

BoatSafe Competency Standard

October 2009

Table of contents

Introduction.....	3
Definitions and acronyms	3
Competency standard	3
Licensing requirements	3
Skills and knowledge requirements	5
Underpinning knowledge	5
Recognition of prior learning.....	5
Assessment strategy	5
Resource requirements	5
Physical resources	5
Information resources	6
Seamanship.....	6
Units of competency	7
Unit 1 — prepare a recreational vessel for operation	8
Unit 2 — apply international and state regulations relevant to the operation of a recreational vessel	10
Unit 3 — assess weather conditions and forecasts	12
Unit 4 — operate mechanical and electrical appliances of a recreational vessel	14
Unit 5 — manoeuvre a recreational vessel	16
Unit 6 — apply safety management processes on a recreational vessel	18
Unit 7 — operate a personal watercraft	20



Introduction

This BoatSafe Competency Standard outlines the skills, knowledge and competencies that must be demonstrated by those who wish to acquire a marine licence to operate registrable powered recreational vessels and personal water craft in Queensland.

The competency standard quantifies what an operator must be able to do and how well it must be done. The evidence guides provide guidance to the type and quality of evidence that should be seen by the assessor. This information should provide applicants for a recreational marine driver licence or personal watercraft licence with an accurate indication of what must be done and what must be known to be assessed as competent to hold a licence.

Definitions and acronyms

- **Recreational vessel** — reference to recreational vessel/s in this document is confined to registrable vessels powered by main engines in excess of 4.5 kilowatts or six horsepower.
- **Personal water craft or PWC** — reference to a personal watercraft in this document includes a jet ski, wave runner, sea doo and similar craft.
- Recreational marine driver licence — (RMDL)
- Personal watercraft licence — (PWCL)
- *Transport Operations (Marine Safety) Act 1994* — (the act)
- *Transport Operations (Marine Safety) Regulation 2004* — (the regulation)

Competency standard

Competency standards separate and fix the limits of the tasks required to be performed in a particular situation or environment. They specify the level of performance needed to complete each task to the required standard. In this case, they are the foundation for competency-based training for the operation of recreational vessels and personal watercraft in Queensland. They define the job of handling these craft and they define how well the operator must do that job.

Competency standards, as the name implies, are based on the competency concept which, in this context, means all aspects of the performance of a specified task. It includes:

- performance at an acceptable level of skill
- organising one's tasks
- responding and reacting appropriately to the unexpected
- fulfilling the role expected in the specific environment, and
- transferring skills and knowledge to new situations.

Licensing requirements

The *Transport Operations (Marine Safety) Act 1994* and the attendant *Transport Operations (Marine Safety) Regulation 2004* prescribe the licence requirements for the operators of recreational vessels and personal watercraft in Queensland. The regulation refers to the recreational boat licence as a recreational marine driver licence and recent amendments introduced the new requirement for a personal watercraft licence which came into effect in Queensland on 1 January 2006.

Maritime Safety Queensland administers this legislation and the operators of these craft must observe their general safety obligations under the act.

Section 97 of the regulation enables the chief executive or general manager to issue the classes of licence provided for in schedule 3 of the regulation. The schedule includes the recreational marine driver licence and personal watercraft licence and provisions at section 84(2)(f) of the regulation stipulate a recreational marine driver licence is currently required when operating a vessel powered by a motor of greater than 4.5 kW.

Valid licences include a:

- recreational marine driver licence
- recreational ship master's licence
- speed boat licence, including suitably endorsed water ski licences



- commercial marine licence, for example, coxswain
- personal water craft licence
- current equivalent boat or personal watercraft licence issued in another Australian jurisdiction.

An unlicensed person may operate a recreational vessel or personal watercraft provided a suitably licensed driver is on board and able to take immediate control. However, unlicensed persons may not, under any circumstances, operate a vessel which is towing a person, for example, in activities such as water skiing, parasailing, tobogganing and the like.

The standards outlined in this document are the minimum competency requirements for licensing purposes for the operation of certain powered recreational vessels in Queensland. Section 99 of the 2004 regulation states:

'The chief executive or general manager may grant an application for a recreational marine driver licence only if the applicant—

- (a) *is 16 years or more; and*
- (b) *has knowledge, to the satisfaction of the chief executive or general manager, of—*
 - (i) *the Act and this regulation as they affect recreational ships; and*
 - (ii) *the collision regulations; and*
- (c) *has demonstrated competency in safe operating practices for recreational ships to the satisfaction of the chief executive or general manager.'*

As well as the prerequisites listed in (a) above, to satisfy the provisions of (b) and (c), an applicant for a recreational marine driver licence must demonstrate competence at the prescribed performance level in units 1 to 6 listed in this competency standard.

Section 99A of the 2004 regulation states:

'The chief executive or general manager may grant an application for a personal watercraft licence only if the applicant—

- (a) *has 1 of the following-*
 - (i) *a recreational marine driver licence or current equivalent licence issued under the law of another State;*
 - (ii) *a current commercial ship or fishing ship licence to operate the ship as its master or a current equivalent licence issued under the law of another State;*
 - (iii) *a current certificate to operate a fishing ship less than 10m issued by the Queensland Fishing Industry Training Council; and*
- (b) *is 16 years or more; and*
- (c) *has knowledge, to the satisfaction of the chief executive or general manager, of—*
 - (i) *the Act and this regulation as they affect personal watercraft; and*
 - (ii) *the collision regulations; and*
- (d) *has demonstrated competency in safe operating practices for personal watercraft to the satisfaction of the chief executive or general manager.'*

As well as the prerequisites listed in (a) above, to satisfy the provisions of (b) and (c), an applicant for a personal watercraft licence must demonstrate competence at the prescribed performance level in all units listed in this competency standard that are applicable to personal watercraft operations — unit 7.



