40697   Respond to flood incidents

Kaupae | Level	3
Whiwhinga | Credit	4
Whāinga | Purpose	This skill standard is for people who are required to provide initial response to flooding incidents. People credited with this skill standard are able to: determine flood incident management in New Zealand; set-up and operate portable pumps in proximity to flooding; and install a flood control method. This skill standard can be used for assessment within programmes across the Emergency Management sector.
Whakaakoranga me mātua oti | Pre-requisites	Skill standard 40696, *Work safety at flood incidents,* or demonstrate equivalent knowledge and skill.

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

Hua o te ako | Learning outcomes	Paearu aromatawai | Assessment criteria
1. Determine flood incident management in New Zealand.	a. Describe how flooding is managed across the 4 Rs of emergency management.
	b. Determine actions, and their rationale, for two specific flood recovery operations.
2. Set-up and operate portable pumps in proximity to flooding.	a. Select and set-up pump in accordance with the situation requirements, manufacturer's instructions, and safety requirements.
	b. Operate pump to transfer water from one location to another in accordance with the situation requirements, manufacturer's instructions, and safety requirements.
	c. Explain solutions for common pump problems.
3. Install a flood control method.	a. Select method of flood control in relation to resource requirements, and in accordance with the flood situation, safety requirements, and industry best practice.
	b. Install flood control measures in proximity to flood water based on the projected incident development and site conditions.

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

Assessment specifications:

Assessment criterion 1a includes preventative, clearing and monitoring techniques relevant to drains and response tactics in accordance with the flood incident.

For assessment of learning outcome 3

- Methods of flood control include sandbags, polymer filled bags, inflatable tube barriers, rigid barriers.

- Selection of flood control methods include consideration of cost, terrain, base materials, clear up costs, achievable height, personnel, equipment, materials, PPE.

- Installation of flood control measures include demonstration of installing sandbags, polymer filled bags, inflatable tube barriers, rigid barriers.

Definitions:

4 Rs New Zealand's approach to civil defence emergency management is known as the 4 Rs: reduction, readiness, response and recovery.

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

Flood incident management in New Zealand.

- 4 Rs of emergency management.

- Roles and responsibilities of key agencies.

- Flood warning systems and their use

- Building codes and regulations relating to floods.

- Drain cleaning techniques: cages, sleeves, removal of debris.

- Response tactics: pre-plan, training, activation levels, resource identification.

- Flood plans, evacuations, clean-up.

Portable pumps.

- Pump selection: size of pump allows movement to site with given personnel.

- Pump set-up location selection: clear of combustible material, flat to slight slope, anchorage to secure pump to if required, discharge of floodwater does not cause additional damage.

- Trouble shooting for common problems with pump operation.

Methods of flood control.

- Overview of flood control methods: advantages and disadvantages of each.

- Sandbags, polymer filled bags, inflatable tube barriers, rigid barriers.

- Selection of flood control methods include consideration of cost, terrain, base materials, clear up costs, achievable height, personnel, equipment, materials, PPE.

- Situational suitability of methods based on flood type and site conditions.

- Installation of flood control measures include demonstration of installing sandbags, polymer filled bags, inflatable tube barriers, rigid barriers.

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 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 22297.		
Rā arotake | Planned review date	31 December 2030		

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.