



Health, Safety and Wellbeing - Field Activity Guidance for a Water or Marine Environment

Water or Marine Environment Guidance for all users

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Introduction

Field activities that involve operations in, on and around water environments are inherently high **risk**. The hazards associated with water and marine environments can result in injury, death and missing persons.

Marine and water environments are continually changing and can be quite unpredictable. Thorough preparation, contingency planning, knowledge, competence and experience are required to make informed judgements while onsite. The following table offers a guide as to what would be considered a 'Water or Marine Environment':

Environments	Activities
Seashore Coastlines Estuaries / mudflats Beaches Coral Rivers Ponds Lakes Effluent Ponds Water courses	Observations Sample collecting Water sampling / temperature reading Walking to and from sites Use of watercraft Marine creature observations, research, rescue

1 PLANNING - GENERAL

The University's Field Activity Health and Safety Standard requires that a **field activity plan/risk assessment** and an emergency response plan are prepared. Planning must be thorough and robust for all or any activities that occur in or around marine and water environments. If you are unsure about any aspect of your plan, seek **expert review**.

Planning and preparation must consider:

- Weather conditions
- Seasonal conditions
- Sea/water conditions/pollution
- Tides
- Terrain
- Structures/underwater objects
- Site access
- Safety equipment/clothing
- Knowledge/competence/ability **of field activity leaders and participants**

- Number, gender and any medical conditions of participants
- Fitness/capabilities of participants
- Emergency response and accessibility

1.1 Emergency response actions

An emergency response plan should consider:

- Actions to take should someone fall into the water
- Missing persons procedures
- Managing persons with hypothermia
- Life-saving and survival equipment
- First aid equipment and kits
- Emergency communication equipment and contact numbers
- Identification of nearest emergency medical centres for the location
- Emergency Services access

1.2 Emergency warnings

In the event of a tsunami or Civil Defence alert that will affect a coastal location, field activities should immediately cease and the participants should go without delay to a safe area, normally being high ground. Safe evacuation areas may be signposted or instructions issued over radio and mobile phone networks. In some coastal areas a Civil Defence siren will be sounded continuously.

Where a tsunami warning is issued and the waves are not expected for several hours the activity should be postponed. It should not start again until the warning has been cancelled. Tidal and sea conditions may remain hazardous and unsettled for several days after an earthquake event, and aftershocks should be expected.

1.3 Maritime vessels – coverage

This guidance will not specifically cover safety requirements for vessels or water craft that are covered by the Maritime Operators Safety System (MOSS) as approved by Maritime NZ.

All University vessels are subject to MOSS regulations. Both the vessel and the skippers must adhere to Maritime NZ operational requirements. The University of Auckland Leigh Marine Centre should be consulted for guidance involving new or existing vessels owned and operated by the University of Auckland.

A “safety case” applies to novel craft that operate on the New Zealand coast and/or internal waters of New Zealand. Novel crafts include, but are not limited to the following:

- Waka
- Powered canoe or kayak
- Powered surf board

- Personal water craft (includes jet skis)
- Amphibious craft
- Submersibles
- Reconfigurable barges

If any of the above named vessels are considered for operation, then Maritime NZ should be consulted: [Commercial safety systems](#)

Watercraft such as kayaks, canoes and paddleboards are covered by these guidelines.

1.4 Weather conditions

- Weather report checks should be monitored three days prior to the field activity and regularly checked throughout the duration of the activity.
- Severe weather warnings issued by MetService must be monitored. Such conditions should be avoided, and the field activity cancelled or delayed until conditions have settled and warnings have been removed.
 - Weather conditions in New Zealand are very changeable.
 - Weather systems offshore may influence sea conditions and result in heavy wave swells on coastlines.
 - Changes in the season will influence weather patterns, temperatures and sea conditions, which will determine when certain activities around coastlines should take place.
 - Storms resulting in heavy rain or melting snow in mountains or foothills may rapidly flood or rise downstream.