Skills and knowledge requirements

A person is taken to have the competency required under sections 99 and 99A of the regulation if the person has satisfactorily completed a course in seafaring skills and safe operating practices for recreational ships and/or personal watercraft (as they apply) provided by a training organisation approved by the general manager under section 104 of the regulation.

A person must possess the skills and knowledge detailed in this standard and must demonstrate competence in performing the tasks outlined in the standard at the prescribed level of performance.

Underpinning knowledge

Underpinning knowledge is the essential knowledge and understanding a person needs to perform a task. Relevant underpinning knowledge is listed for each unit of competency.

Recognition of prior learning

Candidates who consider that they meet the requirements of these competencies as a result of previous training, practical experience, or both, may be granted exemption from part or all of the training components on documented substantiation of their claim to a BoatSafe training provider.

Assessment strategy

A candidate must demonstrate the required level of skills and knowledge in all units of competency. More than one unit of competency may be assessed at the same time.

Assessment processes will be used to validate the candidate's competency. These may take the form of written and/or oral examination of a candidate's knowledge, and application of that knowledge through practical demonstration of skills by the candidate.

Where a practical assessment under actual conditions is not feasible or is considered dangerous, assessment under simulated conditions may be used as a substitute.

Resource requirements

The following physical, information and human resources (as a minimum) must be available for the respective training course and assessment components.

Physical resources

Appropriate training facilities and a range of resource materials and instructional aids that are not limited to but may comprise any of the following:

- white boards
- flip charts
- models
- simulators
- overhead projection and video equipment.

Access to a suitably Queensland commercially registered vessel of at least USL Class 2E, capable of performing all of the operational requirements specified in the BoatSafe competency standard with a minimum of two adults on board.

Personal watercraft are not acceptable for use in training and assessment towards a recreational marine driver licence. However personal watercraft may be used for the training and assessment component that bridges the gap between the recreational marine driver licence and personal watercraft licence competencies.

In addition, recent amendments to the regulation:

- enable training providers to conduct the training and assessment component for the personal watercraft licence from their commercially registered boat
- legitimise the use of recreationally registered personal watercraft by persons participating in a BoatSafe training program, but only for the training and assessment component that bridges the gap between the recreational marine driver licence and personal watercraft licence competencies.



A person providing BoatSafe training towards a recreational marine driver licence or personal watercraft licence may use a Queensland registered USL class 2E vessel which may not be capable of performing all of the operational requirements specified in the BoatSafe competency standard to supplement training, provided that a fully compliant vessel is used for at least part of the training and all assessment activities. For example, in a school-based marine studies environment that is delivering training towards a recreational marine driver licence, there may be a fully compliant class 2E registered safety vessel supported by a number of smaller class 2E practice/training vessels which may not necessarily fully comply with the performance requirements of this standard. All training vessels must be of the type for which a recreational licence is required, for example, be powered by a motor over 4.5kW/6hp.

Information resources

BoatSafe handbook, other books, documents, legislation, educational material, brochures, navigational charts, compasses, ropes, anchors, safety equipment and the like.

Human resources

For the purposes of this competency standard, a BoatSafe training organisation is approved by Maritime Safety Queensland to provide training and/or assessment under the provisions of section 103 of the *Transport Operations (Marine Safety) Regulation 2004*. The organisation must nominate one or more BoatSafe training provider/s to conduct the training under the BoatSafe scheme.

A BoatSafe training provider whether training or assessing a candidate's competence under one or more units, will have skills and knowledge equal to or higher than the competencies being assessed.

The minimum acceptable qualifications for a person providing BoatSafe training and assessment are:

- Restricted Certificate of Competency as a Coxswain as provided for within the Uniform Shipping Laws Code (Australian Transport Council); and either
- Nationally-recognised Certificate IV in Assessment and Workplace Training (BSZ40198); or
- A secondary or tertiary teaching diploma or degree recognised in Queensland, together with evidence of competency in competency-based training and assessment, as demonstrated by completion of at least the following units from the nationally recognised course — Certificate IV in Assessment and Workplace Training (BSZ40198):
 - BSZ401A Plan Assessment
 - BSZ402A Conduct Assessment
 - BSZ403A Review Assessment
- A personal watercraft licence, in addition to the above, is a prerequisite to conduct training and assessment towards a personal watercraft licence.

Alternatively, qualified teachers may demonstrate competence by providing evidence of completed studies, which, in the opinion of the Maritime Safety Queensland, equals the above-specified units from Certificate IV in Assessment and Workplace Training (BSZ40198).

Seamanship

When operating a vessel, seamanship is an essential component of competency. However, it is difficult to define a concept, which embraces such elusive things as attitude and sound decision-making.

While seamanship itself is not easily evaluated or measured, its effects are, and the results of its application can, to some extent, be specified as performance criteria. In this way, this document sets out, not to explain what seamanship is, but rather, what it does.

For example, in some units of competency, a criterion for the demonstration of seamanship is stated as: *Situation awareness is maintained*. This is a requirement for the operator to be aware of the immediate environment and its potential hazards and it calls for a methodical approach not otherwise alluded to.

