**
Hazards & Risks Appendix A**

This list outlines potential hazards and risks that could occur in any setting related to the type of activity and particular place that your region is likely to be operating in, and **possible control measure to eliminate or minimise risk.** It is recognised that an On-Site Risk Assessment will need to be undertaken each time a team visits a site, to review and identify any new hazards or change in risk, no matter how familiar the team is with the site.

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| *Hazard* | *Risk* | *Risk assessment\* (High/Medium/Low)* | *Control measures* |
| Working in outdoor/field situations  | Injuries |  | * Expectation of appropriate clothing, shoes, first aid training and kit, notification of intentions, communication equipment etc. Refer to outdoor safety code: [www.mountainsafety.org.nz/resources/outdoor-safety-code/](http://www.mountainsafety.org.nz/resources/outdoor-safety-code/)
 |
| **ENVIRONMENTAL CONDITIONS** |
| **Natural hazards** such as uneven or slippery ground, deep boggy ground, icy or frosty ground, water bodies | Twisted ankle or knee, sprain, graze, drowning |  | * Not working in adverse weather or avoiding steep, slippery and unstable ground
* Being aware of physical limitations and acting accordingly
* Notifying others in team when unexpected uneven ground/holes are discovered or surface is slippery. Flag or cordon off where practicable
* Supervising young children in proximity to water bodies
* Looking for secure footing when working on steep banks
 |
| **Natural hazards**Flash flooding, wind, storm, lightningRain, hail, earthquakes, tsunami | Drowning, broken bones, lightning strike,Injuries |  | * Taking into account weather conditions prior to visit, postpone trip if necessary
* Refraining from working on flood plain after heavy rain
* In heavy rain, be aware of risk of rising river levels and being cut off from exit point
* Avoid working in open terrain when caught in a lightning storm
* Be prepared to stop work and seek shelter if conditions become dangerous.
* In the event of an earthquake - drop, cover and hold.
* In coastal areas - if an earthquake is long and strong, move to high ground.
 |
| **Adverse weather - cold**Wind, rain, storm  | Hypothermia |  | * Preparing for adverse weather with appropriate clothing
* Using weather forecasts for decisions prior to and during activity
* Stopping activity if bad weather persists
* Minimise exposure to cold/wet conditions
* Participants are aware of symptoms of hypothermia
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| **Adverse weather – hot**Exposure to sunlight/UV | Heat exhaustion, dehydration, sunburn, sunstroke, skin cancer |  | * Preparing for adverse weather with appropriate clothing e.g. hat, gloves.
* Using weather forecasts to aid decisions prior to and during the field trip
* Ensuring adequate water is carried by participants
* Participants to come prepared with sunscreen
* Watching for signs of heat exhaustion/fatigue
* Providing for regular breaks in shade if possible
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| **Falling objects**Being hit by objects (rocks, trees, branches) falling Dead/dying standing trees  | Bruising, concussion, death |  | * Avoiding working in tall forest in high winds
* Avoiding work at the bottom of exposed rocky slopes or cliffs
* Taking care leaning against trees as they could be weak and fall over
* Being aware of any branches/tree trunks suspended in vegetation
 |
| **Vegetation** Branches on ground Branches at head heightVines on groundHidden sharp objects, broken glass | Tripping, twisted ankle, bruising,poked in eye,allergic reaction, asthmatripping, twisted ankle, cuts |  | * Stepping over branches on ground with care
* Taking care that there are no low branches to hit head on
* Wearing safety glasses or moving to another place if low vegetation is a problem
* Watching out for vines that could cause tripping.
* Being alert to hidden objects below ground vegetation and always wear gloves and closed footwear
 |
| **Stream/river crossings**Slippery rocks, deep water holes, swift water | Twisted ankle, sprain, Hypothermia from wet clothes, drowning |  | * Identifying the safest place to cross stream/river
* Having one person assisting others across if necessary
* Not crossing a stream in flood - check weather forecast
* Not crossing if person doesn’t have skills and experience to safely cross
 |
| **Fire** | Being caught in an area while a fire breaks out |  | * Assess fire danger before entering an area
* Have an escape plan
* Let people know in your team where you are going to be. Leave intentions with family/friends of where you will be going and intended route
* Avoid using equipment that could spark a fire. Have water on hand
* Smoke only in appropriate designated areas
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| **Wasp and bee stings**Wasp nests, bee hives | Allergic reaction, anaphylactic shock |  | * Where possible, identifying any wasp nests or bee hives, avoiding disturbance and moving away from area
* Participants making others aware if they have an allergic reaction, any remedies required and where personal medication is held
* Considering alternatives for high risk participants with serious reactions
* Prescriptions to be carried by any participants with a known history of allergic reaction. Participants are responsible for bringing their own personal medication.
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| **Working near bait stations**Contact with toxin | Illness or possible death |  | * Avoid contact with bait stations and bait
* Supervising young children in proximity to bait stations
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| **Working near electric fences**Unexpected contact | Shock |  | * Where possible contacting landowner to turn off electric fencing
* Using wooden stick or rubber boot to hold down electric fence
* Avoiding working too close to live fence to reduce danger of contact
 |
| **Stock**Stressed stock | Bruising, crushing |  | * Avoid entering paddocks with stock without land manager’s permission
* Leaving gates as found
 |
| **Existing tracks + structures**Broken boardwalk, wire or plastic protrusions, trees across path | Twisted ankle, lacerations |  | * Pointing out any broken boards or protrusions on board walk to rest of team Mark with coloured tape if practicable
* Removing any loose obstacles from access track
* Advising landowner of hazard so situation can be remedied
 |
| **Drug plantation**Discovery of plantation/operation | Injury from booby trapping, encountering drug growers |  | * Watching for trip wires, cyanide paste on trees and stakes and traps
* Leaving any discovered drug plantation immediately, leave site undisturbed
* Responding in a non-confrontational manner if growers are encountered
 |
| **Hunters in vicinity** Accidental shooting | Injury, death |  | * Avoiding popular hunting areas at key times
* Wearing high-vis vests when working in forest
 |
| **TOOLS AND EQUIPMENT**  |
| **Campsite equipment**Gas cookers and lanterns | Burns, asphyxiation |  | * Gas appliances only be used with suitable ventilation
* Gas to be turned off after use
* Cooling cookers outside of hut/tent before refuelling
* Fuel to be kept away from heat sources
 |
| **VEHICLES AND MACHINERY** |
| **Vehicular access**Traffic, collision, lose control of vehicle | Serious injury or death |  | * Taking care turning into entranceways
* Avoiding parking on roadside if possible
* Working on a roadside may require a traffic management plan
* Wear high-vis vests when working near a road
 |
| **Vehicle use – general**Lose control of vehicle, fatigue, goods moving inside vehicle | Crushing, broken bones, death |  | * All drivers appropriately licensed for the type and use of vehicle
* Driving to conditions and within speed limits
* Recognising fatigue and allowing someone else to drive where necessary
* Packing goods securely in vehicle so they don’t move
 |
| **Working around rail corridors**Collision with trains, tripping on rails or sleepers | Serious injury or death |  | * When working in or crossing a railway corridor a permit must be obtained from KiwiRail in advance of the activity at all times
* Always operating to conditions of permit
* Wearing hi-vis vest and checking railway timetable
 |
| **Helicopter use**Rotor blades and tail rotor, getting in and out of helicopters, crashing | Serious injury or death |  | * Always following the pilot’s safety briefing
* The Transport Accident Investigation Commission has noted that Robinson helicopters are at risk of mast bumping in New Zealand, and also notes that there is a particular risk of flying these helicopters in mountainous terrain and in turbulent weather conditions.  Consequently, members planning aerial surveys or other projects endorsed by the Society are discouraged from using Robinson helicopters in mountainous regions and in turbulent weather. It is recommended that travel be deferred or suspended in turbulent weather.
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| **DISEASE OUTBREAKS** |
| **Covid-19 pandemic** | Infection, spreading the virus |  | * Avoid close contact with people with cold or flu-like illnesses.
* Cover coughs and sneezes with disposable tissues or clothing.
* Stay home if you're unwell.
* Wash hands for min. 20 sec with water and soap and dry them thoroughly: before eating or handling food, after using toilet, coughing, sneezing or blowing nose.
* Ensure that you are aware of the current COVID-19 Alert level.
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**\* Risk Assessment**

