink as they exhale. We must always check ourselves for neutral buoyancy upon entering the water and adjust our weight belt accordingly.

If you notice a diver struggling to reach the surface, the first thing to do is remove their weight belt.

When teaching students or novices, we must ensure they are positively buoyant so they will tend to float rather than sink, making them much safer. We do this by getting them to wear a wetsuit but NO weight belt, unless specific training is delivered in the pool prior to open water for year 8's and below or if the weight belt belongs to the student and they are supervised by their parent

Buddy System

When snorkelling, we must always go with a buddy. The EMR programme recommends a ratio of 1:2 (one adult supervisor to two students) for year 8's and below. You must stay one arm's length from your student and adult buddies. In your buddy group, your adult supervisor will have a buoyancy device (body board), this allows you to hang over the front and get used to seeing and breathing through your mask and snorkel. The body board can be used for resting on or holding on to keep your group together. The use of body boards also makes EMR buddy groups identifiable. Refer to EMR SOP for snorkelling

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Diving down while snorkelling

Indicate to your buddy that you are going down using the signals, take a deep breath, duck dive underwater (head first), kick your legs into the air and use your legs and body weight to force you down. Equalise on your way down and point your hand up on return on the way up to avoid collisions.

The best way to clear your snorkel is to use the blast method when you reach the surface. To do this you must hold your tongue over the mouthpiece while duck diving and then take your tongue out of the mouthpiece and blow! Always take a cautious breath after clearing your snorkel, in case you did not clear all the water.

If you have water in your mask this can be cleared without taking it off. By using the top of the mask as a hinge and the bottom as a door, tilt your head back and open the door to let water out while exhaling at the same time.

Buddy Cooperation

When snorkelling with your buddy, it is important for you to watch out for each other. While one duck dives down the other keeps watch from the surface and vice versa. This is called the 'one up one down' rule.

Practise your going down hand signals with each other. Make sure you stay together - within one arm's length. Inform your adult buddy if one of you is getting cold. If one person needs to go back to the beach, then the whole buddy group must go back. Never snorkel alone!

Treatment of incidents in relation to snorkel diving

All EMR coordinators are qualified First Aiders. The most recent information from First Aid trainers should apply to the information below.
Priority action plans include SRABCS – Safety, Response, Airway, Breathing, Circulation, and Severe Bleeding.

Pressure related injuries or Barotraumas

When diving down under the water the pressure increases, which in turn increases pressure on the eardrum. Air in the middle ear is trapped and can expand and contract inside the ear, causing pain in your ear drum. Therefore, we must 'equalise' the pressure. You can equalise by pinching your nose and gently blowing. Pressure can also cause a face mask 'squeeze'.

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Blowing gently into your mask will also equalise the air space between your eyes and the water. Never snorkel with swim goggles, as these cannot be equalised and can cause serious damage to your eyes.

Equalisation can also be achieved by swallowing or wriggling your jaw or moving your neck.
Tilting the head back, yawning and moving the jaw around may also help as it will open the Eustachian tube more, making equalising easier. Chewing menthol gum before a dive can help as it also opens the Eustachian tube.

If pain persists when you dive down, then you should stay on the surface of the water. It is also important not to dive under if you have a cold, as this blocks the ear and makes equalisation difficult. Always equalise on your way down gently – never blow hard and do not equalise on your way back up.

First aid treatment for barotraumas involves keeping passages unblocked. If ear bleeding occurs, lay the patient down, cover the ears (but do not plug), help the patient to relax and call for medical assistance.

Allergies

Mild to moderate allergic reaction

Swelling of lips, face, eyes. Hives or welts, tingling mouth abdominal pain or vomiting Last two are signs of anaphylaxis for insect allergy)

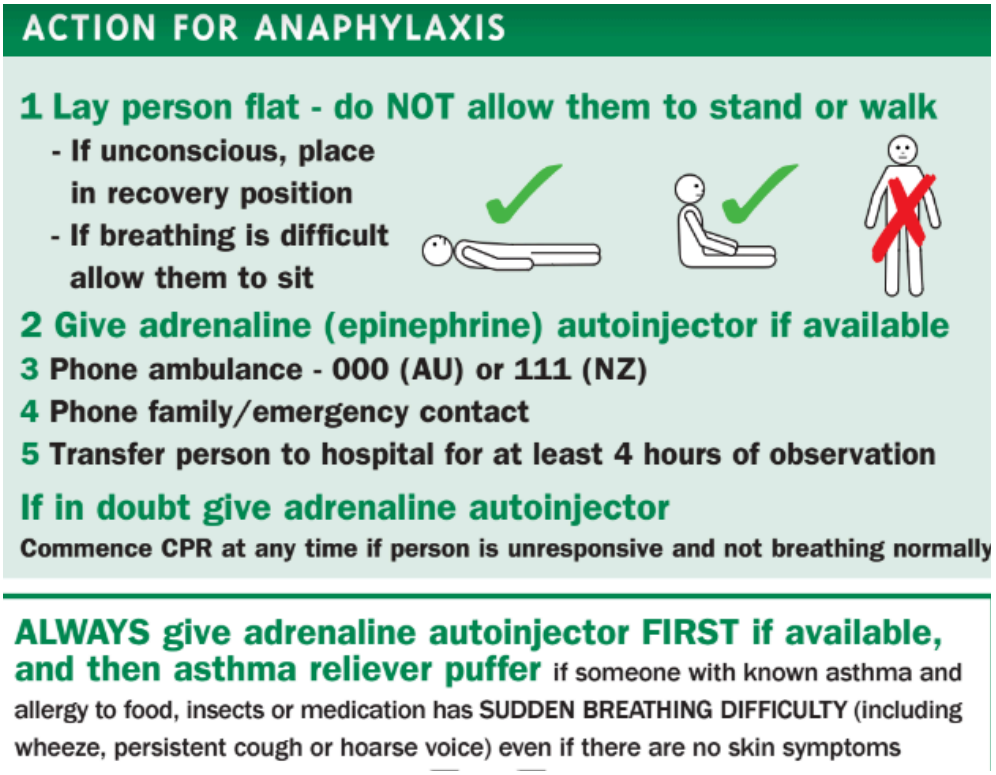
Action
For insect allergy, flick out sting if visible
Stay with the person and call for help. Give other medications (if prescribed), Phone family or emergency contact

Anaphylaxis - severe allergic reaction

Watch for any one of the following signs of anaphylaxis

- Difficult/noisy breathing
- Swelling of tongue
- Swelling/tightness in throat
- Wheeze or persistent cough
- Difficulty talking and /or in hoarse voice
- Persistent dizziness or collapse
- Pale and floppy (young children)

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Hypothermia

Hypothermia results when the core body temperature drops to a level it cannot recover from (below 35°C). If exposed for an extended period, cold water temperatures can cause hypothermia while snorkelling.

Symptoms include: intense shivering, numbness, slurring of words, loss of coordination, stumbling, clumsiness and changes in behaviour – anxious, irritable, and irrational. While snorkelling, the chances of hypothermia are much reduced by wearing a suitable wetsuit for the water temperature. Typically 7% of our body heat is released from the head, a hood can increase time spent in the water. On land sufficient warm clothes should be worn.
If a person starts to feel cold or begins to shiver, they should exit the water immediately. Later more serious signs are when shivering stops and unconsciousness occurs. When the body drops below 26°C death occurs.

To treat hypothermia, move the patient to a dry, sheltered area and change them out of wet clothing into warm, dry clothes. Give the patient warm sweet liquids to drink if they can (not tea, coffee or alcohol). Avoid warming too quickly, swaddle the patient's head. Keep the person lying down and warm with blankets. If symptoms persist and patient shivering decreases or stops, contact emergency services. Severe hypothermia is a medical emergency. Monitor vital signs, CPR may be required. SRABCS – Safety, Response, Airway, Breathing, Circulation, Severe Bleeding.

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Note: The **1-10-1** rule for hypothermia. I have found many people believe exercise warms the body up. This is the last thing they should be doing. Knowing this will help snorkel guides make correct assessments when they are actually in the water. This rule is for sudden immersion in cold water but I think it is relevant to us, as hypothermia can set in without anyone realising until the situation becomes a problem.
https://nationalwatersafetycongress.wildapricot.org/1-10-1

Hyperthermia

Hyperthermia is the opposite of hypothermia and results when the body produces or absorbs more heat than it dissipates. It is caused by excessive exposure to heat. Body temperatures above 40°C can be life threatening and while serious hyperthermia can come on quickly, it usually follows a period of heat exhaustion.

Symptoms of hyperthermia initially include sweating profusely but serious hyperthermia occurs when the body is no longer able to sweat due to dehydration. Patients with hyperthermia often become confused or hostile and experience headaches. Blood pressure often drops which can lead to dizziness and fainting.

In serious cases, patients may encounter chills and trembling and children may suffer convulsions. Hyperthermia can be prevented by drinking plenty of liquids and keeping out of direct sunlight during the hottest parts of the day. Wetsuits should only be worn just before you enter the water, not for extended periods of time on land.

SRABCS – Safety, Response, Airway, Breathing, Circulation, Severe Bleeding.

Treatment for hyperthermia revolves around lowering the body temperature and rehydrating the patient. Moving the victim to a cool place and removing clothing can help, but in serious cases immersing the patient in cold water is necessary. Once in a cool area, place the victim in the recovery position and contact emergency services.

Hyperventilation and shallow water blackout

Hyperventilation is sometimes used during breath-hold diving to expel carbon dioxide from the body, reducing the urge to breathe and allowing a diver to stay underwater for longer periods of time. This method is dangerous and can cause shallow water black out where a diver loses consciousness when the body does not get enough oxygen. Shallow water blackouts are avoided by not hyperventilating and allowing the body to accurately signal the need to breath. Relaxing at the surface and breathing constantly also reduces the chances of shallow water blackouts. You should always take turns at diving under so if your buddy blacks out you will see this happen.

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Unconscious snorkeler

Notify your snorkel leader. Respond by bringing the diver back to the surface (if required), achieving positive buoyancy (by dropping weights if wearing a belt and using a buoyancy device). In-water resuscitation may improve survival of victims who are in the initial stages of the drowning sequence but delays time to full assessment and CPR.