This is simply a matter of the operator knowing what is happening in and around the vessel—common sense, certainly, but in need of documenting. Without this awareness and knowledge, the objectives of the unit of competency will not be achieved, or not achieved to the required standard.



Units of competency

The issue of a licence to operate a recreational vessel in Queensland is, among other requirements, conditional on an applicant demonstrating competence in all of the units listed below. As a result of the round two consultation minor changes (shown in italics) have been made to the units of competency.

Unit	Element
1 Prepare a recreational vessel for operation	1.1 Select equipment and prepare for activity 1.2 Apply state legislation relevant to the fitting out and equipping of a recreational vessel and ensure provision of safety and emergency equipment 1.3 Ensure vessel is seaworthy and suitable for intended operation
2 Apply international and state regulations relevant to the operation of a recreational vessel	2.1 Apply IALA Buoyage system 'A' and use aids to navigation not covered by IALA 2.2 Identify and apply collision and water traffic regulations relevant to the activity area 2.3 Report incidents 2.4 Avoid pollution 2.5 Exercise seamanship
3 Assess weather conditions and forecasts	3.1 Access and interpret weather information 3.2 Interpret tide tables 3.3 Anticipate weather conditions 3.4 Exercise seamanship
4 Operate mechanical and electrical appliances of a recreational vessel	4.1 Operate inboard/outboard engine and controls 4.2 Operate recreational vessel electrical equipment 4.3 Operate recreational vessel mechanical equipment 4.4 Exercise seamanship
5 Manoeuvre a recreational vessel	5.1 Leave and return to launching facility or berth 5.2 Bring a recreational vessel alongside a floating object 5.3 Moor and anchor a recreational vessel 5.4 Manoeuvre a recreational vessel 5.5 Manoeuvre a recreational vessel in adverse conditions 5.6 Exercise seamanship
6 Apply safety management processes on a recreational vessel	6.1 Assess risk and prepare for management of foreseeable emergencies 6.2 Manage emergencies 6.3 Exercise seamanship
7 Operate a personal watercraft	7.1 Select equipment and prepare for activity 7.2 PWC is started correctly 7.3 Operate PWC in favourable conditions 7.4 Operate PWC in adverse conditions 7.5 Exercise seamanship 7.6 Apply emergency procedures 7.7 Demonstrate knowledge of legislative requirements

Unit 1 — prepare a recreational vessel for operation

Description

Unit 1 deals with the knowledge and skills necessary to ensure seaworthiness of a vessel and its equipment, and to prepare for a voyage.

Elements	Performance criteria
<p>1.1 Select equipment and prepare for activity</p>	<p>1.1.1 Correct terminology is used to identify the main parts of a recreational vessel and its equipment</p> <p>1.1.2 Safety equipment is carried/worn/used in accordance with state/territory legislation and weather and light conditions</p> <p>1.1.3 Equipment is stowed or stored in accordance with manufacturer's recommendations.</p> <p>1.1.4 Information on weather and wind conditions is sourced to enable selection of a location to suit vessel type and skill level</p> <p>1.1.5 Risks associated with the boating environment are identified and strategies are implemented to reduce risks</p> <p>1.1.6 Collision and water traffic regulations relevant to the activity area are identified and other safety signals, such as code flags, are recognised</p>
<p>1.2 Apply state legislation relevant to the fitting out and equipping of a recreational vessel and ensure provision of safety and emergency equipment</p>	<p>1.2.1 Personal flotation devices (PFDs) are available</p> <p>1.2.2 Vessel is equipped with safety and emergency equipment appropriate to the intended operation in accordance with the <i>Transport Operations (Marine Safety) Regulation 2004</i> and the Transport Operations (Marine Safety – Recreational Ships Miscellaneous Equipment) Standard 2006</p> <p>1.2.3 Vessel is fitted in accordance with the provisions of the International Regulations for Preventing Collisions at Sea</p>
<p>1.3 Ensure vessel is seaworthy and suitable for intended operation</p>	<p>1.3.1 Maintenance of vessel is current</p> <p>1.3.2 Vessel has tools, spares and equipment stowed on board appropriate to the vessel and its intended operation</p> <p>1.3.3 Sufficient fuel for intended operation and contingencies is on board.</p> <p>1.3.4 Battery condition is adequate for intended operation</p> <p>1.3.5 Vessel has been inspected and defects have been managed appropriate to the intended operation</p>