1.5 Sea conditions

- High energy shorelines (rugged rocky areas and cliffs) have larger wave swells, which can be more destructive. These areas are predominantly found on New Zealand's West Coast and in exposed areas on the east coast.
- Low energy shorelines (smooth and low-lying terrain) have smaller, more predictable wave swells. These are found around the east coast of New Zealand and are not usually exposed directly to open sea. However, in severe weather any shoreline can be treacherous and needs to be avoided.
- There are various type of waves and the type most common around rocky coastlines are "surge waves". They tend not to break, and can sweep people off their feet and drag them into the sea. More information: findabeach.co.nz
- A marine and weather check should occur three days prior to the activity and be monitored for the duration.

Weather and Sea
Conditions

NZ Forecasts

[http://www.metservice.co
m/national/home](http://www.metservice.co.nz/national/home)

Weather Warnings

[http://www.metservice.co
m/warnings/home](http://www.metservice.co/m/warnings/home)

Marine Weather Warnings

[http://www.metservice.co
m/warnings/marine-
warnings](http://www.metservice.co/m/warnings/marine-warnings)

MetService Marine App

[http://about.metservice.co
m/our-company/ways-to-
get-the-weather/weather-
on-your-/metservice-](http://about.metservice.co/m/our-company/ways-to-get-the-weather/weather-on-your-/metservice-)

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- Tidal checks need to be undertaken to determine high and low tide ranges, as well as the best time to access beaches, estuaries and shore lines. Contact with a harbourmaster, surf lifesavers, coastguard, ranger or locals can also provide valuable information.
- Note that at high tide and during storms, sea conditions will be at their most treacherous.
- On some coastlines, high tide ranges can trap people on higher rocky outcrops or cut off previously used access ways.
- On some coastlines, tidal changes are more rapid than is normally expected. The activity should be planned accordingly to avoid becoming trapped.
- Trips should be planned to coincide with low tide and participants should return to a safe area prior to high tide.
- Where a high tide range is to be observed, this should be carried out in an area where participants are clear of incoming wave swells and have an alternative means of access or escape. Where this cannot be done, remote monitoring and measuring equipment should be used as an alternative.

1.6 Common warning signs / symbols



Large breaking waves



Strong currents / rips



Sudden drop-off / deep shelving beach



Submerged objects / rocks that could trap



Unstable cliff / dunes / falling rocks and debris

1.7 Communication equipment

At least two means of communication equipment should be carried at all times:

- Mobile phones should be placed in a sealed plastic bag to provide protection from water. Mobile phone coverage may be limited in some coastal areas and an alternative communication alerting device will need to be carried e.g. SPOT.

- SPOT Tracker is a suitable alerting and tracking device for remote areas or where mobile phone coverage is unreliable or non-existent.
- A Personal Locator Beacon (PLB) should be carried for water/marine activities that are isolated, where access is difficult, or there is no mobile phone coverage
- VHF Marine Radio

1.8 Heavily polluted areas

Heavily polluted areas should be avoided where possible. If required to examine or obtain samples, appropriate protective clothing and equipment will need to be worn. PPE should prevent physical contact and absorption of contaminated materials. Depending on the nature of contamination, such equipment may inhibit movement or flotation on a coastal environment.

1.9 Lifejackets

Lifejackets (or alternatively the appropriate personal flotation devices (PFDs)) provide more than flotation. They allow a person in the water to keep still, thereby conserving energy, which will help to delay the onset of hypothermia. They also provide protection from injury in collisions, or when running aground.

A lifejacket or the appropriate PFD shall be worn when:

- There is a risk of falling into water
- There is a risk of being carried into deep or swift flowing water
- Swimming or wading ability is impaired
- Surge waves may sweep someone into the water
- Operating within 2 metres of a rock edge or ledge
- A participant has poor or no swimming ability.

Lifejackets should be worn at any time individuals are operating and when transiting to or from a site in a marine vessel (unless the vessel is commercially operated).

The lifejacket or PFD device shall meet NZ Standard 5823:2005 or other standard that is accepted by Maritime NZ. For more information, see [Choosing the right Lifejacket](#)

Note: Wetsuits provide warmth and a level of buoyancy, but a wetsuit is not an approved alternative to a lifejacket. Suitable lifejackets must be worn.