Remove the victim from the water as soon as possible, and only begin in water rescue breathing if immediate removal from the water is delayed or impossible. Rescue breathing in deep water requires an appropriately trained rescuer and floatation aid such as a rescue board, tube or buoyancy vest. In water, chest compressions are ineffective and should not be attempted.

If consciousness is not returned, once on shore, remove the diver from the water, follow DRSABCD | **D**angers? **R**esponsive? **S**end for help. **O**pen Airway. Normal **B**reathing? Start **C**PR. **A**ttach Defibrillator (AED) as soon as available, follow prompts Continue CPR until responsiveness or normal breathing return

Any immersion event that is not symptomatic needs monitoring while in EMR duty of care and subsequent responsible persons advised to seek medical assessment.

Rescue tow techniques are covered in initial training of all coordinators as part of snorkel instructor training and at annual Mountains to Sea Wānanga conference and/or as part of EMR training courses.

Drowning

Drowning occurs when water enters the lungs. If someone has nearly drowned, it is likely they will be struggling to breathe if breathing hasn't already stopped. They may be frothing at the mouth and show little or no response. Make sure buoyancy is achieved and remove the patient from the water as soon as possible, and only begin in water rescue breathing if immediate removal from the water is delayed or impossible (as explained above).
Check for dangers to yourself and bystanders.

Check RESPONSE using voice and touch. If there is no response, call 111 and ask for AMBULANCE. Check airway: tilt head back and lift the chin. Check breathing: look for normal breathing. If not breathing normally, commence CPR. Place one hand in the centre of the chest. Give 30 chest compressions: HARD and FAST then give two breaths. Continue until the ambulance arrives. Attach AED (defibrillator) if available. Always remember 30 to 2 no matter who!

If patient conscious, keep them sitting up (on their side may also be appropriate) warm and reassured. A drowning casualty must be seen by a doctor as they may have water in their lungs. Call 111, for anyone with pale/bluish skin, especially around mouth, a persistent

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cough, shortness of breath, increased work of breathing, agitation or altered level of consciousness. Refer to ANZCOR Drowning Guideline

Note: Any immersion event that is not symptomatic needs monitoring while in EMR duty of care and participants involved advised to seek further medical assessment.

Minor aquatic injuries

Cuts and abrasions are common in a marine environment where there are many sharp rocks and marine life. Most minor aquatic injuries can be treated with your first aid kit for bumps, scrapes and stings. To treat a minor injury, get the patient safely out of the water. Keep the person warm and comfortable and monitor their condition.

Flush the wound with fresh water or saline and cover with a sterile dressing. Kina spikes are often difficult to remove using a splinter probe and tweezers. If there is any doubt about the person's condition, seek medical assistance.

Marine Life

Sharks

Some sharks may exhibit lack of fear and may approach snorkelers out of curiosity. Snorkel groups should stay close together at all times and within 1 arms length of the buddy group. If snorkelling in known shark territory (e.g.: Galapagos sharks in the Kermadec Islands) a minimum of 1 push stick per group is to be carried. If aggressive shark behaviour is displayed (watch for back arching and dropping of the pectoral fin, rapid movements towards snorkelers or build up of shark numbers throughout snorkel)- 3 whistle blasts to evacuate snorkel to nearest safe landing point.

Try not to get in between the shark and the reef, avoid getting in tight gullies. Someone who experiences panic should be evacuated with a buddy group. Avoid splashing. If anyone is cut they should abort with a buddy group. If an Oceanic white tip, tiger shark, Mako or great white shark were sighted the snorkel should be aborted

Jellyfish – Managing This Dynamic Hazard

Some of you are noticing more jellyfish in the water. As a reminder, jellyfish are a classic example of a dynamic hazard that requires careful management during your sessions.

Assessment and Planning

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During your shallow water assessment, if you note jellyfish presence:

- Identify the species
- Check for allergies noted in pre-site information
- Re-check for allergies with your group
- Brief participants on the dynamic hazard so they understand the risk

You might choose an alternate location if there are allergies to jellyfish and/or abundant dangerous jellyfish identified (e.g., relocation to the other end of the bay). Ideally, have this planned before the group arrives.

Mitigation Strategies

- Coordinators: Perform a site recce before the group arrives if it's a known area for jellyfish
- Make sure your group is aware of the potential hazard
- Advise the group of alternative snorkel routes to avoid hotspots
- Keep hot water in a thermos on the beach
- Ensure the group is as covered as possible (could suggest wearing socks to protect ankles)
- Brief the group on treatment for jellyfish stings and tips to avoid them as much as possible

Dangerous Jellyfish in New Zealand Waters

New Zealand's coastal waters are home to several jellyfish species that can deliver painful and potentially dangerous stings.

Portuguese Man o' War (Physalia physalis) – Most Dangerous

This creature is technically a siphonophore rather than a true jellyfish. It features distinctive blue, pink, or purple gas-filled floats and long trailing tentacles that can extend several meters. Its sting causes immediate intense pain, red welts, and in severe cases can trigger allergic reactions, breathing difficulties, and cardiovascular problems. Portuguese Man o' War are most commonly found during summer months and are often washed ashore in large numbers after strong onshore winds.

Lion's Mane Jellyfish (Cyanea capillata)

Found in New Zealand waters, particularly in cooler southern regions. While less common than the Portuguese Man o' War, this large jellyfish can have a bell up to 50cm in diameter with long, hair-like tentacles. Stings typically cause localized pain, redness, and itching, though they are generally less severe than Man o' War stings.

Box Jellyfish

Occasionally reported in northern New Zealand waters, though they are far less common and less dangerous than their Australian counterparts.

First Aid Treatment for Jellyfish Stings

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The recommended first aid approach has evolved in recent years. For most jellyfish stings in New Zealand, including Portuguese Man o' War:

1. **Rinse** the affected area with seawater (NOT freshwater, which can trigger more venom release)
2. **Remove** any visible tentacles using tweezers or a stick—never bare hands
3. Do **NOT use vinegar** for Portuguese Man o' War stings, as it may worsen the injury
4. **Immerse** the affected area in hot water (as hot as can be tolerated, around 45°C) for 20-40 minutes—heat helps break down the venom proteins and provides significant pain relief
5. **Monitor** for signs of severe reaction
6. **Pain relief:** Use over-the-counter pain relief like paracetamol or ibuprofen

Avoid: Rubbing the area, applying ice directly to the skin, or using alcohol, as these may worsen the injury.

When to Call 111

Call immediately if any of these symptoms develop or if the sting covers a large area:

- Difficulty breathing
- Chest pain
- Nausea or vomiting
- Excessive sweating
- Altered consciousness

If you're unsure about the type of jellyfish or if symptoms persist or worsen, seek medical attention promptly.

Rays

The barb/sting of rays are found on the base of the tail. They may be multiple and up to 30cm in length. In response to being disturbed, the barb/sting is driven with the point usually travelling forward and upward. The barb/sting is made of cartilage, as is the skeleton of the stingray. It has a barbed/serrated surface which is covered in a tissue-necrotic toxin in a mucous sheath. The sting can cause massive local trauma, while the toxin results in local necrosis and a great deal of pain.

Initial treatment of a wound should include stabilisation of any respiratory or cardiovascular compromise and local measures to reduce major blood loss (pressure, tourniquet) visible loose spine fragments should be removed from wounds immediately and the wound irrigated with saline. Placing the affected part in hot water as hot as can be tolerated (40-45 degrees C) for up to 45 minutes should be attempted. Pain relief may be rapid but is likely to be temporary if not heat treated for more than 30 minutes. Any large objects embedded in the skin such as a stingray barb or stake should be treated for bleeding, but left in place for medical professional to remove.

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Scorpion fish

Dorsal spines can administer a very painful sting. Should be treated the same as rays, with heat.

Shock

Symptoms include-pale appearance, cold clammy skin, altered breathing (rapid and shallow), rapid weak pulse, faintness, nausea/vomiting, shaking and trembling.

Treatment- Call 111. Monitor the patient's breathing and pulse regularly. If the patient becomes unconscious, place them in a lateral position. Reassure the patient, and raise the leg about the level of the heart and keep warm. Give nothing by mouth, you can moisten the lips but do not give any food or drink.

Bleeding

Try at all times to wear gloves or avoid contact with blood.

Severe bleeding | Apply pressure, using a towel or anything to stop bleeding. Elevate the bleeding area. Rest the patient and treat for shock.

Bleeding from nose | Ask the patient to sit up, lean slightly forwards and pinch nostrils for 10 minutes breathing through mouth. Advise patients not to sniff or blow their nose. If persisting seek medical advice

Bleeding from lacerations | Control bleeding by pressure, elevation and rest. Clear the area of skin around the laceration and apply sterile dressing. Those with broken skin should check their tetanus injection records. Superficial foreign matter should be removed but anything deep should be left for a doctor. Large cuts may require stitching (medical assistance).

Cramps

A cramp is a painful muscle contraction often caused by cold temperatures or physical exertion. The affected muscle can be stretched and massaged to relieve the pain; your buddy may be able to help with this. You may require assistance getting back to shore (notify your snorkel instructor).
A good calf muscle stretch is to pull the end of your fin towards you gently while massaging the muscle with your other hand. Once on shore, drink plenty of water as dehydration is one of the main causes of cramps. Drinking water before swimming and stretching muscles first can prevent cramps.

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Exhaustion

Exhaustion often occurs due to excessive loss of body fluids and body salts. The person may suffer from headaches, dizziness, rapid breathing, feeling sick, muscle cramps, tiredness and restlessness. Assist the patient out of the water using a flotation device. Get the patient warm and dry but keep them out of direct sunlight. Give the patient energy, food and liquid and allow them to rest until they recover. If condition doesn't improve, seek medical assistance

Information for treatment of snorkel incidents compiled by Samara Nicholas and EMR regional coordinators.

Questions to ask if you have participants with diabetes

Do you get symptoms of low blood sugar?

If there is a child with type 1, without their parents you can ask what their main symptom of low blood sugar is, for example this can often be shaking hands, hyperactivity or quiet/non audible which are qualities most kids show when cold.

Have you checked your sugar recently? ask them to check before getting in the water. I make sure they know we can work around it if they aren't happy with their current levels.

Do you have any snacks with you? (if you have resources ,offer to take some out with you if they think they will need it. Normally at goat island this isn't needed, but a good consideration if, for some reason, you are covering a long distance in the water.)

Encourage them to bring snacks to the entry point/beach bag.