Range of variables

Variable	Scope
1 Assessment environment	<p>Assessment environment may include the following:</p> <ul style="list-style-type: none"> - displacement or planing hull vessel - inboard or outboard engines - single or twin propulsion units - stability - flares and life jackets - EPIRB - radio - magnetic compass - torch - mechanical spare parts - bilge pumps - anchor - tools.
2 Sources of information may include	<p>Transport Operations (Marine Safety – Recreational Ships Miscellaneous Equipment) Standard 2006</p> <p>Small Ships Manual (Maritime Safety Queensland) Queensland Recreational Boating Safety Handbook - Current Edition Sources of weather information</p>
3 Regulations/ legislation may include but are not limited to	<p><i>Transport Operations (Marine Safety) Act 1994</i> <i>Transport Operations (Marine Safety) Regulation 2004</i></p>
4 Consistency of performance	<p>Assessment should confirm that the specified performances can be repeated as required</p>
Evidence guide	
1 Critical aspects of evidence	<p>Assessment must confirm, in a real or simulated boating environment, the ability to:</p> <ul style="list-style-type: none"> - assess and plan for prevailing conditions - prepare the recreational vessel - select safety and other equipment - stow, care for and use equipment - apply weather information to interpret local conditions - determine stability of vessel.
2 Interdependent assessment of units	<p>This unit of competency may be assessed in conjunction with other units that form part of the function</p> <p>Competence in all elements of all units relevant to the qualification must be demonstrated</p>
3 Underpinning knowledge and skills	<p>A knowledge of, (determined by questioning or observation of application):</p> <ul style="list-style-type: none"> - types of all small boats, sizes and suitability for local waters and conditions - types of PFDs (1,2 and 3) and situations where each is applicable - other necessary equipment - <i>vessel capacity plates</i> - parts of a recreational vessel and their function - equipment maintenance.
4 Context of assessment	<p>Assessment should confirm that actions are consistently performed in accordance with regulations and accepted best practice.</p> <p>Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on underpinning knowledge and skills and consideration of required attitudes.</p> <p>Evidence should include determination of underpinning knowledge and skills with regard to the application of the required maritime knowledge and applicable legislation.</p>

Unit 2 — apply international and state regulations relevant to the operation of a recreational vessel

Description

Unit 2 deals with the knowledge and skills required to demonstrate compliance with applicable regulations, signs, marks and procedures in order to maintain marine safety.

Elements	Performance criteria
2.1 Apply IALA Buoyage system 'A' and use aids to navigation not covered by IALA	2.1.1 Knowledge of the following is demonstrated and their implied directions are followed: <ul style="list-style-type: none"> - lateral and cardinal marks - isolated danger marks - safe water marks - blue middle channel marks - lead marks - special marks - speed signs - cable crossings
2.2 Identify and apply collision and water traffic regulations relevant to the activity area	2.2.1 Compliance with all relevant collision and water traffic regulations is demonstrated 2.2.2 Vessel is operated within designated/defined areas, on regulated smooth and partially smooth waters 2.2.3 Application of regulations applicable to the following is demonstrated: <ul style="list-style-type: none"> - International Regulations for Preventing Collisions at Sea - general safety obligation - local and State navigation rules - distress signals - navigation lights - buoys and beacons - sound signals - safety signals, such as code flags - commercial vessel recognition - vessels restricted in ability - sailing vessels - stand on vessels - passing/overtaking vessels and giving way to vessels - speed - alcohol/drugs - gas/electrical installation
2.3 Report incidents	2.3.1 Incidents are defined according to regulations 2.3.2 Incident reporting requirements are observed
2.4 Avoid pollution	2.4.1 Application of requirements applicable to the following is demonstrated: <ul style="list-style-type: none"> - sewage discharge - grey water discharge - oil discharge - draining bilge - other local or maritime regulations
2.5 Exercise seamanship	2.5.1 Application of knowledge of regulations and hazards associated with the use of alcohol/drugs is demonstrated 2.5.2 Vessel limitations are known and not exceeded 2.5.3 Ability is demonstrated to consistently maintain compliance – not overlooking any condition or item that may compromise safety 2.5.4 Local and published noise abatement requirements and curfews are observed 2.5.5 Right of way rules are known and complied with 2.5.6 Situation awareness is maintained

Range of variables

Variable	Scope
1 Assessment environment	Assessment environment may include the following resources or conditions: <ul style="list-style-type: none"> - classroom - confined or open waters - relevant regulations and rules - navigation markers - navigation lights and flags
2 Sources of information may include	Small Ships Manual (Queensland Transport) Queensland Recreational Boating Safety Handbook - Current Edition Sources of weather information
3 Regulations/ legislation may include but are not limited to	Transport Operations (Marine Safety) Act 1994 Transport Operations (Marine Safety) Regulation 2004 Gas Act 1965 Transport Operations (Marine Pollution) Act 1995 and Regulation Local noise abatement or nuisance regulations <i>Local waterways management plans</i>
4 Consistency of performance	Assessment should confirm that the specified performances can be repeated as required

Evidence guide

1 Critical aspects of evidence	Assessment must confirm, in a real or simulated boating environment, the ability to: <ul style="list-style-type: none"> - apply appropriate emergency procedures - demonstrate a sound understanding of the safety and regulatory requirement relevant to the operation of a recreational vessel
2 Interdependent assessment of units	This unit of competency may be assessed in conjunction with other units that form part of the function. Competence in all elements of all units relevant to the qualification must be demonstrated.
3 Underpinning knowledge and skills	A knowledge of, (determined by questioning or observation of application): <ul style="list-style-type: none"> - emergency procedures - relevant marine regulations and rules
4 Context of assessment	Assessment should confirm that actions are consistently performed in accordance with regulations and accepted best practice. Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on underpinning knowledge and skills and consideration of required attitudes. Evidence should include determination of underpinning knowledge and skills with regard to the application of the required maritime knowledge and applicable legislation.

Unit 3 — assess weather conditions and forecasts

Description

Unit 3 deals with the knowledge and skills required to access, interpret and act upon meteorological information and tide tables.