Dry suits are also appropriate if operating in a cold environment/low water temperatures and submersion is required or possible.

1.10 Water rescue equipment

Designed to help you stay afloat in the water, rescue equipment includes life buoys, life belts and buoyant cushions. They should be brightly coloured and fitted with a light, whistle or flag for marking your position in the water.

A flotation rescue buoy ("angel ring") or similar flotation device should be available to throw to any person who has fallen into the water.

Such devices include:

- MRD100 rescue stick
- Angel ring
- Rescue buoy, also called a Burnside buoy, or can



1.11 Clothing and footwear

When operating in moderate climates, light clothing should be worn to provide protection from sun, rain and cold. Light clothing is better if there is a risk of falling into the sea, as it allows the individual to swim and stay afloat. Shorts should be worn instead of long trousers. High visibility clothing should be worn.

- A spray jacket will provide good protection from sea spray and rain.
- Hats should be worn for sun protection and a thermal hat for head warmth in cold conditions.
- Gloves or fingerless gloves should be worn for hand protection.
- Spare dry clothing should be accessible.
- Sunglasses will help to minimise glare from the sea.
- On volcanic rock, rubber-based or soft-soled shoes are suitable.
- On sandstone or wet weedy slippery rock, shoes with cleats or spikes, or purpose-made felt rock-fishing shoes are recommended.
- 'Jandals', sandals and crocs should not be worn. They do not provide grip, security or support.
- Note that a change of footwear may be needed while transiting to and from site or walking on dry land.
- Do not wear gumboots or heavy clothing that will add significant weight to your body in water.

1.12 Marine creatures/mammals

Research activities that involve observations of or interaction with marine creatures/mammals pose unique challenges and hazards. Great care is needed for the protection of the creatures and participants who may come into contact with them.

It is important that planning includes:

- Identification of known creatures/mammals located in the area. This is particularly important if operating overseas
- The dangers and risks these creatures pose
- The signs, symptoms, treatment and required first aid items to treat stings, barbs or poisons and where to get immediate help
- How to approach or move around such creatures

1.12.1 General principles

- Do not disturb, harass or make loud noises near marine creatures/mammals.
- Contact should cease should marine creatures/mammals show any signs of becoming disturbed or alarmed.
- Do not feed or throw any rubbish near marine creatures/mammals.
- Avoid sudden or repeated changes in speed or direction of any vessel or aircraft near a marine creature/mammal.
- There should be no more than three vessels and/or aircraft within 300m of any marine mammal.

1.12.2 On shore

- Give seals and sea lions space. Where practicable stay at least 20m away.
- Avoid coming between fur seals and the sea.
- Keep dogs on a leash and well away.
- Where practicable, do not drive vehicles closer than 50m to a marine mammal.
- Never attempt to touch seals or sea lions – they can be aggressive and often carry diseases.

For safety guidance and rules on the protection of marine mammals, refer to:

[Department of Conservation Guidelines](#)

Where specific research requires interaction or tagging of marine creatures and is approved, a robust plan must be developed to ensure the safety of the creatures and the participants is in place.

1.13 Training

A moderate to high level of physical ability/fitness is needed to negotiate sea shore, rock and cliff coastlines. Participants will need to be able handle irregular, possibly steep terrain and some walking may be needed to reach the site.

Participants should have a moderate to high ability to swim or stay afloat while operating in known high risk environments. Lifejackets must be worn for all high risk activities (see page 8 for more detail).