Also just pointing out if they needed to be towed back to the beach for feeling like they had low blood sugar, do not get them to kick haha.

If you are doing land based activities I would just again ask if they have any snacks on them and let them know the extent of activity e.g. if you will be walking quite far , how long you will be doing an activity for, in case they want to bring a snack/insulin with them.

Any participants we have had with diabetes have had their own snacks but if anyone wanted to add to the personal "first aid" kit, lollies or juice boxes , fast acting carbs, are best used to treat low blood sugar.

Most people with diabetes are well practised in managing their levels but it pays to make young children know they can tell you if they feel funny and we have had the odd adult who is recently diagnosed with type 2 , so may not be as well practised at self care.

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Last Advice

Before entering the water – remember

LOOK – be aware of the environment around you
LISTEN – for instructions and any emergencies
FEEL – if you are getting cold
Remember 'Tiakina Tangaroa'
(Care for the Ocean and Seas)

Karakia

Whakamana te maunga
Whakamana te wai
He mauri o ngā tangata
Ngā mea katoa he pai
Haumi e Hui e Taiki e !!

If we look after the water
from the mountains to the sea,
it will look after us.
It is our life force.

Appendix 5 | Incident Form

2026 MTS Incident Report Form.pdf

Appendix 6 Volunteer Form

2026 MTS Volunteer Registration - Template
2026 MTS Volunteer Role Descriptions.pdf
2026 MTS Volunteer Terms.pdf

Appendix 7 | School Agreement

2026 MTS School Agreement.pdf

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Appendix 8 | EMR Peer Appraisal

2026 EMR Peer Appraisal.pdf

Appendix 9 | Youth Senior Snorkel Guide Permission Form

2026 EMR Youth Senior Snorkel Guide Permission Form.pdf

Through development of the rangatahi programme we have had increased participation of young people as snorkel guides in relation to our Community Guided Snorkel Days events. The permission we seek from parents of under 18 years old is to approve the progression to senior guide only. Under 18's can be used as trainees and assistants without this written approval. Under 16 senior snorkel guides can be used for a 1:1 ratio only.

Volunteer snorkel guides

Volunteer guides will each take a small group of the public (maximum 6), assisting them to snorkel and identify the fish they see. The groups will keep close to the shore on the whole and sessions will last about 20 minutes. Volunteer guides will do 2 - 3 sessions then take a break. A kayak or other safety watch might support the groups and a full briefing will be held before the event. You will need to be an experienced snorkeler i.e. comfortable in the marine environment and have the ability to look after the group, plus a basic knowledge of what you're likely to see in the way of fish and other marine life. Able to follow instructions, fit and healthy and free from the influence of drugs or alcohol.

Volunteer Rating

Senior guide – proven capability (previous events or training attended) or adequate qualifications (dive master etc), experience and knowledge of area.
Assistant guide – Working with a senior guide, could have additional ratio or bring people back to shore
Trainee guide – (working under direct supervision of a senior guide – no additional ratio)
Land based - assists in registration tent and helps gear, evaluation or shore based spotter

Volunteer terms

Medical conditions: On the day of event participation - Please advise the supervisor if there has been any change to your medical situation.

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Induction

MTSCT requires all staff and volunteers to comply with our Safety Management Systems, policies and SOP's found on our programme websites. On the day volunteers will be inducted into the SMS and relevant SOP for the day, including access to the relevant site specific RAMS form/s or event plans and guide checklists for the site and given a verbal Health and Safety briefing from the supervisor, including (but not limited to) the identification of potential risks and management strategies. Volunteers will be verbally briefed about the work to be undertaken and potential hazards, location of first aid, facilities and emergency procedures on the commencement of every activity. Site familiarisation is undertaken and relevant issues explained wherever these arise.

Volunteer responsibilities

- ☐ Take reasonable care of your own health and safety,
- ☐ Take reasonable care that what you do or don't do doesn't adversely affect the health and safety of others,
- ☐ Cooperate with any reasonable policies or procedures the business or undertaking has in place on how to work in a safe and healthy way, and
- ☐ Comply with any reasonable instruction given by the business or undertaking so that they can comply with HSWA and the regulations.

The complaints policy is found on our website. Health and Safety feedback and/or comments can also be submitted via our programme websites www.whitebaitconnection.co.nz website www.emr.org.nz

Appendix 10 | Snorkel Day Registration Form

2026 EMR Snorkel Day Registration Form.pdf

Appendix 11 | Advanced Snorkelling SOP

2026 EMR Advanced Snorkel Pre-site Assessment.pdf

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EMR Specific activity SOP - Advanced snorkelling

Advanced snorkelling operations to be led by an EMR endorsed coordinator.

Purpose

The purpose of this policy is to establish a Standard Operating Procedures specific to advanced snorkelling activities to ensure the health and safety of all participants involved in the Mountains to Sea Conservation Trust programme and projects throughout NZ, under the leadership of an Experiencing Marine Reserves (EMR) endorsed coordinator. Advanced snorkelling activities will enhance participation in community science such as monitoring in relation to marine biosecurity (fan worm removal) and the Love Rimirimu project https://www.loverimurimu.org/

This policy is to be applied for any snorkelling deeper than 4m and within 6m and aims to minimise the risks associated with advanced snorkelling and to provide a safe and healthy working environment. This policy is intended to supplement the EMR Snorkelling SOP when carrying out advanced activities such as monitoring.

Note: This Advanced snorkelling SOP will only apply when a snorkelling activity is focused on monitoring the marine environment and more frequent duck diving is required. Advanced snorkelling to be led by a EMR endorsed coordinator, with small working groups of 6 freedive qualification or suitably trained divers at a time.

Definitions - Snorkelling vs advanced snorkelling

Snorkelling | Swimming on the surface of the water using a snorkel, mask and swimming aids such as fins and duck-diving to depths not exceeding 4m. Students don't usually wear a weight belt. Snorkel in the mouth when going underwater, using blast technique when surfacing.

Advanced snorkelling | Breath-hold diving to depths within 6m without the use of breathing apparatus. Weight belt on, snorkel removed from mouth when diving underwater. Main purpose of the activity is observations not depth.

Tools | (camera, knife, transect line, quadrat) may be used for both freediving and snorkelling.

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Key Hazards

Hazard/risk identification and control procedures. Refer to 2026 MTS Risk Assessment and Supervision Form (RAS) - MARINE Part 2 .pdf

Training and competency

2026 EMR Snorkel In-water Management Training Checklist.pdf

Advanced snorkelling leader | Additional training for EMR endorsed coordinators (refer to EMR coordinator qualifications) leading advanced snorkelling - record of freedive training with Sacha Williamson from Freedive Aotearoa initially and every 2 years (training recorded on personnel file - training records). Some additional site specific risk assessment training for some environments such as wharfs to demonstrate proficiency.

Participants | Basic freedive training or equivalent certification, or assessed to an equivalent level by an endorsed EMR coordinator. Medical liability form - rechecked every 3 years, Participated in an advanced snorkel assessment session (to verify qualification).

Completed proficiency requirements (training)

- ☐ Holds basic freediving knowledge and/or training record and experience, including health and fitness requirements for freediving. AIDA, PADI or equivalent certification.
- ☐ Proven proficiency of advanced snorkelling techniques in water including equalising, breath holds, deep dives and safety/emergency procedure (see list below)
- ☐ Introduction to the specific monitoring methods and equipment required for the programme through theory sessions and “dry runs” with the equipment.
- ☐ Practical, in-water (pool and ocean) runs of the methods.
- ☐ Attended a data collection and management workshop/s. (if applicable)
- ☐ Proven knowledge in seaweed/marine life identification relevant to monitoring

All participants in advanced snorkelling must demonstrate proficiency in the following:

- ☐ Demonstrate “exhale check” to ensure you are correctly weighted.
- ☐ Demonstrate weight belt removal and replacement at the surface.
- ☐ Demonstrate removal and replacement of the mask while in the water.
- ☐ Demonstrate two methods of mask clearing.
- ☐ Demonstrate proficient duck dive.

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- ☐ Demonstrate surface and underwater swimming using a mask and snorkel.
- ☐ Demonstrate equalising the middle ear and sinus gas spaces.
- ☐ Duck dive to 4 metres and retrieve an item from that depth.
- ☐ Perform unconscious snorkeller recovery from 4 metres.
- ☐ Demonstrate rescue procedures for a snorkeler who has suffered shallow-water blackout.
- ☐ Support buddy and tow or push 50 metres in a simulated rescue exercise.

All EMR advanced snorkelling leaders (endorsed coordinators) must additionally demonstrate proficiency in the following:

- ☐ Swim down a dive line to 10 metres and retrieve an item from that depth.
- ☐ Perform unconscious snorkeller recovery from 10 metres.

Equipment

Participants

All participants in the monitoring programme must have the following basic equipment:

- ☐ Wetsuit: A wetsuit is required to protect the participant from the cold water temperatures, and to provide buoyancy.
- ☐ If necessary, the participants will also be provided with a neoprene hood, gloves and socks for extra comfort and warmth.
- ☐ Mask & snorkel: A mask and snorkel are required to enable the participant to see and breath underwater.
- ☐ Fins: Fins are required to provide propulsion and manoeuvrability in the water.
- ☐ Weight belts: Weight belts are required to aid in the descent of the participant to depth. All weight belts must be checked for proper weighing in the shallows and adjust accordingly before starting any freediving activities.
- ☐ Knife or cutting tool: A dive knife or cutting tool is an essential safety item for freediving activities, as it can be used in emergency situations to quickly and safely cut through entanglements or other obstructions that may prevent a diver from surfacing. This could include getting tangled in fishing lines, ropes, or seaweed, or getting trapped in a submerged object.
- ☐ Whistle: A whistle will be used by participants in freediving. Following EMR whistle procedures, 1 whistle blast will mean “stop and listen for instructions” and 3 whistle blasts will mean “emergency happening, promptly evacuate to emergency meeting point on shore with your group”.
- ☐ Surface marker buoy (SMB) and dive flag: The dive flag and buoy provides a visual reference point on the surface of the water to increase visibility of the participants to other boats or watercraft in the area and provides in-water support. The SMB is typically a brightly coloured, inflatable buoy that marks participants’ position in the water and provides support to rest on. The dive flag is used to indicate the presence

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of a diver below or at the surface to other boats or vessels in the area, helping to prevent accidents and ensure the safety of all water users.