Elements	Performance criteria
3.1 Access and interpret weather information	<p>3.1.1 Quality of information is evaluated with regard to source and currency</p> <p>3.1.2 Probable water conditions are determined, based on current information on weather conditions, wind directions, tide times and water depth</p> <p>3.1.3 The effect of local water conditions on small vessels is determined</p>
3.2 Interpret tide tables	<p>3.2.1 The distinction between tides, tidal streams and currents is explained.</p> <p>3.2.2 High and low water for standard ports is determined</p> <p>3.2.3 The depth of water is calculated for a specific position on the chart at a given time</p>
3.3 Anticipate weather conditions	<p>3.3.1 Wind indicators and signs are used to anticipate adverse conditions</p> <p>3.3.2 Action is taken to avoid heavy weather conditions - appropriate responses may include:</p> <ul style="list-style-type: none">- change of plans/destination- shore, safe harbour, or the lee of an island is made for- return home
3.4 Exercise seamanship	<p>3.4.1 Weather conditions are monitored</p> <p>3.4.2 Situation awareness is maintained</p> <p>3.4.3 Allowance for changed conditions is made during manoeuvres</p> <p>3.4.4 Contingencies are anticipated</p>

Range of variables

Variable	Scope
1 Assessment environment	Assessment environment may include the following resources or conditions: <ul style="list-style-type: none"> - classroom - various weather conditions - confined or open waters - weather information sources - tide charts - basic navigation - chart plotting.
2 Sources of information may include	Maritime/boating weather service Tide tables Internet Volunteer Maritime Rescue Organisations <i>Coastal charts</i>
3 Regulations/legislation may include but are not limited to	<i>Transport Operations (Marine Safety) Act 1994</i> <i>Transport Operations (Marine Safety) Regulation 2004</i>
4 Consistency of performance	Assessment should confirm that the specified performances can be repeated as required

Evidence guide

1 Critical aspects of evidence	Assessment must confirm, in a real or simulated boating environment, the ability to: <ul style="list-style-type: none"> - access and interpret weather and tide information - apply weather information to voyage planning
2 Interdependent assessment of units	This unit of competency may be assessed in conjunction with other units that form part of the function. Competence in all elements of all units relevant to the qualification must be demonstrated.
3 Underpinning knowledge and skills	A knowledge of, (determined by questioning or observation of application): <ul style="list-style-type: none"> - local boating conditions - weather information sources - interpretation of tide charts - emergency response for example, electrical fire/gas fire.
4 Context of assessment	Assessment should confirm that actions are performed in accordance with regulations and accepted best practice and in such a manner that if the successful outcome of a procedure is in doubt, corrective action is taken. Competency should be assessed under operating conditions. Evidence should include determination of underpinning knowledge and skills with regard to the application of the required maritime knowledge and applicable legislation.

Unit 4 — operate mechanical and electrical appliances of a recreational vessel

Description

Unit 4 deals with the knowledge and skills required to operate the mechanical and electrical systems of a recreational vessel.

Elements	Performance criteria
4.1 Operate inboard-outboard engine and controls	4.1.1 Manufacturer's operating procedures are followed 4.1.2 Relevant checks are carried out prior to operation
4.2 Operate recreational vessel electrical equipment	4.2.1 Knowledge of types, location and operation of electrical equipment is demonstrated 4.2.2 Hazards associated with batteries and low voltage electrical equipment are known and avoided
4.3 Operate recreational vessel mechanical equipment	4.3.1 Knowledge of types, location and operation of mechanical equipment is demonstrated 4.3.2 Hazards associated with operation of mechanical equipment are known and avoided
4.4 Exercise seamanship	4.4.1 Mechanical and electrical defects are identified and managed 4.4.2 Fire hazard precautions are observed 4.4.3 Actions are performed with regard to safety of personnel and property

Range of variables

Variable	Scope
1 Assessment environment	<p>Assessment environment may include the following:</p> <ul style="list-style-type: none"> - classroom - inboard or outboard engines - single or twin propulsion units - petrol or diesel units and ancillaries - common marine electrical appliances - radio - bilge pumps - fire extinguishers - EPIRBs - batteries - LPG installation.
2 Sources of information may include	<p>Manufacturer's manuals and specifications Marine service and repair organisations</p>
3 Regulations/ legislation may include but are not limited to	<p><i>Transport Operations (Marine Safety) Act 1994</i> <i>Transport Operations (Marine Safety) Regulation 2004</i></p>
4 Consistency of performance	<p>Assessment should confirm that the specified performances can be repeated as required</p>

Evidence guide

1 Critical aspects of evidence	<p>Assessment must confirm, in a real or simulated boating environment, the ability to carry out relevant safety precautions</p>
2 Interdependent assessment of units	<p>This unit of competency may be assessed in conjunction with other units that form part of the function. Competence in all elements of all units relevant to the qualification must be demonstrated.</p>
3 Underpinning knowledge and skills	<p>A knowledge of, (determined by questioning or observation of application):</p> <ul style="list-style-type: none"> - basic operating procedures relevant to the specified vessel - safety requirements.
4 Context of assessment	<p>Assessment should confirm that actions are performed in accordance with regulations and accepted best practice and in such a manner that if the successful outcome of a procedure is in doubt, corrective action is taken.</p> <p>Competency should be assessed under operating or simulated conditions wherever possible.</p> <p>Evidence should include determination of underpinning knowledge and skills with regard to the application of the required maritime knowledge and applicable legislation.</p>

Unit 5 — manoeuvre a recreational vessel

Description

Unit 5 deals with the knowledge and skills required to manoeuvre a recreational vessel in a range of conditions