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| *Risk* | *Possible worse outcome using current knowledge* | *How to manage* |
| **High** | Extremely harmfulto people,regardless of the frequency of occurrence | The risk is unacceptable. Substantial improvement is required to reduce risk to an acceptable level. The work activity should be halted, or not commenced, until controls are implemented. If it is not possible to reduce the risk the work should not be undertaken |
| **Medium** | Moderately harmful to people**,** regardless of the frequency of occurrence | Consider lowering the risks to an acceptable level |
| **Low** | Slightly harmful or temporary discomfort for people, regardless of frequency of occurrence  | Risk considered acceptable. No further action is necessary other than to ensure that the controls are maintained |

**On-Site Risk Assessment Appendix B**

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| **Location** |  |
| **Date** |  |
| **Tasks being undertaken***(list in sequence they are carried out – including travelling to site)* |  |
| **Hazards or risks that differ from Safety Plan:** |
| Task: | Hazards | Risk Level H/M/L |  Control Measures |
| **Team briefing coverage:** | □ All participants competent for tasks□ Communications/emergency procedures in place□ Opportunity given for participants to express any concerns |
| **Team leader for day:****Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | □ Team briefing delivered (as per general standard of care)□ Clear expectations set for team members about the work □ Team members are in agreement with health and safety plan |
| **Confirm team briefing delivered** | Signature: |

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| **Team members present at Health and Safety briefing (Names):** |
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**Incident Reporting Form Appendix C**

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| **Date of incident:****Time of incident:****Location:** | **Injured person:****Name of any witness:****Task being undertaken:** |
| **Details of Incident:** (*Describe what actually happened*) | **What caused the physical injury?** *(Slip or trip, moving object, lifting etc)* |
| **Part of body injured:** |
| **Severity of injury:****□** Near miss/unsafe act**□** Minor**□** Moderate requiring reporting to Council**□** Serious injury requiring reporting to Council | **Medical treatment required:****□** None**□** First aid□ Medical treatment(Doctor)□ Hospitalisation |
| **Safety Implications** |
| **Immediate corrective action taken:** |
| **Likelihood of reoccurrence:** |
| **Amendments required to safety plan:** |
| **Signed:****Name:** | **Date:** |

*March 2020*