- [ ] In addition to the basic equipment, the programme must have the following specific health and safety equipment:
- [ ] First Aid Kit: The first aid kit should be well-stocked and readily available to treat minor injuries such as cuts and scrapes, as well as more serious injuries such as hypothermia or diving-related illnesses.

Advance snorkelling leader equipment

- [ ] Freedive float ring or float boat (with dive flag as per EMR snorkelling)
- [ ] AED highly recommended
- [ ] Weight Belts
- [ ] Depth gage
- [ ] Recommended type of fin for activity

Monitoring/pest removal equipment

- [ ] Flotation buoys for transects

Note: In activity/training/assessment led by a freediver instructor, the instructor is required to have oxygen.

Advanced snorkelling leaders are responsible for ensuring that all equipment is properly stored and maintained and available at the time of carrying out the freediving activity. This includes other equipment specific to the monitoring or restoration activities taking place at the time. The programme leader is responsible for rinsing with freshwater and drying all equipment for proper maintenance and storage.

Sanitisation Policy

2026 MTSCT Sanitisation Policy.pdf

Ratio

1:6 (working in buddy pairs for trained participants)
1 EMR endorsed coordinator to 6 trained divers

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Advanced snorkel safety plan

An advanced snorkel plan is similar to a group itinerary or detailed snorkel plan for remote sites but must have more detail on the site and planned activities and depth - timeline - etc.

Part A and B RAFS (hazard register for snorkelling)

2026 EMR Site Information - Risk Assessment and Supervision RAS Part 1 - Templat...
2026 MTS Risk Assessment and Supervision Form (RAS) - MARINE Part 2 .pdf

2026 EMR Advanced Snorkel Pre-site Assessment.pdf **and participant register** (see appendix)

The advanced snorkel safety plan should include

- ☐ The location of the freedive
- ☐ An evaluation of the surface and underwater conditions and hazards at the site (site specific hazards)
- ☐ An evaluation of underwater visibility, which will determine the maximum depth of freediving activities to maintain visual contact between buddies.
- ☐ Consideration of the snorkel team's ability to work in the conditions at the site.
- ☐ The water temperature at the site.
- ☐ The roles and tasks of all members of the free dive team
- ☐ Emergency procedures, including location of all emergency equipment.
- ☐ The agreed system or procedure of recalling snorkelers.
- ☐ The agreed procedure for retrieving a snorkeller.

Briefing

The briefing must be clearly communicated to all involved in the free diving operation. All advanced snorkelers must be given the opportunity to refuse to enter the water or terminate activities at any stage for any reason – the decision to enter the water is that of the individual and this decision must be respected by all involved in the operation.

Additional aspects to add to briefing

- ☐ Demonstration and discussion around monitoring equipment
- ☐ Target species
- ☐ Suitability of conditions for monitoring task
- ☐ Specific hazards for the site, e.g entanglement/ higher risk of hypothermia

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Advanced snorkelling procedures

All advanced snorkelers must:

- ☐ Always snorkel with a buddy
- ☐ Be correctly weighted
- ☐ Not hyperventilate
- ☐ Relax before holding their breath.
- ☐ Take a minimum of three proper recovery breaths at the surface following a breath hold dive

Buddy pairs

All snorkelling activities must be undertaken in 'buddy' pairs. Buddies should remain close enough to communicate and assist each other while undertaking free diving activities and should operate to the "one-up one-down" rule with constant visual contact between each other.

Correct weighting

All divers and snorkelers should be correctly weighted and should not sink from the surface when exhaling forcefully - their head might go underwater, but they should then stay neutrally buoyant and not sink.

Hyperventilation

Hyperventilating before a breath-hold dive is strictly prohibited.

Hyperventilating is rapid or deep breathing more than you need to. The main result of hyperventilation is a rapid decrease of Carbon Dioxide (CO2) in the bloodstream, which is the gas that causes us to want to breathe. By removing CO2 from the bloodstream, hyperventilating tricks the body into thinking that it doesn't really need to breathe. However, the hyperventilation hasn't increased Oxygen (O2) levels to compensate and O2 levels decrease just as quickly as normal, but without the safety mechanism of the high CO2 'need to breathe' reflex. Hyperventilating therefore means breath-hold divers can continue to dive without any strong desire to return to the surface.

Symptoms of hyperventilation include

- ➢ Euphoria.
- ➢ Tingling in the extremities
- ➢ Light-headedness.

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- ➢ Dizziness.
- ➢ Numbness around the mouth.
- ➢ A metallic taste in the mouth.
- ➢ Semi paralysis of the hands.

If you experience any of these symptoms, do not undertake breath hold diving.

Snorkel out

All breath hold divers should take their snorkel out of their mouth before they descend. In case of a black out the snorkel is an open water pipe to the victim's airways, making an effective rescue much more challenging and complex.

Equalisation

During breath-holds, divers must equalise frequently (when they feel the rising pressure) and never wait until the pressure becomes painful to the ears. Divers should not undertake diving activities if they are sick and/or congested and must wait until their airways are clear before going back to water. All breath hold divers must be able to equalise their middle ears and sinuses using either the Valsalva or the Frenzel manoeuvre.

Valsalva manoeuvre

With the mouth closed and the nose pinched, you exhale through your nose. As the air cannot escape out of your nose, it will automatically be moved through your Eustachian tubes into your middle ears. Your ears will make a "popping" noise – this is an equalisation.

Frenzel technique

The Frenzel technique works by pinching your nostrils, then placing your tongue at the roof and back of your mouth and moving the back of your tongue gently upward. This moves the air up into your middle ear making a "popping" noise as your ears equalise.

Finning technique

Good finning technique starts from the hips and uses the hip flexor to move the leg forward and the buttocks to move the leg backwards. Most other leg muscles are used to propagate that action towards the fin by keeping the leg and foot as extended as possible. Knees and ankles should stay as straight as possible throughout the whole range of the finning movement. To avoid a "bicycle style" kick, always keep your knees and ankles straight. How wide and how fast you kick depends on the length and strength of your legs, the length and

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stiffness of your fins and the level of your technique. In general, you should apply a strong, steady, and symmetrical kick with a continuous rhythm.

Recovery breathing

A breath hold dive is only completed once you have taken a minimum of three proper recovery breaths at the surface. If breath hold diving is undertaken, the minimum time at the surface between breath hold dives should be twice the duration of the breath hold time.

Pre-activity health checks

The purpose of pre-activity health checks are to ensure the safety and well-being of all participants in the programme by implementing a daily health check to assess their physical and mental readiness for the activity. The procedure aims to identify any health issues or concerns that may impact the participant's ability to perform their duties safely and effectively.

All participants in advanced snorkelling should complete a daily health check before beginning any activity. The health check will be a whole-group verbal activity. The health check will consist of the following:

Symptom Check

- ☐ Participants will be asked if they are experiencing any symptoms such as coughing, shortness of breath, sore throat, loss of smell or taste, or any other symptoms associated with COVID-19 or other respiratory diseases.

Anyone experiencing any of these symptoms will not be allowed to participate and will be advised to seek medical attention.

General Health Check (Hauora tinana)

- ☐ Participants will be asked about their general health and any medical conditions or concerns that may impact their ability to participate safely and effectively.
- ☐ This will include questions on any physical injuries or illnesses, chronic conditions, or recent surgeries. Any participant who reports a medical condition or concern will be assessed by the programme supervisor to determine if they are fit to participate.
- ☐ Participants will also be asked about their hydration/hunger status and encouraged to drink water/eat food if necessary.

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Mental Health Check (Hauora wairua)

- ☐ Participants will be asked about their mental state and well-being, including stress, anxiety, or any other mental health concerns.
- ☐ Participants will be encouraged to report any concerns they have about their mental health, and provided with appropriate support and resources.

The programme lead will ensure that all participants are aware of the daily health check policy and that it is always adhered to. Participants who are deemed unfit to participate based on the daily health check could participate in land-based support roles if appropriate or will be advised not to participate at all until they have been cleared by a medical professional.

The daily health check is a critical component of any advanced snorkelling. It ensures that all participants are physically and mentally prepared for the activity, minimising the risk of injury or harm. All participants are expected to comply with this policy to ensure their own safety and the safety of others. The programme lead will ensure that any concerns raised during the daily health check are addressed in a timely and appropriate manner, and that all participants receive the support and resources they need to stay healthy and safe.

Advanced snorkel safety

Signs of a diver in need of help

A diver who has stayed down too long will gradually get low on Oxygen. Buddy pairs can identify signs of a free diver in need of help by looking out for the following signs:

- ➢ **Change of finning style |** When a free diver with a usually strong kick suddenly becomes sloppy in their movements, it should be interpreted as a sign of trouble. A diver that stops kicking on ascent at an inappropriate time or while swimming horizontally without any obvious reason (e.g., watching marine life) should be suspected to be in trouble.
- ➢ **Unfocused eyes |** A free diver returning from depth close to or beyond their personal maximum should always be escorted on the last few metres of their ascent by their buddy. The buddy should stay face to face with the free diver so that they can see their eyes. If their eyes become unfocused it is a strong indication they need help.
- ➢ **Speeding up at the end of a dive |** Towards the end of a dive, your buddy might have accumulated a lot of CO2. A well trained and in-control free diver will slow down at this point in order to avoid wasting Oxygen and producing excessive amounts of CO2. Speeding up to be able to get to the surface is a sign of a free diver losing control.

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- **Exhaling underwater |** If your buddy clearly exhales underwater, they are losing oxygen and buoyancy and there is increased likelihood they will black out underwater.
- **Inability to keep the head above water (after surfacing) |** This is a clear sign that your buddy is in a low Oxygen state, as are uncontrollable twitches and/or reduced responsiveness. All these signs indicate that your buddy needs your immediate support.

Loss of Motor Control (LMC) after surfacing from breath-hold dive

Loss of Motor Control, or LMC, is a hypoxic fit that occurs after surfacing if Oxygen levels are too low. A loss of motor control happens only after a dive. It is not the same as a black out, it can be described as the red zone of low oxygen before falling unconscious.

A clear indicator that your buddy suffers from loss of motor control are jerky movements with the limbs or the head. A light loss of motor control will last a few seconds and will mainly induce light uncontrolled eye and/or head movements, while severe loss of motor control can affect the whole body and leads to an inability to maintain the airways out of the water.