Elements	Performance criteria
5.1 Leave and return to launching facility or berth	5.1.1 Conditions are determined 5.1.2A recreational vessel's stability and direction are maintained and speed is controlled while berthing and departing a berth 5.1.3 Crew and passengers are managed while berthing and departing a berth
5.2 Bring a recreational vessel alongside a floating object	5.2.1 Vessel is brought alongside and within reach of a floating object 5.2.2 Conditions of wind, wave and current are assessed to determine the safest approach
5.3 Moor and anchor a recreational vessel	5.3.1 Vessel is untied from a fixed platform 5.3.2 Vessel is berthed alongside a fixed platform 5.3.3 Mooring is picked up and released 5.3.4 Anchor is released and recovered 5.3.5 Conditions of wind, wave and current are assessed to determine the most favourable approach 5.3.6 Length of anchor line is determined to suit prevailing conditions 5.3.7 Swinging circle of vessel is estimated with regard to prevailing and anticipated conditions. Water depth, wind, wave and current conditions are considered 5.3.8 Vessel is anchored and anchor hold is tested using accepted method 5.3.9 Vessel's final position is noted and regularly checked 5.3.10 Engine power is used to manoeuvre vessel during anchor retrieval
5.4 Manoeuvre a recreational vessel	5.4.1 Vessel is controlled at varying speeds 5.4.2 Ahead and astern manoeuvres are executed 5.4.3 The effects of the following are demonstrated: <ul style="list-style-type: none"> - rudder movement at varying speeds - varying tilt/trim angles - transverse thrust of propeller - varying speed on stopping distance
5.5 Manoeuvre a recreational vessel in adverse conditions	5.5.1 Vessel is controlled in confined waters 5.5.2 Vessel is controlled through wash of another vessel 5.5.3 Techniques for manoeuvring and controlling vessel in adverse conditions are demonstrated
5.6 Exercise seamanship	5.6.1 Vessel is operated within manufacturer's limitations 5.6.2 Local and published noise abatement requirements and curfews are observed 5.6.3 Allowance is made for water traffic conditions 5.6.4 Right of way procedures are followed 5.6.5 Lookout is maintained during manoeuvres 5.6.6 Fuel status is monitored 5.6.7 Weather conditions are monitored and responded to accordingly 5.6.8 Contingencies are anticipated 5.6.9 Passenger safety and well-being are considered 5.6.10 Situation awareness is maintained

Range of variables

Variable	Scope
1 Assessment	Assessment environment may include the following:



environment	<ul style="list-style-type: none"> - varying tidal conditions - displacement or planing hull vessel - inboard or outboard engines - single or twin propulsion units - confined or open waters - fixed platform and mooring.
2 Sources of information may include	<p>Transport Operations (Marine Safety – Recreational Ships Miscellaneous Equipment) Standard 2006</p> <p>Small Ships Manual (Queensland Transport)</p> <p>Queensland Recreational Boating Safety Handbook - Current Edition</p>
3 Regulations/ legislation may include but are not limited to	<p><i>Transport Operations (Marine Safety) Act 1994</i></p> <p><i>Transport Operations (Marine Safety) Regulation 2004</i></p>
4 Consistency of performance	Assessment should confirm that the specified performances can be repeated as required.

Evidence guide

1 Critical aspects of evidence	<p>Assessment must confirm, in a real or simulated boating environment, the ability to:</p> <ul style="list-style-type: none"> - respond to changing circumstances - manage the effects of tide, poor visibility, inclement weather and adverse conditions - access and apply relevant regulations and information - identify minimum equipment applicable to vessel type.
2 Interdependent assessment of units	This unit of competency may be assessed in conjunction with other units that form part of the function. Competence in all elements of all units relevant to the qualification must be demonstrated.
3 Underpinning knowledge and skills	<p>A knowledge of, (determined by questioning or observation of application):</p> <ul style="list-style-type: none"> - performance characteristics of planing and displacement hulls - performance characteristics of inboard and outboard engines - performance characteristics of single and twin propulsion units - procedures for managing the effects of tide, poor visibility, inclement weather and adverse conditions - principles of trim and loading as applied to vessel stability - principles to minimise wash.
4 Context of assessment	<p>Assessment should confirm that actions are performed in accordance with regulations and accepted best practice.</p> <p>Competency should be assessed under operating conditions.</p> <p>Evidence should include determination of underpinning knowledge and skills with regard to the application of the required maritime knowledge and applicable legislation.</p>

Unit 6 — apply safety management processes on a recreational vessel

Description

Unit 6 deals with the knowledge and process skills required to manage the safe operation of a recreational vessel and to anticipate, prepare for and react appropriately to an emergency.

