

Apply knowledge of river rescue skills on Grade III or above whitewater rivers

Level 4

Credits 10

Purpose This unit standard is intended for people who work guiding commercial river trips on Grade III or above whitewater river environments.

People credited with this unit standard are able to: explain river dynamics and features and their effects on craft and people; demonstrate the ability to move quickly and confidently in Grade III or above whitewater rivers and accurately communicate with other guides; demonstrate knowledge of rescue equipment and its application in a range of whitewater river rescue situations; demonstrate knowledge of rope systems used in whitewater river rescue situations; and demonstrate knowledge of rescue techniques suitable for Grade III or above whitewater rivers.

Subfield Outdoor Recreation

Domain Rafting

Status Proposed

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Entry information Open

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) Skills Active Aotearoa Limited

Accreditation and Moderation Action Plan (AMAP) reference 0099

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Special notes

- 1 All activities must comply with the policies, procedures and requirements of the operator involved and any relevant legislative and/or regulatory requirements which include but are not limited to: Department of Conservation *Environmental Care and Water Care Code*, Health and Safety in Employment Act 1992, Injury Prevention, Rehabilitation, and Compensation Act 2001, Maritime Transport Act 1994, Maritime

Rule Part 80, Maritime Rule Part 91 and their subsequent amendments, and relevant Maritime New Zealand safety guidelines.

- 2 All river guiding activities must be logged. Logged information must include but is not limited to – dates, river, section, duration, water level, grade, craft type, trip leader, participant and guide numbers, accidents and incidents. Log books can be obtained from New Zealand Rafting Association <http://www.nz-rafting.co.nz> .
- 3 This unit standard is part of the National Raft Guide Award Grade III and Grade IV/V, and is intended to form part of the National Whitewater Boarding Guide Award and the Inflatable Craft Group Guiding Award under development by Maritime New Zealand <http://www.maritimenz.govt.nz/>.
- 4 This standard may be assessed in simulated conditions.
- 5 Recommended resource – *Whitewater Safety and Rescue*, Franco Ferrero, 2nd Edition, Pesda Press 2006. <http://www.pesdapress.com>
- 6 Behaviour during assessment demonstrates environmental care and consideration of other river users, consistent with the Environmental Care Code, and current industry practice.
- 7 Definitions
Current industry practice refers to practices propagated through industry national forums, newsletters, and assessments and which are generally accepted by experienced practitioners as safe and relevant. These will be consistent with any applicable regulatory requirements and/or manufacturer’s recommendations. Applicable regulatory requirements and manufacturer’s recommendations may be specified in performance criteria where required for particular emphasis.
Justified, where used in performance criteria, refers to the candidate explaining why something is needed.
Organisational requirements refer to policy and procedures of the outdoor activities organisation, and include compliance with any applicable legislation, standards, and codes.

Elements and performance criteria

Element 1

Explain river dynamics and features and their effects on craft and people.

Performance criteria

- 1.1 River dynamics and features are identified and their effects on craft and people are clearly explained.

Range	flow type (laminar, helical) and volume, eddies, boils, seams, pillows (buffer or cushion), holes (reversal or hydraulic), weirs, standing waves, lateral waves, tongues, upstream and downstream V’s, rapid grades, strainers, sieves, undercuts, bluffs.
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Element 2

Demonstrate the ability to move quickly and confidently and communicate with others in Grade III or above whitewater rivers.

Performance criteria

- 2.1 On river communication with other guides is clear, effective, utilises recognised river signals, and includes acknowledgement of signals received.
- 2.2 Confident movement in and around river environments is demonstrated.
- 2.3 Use of entrapment avoidance techniques are demonstrated in accordance with current industry practice.
- Range entrapment avoidance – foot entrapment, strainer swim, whitewater float position, self rescue swimming.
- 2.4 Use of appropriate river crossing techniques is demonstrated in accordance with current industry practice.
- Range solo, group.

Element 3

Apply knowledge of rescue equipment in river rescue situations.

Performance criteria

- 2.1 Personal safety equipment is selected and its selection is justified
- 2.2 Technical rescue equipment is selected and its selection is justified
- Range static rope, carabiners, pulleys, Prusik loops, slings or lengths of rope.

Element 4

Apply knowledge of rope systems used in whitewater river rescue situations.

Performance criteria

- 4.1 Rope types are compared in terms of qualities and limitations for use in river rescues.
- Range static, dynamic, polypropylene, nylon, spectra.
- 4.2 Knowledge of the purpose, use and limitations of rope rescue knots, bends and hitches is applied in river rescue situations.
- Range knots include but are not limited to – bowline, tape or water, figure eight, follow through figure eight, figure eight on a bight, double

figure eight, alpine butterfly;
bends include but are not limited to – fishermans, sheet;
hitches include but are not limited to – Prusik, truckers, half hitch,
clove, Italian.

4.3 Knowledge of rope systems used for rescues in whitewater river environments is applied in accordance with current industry practice.

Range must include but not limited to – vector pulls, Z drag (3:1), pig rigs (4:1), 2:1.

4.4 Application of rope systems demonstrates understanding of maximum limits on loading gear and protects people and equipment.

Element 5

Apply knowledge of rescue techniques suitable for Grade III or above whitewater rivers.

Performance criteria

5.1 Throw line rescues are demonstrated in accordance with current industry practice.

Range throw bags, re coil and throw (within 20 secs) accurately over 20m;
selection of access and retrieval point;
static and dynamic belay technique.

5.2 Strong swimming rescue techniques for whitewater river environments are demonstrated in accordance with current industry practice.

Range may include – tethered swimmer, rope retrieval, contact swim towing, lifeguard defensive techniques, gear retrieval, unconscious victim support.

5.3 Use of entrapment recovery techniques are demonstrated in accordance with current industry practice.

Range entrapment recovery - foot entrapment, tethered rescuer, support lines, tethered craft, extraction with lines.

5.4 Effective placement of craft to provide assistance in a rescue situation is demonstrated in accordance with current industry practice.

5.5 Techniques for the retrieval of pinned or trapped craft, where required, is demonstrated in accordance with current industry practice.

5.6 Risk assessment of river rescue situations and appropriate prioritisation of actions are demonstrated in accordance with current industry practice.

Range personal and group safety, airway priority, casualty stabilisation, incident containment, up-stream and down-stream cover.