The cause of a loss of motor control is a lowered level of oxygen in your blood that has reached the point where normal cell function cannot occur. This means the metabolism is disturbed and normal functioning is reduced, hence the jerky movements and lack of responsiveness. A loss of motor control can result in a full black, depending on the correct application of recovery breathing. After recovery from a loss of motor control, you may not be aware of what just happened. Trust your buddy, they will tell you.

If you experience loss of motor control, you MUST stop diving for the rest of the day.

Shallow-water blackout

A Black Out is the loss of consciousness caused by lack of oxygen towards the end of a breath hold dive or immediately after.

In the event of shallow water blackout

- Get the victim to the surface immediately, establish positive buoyancy for both of you and signal the Lookout for assistance.
- Get the victim on their back, remove their mask and snorkel,
- Blow – Tap – Talk (BTT-Cycle) | Blow on the skin below the eyes to dry the skin and signal thus to the unconscious body that there is now air to breathe. Tap alternatively both cheeks of the unconscious free diver with your open hand. Talk to

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the still subconsciously active mind of the victim: Tell them to breathe in and use their first name. For example, “Mara, breathe in!” in a very direct tone.

- ➢ Repeat the BTT-Cycle. If they do not resume breathing within 15 seconds or earlier get them to land or boat ASAP, begin rescue breathing if immediate removal from water is delayed or impossible.
- ➢ After suffering from a black out, the diver MUST stop diving for the rest of the day to allow the body to fully recover from the incident.

Love Rimurimu

LOVE RIMURIMU
Imagine the Blue Belt of Wellington sustaining a healthy and vibrant ocean forest; able to absorb more carbon than trees, improving water quality and providing habitat for thousands of marine creatures. Regenerating our seaweed forests is a way to make this a reality - and it’s what this project is all about.

Our Plan.
By improving conditions and restoring sites in the harbour with juvenile and adult seaweeds, we hope to set up the right environment for regeneration- helping nature to be a self-sustaining and healthy ecosystem again.

These sites will take up carbon, restore habitat and strengthen our marine ecosystem - making it more resilient into the future. But we must act soon, and we must be prepared to learn and innovate along the way.

The snorkelling component of Love Rimurimu is delivered by EMR.

https://www.loverimurimu.org/

Pre-site assessment for Advanced Snorkel Activity

Appendix 12 | River Drift Snorkel SOP

EMR Specific activity SOP - River drift snorkelling

Purpose

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The purpose of this policy is to establish a Standard Operating Procedures specific to snorkelling in freshwater rivers to ensure the health and safety of all participants involved in the Mountains to Sea Conservation Trust programme and projects throughout NZ, under the leadership of a Experiencing Marine Reserves (EMR) endorsed coordinator.

This policy is intended to supplement the EMR SOP when carrying out river snorkelling. Some procedures and processes from the EMR SOP will still apply when carrying out river snorkelling activities.

Definitions

River drift snorkelling takes place in the freshwater/ flowing water environment

- Key Hazards
- Submerged Rocks
- Strainers
- Foot entrapments
- Logs
- Slippery rocks
- Wraps onto rocks
- Poor water quality

Hazard/risk identification and control procedures

2026 MTS Risk Assessment Supervision MARINE Part 2

Training and competency

EMR endorsed coordinator

- ☐ Skilled in river snorkelling.
- ☐ Needs to be able to swim in river currents confidently
- ☐ Be able to rescue snorkeller/s using the currents.
- ☐ Must understand river hydrology

Participants

- ☐ Snorkelled before and can swim

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Equipment (additional for river snorkelling)

- ☐ Throw rope
- ☐ Experienced Safety Kayaker stays with each group must be experienced with a throw bag

Safety precautions for river snorkelling

- ➢ Avoid white water and rapids.
- ➢ Swim check prior to river snorkel (rubbish or new logs).
- ➢ Each section of river to be swum should be thoroughly checked before the dive, from the bank, from the air, by rafting or by seeking local knowledge about the current state of the river and rainfall updates and have established safe flow rate (cubic metres per second) operating levels
- ➢ Must have a safety watch with a throw bag who is able to throw, recoil, loop and rethrow accurately to a snorkeler moving in current.
- ➢ Kayakers remain downstream of snorkelers and carry extra snorkel gear on kayak.
- ➢ Need to model how to swim in and out of an eddy
- ➢ How to avoid rocks and strainers and how to feet glide out across a current
- ➢ Safety watch to follow the group from the put in, if possible, if not possible have safety watch on entry and exit.
- ➢ Safety watch on exit has participant shoes in a bin so snorkelers can move safely on rocks and uneven terrain.
- ➢ If there are obstacles, a suitable bypass should be located and agreed upon and beaches or areas suitable for landing should also be located.
- ➢ A minimum of 3 metres underwater visibility is recommended.
- ➢ Emergency plan for what happens mid drift snorkel and where to go in an emergency must be stated on EVENT Plan

Ratio

Maximum 1:4 | EMR endorsed coordinator to participant ratio
Preferred 1:2

River snorkel event plan to include the following

- ☐ Event details
- ☐ Assign an event controller
- ☐ Key hazards and controls
- ☐ Key messages and outcomes
- ☐ Site Specific RAF (part A)
- ☐ Link to Part B RAF

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- ☐ Weather calls - choosing safe river levels. Need to know safe flow rates (cubic metres per second) and have cut offs for too high and to low levels
- ☐ Resources/ protective equipment required
- ☐ Group briefing
- ☐ Timeline
- ☐ Waste and traffic management (if applicable)
- ☐ List of other providers roles
- ☐ List of overlapping duties of care
- ☐ Signed agreement of overlapping duties of care
- ☐ Clear assignment of overreaching SMS for event and activity specific SOP's
- ☐ Check site for unrestrained dogs
- ☐ EMERGENCY PLAN - that covers what happens mid drift snorkel

Motueka Case Study event

This river was grade 1 - 2.

The Snorkel Guides felt 1- 2 was optimal, 1-3 was ok.

They found 1;4 was too difficult to manage in the current as some would take off in the flow.

You need at least 1 adult in a group of 3.

The safety kayaker needs to sit downstream in eddy below swimmers because they could run over swimmers who have not much control of direction in the current.
Need to check that the river has enough flow and there are not rocks or strainers or logs that swimmers can hit their face on or become stuck.

Snorkel guides taught snorkelers how to swim to avoid obstacles, discussed, wraps, foot entrapments and asked snorkelers not to stand up in the river.

Need a good whistle as it is sometimes hard to hear with river flow.

Snorkel Guides taught hand signals to group before departure and showed where the coned take out area was.

Appendix 13 | Night snorkel SOP

EMR Specific activity SOP - Night Snorkel
To be used in conjunction with EMR SOP for snorkelling and MTSCT SMP

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Purpose

The purpose of this SOP is to establish a Standard Operating Procedures specific night snorkelling to ensure the health and safety of all participants involved in the Mountains to Sea Conservation Trust programme and projects throughout NZ, under the leadership of a Experiencing Marine Reserves (EMR) endorsed coordinator.

Definitions

Twilight	|	Sun is going down but it's not completely dark
Night	|	Sun has gone down

Key Hazards

- ☐ Panic
- ☐ Visibility (on land and in water),
- ☐ Hazardous marine life may be more active at night

Hazard/risk identification and control procedures

2026 MTS Risk Assessment and Supervision Form (RAS) - MARINE Part 2 .pdf

Training and competency

EMR endorsed coordinator to lead night snorkel activities

- ☐ Familiar with the night snorkel location
- ☐ Night snorkelling experience

Participants

- ☐ Participants must be able to swim 100m with fins to be able to participate in a night snorkel
- ☐ Snorkel experience (prior to night snorkel).
- ☐ Not recommended for snorkelers who experience panic

Equipment

- ☐ Underwater torches for every guide.
- ☐ Whistles for EVERY person.
- ☐ Blinky lights or glow sticks for every person (check glow stick quality to make sure they work before the event).
- ☐ Kayak or SUP to follow the group (with illuminated dive flag attached).

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- ☐ Communication device between safety vessel and shore
- ☐ Big lights for entry and exit point (make sure entry point visible etc)
- ☐ Loud hailer for emergency recall

Supervision structure

Max 24 participants at a time, may be less depending on the environment (lake versus ocean). 1 x endorsed coordinator to lead and a 2IC for back of the group, 1:4 max supervisor to participant ratio. Kayak to follow the group with luminated dive flag.. Check in and out with person on shore.

Age

Recommend age 12 and up, but base judgement on snorkel experience

Event plan

Same event plan as a community guided snorkel day, including site specific RAMS for site.

Things to note

- ☐ Registration forms for a night snorkel must list
  - ☐ names
  - ☐ medical info
  - ☐ emergency info of each person in the group.
- ☐ Remind people to constantly number off
- ☐ Use school check in and out form with all names, not just group name (as per a guided day)
- ☐ Ensure each snorkel guide has a group, but led by a EMR snorkel leader (without a group, similar to a EMR school/group tour)

Notify the community about a night snorkel happening so not to alarm people (especially for bigger groups of over 4).

Emergency plan

Appendix 17 | Marine Risk Register & Hazard ID

PDF 2026 MTS Risk Assessment and Supervision Form (RAS) - MARINE Part 2 .pdf

See below.

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MOUNTAINS TO SEA
CONSERVATION TRUST

EXPERIENCING
MARINE RESERVES

Marine Risk Register & Hazard ID | 2026

Mountains to Sea Conservation Trust | Risk Assessment and Supervision form (RAS) - Part 2

Reviewed by H & S representatives - approved by Poutokomanawa/Co-director (marine lead). Next review due July 2027.