Elements	Performance criteria
6.1 Assess risk and prepare for management of foreseeable emergencies	6.1.1 Potential hazards which could lead to emergencies are identified 6.1.2 Nature of potential emergencies and procedures for correction are identified 6.1.3 Strategies are developed for management of identified potential emergencies
6.2 Manage emergencies	6.2.1 Strategies to avoid injury and/or minimise damage are implemented 6.2.2 Alarm is raised or assistance requested as required 6.2.3 Adequate communication, correct technique and order of actions are displayed
6.3 Exercise seamanship	6.3.1 Fire hazard precautions are observed 6.3.2 Actions are performed to ensure personnel and property safety 6.3.3 Passenger/crew safety and well-being is maintained 6.3.4 Situation awareness is maintained

Range of variables

Variable	Scope
1 Assessment environment	Assessment environment may include the following: <ul style="list-style-type: none"> - fire - mechanical breakdown - injury - illness - person overboard - collision - grounding - emergency use of marine radios - pollution incidents - <i>navigation hazards</i> - <i>recognise hazards at boat launching facilities</i> - <i>hazards with LPG – cooking</i>
2 Sources of information may include	Transport Operations (Marine Safety – Recreational Ships Miscellaneous Equipment) Standard 2006 Small Ships Manual (Queensland Transport) Queensland Recreational Boating Safety Handbook - Current Edition Sources of weather information VMR organisations
3 Regulations/legislation may include but are not limited to	<i>Transport Operations (Marine Safety) Act 1994</i> <i>Transport Operations (Marine Safety) Regulation 2004</i>
4 Consistency of performance	Assessment should confirm that the specified performances can be repeated as required



Evidence guide

1 Critical aspects of evidence	Assessment must confirm, in a real or simulated boating environment, the ability to: - identify required and appropriate action - adequately communicate
2 Interdependent assessment of units	This unit of competency may be assessed in conjunction with other units that form part of the function. Competence in all elements of all units relevant to the qualification must be demonstrated.
3 Underpinning knowledge and skills	A knowledge of emergency procedures (determined by questioning or observation of application)
4 Context of assessment	Assessment should confirm that actions are performed in accordance with regulations and accepted best practice. Competency should be assessed under operating conditions. Evidence should include determination of underpinning knowledge and skills with regard to the application of the required maritime knowledge and applicable legislation.

Unit 7 — operate a personal watercraft

Description

Unit 7 deals with the knowledge and skills required to manage the safe operation of a personal watercraft (PWC) – 'jet-ski'– and to anticipate, prepare for and react appropriately to changed conditions.

Note: This unit may be taken as a single unit to qualify for a personal watercraft, or as part of the BoatSafe course to qualify for **both** a recreational marine driver licence and a personal watercraft licence. A person who does not require a personal watercraft licence need only complete Units 1 to 6.

Prerequisites for personal watercraft licence training and assessment:

- (a) The participant must be the holder of a recreational marine driver licence (RMDL) or its recognised equivalent in terms of section 95 of the *Transport Operations (Marine Safety) Regulation 2004*; or
- (b) The participant must be undertaking a BoatSafe course in which case the prerequisites are Units 1 to 6 of that course; or
- (c) If an applicant is seeking recognition of prior learning (RPL), the applicant must be able to demonstrate currency in the competencies of the unit.

Elements	Performance Criteria
7.1 Select equipment and prepare for activity	<p>7.1.1 Identify and describe the main parts of a personal watercraft and its equipment using correct terminology</p> <p>7.1.2 Safety equipment is worn/carried in accordance with legislation (Demonstrate knowledge of the type of PFD to be worn based on the types of water areas, Indicate why PFD 1 and lifejacket cannot be worn, state the safety equipment for open waters and night operations)</p> <p>7.1.3 Test equipment for correct operation (for example, throttle, steering and drain plugs, navigation lights (as required), for fuel leaks, all compartments are sealed and seats are locked down)</p> <p>7.1.4 Perform pre-launch checks and brief passengers (drain plugs secured; safety lanyard attached with wrist strap, correct PFDs are available and passengers are briefed on safety requirements.)</p> <p>7.1.5 State local area requirements</p> <p>7.1.6 Display RideSmart sticker as required</p> <p>7.1.7 Display registration numbers and label in accordance with the regulations.</p>
7.2 Personal watercraft is started correctly	<p>7.2.1 Start engine in accordance with manufacturer's instructions, and control is maintained</p> <p>7.2.2 Ensure sufficient depth of water to prevent engine damage from sand (for example, not less than 600 mm)</p> <p>7.2.3 Test cut off switch to ensure it is working</p>
7.3 Operate personal watercraft in favourable conditions	<p>7.3.1 Effect a smooth departure from ramp/jetty, control is maintained and collision avoidance requirements are demonstrated</p> <p>7.3.2 Demonstrate ability to manoeuvre a personal watercraft smoothly while operating at various speeds including turns to port and starboard</p> <p>7.3.3 Demonstrate a knowledge of the different handling properties of a personal watercraft (for example, loss of steerage when power is taken off and turning at high speed)</p> <p>7.3.4 Demonstrate ability to bring personal watercraft alongside a floating object</p> <p>7.3.5 Demonstrate ability to bring personal watercraft alongside a fixed platform</p> <p>7.3.6 Conditions of wind, wave and current are assessed to determine the most favourable approach</p> <p>7.3.7 Demonstrated ability to adequately determine a distance of 60 metres</p> <p>7.3.8 Demonstrated ability to adequately determine a speed of six knots</p>



