

1XXXXX **Protect personal safety and the safety of others at flood incidents**

Kaupae Level	2
Whiwhinga Credit	3
Whāinga Purpose	<p>This skill standard is for people working in any role that may require them to work in, or in proximity to, flood waters.</p> <p>People credited with this skill standard are able to describe environmental considerations relating to floods and demonstrate safety techniques when working in floodwaters.</p>

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Describe safety considerations relating to floods in accordance with industry best practice.	a. Identify types of flooding and their characteristics.
	b. Identify river features that influence flood behaviour and safety.
	c. Describe potential hazards of crossing flooded rivers and the associated safety considerations.
	d. Describe potential medical problems associated with floodwater, and their treatments.
2. Describe safe practices for vehicles entering and crossing flooded roads in accordance with industry best practice.	a. Identify safe practices for vehicles entering flooded areas.
	b. Describe emergency procedures when crossing flooded areas in a vehicle.
3. Demonstrate safety techniques working in floodwaters in accordance with industry best practice.	a. Demonstrate survival swim techniques.
	b. Demonstrate safe wadding with or without a platform.
	c. Demonstrate three types of shallow river crossing.
	d. Demonstrate the use of a throw bag to rescue a swimmer.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria**Assessment specifications:**

- Practical assessment may be carried out under simulated flood conditions.
- Learning outcome 2 must be assessed on a grade 1 river, based on the international river grading system.
- For outcome 2 the candidate must wear appropriate personal protective equipment. The minimum requirements are a water helmet and personal floatation device complying with New Zealand Standard NZS 5823:2005 Specification for buoyancy aids and marine safety harnesses and lines.
- Flood types include gradual onset, surface, lake, riverine, rapid onset, dam, flash, coastal, tsunami.
- River features may be identified from the natural environment or images. All river features include eddies, waves, recirculating waves, buffer waves, undercut banks, rapids, strainers, obstacles, and waterfalls.
- Potential hazards of crossing flooded rivers and floodwaters include depth, speed of current, rapids, waterfalls, strainers/obstacles, water temperature, foot entrapment.
- Potential medical problems associated with floodwater, and their treatments - fatigue, dehydration, hypothermia, hypothermia induced debility (HID), cold water immersion, contact with contaminated water.
- Survival swim techniques include position in water, looking for downstream obstacles, ferry angle used, pushing off obstacles if needed.
- Types of shallow river crossing may include solo, line astern, line abreast and wedge.
- Candidates must wear appropriate PPE in the assessment of LO3 in accordance with industry best practice.

Ngā momo whiwhinga | Grades available

Achieved /

Ihirangi waitohu | Indicative content**Rivers and flooding**

- Types of flooding
- Common features of rivers that influence flood behaviour: Flood plains, riverbanks, confluence points, low-lying, currents and erosion.
- Hazards crossing rivers
- Safety considerations crossing rivers
- Medical problems associated with flood waters
- Treatment of medical conditions associated with flood waters

Safe practices crossing flooded roads in a vehicle

- Safe practices for vehicles entering flooded areas include e.g. speed, depth, surface
- Emergency procedures for vehicles crossing flooded roads: vehicle and people escape methods, communications plan, and briefing, escape route.

Safety techniques working in floodwaters

- Survival swim.
- Wading – with or without a platform.
- PPE
- Throw bags
- Types of shallow river crossing solo, line astern, line abreast and wedge.

Rauemi | Resources

Where the resources have been updated, please refer to the latest version.

- Civil Defence and Emergency Management Act 2002.
<https://www.legislation.govt.nz/act/public/2002/0033/latest/whole.html>
- Health and Safety at Work Act 2015.
<https://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5976660.html>
- River Safety Mountain Safety Council. *River safety: How to cross a river safely?*
<https://www.mountainsafety.org.nz/learn/skills/river-safety>
- Survival Swimming Water Safety New Zealand. *Survival swimming*.
<https://www.watersafetynz.org/resources/survival-swimming>

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Toitū Te Waiora, Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Community and Social Services, Civil Defence Emergency Management, Civil Defence Emergency Management Response
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0223

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	31 December 2029	N/A
Kōrero whakakapinga Replacement information			
Rā arotake Planned review date	31 December 2029		

Please contact Toitū te Waiora Community, Health, Education, and Social Services Workforce Development Council at qualifications@toitutewaiora.nz to suggest changes to the content of this skill standard.