Marine (EMR)	**2**
People	2
Environment (including Natural Hazards)	12
Equipment	23
General workplaces and events	27
Reputation	31

RISK RATING TABLE				
Likelihood of injury or harm to health	Consequences of injury or harm to health			
	Insignificant *no injuries*	Moderate *first aid and/or medical treatment*	Major *extensive injuries*	Catastrophic *fatalities*
Very likely	High	Extreme	Extreme	Extreme
Likely	Moderate	High	Extreme	Extreme
Moderate	Low	High	Extreme	Extreme
Unlikely	Low	Moderate	High	Extreme
Highly unlikely (rare)	Low	Moderate	High	High

Marine (EMR)

Hazard/Risk A situation or thing with the potential to cause death, injury or illness	Potential Harm	Risk Rating How serious is this?	Controls How can it be prevented? First try to eliminate (e), then minimise (m) the risk	Residual risk after controls	Responsibility of EMR	Responsibility of School/group
People						
Drowning (or potential of death)	Death	E	m) Observer (check in and out) based on shore m) competent snorkel leader m) pre site assessment m) Clear briefing to participants and supervisors, set boundaries m) shallow water assessment	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
Existing medical conditions	Incident, injury, death	H	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 devices.	M	Pre-site assessment and supervisor forms complete Initiate any precautions required Event registration forms	Collect medical conditions – disclose to EMR

Separation (missing person in water)	Incident, injury, death	H	m) Boundaries, snorkel route and entry and exit points made clear. m) Snorkel leader to keep control of the group by using a dive flag for participants to follow and whistle to keep groups attention m) Snorkel leader to 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 Missing person procedure	Cooperate with any policies or procedures of EMR Check in and out form complete
Cardiac Arrest	Incident, injury, death	H	m) Medical conditions known m) Screening participants in water	M	Snorkel leaders to keep control of the entire group during snorkel	Medical conditions declared/discussed

			m) Emergency preparedness and location of nearest defibrillator		First aid is kept up to date	
Inexperience (including non-swimmers). Over estimation of skill	Incident, injury, death	H	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) Shallow water assessment and screening m) Use of body board for floatation m) Adjustments made to ratio, limiting depth and distance, using snorkel buoyancy vest	L	EMR uses experience and qualified snorkel leaders. Supervisor forms	Must advise/identify non-swimmers Appropriate supervisors provided by school
Panic, exhaustion, lack of confidence	Emotional trauma Incident, injury, death	H	m) No weight belts unless training given or student supervised by their parent m) Ask about panic in pre-site assessment m) One up one down rule to ensure supervision	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

			m) Snorkelers advised to hold up their hand on ascent to the surface m) Rest on board m) Re-assurance from snorkel leader and/or supervisor			
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 Have appropriate warm clothing
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
Advanced snorkelling	Drowning, death, secondary drowning	H	m) Led by EMR snorkel leader m) Buddy pairs system m) Correct weighting and equipment m) 3 times longer on surface than the dive	L	Snorkel leaders to keep control of the entire group during snorkel	Comply with EMR instructors directions while in water

			m) 1 up 1 down rule m) Rescue training for all participants			
Loss of motor control	Underlying health conditions, shallow water blackout, injury	H	m) Buddy and ratio system m) EMR snorkel leader adequately trained	L	Initiate rescue scenario Tap, blow, talk	Comply with EMR instructors directions while in water
Inadequate supervision (ratio's)	Missing person Minor incident	M	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	Ensure supervision adhered to Control of group in water	Provide suitable supervisors Comply with EMR instructors directions while in water
Inappropriate behavior	Incident or Injury	M	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	L	Conduct a clear briefing on expectations Pre-site assessment forms to capture behaviour issues	Identify and discuss management for behaviour issues and provide appropriate support for students with special needs Control behaviour

			and healthy and free from the influence of drugs or alcohol m) Student behaviour issues discussed via pre-site assessment			
Fitness	Incident		m) Screening participants and supervisors in shallow water and throughout snorkel		Pre-site assessment forms	Monitor throughout snorkel
Shallow water blackout	Injury, incident, death	M	m) No hyperventilating m) One up one down rule to ensure supervision m) Encourage relaxed breathing and time on surface m) Buddy pairs system m) Correct weighting and equipment m) 3 times longer on surface than the dive	L	Snorkel leaders to keep control of the entire group during snorkel Wightbelt worn by snorkel leader	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 (due to a medical event or incident)	Incident, injury, death	M	m) Achieve positive buoyancy m) refer to emergency preparedness and response	L	Snorkel leaders to keep control of the entire group during snorkel 2IC identified	Supervisors to notify snorkel leader
Seasickness/motion sickness	Illness	M	e) Don't go on the boat	L	Charter to provide instructions	Advise participants of risk of seasickness

			m) Seasick pills included as part of first aid kit (charter boat trips only) – stay away from fumes, look to horizon m) Avoid safety kayak role			
Lack of communication	Incident, injury, death	M	m) Communication device on beach at all times m) Poor or no reception areas noted via pre-site assessment m) Language barriers identified m) VHF radio for known poor/no reception areas	L	Check cell phone reception When working solo, in environments where there are no other people expected to be present (isolated) or areas where there is known bad reception, take a second form of emergency communications device (such as VHF for coast or Garmin SOS for rivers) Ensure competency in alternate means of communication (VHF)	Advise of non-English speaking participants
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
Duck shooting near a kayak/SUP event	Incident/Death	M	m) Warn duck shooters of event e) Avoid duck shooting season	L	Event organiser to be aware of duck shooting season	Inform EMR of known local duck shooting locations/events
Low energy levels	Various	M		L	Adequate briefing Care of self	Teachers to ensure school groups have had snack etc

			m) Team to take adequate breaks for snacks and keep hydrated			
Swimming around pontoons	Drowning, boating injury, entanglement (fishing/boating lines)	M	m) Adequate supervision	L	No swimming in EMR equipment	School to manage and supervise any swimming beyond snorkelling activity
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 m) adequate hydration	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

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 m) No entering small overhead environments	L	Wear weight belt Knife carried by snorkel leader or guides if taking a guided tour (snorkel days)	Follow one up one down rule
Disorderly people	Incident	L	m) Refer to difficult people policy	L	Snorkel leaders to be aware of other users in area	Schools/groups to work together
Bullying behaviour	Incident	L	m) Refer to Child Protection Policy	L	Commitment to ensure we provide an experience free from bullying and harassment.	School/group to manage behaviour
Coordinators not having updated versions of SOP and forms.	Inadequate knowledge of best practice	L	m) Updates controlled by Poutokomanawa (marine lead) m) Whenever updates are made the PDF version on the Google Drive and websites to be updated	L	Familiarise yourself with most recent SOP version number	Comply with any instructions from MTSCT
Afraid of the dark (night time events)	Emotional trauma Incident, injury	L	m) Brief participants about expectations of the night event	L	Adequate briefing	Participants to comply with instructions from event leaders
Communication between staff and participants, kids translating for parents	Misunderstanding	L	m) Check for understanding of safety information m) Mandarin infographics	L	Check understanding during briefing	Comply with any instructions

Participants leaving events without signing out or telling anyone	Misunderstanding	L	m) Robust check in and out procedures	L	Make clear in briefing	Comply with any instructions
Retrieving large heavy items	Injury	L	m) Adequate support to lift item m) Retrieve at later a day	L	Instructions to prevent injury	Comply with any instructions
Overlapping duties of care. Working with other PCBU's	Misunderstanding	L	m) Signed and documented agreements m) Briefing on day m)Signing of event plans and pre-site agreement	L	Make clear in briefing	Comply with any instructions
Emotional distress	Fear of water/bad past experiences		mOffer extra flotation m) Buddy with someone they trust		Participants told what to expect from experience	Comply with any instructions
Food allergies / anaphylaxis	Incident, injury, death	E	m) Food allergies identified via pre-site assessment or registrations (if providing food) m) Schools/parents to ensure medication (e.g. EpiPen) accompanies participant and is accessible on the day m) EMR snorkel leader and first aiders made aware of any declared allergies before activity begins m) Avoid sharing or providing food where allergies are known	M	Identified participants with allergies First aid kit and trained first aiders on site	School ensures medication and medical action plans Disclose all known allergies
Participants with disabilities or additional support needs	Incident, injury	M	m) Specific risk assessment conducted covering participant, supervisor and intended activity m) Screening at multiple stages	L	Pre-site assessment completed Reasonable accommodations arranged	Disclose support needs in advance Provide appropriate supervisor or aide

			Adjustments made to ratios, equipment or activity as required m) Relevant staff training and qualifications confirmed m) Liaise with school/whānau on appropriate support prior to the day			
Snorkel leader fatigue or pressure to continue activity despite unsafe conditions	Incident, injury, death	M	m) Snorkel leader empowered and expected to modify or cancel activity regardless of time, distance travelled or customer expectations m) Adequate rostering and breaks between sessions to manage fatigue m) No-blame incident reporting culture m) 2IC or coordinator oversight where multiple sessions run in a day	L	Roster planning Uphold snorkel leader's authority to modify/cancel activity Fatigue management	Respect EMR leader's decisions regarding activity changes or cancellation
Environment (including Natural Hazards)						
Cold water/ exposure/ temperature	Hypothermia	E	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 the 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)	H	Provides adequate wetsuit protection for conditions Keep watch of the entire group during snorkel	Supervisors check their buddy group at regular intervals

			m) Appropriate wetsuits worn and duration in water for location			
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	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, 3 whistle blasts for emergency and exit water m) Group to stay close together giving boats easy passage through m) Bright body boards will help boats identify snorkelers m) Stay clear of glass bottom boat motors (at Leigh Marine Reserve) or any boat motor.	M	Tows dive flag	Comply with EMR instructions in water
Weather conditions: (storm) High winds, extreme hot and cold weather, lightning strikes, heavy rainfall, hailstorm, thunderstorm.	Sunburn, exposure, hypothermia, incident, injury	H	m) Up to date weather forecast, pre-site assessment. m) Sensible assessment of environmental conditions.	M	Check the weather forecast. Care of self Pre-site assessment complete	Communication with School/group about weather calls. School to to provide sunscreen to participants

			m) Safe location of entry and exit points, depending on conditions m) Wetsuits worn m) Sunscreen available. e) Cancel or move activity m) Monitor throughout activity - end early if needed m) Evacuate to safe place if visible/audible signs of electrical storm, or storm cells within 30km on radar m) If caught in an unexpected thunderstorm - prompt immediate calm evacuation from water		Continued observation of weather - keep watch for storms Sensible weather assessment	Comply with EMR instructions
Fire	Incident, injury		m)If inside, smoke alarms alert group to danger m)Follow pre-discussed evacuation plans and evacuate to designated meeting place m)If outside, move away from fire to a safe location m)Wait for further instructions m)In the event of fire in the outdoors, call 111 or the Department of Conservation, depending on location. In the event of very small fires, using buckets of water may be appropriate, but personal safety and that of any participants is paramount.		Do not take risks. Raise the alarm and move out of the area. Calmly organise group Fire extinguisher in equipment trailer	On land – activity leader to take charge