In addition, the following training may be required:

- Understanding of river properties (e.g. standing waves, eddy lines, holes, sieves)
- How to avoid foot traps and obstacles underwater
- What to do if swept off their feet (e.g. white water swimming, self-rescue, assisted rescue)
- River crossing technique
- How to assess bank stability, entry and exit points
- How to assess river speed, depth and bed condition from the bank
- Knowledge of survival strategies in swift-flowing and cold water

1.14 Safety equipment

Personal items	Group safety equipment
Whistle	First aid kit(s) (refer to Operation Guidelines Appendix 1)
Water bottles / food	Spare blankets
Sunscreen	Torches (including spare batteries)
Drinking water	Angel ring or rescue buoy with 20m rope attached
Clothing / hat / gloves Warm clothing Spare dry clothing Clothing suitable for wet conditions or submersion	Rubbish waste bags
Footwear including spare pair	Communication equipment Mobile phone Personal Locator Beacon
	Hand sanitisers
	Signalling mirror
	Laminated emergency contact list
	Spare water 1 – 5 litres

2 SAFETY AROUND COASTLINES

Research and teaching may involve participants operating on and around coastlines, rocky outcrops, caves, cliffs, headlands and skerries.

Operating around coastlines is considered a potentially high risk activity due to the risk of serious injury and drowning.

2.1 Risk categories

High risk activities:

- On or around high energy coastlines, potential wave surge areas, areas where tidal ranges are large or change quickly, areas with currents and/or rips, unstable cliffs or foreshore, cliff edges and rock ledges
- In extremes of climate
- Operating at night
- Immersion in water at a depth of 0.5m or more
- Working with unpredictable marine creatures

Medium risk activities:

- On or around low energy coastlines
- At low tide, in areas with low wave swells and where tide changes are predictable
- Operating during daylight hours

Hazard	Cause of harm	Result of harm
Wave swells / rips / currents	Falls Washed off rocks / coastal landings	Broken bones, skin lacerations, head injuries, drowning
Tide ranges and changes	Being trapped Washed off rocks Increased wave swell	Broken bones, skin lacerations, head injuries, drowning
Unstable and abraded cliff faces / loose rocks	Rocks falling Cliff collapse	Broken bones, skin lacerations, head injuries, suffocation, death
Undulating, unstable and slippery surfaces	Slips, trips and falls from slippery moss algae or rock outcrops	Broken bones, skin lacerations, head injuries, drowning, death
Marine creatures	Attacks and injuries from marine creatures or bird life	Loss of blood, poisoning, allergic reaction, infection, death
Pollution / waste materials	Needles, hazardous materials, oil, wire netting	Poisoning, allergic reaction, infection, death
Visibility / light	Trips, slips and falls on terrain	Broken bones, skin lacerations, head injuries

Changeable weather extremes	Treacherous sea conditions Sodden and/or damaged terrain	Hypothermia, drowning
Climate	Extremes of heat or cold, exposure to sun	Hypothermia, dehydration, sunburn

2.2 Prior planning and preparation

Information must be gathered on the location/s that will be visited:

- Determine site access and condition
- Determine the type of terrain to be encountered, vehicle and track access
- Determine the sea conditions at that specific coastline location
- Determine tide times and influences on that coastline location
- Decide when is the best time to go, then monitor weather forecasts three days prior to activity departure.
- Determine safety equipment to be carried e.g. ropes, flotation devices, rescue equipment, helmets, beacons
- Determine the type of clothing and footwear, what and spares are needed
- Determine whether pollution or hazardous substances may be present.

Onsite final checks:

- Check in with rangers, harbour master or other relevant agencies (e.g. surf lifesaving) for any further information or advice.
- Check safety signs and notice boards.
- Confirm check in time, expected duration and completion time of activity.
- Confirm pre-determined check in times with administrative base and /or nominated contacts.
- Check and review emergency response and survival equipment.
- Conduct participant safety briefing, pointing out hazards and relevant features.
- Undertake roll call of participants if it is a group activity.
- Ensure each participant has suitable clothing and support equipment.
- Ensure participants' safety equipment (e.g. life jackets, helmets) is accessible, fits the individual and is in good repair
- Prior to entering the location, it is imperative that wave swells and weather conditions are observed to establish their movement and coverage of a coastline.
- Monitor the weather forecast regularly for approaching squalls or wind changes. This is particularly important if conducting activities on high energy coastlines.
- Activities should be carried out when the tide is going out/low and participants should return to a safe area prior to high tide.

