

<b>Title</b>	<b>Apply knowledge of river rescue skills and techniques for Grade 4 or 5 rivers</b>		
<b>Level</b>	<b>5</b>	<b>Credits</b>	<b>8</b>

<b>Purpose</b>	People credited with this unit standard are able to: identify and explain river dynamics and features of Grade 4 or 5 rivers; demonstrate the ability to move quickly and confidently in and around Grade 4 or 5 rapids; demonstrate use of rescue equipment for Grade 4 or 5 river rescue situations; apply knowledge of rope systems used for Grade 4 or 5 river rescue situations; demonstrate river rescue techniques suitable for Grade 4 or 5 rivers.
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<b>Classification</b>	Outdoor Recreation > Rafting
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<b>Available grade</b>	Achieved
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<b>Prerequisites</b>	<p>Unit 31727, <i>Apply knowledge of river rescue skills and techniques for Grade 3 rivers</i>, or demonstrate equivalent knowledge and skills.</p> <p>Completion of this standard requires successful completion of a New Zealand Rivers Association for Professional Guides (NZRA) River Rescue Workshop, Whitewater Rescue Technician (WRT2) or River Rescue Certification for Professionals (RRC-PRO) or NZRA recognised equivalents. This workshop must have been completed within the last 18 months.</p>
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## Guidance Information

- All learning and assessment against this standard must be carried out in accordance with the following:
  - relevant legislation including Health and Safety at Work Act 2015, Human Rights Act 1993, Children’s Act 2014, Health and Safety at Work (Adventure Activities) Regulations 2016, Maritime New Zealand Rule Part 81, and subsequent amendments;
  - industry Codes of Conduct, such as the Mountain Safety Council Outdoor Safety Code available from <https://www.mountainsafety.org.nz/resources/outdoor-safety-code/> and ‘Leave No Trace’ principles available from <https://www.doc.govt.nz/>;
  - a recognised and approved Safety Management System (SMS) including organisational policies and procedures, Emergency Action Plans (EAPs), Standard Operating Procedures (SOPs), incident response management plans and the use of personal protective equipment (PPE);

- current industry good practice.

- 2 Classification of river grading systems as stated in the WorkSafe NZ June 2020, Good Practice Guideline, *White Water Rafting: Guidance for Commercial Rafting Operators*, available from <https://worksafe.govt.nz/topic-and-industry/adventure-activities/white-water-rafting> Section 3.0. Managing risk: the river environment.

#### Grade 4 rapids

##### Characteristics

- have high, powerful, irregular waves, broken water, often boiling eddies, strong stoppers, ledges, drops, and dangerous exposed rocks,
- a passage that is often difficult to recognise, and
- require precise and sequential manoeuvring to negotiate the rapids.

#### Grade 5 rapids

##### Characteristics

- have very confused and broken water, large drops, violent and fast currents, abrupt turns, difficult powerful stoppers, and fast boiling eddies,
- numerous obstacles in the main current,
- require complex, precise, powerful and sequential manoeuvring to negotiate the rapids, and
- pose a definite risk to personal safety.

- 3 Definitions

*Craft* means a raft or a riverboard.

*Current industry good practice* means the range of actions currently accepted within the adventure and outdoor sector (which includes the raft and riverboard industries) to manage the risk of harm to staff, participants, and visitors.

- 4 Evidence towards practical performance can be collected under simulated conditions.
- 5 Further information regarding industry guidelines, key definitions and other relevant information can be found within the Rafting programme guidance document. This document should be consulted when developing learning or assessment against this unit standard. It can be found at [www.skillsactive.org.nz](http://www.skillsactive.org.nz).

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## Outcomes and performance criteria

### Outcome 1

Identify and explain river dynamics and features of Grade 4 or 5 rivers.

#### Performance criteria

- 1.1 Identify river dynamics and features of Grade 4 or 5 rapids and explain their effects on a raft and people.

### Outcome 2

Demonstrate the ability to move quickly and confidently in and around Grade 4 or 5 rapids.

**Performance criteria**

- 2.1 Demonstrate river swimming in and around Grade 4 or 5 rapids.
- Range swimming into eddies, access mid-stream boulders, aggressive head up swim technique, safe defensive swim technique, swim through turbulent whitewater and/or wave train, shallow dive, entering water from a height.
- 2.2 Demonstrate river access techniques used for river rescue situations on Grade 4 or 5 rivers.
- Range wading, boulder hopping, mutual support, support lines.

**Outcome 3**

Demonstrate use of rescue equipment for Grade 4 or 5 river rescue situations.

**Performance criteria**

- 3.1 Demonstrate the use of personal safety equipment.
- Range helmet, rescue personal floatation device (PFD) with releasable tow line, footwear, knife, throw bag, whistle, clothing, long sling and carabiner, watch.
- 3.2 Demonstrate the use of technical rescue equipment.
- Range static rope, carabiners, pulleys, Prusik loops, slings or lengths of rope.

**Outcome 4**

Apply knowledge of rope systems used for Grade 4 or 5 river rescue situations.

**Performance criteria**

- 4.1 Apply rope rescue knots, bends and hitches in river rescue situations.
- Range knots include – bowline, tape or water, figure eight, follow-through figure eight, figure eight on a bight, alpine butterfly;  
bends include – fisherman's, sheet;  
hitches include – Prusik, truckers, half, clove, Italian.
- 4.2 Demonstrate anchor-building techniques.
- Range may include but is not limited to – craft anchors and on shore anchors.
- 4.3 Demonstrate the use of rope systems for Grade 4 or 5 river rescue situations.
- Range vector pulls, Z drag (3:1), pig rigs (4:1), 2:1.

- 4.4 Explain maximum loading limits on gear used in rope systems.
- 4.5 Demonstrate strategies to protect people and equipment while using rope systems in river rescue situations on Grade 4 or 5 rivers.

### Outcome 5

Demonstrate river rescue techniques suitable for Grade 4 or 5 rivers.

#### Performance criteria

- 5.1 Carry out assessment of river rescue situations for Grade 4 or 5 rivers and prioritise appropriate actions.
- Range personal and group safety, casualty stabilization if required, incident containment.
- 5.2 Demonstrate throw-bag rescues for multiple swimmers.
- Range throw-bag deployed accurately over full length of bag, half re-coil and re-throw.
- 5.3 Demonstrate a static and dynamic belay technique during throw line rescues on Grade 4 or 5 rivers.
- Range selection of access and retrieval point.
- 5.4 Demonstrate swimming rescue techniques for Grade 4 or 5 rivers.
- Range includes – tethered swimmer, contact swim towing, unconscious victim support.
- 5.5 Demonstrate establishing lines across the river.
- 5.6 Demonstrate entrapment recovery techniques.
- Range entrapment recovery includes – stabilization lines, tethered rescuer, tethered craft, contact rescue techniques, extraction with lines.
- 5.7 Demonstrate techniques for the retrieval of pinned or trapped craft for Grade 4 or 5 rivers.

<b>Planned review date</b>	31 December 2025
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	24 September 2020	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0099
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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**Comments on this unit standard**

Please contact Skills Active Aotearoa Limited [info@skillsactive.org.nz](mailto:info@skillsactive.org.nz) if you wish to suggest changes to the content of this unit standard.