

# Tier One Hazards and Risk Overview

Peel Forest Outdoor Centre is registered as an Adventure Activity Operator with WorkSafe (AAO 134) and is safety audited by AdventureMark.

The table below identifies the general and environmental hazards as well as the **residual risks** (risk after management strategies and controls) that exist within the Centre's activities.

The Peel Forest Outdoor Centre operates a comprehensive safety and hazard management system. If you'd like to view our current documentation, it is available on-site at the Centre or via digital communications during the booking process.



	Natural Hazards						General Hazards										
<b>Alpine Activities</b> Tramping, Snow Skills, Avalanche Courses	●	●	●		●	●	●	●	●	●	●	●				●	●
<b>Bush Activities</b> Tramping, Bush Survival, Orienteering, Environmental Education, Camping and Cooking	●		●		●	●	●	●	●	●	●	●	●	●	●		
<b>Flat Water Activities</b> Kayaking, Raft-Building	●			●		●		●	●						●		
<b>Ropes Activities</b> Abseiling, Climbing, High Ropes	●		●		●	●		●	●	●	●						
<b>Transport</b> Driving, loading trailers	●									●	●						●
<b>Whitewater Activities</b> Rafting, Kayaking, Fundaying, River Safety	●		●		●	●		●	●	●	●	●	●	●			●
<b>Canyons</b> Canyoning	●		●		●	●		●	●	●	●	●	●	●	●		

## Key

















	Extreme weather - Thunderstorms, extreme wind, rain, snow, and temperatures
	Avalanche - Mass of snow moving down a slope, can be very destructive
	Earthquake
	Tsunami
	Landslide
	Extreme conditions - visibility, river flow, air and water temperatures
	Fire - fire lighting, cooking fires and stoves
	Steep, slippery, uneven terrain
	Toxins - cleaning chemicals, fuel, stings, bites, poison
	People - Mental health/well-being and other people/hunters/recreationalists
	Remote locations
	Height - Falling objects, or people
	Deep water
	Moving water - Includes white water, maybe swift, shallow or deep.
	Sharp objects - knives, tools, items of gear
	Moving at speed

**Risk Level after controls:** High ● Considerable ● Moderate ● Low ●

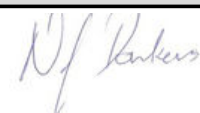
# Tier One Hazards Management Strategies Overview

The following documents provide more comprehensive details on management practices.

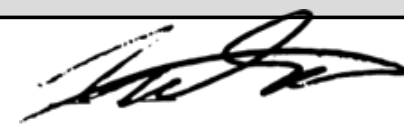
- **Instructor Field Book** - Outlines general operational processes for operating in the field, including daily intentions and review, communications, crisis and incident management, general environmental hazards, and driving and maintenance hazard management.
- **Activity Management Plans (AMPS)** - Policies and procedures for safety, best practice and quality for each activity.
- **Location Management Plans (LMPS)** - Policies and procedures specific to locations, including, but not limited to, hazards, access, communication, activity-specific processes for the location, and environmental cut-offs.