2.3 Activities at high tide

Where high tide range is to be observed this should be done in a safe area where the participants are clear of incoming wave swells and have an alternative means of access or escape. Where this is not possible, remote monitoring and measuring equipment should be used as an alternative.

2.4 Operating at night

Activities being conducted overnight, after sunset or before sunrise should be avoided. Lack of visibility and the rugged terrain increases the risk of harm from falls, and reduces options for escape and emergency response.

Where research activities require observations overnight, all reasonable steps must be taken to install and utilise monitoring equipment that is operated remotely from a safe location. Research activities requiring participants to be onsite overnight will require approval from the dean/head of school.

2.5 Working alone

- No activity in this environment can be undertaken alone.
- This type of field activity requires a minimum of two persons who are suitably competent, knowledgeable and physically able to undertake it.

2.6 Group work/staff ratios

- Seek further advice from the Health, Safety and Wellbeing Service with regards to suitable ratios for group work and supervision.

2.7 Communication equipment (for more detail, see page 7)

- Mobile phone, placed in a sealable plastic bag
- Personal Locator Beacon 406khz (where mobile phone coverage is not available)
- SPOT Tracker

2.8 Approvals/authorisations/external organisations

- Harbour master
- Department of Conservation (Rangers)
- Auckland Council (Rangers)

2.9 Operational safety guidance quick reference

- Wear a lifejacket.
- Pay particular attention to swell and tide information.
- Pay attention to warning signs.
- Let others know your location, time onsite and confirm when completed.
- Never operate alone.
- Never operate in exposed areas during rough or large seas.
- Spend at least ten minutes observing the sea conditions before approaching a rock ledge.
- Never turn your back on the sea.
- Never operate from wet rocks where waves and spray have obviously been sweeping over them.
- Stay clear of rock ledges, blow holes or where wave spray or surges are apparent.
- Wear light clothing and suitable footwear that will allow you to swim or stay afloat should you fall into the sea. Have spare dry clothing available to change into.
- Have two means of communication e.g. mobile phone, PLB in a waterproof bag.
- Keep to well-defined footpaths and tracks.
- On or under cliff faces:
 - Avoid any areas where there are signs of recent landslide/rock falls.
 - Do not climb cliffs.
 - Take care near cliff edges, particularly in strong or gusty winds.
 - Never shelter under overhangs.
- Do not disturb, harass or make loud noises near marine mammals.
- Contact should cease if marine mammals show any signs of becoming disturbed or alarmed.
- Give seals and sea lions space. Where practicable stay at least 20m away.
- Avoid coming between fur seals and the sea.
- Keep dogs on a leash and well away.
- Where practicable, do not drive vehicles closer than 50m to a marine mammal.
- Never attempt to touch seals or sea lions – they can be aggressive and often carry diseases.

2.10 Emergency procedures

If someone else is washed into the sea:

1. Don't jump in after them.
2. Look for an angel ring, life buoy or something that floats.
3. Throw the life buoy, or something that floats, to the person in the water.
4. Direct person to a calm area to get back to shore.

5. Dial 111 on your mobile phone or go for help.
6. Wrap person in warm clothing once they have reached the shore.
7. Seek immediate medical attention or call for an ambulance.

If you are swept into the sea:

1. Stay calm.
2. Inflate your lifejacket or grab an angel ring/flotation buoy.
3. Yell for help if no one has observed you falling in.
4. Swim or paddle to shore if you can.
5. Remain with flotation device if swept further out to sea, conserve energy and turn your back to incoming waves.
6. Activate EPIRB or PLB if carried.
7. Raise an arm in the air and wave to indicate to searchers where you are.

3 SAFETY ON AND AROUND CLIFFS

There are numerous hazards that can be encountered while operating on or around coastal cliff environments and it is essential that robust planning and preparation is conducted. Operating around coastlines is considered a potentially high risk activity due to the risk of serious injury.