Earthquake	Incident, injury	H	m) DROP, COVER, HOLD m) If outdoors, take no more than three steps towards a safe, stable place, if possible away from trees etc. m) If indoors, take no more than three steps to a safe stable place, if possible away from windows and heavy items m)Wait until the shaking stops before moving and be prepared for aftershocks m)If the earthquake was long (more than one minute) or strong (hard to stand up) and you are in a tsunami zone, go immediately inland or to higher ground, out of the tsunami zone, and stay there until the All Clear is given m)Advise emergency services of your situation and location if you need assistance. e) Cancel activity if earthquake in the area	H	Calmly organise group	On land – activity leader to take charge
Flooding (including flash flood) Impermeable surfaces in cities can also cause flash flooding during heavy rainfall events	Incident, injury	H	e) Cancel or move activity m) Assess for risk of flash flooding m) Weather checks looking at the rain in the upper catchment not just near the site, rain last 30 days/ last 48 hours m) Safe close evac zone	M	Site specific RAF Pre-site assessment	Comply with EMR instructions in water
Current/water/tidal movement/chop, rips	Participants swept to sea Incident Injury	H	m) Up to date weather forecast, pre-site visit and on site assessment	M	Check tides and conditions suitable for site	Comply with EMR instructors

(including waves, tides, wind and wake)			m) Identification of potential hazards (waves, rocks, current etc.) m) clear briefing of what to do if stuck in current 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) Use of EMR floatation boards 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.		Monitor conditions throughout	
Infectious disease/flu/gastro	Illness	H	m) Refer to sanitisation policy m) Team have BU team members	M	Follow sanitisation procedures Halt activity if safety compromised	Work together to implement plan
Water Surge or Tsunami Tidal surge, rogue waves and tsunami, including tsunami and seiche on lakes or underground waters.	Incident, injury, death	H	e) Cancel or move activity 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	H	Tsunami warning check Have a heightened awareness of water movement and surges following a Tsunami warning/event	Comply with EMR instructions in water

			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) Advise emergency services of your situation and location whenever this is practicable. If it is a local tsunami warning, go immediately inland or to higher ground Stay there until official 'All Clear' has been given *follow all advisories on the Civil defence website https://www.civildefence.govt.nz/.*		*Coordinators leading in water snorkelling must have a heightened awareness following a tsunami or tsunami warning with regards to water movement. Part 1 RAS must consider Tsunami zones for site* https://getready.govt.nz/emergency/tsunami/tsunami-evacuation-zones	
Hazardous marine life –stingrays (can be flighty at night)	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 m) Monitor behaviour in shallows	L	Brief on hazard - note more active at night and more unpredictable at night	Comply with EMR instructions in water
Landslide A moving mass of debris, loose mud, sand, soil, rock, water and air that travels down a slope under the influence of gravity. Structure collapse	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	L	Continually identify and manage hazards	Comply with EMR instructors directions while in water

			and make way back to assemble on shore (no one returns alone)			
Hazardous marine life - sharks	Bleeding, shock, death	M	m) No killing of marine life during EMR snorkels m) Snorkel locations chosen for suitability Any shark larger than 1.8 m (about the size of a human) should be considered potentially dangerous, any observation of any shark that size should prompt an orderly immediate evacuation of the water, as per EMR evacuation protocol.	L	Calmly organise a group.	Comply with EMR instructors
Hazardous marine life – orca	Panic	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 https://www.doc.govt.nz/nature/native-animals/marine-mammals/sharing-our-coasts-with-marine-mammals/	Comply with EMR instructors
Hazardous marine life – seals	Injury or 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 https://www.doc.govt.nz/nature/native-animals/marine-mammals/sharing-our-coasts-with-marine-mammals/	Comply with EMR instructors
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	L	Site checked and monitored EMR team are all first aiders	School first aid kit and first aiders

			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		Brief on increased risk of sea lice in estuaries Ask about allergies	
Unidentified/unexplained hazard in the ocean	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 The EMR team are all first aiders.	School to ensure they have provided medical information
Jet skis Foil surfers	Collision or distraction	M	m) Snorkel site location m) Harbour master to be called for inappropriate use	L	Tows dive flag	Comply with EMR instructions in water
Fishing lines and hooks/entanglement	Cut or entanglement	M	m) Knife to cut fishing line (not usually necessary in marine reserves). Look out for loose fish hooks.	L	Wear knife	Supervisors to notify snorkel leader
Set net in snorkel area	Entanglement	M	e) Don't enter the water. Consider relocation m) Call MPI if there is a ban in the area and they will give instruction on what to do next	L	Have phone and MPI number on site	Comply with EMR instructions in water
Spearfishers in water close to group	Injury		m) Make group known to fisher m) Be aware of any dynamic hazards		Whistle carried to help communicate in water - 1 whistle blast	Comply with EMR instructions in water

Sharp rocks and slippery surfaces/pebbles/rocks Hazardous terrain in intertidal area (including slippery seaweed and debris)	Injury/fall/slip/drown	M	m) No running on rocks, clear boundaries and supervision when observing from shore or walking to changing rooms/toilets m) Prepare for trips, slips and falls m) Slippery surfaces identified during briefing. m) Best entry and exit points located m) Instruct to take care on pebbly beaches	L	Identification of significant hazards	Supervision for land activities, near water Awareness of hazards on land and around rock pools Boundaries and supervision for working near rock pools
Problems associated with being stuck in the mud/quicksand	Injury/suffocation	M	m) Appropriate footwear m) Appropriate supervision	L	Identification of hazards	Supervision for land activities, near water Awareness of hazards on land and around muddy shore
Broken glass, rubbish, rusty nails	Injury	M	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
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 in the water	Incident	M	m) Poor visibility sites are avoided m) Stay in close contact with buddy	L	Weather assessment and pre-site assessment	Comply with EMR instructions in water
Tracks to site	Injury/slips/fall	M	m) Check after wet weather m)prepare for trips, slips and falla	L	Advise groups if known hazard	Comply with EMR instructors
Hard concrete on side of pool, falling into pool	Injury/slips/fall	M	m) 1 EMR snorkel leader or adult supervisor in water and 1 adult 'spotter' on poolside (with the view of all students) at all times for year 8 and below, the number of adults in the pool should be increased for year 0 – 1. m) No running around pool m) No walking with fins on	L	Advise groups of known hazards associated with concrete	Comply with EMR instructions
Uneven surfaces Submerged rocks at low tide and potential slippery boat ramp	Injury/trips/slips/fall	M	m) Pre-warn groups of site specific hazards.	L	Advice given re: uneven surfaces and operating in public space	Comply with EMR instructors
Dangerous land animals - loose dogs	Injury or death caused by wild animal	M	m) Aggressive unsupervised dog Adopt STOP- STAND- LEAVE e) Seeking alternative site e) Return to vehicles or bus, call dog management	L	Refer to dangerous animal policy	Comply with EMR instructors
Obstruction at entry point - Sharp metal at entry point or broken glass, rubbish, rusty nails, fish hooks	injury, entanglement	L	m) Advise groups of the hazard m) Bring attention in site specific RAS	L	Advise and document	Comply with EMR instructors

- Kayaks (clearyaks) anchored in shallows			m) Bring attention in pre-site assessment			
toxocariasis (dog) toxoplasmosis (cat) or human efluent	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
Hazardous substances - Asbestos	Inhalation	M	e) Avoid sites with known asbestos m) Ask schools/groups to inform us if known contamination m) If found on the day, re-locate and don't disturb area		School/group agreement asks for disclosure	Disclose any information and comply with instructions on day
Hazardous chemical - DX50 vapour (Chlorine dioxide)	Inhalation	M	m) Does not bioaccumulate or persist in the environment ClO2 is also considered one of the most environmentally friendly chemicals.	L	Coordinator to take care	Comply with EMR instructors
Dead life on beach or in water	disease transmission, infection		m) Assess risk or relocate		Site check	Comply with EMR instructors
Insect bites	Minor injury	L	m) Pre-warn groups of site specific hazards m) Carry repellent as part of beach box for known affected sites	L	Advise groups if known hazard	Supervision for land activities
Unpredictability of dynamic hazards in public spaces	Injury/slips/fall	L	m) Advise groups to manage selves in public spaces	L	Manage selves	People to take personal responsibility to manage selves

Terrain Steep beaches, headlands and cliffs	Injury/slips/fall	L	m) Advise groups of the hazard m) Bring attention in site specific RAF m) Bring attention in pre-site assessment	L	Advise and document	Comply with EMR instructors
Floating debris (rope, plastic, driftwood etc.) in open water	Entanglement, injury	M	m) Dynamic site assessment during snorkel m) Snorkel leader to identify and direct group around debris m) Knife carried to cut entangling debris	L	Continually identify and manage hazards	Comply with EMR instructions while in water
Falling debris, rockfall near cliffs and headlands	Injury, death	M	m) Site assessment to avoid snorkelling or standing directly beneath unstable cliffs or headlands m) Increased vigilance and additional site assessment following heavy rain or recent seismic activity e) Relocate if unstable terrain identified	L	Site assessment Relocate activity if required	Comply with EMR instructions
Wahi tapu sites	Contravene against iwi and hapu tikanga/ management plans	M	m) Liaise with iwi prior to activity, especially if the site is known to be culturally sensitive. m) Identification of wahi tapu sites/seek history and prior knowledge m) Do not enter wahi tapu sites.	L	Liaise with relevant hapu Pre-site assessment. Clear kaupapa briefing given to school.	Comply with all instructions. Undertake activity with respect and regard to culturally sensitive sites.
Equipment						

Heavy equipment	Injury	H	m) Operate out of equipment trailer to avoid heavy lifting when possible m) Maximise help of volunteers and advise of heavy equipment when multiple bins require relocation	M	Advise of heavy equipment	Comply with EMR instructors
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
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) Training for trailer use m) Trailer maintenance - current WOF	M	Follow EMR policy on use	Comply with EMR instructors
No first aid kit No first aid certified personnel onsite.	Incident, worsened injury.	H	m) Pre-site assessment m) Equipment checklist m) Event leader to have and use whistle to gain group attention (one blast) if necessary or to organise evacuation to assembly point (car parking area) in the case of an emergency (three whistle blasts).	M	First Aid certificate Always carry first aid kit or communication device when in the field	Comply with EMR instructions