	Hazard	Risk/Undesired Outcomes	General Management Strategies
	Extreme weather - Thunderstorms, extreme wind, rain, snow, and temperatures	Drowning, electrocution, injury or death from physical trauma, hypothermia, heat stroke, sun burn	Pre activity/day instructor meeting - includes weather forecast check using a range of forecasts and it is recorded on the daily intentions form. Weather and intentions are discussed each morning on multi-day expeditions. The centre uses a paid weather forecast provider to allow for hourly forecasts, increased accuracy and thunderstorm tracking.
	Avalanche - Mass of snow moving down a slope, can be very destructive	Injury or death from physical trauma or suffocation or hypothermia	This is a large and complex hazard. We take a conservative approach and operate an Avalanche Management Plan located within the Alpine AMP and each LMP.
	Earthquake	Mass destruction of property, loss of road access, landslides, rock fall - causing Injury or death from trauma	This is a high consequence, low probability hazard. Activity and location policy and procedures are within the AMPs, LMPS and Instructor Field Book. On-site we are well placed in a civil emergency. All our accommodations operate off-grid and have reliable power and water.
	Tsunami	Drowning, mass destruction of environment and property	This is a high consequence, low probability hazard. Activity and location policy and procedures are within the AMPs, LMPS and Instructor Field Book. The LMPS have detailed evacuation maps from areas that could be affected by an event.
	Landslide	Injury or death from trauma	Known active landslide areas, marked on LMPS, are avoided where possible. No unnecessary time is spent in unstable areas. Unstable areas are avoided during heavy rain.
	Extreme conditions - visibility, river flow, air and water temperatures	Hypothermia, hyperthermia, sun burn, drowning, geographic disorientation	The centre uses a paid weather forecast provider to allow for hourly forecasts, increased accuracy and weather tracking. Live monitoring websites are used to check river flow, rain fall and water quality. Conditions, cut-offs and limits are stipulated in the AMPs and LMPS.
	Fire - fire lighting, cooking fires and stoves	Burns, destruction of buildings and the environment	Instructors designate cooking and/or camp fire location/s. Participants taught how to use cookers safely by ventilating cooking areas properly and keeping water nearby. If indoors, sit or stand and open windows. The Check It's Alright website is checked prior to lighting any open fires.
	Steep, slippery, uneven terrain	Injury or death from physical trauma	Instructors will explain the terrain risks and protect steep areas using techniques such as spotting and handlines. Unprotectable slopes are to be avoided. Walking and travel techniques appropriate to terrain are taught and used. PPE, such as footwear and helmets, are used where appropriate.
	Toxins - cleaning chemicals, fuel, stings, bites, poison	Injury or allergic reaction, anaphylaxis	Participants are not expected to use chemicals other than cleaning products. Chemical Safety Data Sheet (SDS) are in the office folder. Staff/volunteers must wear PPE and follow application guidelines. Chemicals are locked in cupboards and clearly labelled. Chemicals are used only in ventilated areas. Instructors carry adrenaline and know group allergies and medications. All instructors are trained in first aid and have emergency communication devices.
	People - Mental health/well-being and other people/ hunters/recreationalists	Psychological trauma, injury or death from physical trauma caused by other people	Staff and instructors respect participants' choice, to participate or not. They use gradual methods to teach skills and boost confidence. Medical and previous injuries disclosed on forms, provided by school and reminded/prompted at pre-activity briefing. They adjust the activity level to suit each person and group. Consideration is taken for other users at each location we operate and practice purposeful avoidance of areas or location use that may have a negative effect on other people or ours from their activity.
	Remote locations	Death from exposure, lengthened emergency response times, geographic disorientation	Remote locations are defined as places that have more than a 30-minute walk to vehicle access. Two reliable forms of communication are to be carried and split up between two people; one must be two-way. Two forms of mapping are to be carried, one paper, and one GPS-based. AMP gear lists advise of any extra gear required, and LMPS designate key egress locations/routes. Multi-day intentions form is used for expeditions, with morning and evening scheduled communication.
	Height - Falling objects, or people	Injury or death from trauma	This hazard is nominated as a key training area. Height protected by correct use of rope systems or barriers for participants and staff including non-programme maintenance. Instructors are to teach proper belay and abseil progressions, check equipment prior to use. Use back-ups and climbing communication. Set clear parameters and instructions at cliff tops. Correct PPE is to be used. Sites inspected for overhead hazards and any people on the ground are to avoid being under known hazard zones as described in LMPS.
	Deep water	Drowning	Participants and staff are required to wear an appropriate life jacket minimum NZ standard 403.
	Moving water - Includes white water, maybe swift, shallow or deep.	Drowning, injury from physical trauma	This hazard is nominated as a key training area for both rescue and normal procedures. Use of correct equipment, briefings and client training are critical to managing this hazard. Participants are required to wear an appropriate life jacket minimum US standard type 5 (except some canyoning activities). Instructors are to wear NZ type 406. Specific requirements for each activity are within the AMPs.
	Sharp objects - knives, tools, items of gear	Punctures and cuts, infection	All equipment of a sharp nature must be briefed and training done on its use and how to carry and store it. Appropriate footwear must be worn, including at campsites. Instructors provide knife briefs and training for bushcraft and food preparation.
	Moving at speed	Collision with people or objects at speed, injury or death from trauma	This hazard is nominated as a key training area. Drivers undergo simple driver training as part of their induction. NZ driving law is adhered to at all times. See the Instructor Field Book for further details. For activities where speed is a hazard, it is relative to the environment and is managed through AMPs and LMPS.

Approved by:



Board Chair



Centre Manager

# Risk Matrix

RISK LEVELS						
High		Considerable		Moderate		Low
		Likelihood Level				
		1 - Rare	2 - Unlikely	3 - Possible	4 - Likely	5 - Almost Certain
Consequence Level	5 - Catastrophic	MODERATE	CONSIDERABLE	HIGH	HIGH	HIGH
	4 - Critical	MODERATE	CONSIDERABLE	CONSIDERABLE	HIGH	HIGH
	3 - Major	LOW	MODERATE	CONSIDERABLE	CONSIDERABLE	HIGH
	2 - Moderate	LOW	LOW	MODERATE	MODERATE	CONSIDERABLE
	1 - Minor	LOW	LOW	LOW	LOW	MODERATE
	Likelihood Level		DESCRIPTION			
5 - Almost Certain		Expected to occur at least once during the task or activity				
4 - Likely		Could occur during the task or activity				
3 - Possible		It is conceivable that this could happen, but only expected infrequently				
2 - Unlikely		It is conceivable that this could happen, although only in unusual circumstances				
1 - Rare		It is not conceivable that this could occur				
Consequence Level		DESCRIPTION				
5 - Catastrophic		One or more fatalities				
4 - Critical		Serious injury to one or more people, resulting in permanent disability				
3 - Major		Injury that requires hospitalisation with no permanent disability				
2 - Moderate		Injury that requires first aid with no permanent disability				
1 - Minor		No injury or very minor that does not require first aid				