3.1 Hazards

- Rock falls
- Cliff collapse
- Rugged or craggy terrain
- Slippery and loose surfaces
- Mud entrapment
- Cold, wind chill, hyperthermia, exposure
- Worn steps and stairs, uneven paths
- The condition of the edge – solid, slippery, crumbling, or shelving
- Trip hazards near the edge that could lead to a fall
- Parts of the path or steps that are narrow or steep
- Weather conditions such as high wind, poor visibility and icy surfaces

3.2 Prior planning and preparation

Information must be gathered on the location/s that will be visited.

- Determine site access and condition.
- Determine the type of terrain to be encountered, vehicle and track access.
- Determine the nature of cliff geology and stability.
- Determine the weather and conditions at that specific location.
- Determine tide times and influences of cliffs around coastline.
- Decide when is the best time to go, and monitor weather forecasts three days prior to departure.
- Determine safety equipment to be carried e.g. ropes, flotation devices, rescue equipment, helmets, beacons, personal protective clothing and equipment.
- Determine the type and numbers of protective clothing and footwear (including spares).
- Determine whether pollution or hazardous substances may be present.

Onsite final checks:

- Check in with rangers, harbour master or other relevant agencies (e.g. surf lifesaving) for any further information or advice.

- Check safety signs and notice boards.
- Confirm check in time, expected duration and completion time of activity.
- Confirm pre-determined check in times with administrative base and /or nominated contacts.
- Check and review emergency response and survival equipment.
- Conduct participant safety briefing, pointing out hazards and relevant features.
- Undertake roll call of participants if it is a group activity.
- Ensure each participant has suitable clothing and support equipment.
- Ensure participants' safety equipment (e.g. life jackets, helmets) is accessible, fits the individual and is in good repair
- Monitor the weather forecast regularly for approaching squalls or wind changes. This is particularly important if the cliffs are on high energy coastlines.
- Activities should be carried out when the tide is going out/low and participants should return to a safe area prior to high tide.

3.3 Abseiling

Abseiling down a cliff is a specialised activity, requiring a professional abseiler to assess the suitability of the area and provide training in the use of a rope abseiling system. Only people who are fully trained and experienced abseilers are permitted to undertake such activity.

3.4 Working alone

- No activity in this environment can be undertaken alone.
- This type of field activity requires a minimum of two people who are suitably competent, knowledgeable and physically able to undertake it.

3.5 Safety and personal protective equipment (PPE)

Personal items	Group safety equipment
Helmet	
Whistle	First aid kit (refer to suggest supplies)
Drinking water / food	Spare blankets / sleep bag
Sunscreen	Torches (including spare batteries)
	Rope 20 m
Clothing / hat / gloves Warm clothing	Rubbish waste bags

Spare dry clothing if likelihood of getting wet Clothing suitable for wet environment or submersion	
Suitable footwear that is rubber soled and provides support to ankle Spare footwear should be considered	Communication equipment Mobile phone Personal Locator Beacon
	Hand sanitisers
	Signalling mirror
	Laminated emergency contact list
	Spare water 1 – 5 litres

3.6 Onsite operational plan

- Note warning signs.
- Keep to designated tracks.
- Move around the cliff area at a sensible pace.
- Wear suitable footwear such as walking or safety boots. Avoid wearing gumboots as they offer limited grip and ankle support on loose or slippery rocks.
- Try to avoid muddy areas. Look for evidence of mud depth and if in doubt use a stick to test the stability of the surface ahead of you.
- It's best not to venture off alone, instead try to remain close to at least one other person and carry a mobile phone in case you get into difficulties.
- Keep a safe distance from the cliff edge and always maintain a safe walking pace. There are usually no warnings that you're approaching a vertical drop.
- Keep well clear of the foot of a vertical or near-vertical cliff face – a distance of 8m+. Wearing a hard hat is recommended.
- Have a participant act has a safety supervisor to maintain a watch on the cliff and participants. An escape route and safe assembly point should be determined.

