## **Risk Identification – Canyon**



What could go wrong? RISK	Why would this happen? HAZARD	Significance? RISK RATING Refer to SMP pg. 17	Controls - What we will do about it – Standard Operating Procedures The Assessor is accountable for the overall safety of the course and must ensure the below controls are in place
Serious Injury or Death - Falling from a height	<ol> <li>Person falls while climbing up/down or traversing steep terrain</li> <li>Inadequate belaying or abseiling</li> <li>Equipment failure</li> <li>Human error</li> <li>Slippery surfaces</li> </ol>	Medium	<ol> <li>4 &amp; 5. Assessors, candidates/trainees and model clients must be on a safety system when near the edge of drops unless in the process of jumping.</li> <li>Clear boundaries set for trainees and model clients at the top.</li> <li>Appropriate handlines or abseils are used in areas where there is a risk of falling.</li> <li>Candidates are belaying/abseiling correctly before teaching model clients. Belaying/abseiling on model client day is observed by Assessors who must step in if candidates not instructing it correctly.</li> <li>Equipment is used in accordance with the manufacturer's recommendations and current good practice. Shoes are checked as part of safety equipment prior to participation. Shoes must be covered with good toe and top foot protection.</li> <li>All equipment is checked for appropriate use, age and damage including model client equipment.</li> <li>Equipment is being used correctly.</li> <li>All anchors must be checked by an Assessor before use.</li> <li>Sharp edges are managed sufficiently when running ropes over them.</li> <li>All rescue tasks are monitored closely.</li> <li>Safety backups are used whilst abseiling when needed and as appropriate to the situation. All model clients must be belayed.</li> </ol>
Serious Injury or Death – Impact with river bed, rocks or trees	<ol> <li>Person jumps into shallow water</li> <li>New obstruction present</li> </ol>	Medium	<ol> <li>The water level is checked to ensure it is appropriate for the jump.</li> <li>Prior knowledge of the venue is required.</li> <li>4 &amp; 2. Jump pools have been scoped prior to jumping following a flood.</li> </ol>

Serious Injury or Death –	1. Lots of time spent in and out of water with	Medium	1. All participants have appropriate clothing on or available e.g. thermals, fleece, wetsuits, hats.
	inappropriate clothing on		Model clients are fitted with appropriate spare clothing if needed.
Hypothermia			Warming resources are available e.g. thermos, cooker, sleeping bag.
			Model clients are briefed on clothing and food requirements in pre-event letter as prevention to hypothermia.
Serious Injury or	1. High river flows	Medium	1 & 2. Weather forecast and river flow information obtained for the area.
Death –	2. Flash flooding 2. Non-swimmer		River levels are appropriate for the trip and escape routes or locations are known if rivers suddenly start rising.
Drowning	2. 1001-50011111111		2. Canyon sections are appropriate to the skill level of the candidates/trainees and model clients. (e.g. able to swim in deep water if applicable).
Serious Injury or Death –	1. Person swims through sieve, strainer	Medium	1. Be familiar with the canyon being used and check for updated information prior to using e.g. guidebooks, local knowledge, scouting trip.
Foot entrapment	or undercut rock 2. Person stands in moving water		Avoid/portage sections of canyon with known entrapment hazards e.g. logs, rock sieves.
			Canyon sections are appropriate to the skill level of the candidates/trainees and model clients.
			Consistently look out for sieves, strainers and under-cut rocks while instructing in the canyon and avoid if identified. If any are seen this is communicated with other groups.
			Model clients and trainees are briefed on what to do if they become pinned.
			1 & 2. Correct equipment is carried to rescue a participant from an entrapment. E.g. pin kit
Serious Injury or Death -	1. Known medical condition arises	Medium	1 & 2. Assessors and candidates to have a current first aid certificate and a means of contacting emergency services.
Medical Condition	2. Unknown medical condition occurs		1. Medical forms of candidates/trainees and model clients are checked and relevant information is considered.
			Personal medication is being carried by the participant (ie. inhalers, adrenaline).
			A first aid kit is carried at all times.
Serious Injury or	1. Rock or equipment dislodged by person on	Medium	1. Helmets are to be worn by Assessors, candidate/trainees and model clients while in

Death -	top of ledge.		the canyon.
Object falls on person's head			Loose rocks, and significant debris is cleared at the top of ledges prior to use when practicable.
			Groups are managed at the base of a pitch to ensure they are clear of potential rock fall.
			Equipment is clipped or tied on at the top of ledges.
Serious Injury or Death –	1. Terrain inappropriate for the	Medium	1. Appropriate routes and terrain within the scope of the qualification and the ability of the trainees and model clients are used
Slipping, tripping or	group		2 & 4. Model clients are briefed on footwear requirements in pre-event letter.
falling	2. Inappropriate equipment		Appropriate equipment and movement techniques are available and taught to model clients. Shoes must be covered with good toe and top foot protection.
	3. Poor group management		3. Appropriate techniques to manage the terrain are used.
	4. Slippery Surfaces		
Serious Injury or Death – Lost – person or	<ol> <li>Poor Group Management</li> <li>High river flows</li> </ol>	Medium	1 & 2. NZOIA ratios are maintained at all times.
			1. Assessors to step in if the candidate is not managing the group and potential group separation becomes a safety concern.
group			Assessors to know at all times where the candidates/trainees and model clients are.
			Intentions are left with someone.
			<ol><li>Updated weather forecast and river flows obtained to determine conditions are suitable for the participants.</li></ol>
Serious Injury or Death –	briefed or checked prior to abseiling	Low	1. Candidates to have demonstrated rescue skills prior to model client day.
Hair or clothing caught in abseil device			
Injury Rope burn	1. Incorrect belaying or abseiling technique	Low	1. Candidates are belaying/abseiling correctly before teaching model clients.
			Belaying/abseiling on model client day is monitored by Assessor who must step in if candidates not instructing it correctly.
			Participants stay in control while abseiling and have back up system in place.

## Site specific Hazards - Canyoning:

These site-specific hazards are reported by Assessors following a NZOIA course. This is only one source of the potential hazards in an area and is quickly outdated. Assessors are responsible for seeking up to date information on the location they are going to work in from other sources for e.g. DOC, local operators, instructors and guides.

Risk	Location of Hazard	Date Identified	Control - What we will do about it – Standard Operating Procedures