Vehicle Incidents	Damage to vehicle, injury, incident,death	H	m) Comply with road rules m) Refer to van/trailer policies on website m) Ensure driver is fully-licensed m) Ensure driver is familiar with trailer and van policies m) Driver to undertake training session prior to using the van and/or trailer m) Driver fatigue - incorporate into work plan for the day - plan accordingly	M	Ensure drivers are fully-licensed Assess driver's ability prior to use of van/trailer Keep trailer and van policies up to date and provide training sessions Familiarise yourself with, and adhere to, trailer and van policies Refer to transport policy Report any incidents to National Coordinator	Comply with EMR instructions
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
Hand Sanitiser	Incident, Injury, Fire	H	m) When using alcohol-based gel hand sanitisers, ensure gel has fully dried/evaporated before touching any surfaces m) Stay away from any potential ignition sources immediately after using hand sanitiser	L	Apply hand sanitiser correctly and brief participants Must have in beach box	Comply with instructions.
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)	L	Equipment checked and fitted in shallow water	Can bring own if fit for purpose

			m) Use of personal floatation device m) Maintenance of equipment			
Unsecured gazebo or heavy equipment	Incident, injury	M	m) Always pegged/weighted down if supplied by EMR m) Tied down on windy conditions and not left unmanned m) Careful strop attachment	L	Follow EMR policy on use	Follow school policy on use
No torches or torches failing (night activities e.g. spotlighting, snorkeling)	Poor visibility, injury, fall, death	M	m) All participants asked to bring torches – handheld or head-lamps. m) Some spare torches and head-lamps provided. m) Some spare torches with safety watch m) Each area leader must have a strong spotlight. m) Walking tracks and river access points to be pre-marked m) All participants to wear glow sticks (lights) and whistles m) Leaders to be easily identified	L	Clear instructions given. Some spare torches/headlamps provided. Spare batteries Pre-site assessment/ preparation. Glow sticks. Charge torches	Comply with EMR instructions. Bring your own torch and batteries.
No wetsuits or loss of safety gear	Hypothermia, incident or injury	L	m) Keep hold of board during windy conditions	L	Check equipment fit for purpose	Comply with EMR instructors

			m) Appropriate wetsuits are worn for appropriate temperature and location			
Skin reaction to wetsuit or flippers	Allergic reaction	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
Saniwise in eyes	Injury	L	m) Freshwater to flush eyes when using Saniwise	L	Follow EMR policy on use	Comply with EMR instructors
Skin caught in zipper	Injury	L	m) Check and maintain functionality of zips (rinse off sand)	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
Faulty kayak (safety watch) Capsize	Incident	L	m) Kayak checked to be fit for purpose m) Personal Flotation Device must be worn at all times m) Staff appropriately trained	L	Follow kayak policy and kayak best practise guides	Comply with EMR instructions
Science snorkels - Heavy catch bags, pickers and hammers, survey rope	drowning, entanglement	L	m) Set procedures to be used on day	L	Additional briefing for science snorkels	Comply with instructions

General workplaces and events

Hazard/Risk	Potential Harm (What could go wrong?)	Initial Risk Rank (L/ M/ H)	Control (What can we do to minimise the likelihood of potential harm?)	Residual Risk Rank (L/M/H)	Responsibility of MTSCT
First Aid Kit ● Not available ● Inadequately stocked	● Injury not attended with appropriately ● Infection	H	● First Aid Kit to be available on worksite ● First Aid Kit to be stocked in accordance with Health and Safety Policy ● All staff aware of the location of the First Aid Kit. ● Proper signage is posted to recognise the location of First Aid Kit ● Trained first aiders	L	Annually
Equipment	● Personal Injury / sharp objects ● Musculoskeletal injuries from poor design	H	● Ensure guarding is always in place ● Ensure pre-start checks of high-risk equipment is carried out ● Monitor with regular workplace inspections ● Ensure regular maintenance and repair ● Training	L	Ongoing
Lifting/Manual handling Incorrect lifting	● Musculoskeletal injuries ● Slip, trip and fall injuries	M	● Utilize trolleys and mechanical devices ● Ask for help (2-person lift minimum) ● Store goods at waist level/minimise storage at height and ground levels ● Training	L	Ongoing
Dangerous Goods & Hazardous Substances (used, stored and handled and carried in Organisation vehicles)	● Respiratory problems ● Skin Diseases ● Chemical Burns ● Eye Injuries	H	● Check Safety Data Sheet for safety precautions and inform workers i.e. First Aid measures in the event of accidental release or spillage	L	Annually

Fumes Spillages Incorrect storage. Fire Explosion	• Burns from Substances • Fire		• Use appropriate personal protective equipment is available • Determine if any ignition source and put control measures in place to mitigate • All hazardous chemicals must be listed in the hazardous substances register		
Ladders	• Death or serious injury from falling from height	H	• Remove all unsuitable ladders from site immediately • Do not use ladders as a working platform • Use guarded working platforms instead of ladders (where possible) • Use ladders for short duration work or access to the work area only • 3 points of contact at all times.	L	Ongoing and annually
Poor Housekeeping	• Slips, trips and falls resulting in breaks, cuts, abrasions etc	H	• Keep materials and equipment clear of access ways • Use bins for waste • Contain building materials in designated storage areas • Ensure good housekeeping measures in place/site is clean and tidy • Monitor with regular site safety inspections and keep records of inspections	L	Ongoing
Electricity and electrical appliances	• Electrocution • Electric shock • Electrical burns	H	• Only registered electrician to repair electrical equipment • Use Lock Out/Tag Out practices (if applicable) • Use approved RCDs and/or provide power box • Equipment, leads and RCDs to be checked regularly by a competent person • Avoid overloading power outlets	L	Ongoing and annually

			• Monitor with regular site safety inspections		
Hand and power tools	• Death • Serious laceration/ loss of limbs, Puncture wounds, Nerve damage, • Cuts and abrasions	H	• Ensure guards in place and keep clear of blades • Use correct tool for the job • Ensure regular equipment Servicing and repair (Lock/Out plant and equipment as required) • Keep register of all tools, machinery and equipment (track loss of these) • Training – ensure workers are trained and competent to use specific equipment/ machinery	L	Ongoing and annually
Lone Workers	Unable to obtain first aid care quickly	H	• Field intentions complete • Ensure communication plans are in place with regular check in times and only trained workers are working alone • Ensure lone workers are first aid trained • When working solo, in environments where there are no other people expected to be present (isolated) or areas where there is known bad reception, take a second form of emergency communications device (such as VHF for coast or Garmin SOS for rivers)	L	Ongoing and annually
Contractors and visitors	• Exposure to site hazards resulting in injury, illness or death	H	• Escort/Supervise any visitors/contractors/clients • Ensure all contractors working on site are inducted • Ensure traffic management in place if required • Clear hazards signs throughout the workplace	L	Ongoing
Moving vehicles	• Death i.e.crushing • Broken bones • Cuts & abrasions	H	• Designate and mark out drop off and pick up areas • Stay visible to the driver and keep clear of vehicles • Put traffic management plan in place if appropriate/applicable • Use spotters where visibility is restricted	L	Ongoing

			• Use signage to warn pedestrians		
Public Safety	• Unauthorised access to site by public • Increased risk of personal injury due to access to tools, machinery, materials.	H	• Event plan in place • Site secured by boundary fencing with hazard boards and signs • Site locked when not occupied and monitored by secured if appropriate • Tools, machinery and equipment locked away when not in use and at the end of day/work. • Regular toolbox/safety meetings	L	Ongoing
Aggression from the Public	• Fatality • Serious Injury; Broken Bones /Cuts Scrapes • Mental Health	H	• Follow Difficult people Policy • Training & Awareness • Regular Safety Meetings to inform and discuss scenarios • Emergency Procedure in place	L	Ongoing
Drugs & Alcohol at Events (participants)	• Fatality • Serious Injury • Intoxication • Drug Overdose	H	• Refer to drugs and alcohol policy • Participants are to be free from the influence of drugs and alcohol to participant in safety sensitive activities	L	Ongoing
Reputation					
Hazard/Risk	Potential Harm (What could go wrong?)	Initial Risk Rank (L/ M/ H)	Control (What can we do to minimise the likelihood of potential harm?)	Residual Risk Rank (L/M/H)	Responsibility of MTSCT
Serious incident or injury during an activity	• Negative media coverage • Loss of public trust and confidence • Loss of school or event bookings	H	• Incident response and communications protocol followed • Designated spokesperson for media enquiries • Transparent, timely reporting to WSNZ, funders and affected whānau • Post-incident debrief and corrective actions documented	M	National Coordinator / Comms lead
Breach of tikanga or cultural protocol (e.g. wahi tapu,	• Damage to hapū relationships	H	• Liaise with relevant hapū prior to activity • Cultural competency training for staff • Partnership agreements and kaupapa briefings followed	L	Poutokomana wa (marine

hapū partnership expectations)	• Loss of trust within partner communities • Withdrawal of hapū support for programmes		• Open, respectful communication if a breach occurs		lead) / Hapū liaison
Social media post or public complaint involving participants (especially minors)	• Reputational damage • Complaints to funders or schools • Breach of privacy or Child Protection Policy	M	• Photo/video consent obtained before sharing • Social media policy followed • Child Protection Policy adhered to • Complaints procedure in place	L	Comms lead / Event leader
Non-compliance with funder or regulatory expectations (e.g. WSNZ H&S requirements)	• Loss of funding • Reputational damage within the water safety sector • Reduced credibility for future funding applications	H	• RAS and SOPs kept current and audited • Regular reporting to WSNZ and Board • Strategic plan and H&S policy reviewed annually	L	Co-director / Board
Staff or volunteer misconduct (e.g. breach of Drugs & Alcohol or Difficult People policy)	• Public complaint • Loss of trust from schools, hapū or families • Negative publicity	M	• Code of conduct and police vetting for staff/volunteers • Drugs and alcohol policy enforced • Disciplinary process followed • Regular training and safety meetings	L	National Coordinator
Harm to the marine environment caused by the Trust's own activities (e.g. damage to a marine reserve)	• Reputational damage with conservation community and DOC • Loss of credibility as a conservation-focused organisation	M	• Environmental best practice followed (no touching/removing marine life) • Marine reserve rules and permits complied with • Staff briefed on conservation kaupapa	L	Poutokomana wa (marine lead)