3.7 Communication equipment

- Mobile phone placed in a sealable plastic bag
- Personal Locator Beacon 406khz (where mobile phone coverage is not available)
- SPOT Tracker

3.8 Approvals/authorisations/external organisations

- Harbour master
- Department of Conservation (rangers)
- Park rangers

4 SAFETY IN AND AROUND RIVERS

Rivers present some of the greatest hazards in the outdoors. Errors of judgement often have serious consequences. Even experienced and skilled people have drowned after being tempted to cross a river against their better judgement.

4.1 Hazards

- Flooding
- Swift currents
- Eddies
- Rapids
- Recirculating waves
- Obstacles under the water
- Freezing cold water

4.2 Prior planning and preparation

Information must be gathered on the location/s that will be visited.

- Determine site access and condition.
- Determine the type of terrain to be encountered, vehicle and track access.
- Determine the nature of river bank geology and stability.
- Determine the weather and conditions at that specific location.
- Decide when is the best time to go, and monitor weather forecasts three days prior to departure.
- Determine safety equipment to be carried e.g. ropes, flotation devices, rescue equipment, beacons, personal protective clothing and equipment.
- Determine the type and numbers of protective clothing and footwear (including spares).
- Determine whether pollution or hazardous substances may be present.

4.3 Onsite operational plan

- Note warning signs.
- Keep to designated tracks.
- Wear suitable footwear such as walking boots, and thigh, waist or chest waders when working in the river/stream. Avoid wearing gumboots as they offer limited grip and ankle support on loose or slippery rocks.
- Use a wading staff in the water to help assess depth and brace yourself against strong currents.
- Plan your route, and plan an escape route if the going gets tough.
- In difficult situations, you can hold hands or lock arms with another participant.
- Don't step on the top of big rocks; keep your feet on the bottom between the rocks.

- Avoid getting your feet wedged between rocks.
- Don't allow yourself to get overly tired. Be aware of your energy limit, and take rest breaks accordingly.
- If you do fall into deep water, use the "survival swimming" technique (see 4.5 below).
- Be cautious at all times. Don't take that extra step unless you are sure it is safe to do so.

Onsite final checks:

- Check in with park rangers, DOC and landowners for any further information or advice.
- Check safety signs and notice boards.
- Confirm check in time, expected duration and completion time of activity.
- Confirm pre-determined check in times with administrative base and /or nominated contacts.
- Check and review emergency response and survival equipment.
- Conduct participant safety briefing, pointing out hazards and relevant features.
- Undertake roll call of participants if it is a group activity.
- Ensure each participant has suitable clothing and support equipment.

4.4 Working alone

- No activity in this environment can be undertaken alone.
- This type of field activity requires a minimum of two people who are suitably competent, knowledgeable and physically able to undertake it.

4.5 Safety and personal protective equipment (PPE)

Personal items	Group safety equipment
Polarised glasses	Water rescue equipment (see 1.10 above)
Whistle	First aid kit (refer to suggest supplies)
Drinking water / food	Spare blankets / sleep bag
Sunscreen Hat	Torches (including spare batteries)
	Rope 20 m
Walking shoes/boots Waders Wading staff Warm clothing	Rubbish waste bags

Spare dry clothing if likelihood of getting wet Clothing suitable for wet environment or submersion Spare footwear	
	Communication equipment Mobile phone Personal Locator Beacon
	Hand sanitisers
	Signalling mirror
	Laminated emergency contact list
	Spare water 1 – 5 litres

4.6 Crossing rivers

River crossing is a last resort option unless at clearly identified crossing points. Before attempting to cross a river, ask yourself:

1. Should we cross?

Never attempt to cross a river in flood, for example. If in doubt, stay out.

2. Where do we cross?

Look for the safest place to cross by viewing the river from a high bank. You may be able to see gravel spits or sandbanks just below the surface and get some idea of the depth and position of channels.

3. How do we cross?

Use mutual support methods. The more people in the party, the more strength there is for crossing and for supporting anyone who slips or falls.

4.7 Survival swimming

In preparation for field activities involving working in or around rivers, participants should practise survival swimming in the “white-water position”, in case they are swept off their feet.