	7.3.9 Maintain situational awareness, safe speed and lookout.
7.4 Operate personal watercraft in adverse conditions	<p>7.4.1 Personal watercraft is controlled in confined waters and collision avoidance requirements are demonstrated</p> <p>7.4.2 Personal watercraft is controlled through the wash of another vessel</p> <p>7.4.3 Techniques for manoeuvring and controlling a personal watercraft in adverse conditions are demonstrated.</p> <p>7.4.4 Passenger safety is considered at all times</p>
7.5 Exercise seamanship	<p>7.5.1 Personal watercraft is operated within the manufacturer's limitations</p> <p>7.5.2 Local noise abatement requirements are observed</p> <p>7.5.3 Allowance is made for water traffic conditions</p> <p>7.5.4 Right of way procedures are followed</p> <p>7.5.5 Proper lookout is maintained during manoeuvres</p> <p>7.5.6 Fuel status is monitored</p> <p>7.5.7 Weather conditions are monitored and responded to accordingly</p> <p>7.5.8 Contingencies are anticipated</p> <p>7.5.9 Situation awareness is maintained</p> <p>7.5.10 Passenger safety is maintained</p>
7.6 Apply emergency procedures	<p>7.6.1 Potential hazards which could lead to emergencies are identified</p> <p>7.6.2 Corrective procedures for potential and identified hazards are implemented</p> <p>7.6.3 Knowledge of proper righting procedures for a capsized personal watercraft is demonstrated</p>
7.7 Demonstrate knowledge of legislative requirements	<p>7.7.1 Compliance with relevant regulations is demonstrated in relation to –</p> <ul style="list-style-type: none"> • <i>International Regulations for Preventing Collisions at Sea</i> • <i>Transport Operations (Marine Safety) Regulation 2004</i> • Any local waterways management plan/s • Any other regulatory restrictions on PWC operations such as exclusion zones <p>7.7.2 Responsibility for reporting marine incidents is clearly defined in terms of the <i>Transport Operations (Marine Safety) Act 1994</i></p> <p>7.7.3 Provisions of the <i>Transport Operations (Road Use Management) Act 1995</i> relating to alcohol use is clearly defined</p> <p>7.7.4 Knowledge of the following (as a minimum):</p> <ul style="list-style-type: none"> • lateral and cardinal marks • isolated danger marks • safe water marks • blue middle channel marks • lead marks • special marks • speed signs • cable crossings • measuring distance • distance-off requirements for people, shoreline, infrastructure, moored vessels and boundaries of bathing reserves <p>7.7.5 Knowledge and understanding of behaviours and characteristics which are annoying to others, and those characteristics which demonstrate responsible use of a personal watercraft</p>

Range of variables

Variable	Scope
1 Assessment environment	The assessment environment may include the following resources or conditions: <ul style="list-style-type: none"> - varying tidal conditions - confined or open waters - various weather conditions - classroom (theory) - relevant rules and regulations - navigation lights and markers - EPIRBs - Ramps, fixed platforms and/or moorings
2 Sources of information may include	Small Ships Manual (Maritime Safety Queensland) Guide to Recreational Boating and Fishing Handbook (current edition) Ride Smart — Maritime Safety Queensland BoatSafe Workbook — Maritime Safety Queensland Weather and tide information Manufacturer's manuals and handbooks
3 Regulations/legislation may include but are not limited to	<i>Transport Operations (Marine Safety) Act 1994</i> <i>Transport Operations (Marine Safety) Regulation 2004</i> <i>International Regulations for Preventing Collisions at Sea</i> Local noise abatement or nuisance regulations / by-laws Local Waterways Management Plans
4 Consistency of performance	Assessment should confirm that the specified performances can be repeated as required

Evidence guide

1 Critical aspects of evidence	<p>Assessment must confirm the ability to:</p> <ul style="list-style-type: none"> - prepare the personal watercraft for use - carry out relevant safety precautions - assess and plan for prevailing conditions - apply weather information to interpret local conditions - demonstrate a sound understanding of the safety and regulatory requirement relevant to the operation of a personal watercraft - respond to changing circumstances - manage the effects of tide and current in a range of circumstances (for example, departing and approaching ramps and pontoons) - adequately estimate speed and distance especially distance-off requirements.
2 Interdependent assessment of units	<p>This unit of competency may be assessed as an independent unit for the purpose of obtaining a PWC licence, or it may be assessed interdependently with other units for the purpose of obtaining both a Recreational Marine Driver Licence and a PWC licence.</p>
3 Underpinning knowledge and skills	<p>A knowledge of emergency procedures (determined by questioning or observation of application).</p> <p>A knowledge of (determined by questioning or observation of application):</p> <ul style="list-style-type: none"> - types of PFDs and their application to personal watercraft operation - equipment maintenance - safety equipment required for personal watercraft - relevant marine regulations and rules - emergency procedures applicable to a personal watercraft - local boating conditions - weather information sources - interpretation of tide charts - operating procedures relevant to a personal watercraft - recovery procedures for an overturned personal watercraft (certain personal watercraft should only be righted by rolling the correct way — left to right) - demonstrated knowledge of difference in handling properties of a personal watercraft to other vessels - performance characteristics of a personal watercraft as distinct from other ships
4 Context of assessment	<p>Assessment should confirm that actions are performed in accordance with regulations and accepted best practice.</p> <p>Competency of operation must be assessed under operating conditions.</p> <p>Evidence should include determination of underpinning knowledge and skills having due regard to the application of maritime knowledge and any applicable legislation.</p> <p>Oral and/or written questioning on aspects of underpinning knowledge not involving competency of actual operation may be considered.</p> <p>Where possible, attitude should be considered as an aspect of competency to complement knowledge and skills.</p>

Note:

In addition to the usual instruction on the Collision Regulations, it is important to emphasise that the additional speed of Personal Water Craft (some are capable of speeds up to 120 kph) considerably reduces the time in which assessment of risk of collision can be made and evasive action can be taken. Therefore the need for increased situational awareness and forward thinking is critical.