

Title	Demonstrate canoeing and kayaking river rescue skills on Grade III whitewater		
Level	4	Credits	9

Purpose	People credited with this unit standard are able to: demonstrate knowledge of river rescue principles and equipment for canoeing and kayaking; and demonstrate canoeing and kayaking river rescue skills on Grade III whitewater as a rescuer.
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Classification	Outdoor Recreation > Canoeing - Kayaking
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Available grade	Achieved
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Guidance Information

- 1 Definitions

Belayed contact rescue is where the rescuer is belayed by a rope attached to a releasable towline on their buoyancy aid.

Cumecs is a measure of how much water flows past a point in one second.

Grade III whitewater contains rapids with moderate, irregular waves which may be difficult to avoid. Complex manoeuvres in fast current and good kayak or canoe control in tight passages or around ledges is often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.

Paddle hook refers to a combination of gear that allows a rope to be hooked to an attachment point on the canoe or kayak.
- 2 Simulated rescues should be carried out at a site where the boat and/or swimmer are in proximity to a big rock, shallow water or the riverbank but still on Grade III whitewater.
- 3 *Co-ordinate technical rescues* in this unit standard means assessing the site and establishing priorities, making efficient use of people and resources, and ensuring no losses are incurred.
- 4 All activities must comply with any relevant environmental, legislative and/or regulatory requirements set out in the *New Zealand Environmental Care Code*, *New Zealand Water Care Code*, Health and Safety in Employment Act 1992, Injury Prevention, Rehabilitation, and Compensation Act 2001, and their subsequent amendments. The *New Zealand Environmental Care Code* and *New Zealand Water Care Code* are available from the Department of Conservation, Head Office, PO Box 10420, Wellington, <http://www.doc.govt.nz/>.

- 5 There are minimum assessor requirements for assessment against this unit standard. The details of these requirements are available on the Skills Active website <http://www.skillsactive.org.nz/>.
- 6 It is recommended that candidates have achieved the following unit standards prior to assessment taking place: Unit 20122, *Demonstrate kayaking skills on Grade III whitewater*; or Unit 20821, *Demonstrate canoeing skills on Grade III whitewater*; or demonstrate equivalent knowledge and skills.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of river rescue principles for canoeing and kayaking.

Performance criteria

- 1.1 Knowledge of river hydrology is demonstrated.
- Range bends, upstream and downstream Vs, rooster tails, eddies, waves, hydraulics, holes, laminar and helical flows, eddy walls.
- 1.2 Potential hazards associated with canoeing and kayaking are identified.
- Range strainers, sieves, man-made objects, undercuts, siphons, stoppers, weirs.
- 1.3 Strategies to reduce risk and avoid hazards are described.
- 1.4 The grading system of rivers is described.
- Range Grades I-VI.
- 1.5 Current speed, force of water, and cumecs are explained and their effects on a trapped canoe or kayak are described.
- 1.6 Knowledge of management strategies for potential health problems associated with Grade III whitewater is demonstrated.
- Range hypothermia, cold water immersion, cramps, sunburn, blisters, dislocations, head injuries.
- 1.7 Understanding of river crossing techniques is demonstrated.
- Range mutual support, solo.
- 1.8 Understanding of incident management is demonstrated.
- Range roles, responsibilities, sequence of rescue.

Outcome 2

Demonstrate knowledge of canoeing and kayaking river rescue equipment.

Performance criteria

2.1 Canoe and kayak safety features are identified.

Range kayak – cockpit, pillars, buoyancy, end loops, air bags;
canoe – buoyancy, end loops, thwart braces, air bags.

2.2 Personal safety gear is selected and its selection justified.

Range gear – buoyancy aid, helmet, footwear, clothing, knife, whistle, throw bag, towline;
justification – characteristics, positives and negatives.

2.3 Group safety gear is selected and its selection justified.

Range gear – spare paddle, sling, karabiners, pulleys, mechanical devices, Prussik-brake, first aid, repair kit and tools, river saw, paddle hook, food and drink;
Justification – characteristics, positives and negatives.

2.4 Knots are tied and their use and limitations for river rescue are described.

Range figure-eight on a bight, re-threaded figure-eight, directional figure-eight, tape knot, double fisherman's, clove hitch, tension knot, bowline, Prussik knot, klemheist, classic, Italian hitch.

2.5 Understanding of retrieval systems used in river rescue is demonstrated.

Range anchors, mechanical systems, non-mechanical systems.

2.6 Communications systems are identified and understood on and off the water.

Range hand, paddle and whistle signals, voice, radio.

Outcome 3

Demonstrate canoeing and kayaking river rescue skills on Grade III whitewater as a rescuer.

Performance criteria

3.1 Self-rescue is demonstrated.

Range with and without equipment.

3.2 Contact rescues are demonstrated.

Range swimmer – conscious and unconscious;
rescuer – belayed and not belayed.

3.3 Throw bag rescues are demonstrated.

Range bagged and coiled.

3.4 Towline rescues are demonstrated.

Range towing a kayak or canoe across the current using a towline,
executing a towline release and roll up while capsized, paddle.

3.5 River crossings in slow moving sections of Grade III whitewater are performed.

Range mutual support, solo.

3.6 Simulated people-based retrievals in Grade III whitewater are demonstrated.

Range victim – foot entrapment, stranded victim;
rescue – tagline, throw bag, belayed contact rescue.

3.7 Retrieving a canoe and a kayak from an entrapment without mechanical advantage is demonstrated.

Range vector pull, 10 boy scouts.

3.8 Retrieving a canoe and a kayak from an entrapment using mechanical advantage is demonstrated.

Range entrapment – broach, vertical pin;
rescue – 3:1 Z-drag using a Prussik brake, 4:1 pig rig using an Italian hitch on the main line, tied off.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	29 October 2004	31 December 2022
Revision	2	26 January 2007	31 December 2022
Review	3	25 July 2019	31 December 2022

Consent and Moderation Requirements (CMR) reference	0102
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.