- Float on your back.
- Face downstream with your feet and toes at the surface.
- Keep your arms free to help you manoeuvre.
- Keep your head up out of the water.
- Don't fight the current.
- Align your body so that your butt collides with any obstacles, rather than your tailbone (getting a few bruises is better than getting a fracture).
- Keep your feet off the river bed so you don't get trapped.

- Look out for shallows or a slower current, from where you can find a place to get out of the river, and change to swimming or side-stroking strongly to get to the river bank.

4.8 Communication equipment

- Mobile phone placed in a sealable plastic bag
- Personal Locator Beacon 406khz (where mobile phone coverage is not available)
- SPOT Tracker

4.9 Approvals/authorisations/external organisations

- Department of Conservation (rangers)
- Park rangers
- Local authorities
- Landowners

5 ACCIDENT/INCIDENT REPORTING

As required by the Field Activity Health and Safety Standard:

- *“If any participant(s) is missing or overdue, this must be reported to the school or department and to the University’s Health, Safety and Wellbeing Service immediately.”*
- *“Any incidents (including near misses) during field activity must be reported to the school or department for inclusion in health and safety reporting.”*
- *“If a fatality, hospitalisation or serious injury/illness occurs, this must be reported to the University immediately, as these are **notifiable events**.”*

The University contact needs to know how to activate the agreed emergency response plan if an accident/incident has resulted in a **notifiable event***, and know who else in the University to notify: head of school/department, dean/director of service division and the Health, Safety and Wellbeing Service.

As soon as possible after the incident, the field activity leader (or delegate) is to report the accident/incident, using the University’s online accident/incident reporting system.

***Note:** More information is on the Staff Intranet: [Notifiable events](#)

DEFINITIONS

The following definitions apply to this document:

Accident refers to an incident which has given rise to injury, ill-health or fatality.

Expert review is an appointed individual or group with the qualifications and experience to provide advice and support for the planning and assessment of field activity for the University.

Field activity is any work carried out by staff, students and contractors for the purposes of teaching, research or representing the University off-site (where health and safety is not managed by other host institutions). This may be a taught course, research project or collaborative expedition. See Appendix 2 for a list of specific field activities undertaken by the University.

Field activity leader is an academic leader of teaching and research, professional staff manager or contractor who has the authority and responsibility to make decisions on all aspects of the field activity. This person has the capability, qualifications and experience to be responsible for the planning and operation of the field activity, as designated by the dean or head of school/department. If a participant is working alone in the field, then they are the activity leader.

Field activity participant is anyone taking part in field activities, including volunteers (defined as "pre-recognised" people willing to participate in the fieldwork activities, who are offering their time and services for no remuneration). A participant may work independently, without direct supervision (as an activity leader) or under direct supervision by the field activity leader.

Field activity plan answers the why, what, where, who, and how of the activities to be undertaken, with consideration of the risks and plans for minimisation of those risks at a management level.

Incident refers to any unplanned event resulting in, or having a potential for injury, ill health, damage or other loss. (An incident may also be termed a "**near-miss**", "close call" or "dangerous occurrence".)

Near miss is an incident that could have resulted in injury or illness.

Notifiable event is an event in the workplace that WorkSafe must be notified about. This includes the death of a person, a notifiable injury or illness (requiring immediate treatment or hospitalisation) and a notifiable incident (exposing people to a serious risk to their health and safety). This function is undertaken by the Health, Safety and Wellbeing Service.

Remote area field activity is work that is carried out in locations where it is difficult to summon help and/or where emergency assistance is expected to be more than one hour away.

Risk assessment is the process of evaluating the risk(s) arising from the hazard(s), taking into account the adequacy of any existing control measures, deciding whether or not the risk(s) is acceptable, and taking further action as required.

Shall, are/is to and must are used in health, safety and wellbeing guidance in places where there is a legal requirement to achieve the desired result.

Should is used in health, safety and wellbeing guidance as a way of indicating a preference. It does not indicate a mandatory requirement as other alternatives may achieve an equivalent result.

University means the University of Auckland and includes all subsidiaries.

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