# 40696 Work safely at flood incidents

Kaupae   Level	2
Whiwhinga   Credit	3
Whāinga   Purpose	This skill standard is for people working in any role that may require them to work in, or in proximity to, flood waters.
	People credited with this skill standard are able to: determine safety considerations relating to floods; outline safe practices for vehicles entering flood waters; and employ safe techniques when working in floodwaters.
	This skill standard can be used for assessment within programmes across the Emergency Management sector.

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

Hua o te ako   Learning outcomes	Paearu aromatawai   Assessment criteria		
Determine safety considerations relating to floods.	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 urban environments, and the associated safety considerations.		
	d. Describe potential medical problems associated with floodwater, and their treatments.		
	e. Explain decontamination procedures for self and equipment after contact with flood water.		
	f. Identify safe practices for vehicles entering flooded areas.		
	g. Outline emergency procedures when crossing flooded areas in a vehicle.		

Hua o te ako   Learning outcomes	Paearu aromatawai   Assessment criteria		
Employ safety techniques when working in floodwaters.	a. Demonstrate survival swim techniques.		
iii iioodwatore.	b. Demonstrate safe wading with or without a platform.		
	c. Perform three types of shallow river crossing.		
	d. Demonstrate the use of a throw bag to rescue a swimmer.		
	e. Use communication protocols in a flood environment.		

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

- Assessment must be in accordance with industry best practice.
- Practical assessment may be carried out under simulated flood conditions.
- Assessment criterion 1a flood types include gradual onset, surface, lake, riverine, rapid onset, dam, flash, and coastal, tsunami.
- Assessment criterion 1b river features may be identified from the natural environment or images. River features include eddies, waves, recirculating waves, buffer waves, undercut banks, rapids, strainers, obstacles, and waterfalls.
- Assessment criterion 1c hazards include depth, speed of current, rapids, waterfalls, strainers/obstacles, water temperature, and foot entrapment.
- Assessment criterion 1d potential medical problems include fatigue, dehydration, hypothermia, hypothermia induced debility (HID), cold water immersion, and contact with contaminated water.
- Learning outcome 2 must be assessed on a grade 1 river, based on the international river grading system.
- Learning outcome 2 candidates must wear appropriate personal protective equipment (PPE) in accordance with industry best practice.
- Assessment criterion 2a survival swim techniques include position in water, looking for downstream obstacles, ferry angle used, and pushing off obstacles if needed.
- Assessment criterion 2c types of shallow river crossing may include solo, line astern, line abreast, and wedge.

#### Definition:

*Industry best practice* refers to the documented policies, procedures, and specifications accepted by competent industry practitioners as being current practice. These practices may be documented in organisational material, codes of practice, manufacturer's instructions, legislation.

#### 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.
- Urban hazards: sloping riverbanks, manholes, gutters, urban debris, floating containers/bins, services crossing drains/rivers, and electricity.
- Treatment of medical conditions associated with flood waters.
- Decontamination procedures for self and equipment.

#### Safe practices crossing flooded roads in a vehicle

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

#### Safety techniques working in floodwaters

- Survival swim.
- Wading with or without a platform or other wading equipment.
- PPF
- Hot, warm, and cold zones.
- Throw bags.
- Types of shallow river crossing solo, line astern, line abreast and wedge.
- Use of communications: radios, whistles, and hand signals.

#### 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.
   <a href="https://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5976660.html">https://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5976660.html</a>.
- 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 Community, Health, Education, and Social Services 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	24 July 2025	N/A
Kōrero whakakapinga   Replacement information	This skill standard replaced unit standard 22298.		
Rā arotake   Planned review date	31 December 203	0	

Please contact Toitū te Waiora Community, Health, Education, and Social Services Workforce Development Council at <a href="mailto:qualifications@toitutewaiora.nz">qualifications@toitutewaiora.nz</a> to suggest changes to the content of this skill standard.