

Seascape

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From the helm



Captain John Watkinson
General Manager
Maritime Safety Queensland

Although the *Pacific Adventurer* oil spill has been cleaned up and the event is largely over in the public's mind, the aftermath is still at the forefront of Maritime Safety Queensland's efforts. Reviews of the incident are ongoing in order to make recommendations in the event of similar future occurrences. The process of cost recovery is complex, and involves third party negotiations and national plan arrangements. One of the ongoing key responsibilities for Maritime Safety Queensland is the prosecution of the master of the *Pacific Adventurer*. The parent company, Swire Shipping, is contributing \$25million towards the cost of the clean up operation but the negotiations are by no means over.

The last few months have been a time of change. One of the results of the Machinery of Government changes has been the amalgamation of the Department of Main Roads and Queensland Transport, which has caused only minor administrative disruptions as far as Maritime Safety Queensland's operations are concerned.

Unfortunately another change in recent times is the demise of the Marine Board (see article page 11). The Marine Board was instrumental in consolidating relations between government and industry, and provided advice on important issues such as national maritime jurisdiction reform, maritime training and the Boat Share policy. I wish to sincerely thank the six members of the

Marine Board for their diligent efforts on behalf of Maritime Safety Queensland over the past thirteen years.

I wish to also thank the Sunshine Coast Independent Trawler Association, another organisation which no longer operates, for their untiring efforts to improve trawler safety, particularly in their work on promoting the float-free EPIRB.

Other changes include a new port management structure which has been introduced to address the ever-growing demands on Queensland's ports. See page 5 for more details on the new management responsibilities for each port authority.

The National Marine Safety Committee has introduced changes to the Australian Standard for Personal Flotation Devices, and new commercial vessel standards will be introduced in October this year.

As well, if you own or operate a commercial ship, you will need to be aware that audits are now being conducted to ensure compliance with sewage legislation. See page 8 for details of how the legislation may affect you.

With warmer weather rapidly approaching, it is timely to remind all boaties that safety on the water is essential for a good day out. You're the skipper...you're responsible.

Safe boating

Captain John Watkinson
General Manager

Front cover: 'Champion' taking part in the celebrations of Queensland's 150 years of separation from New South Wales.

New government structure

As a result of the public sector reforms in March, the two departments Queensland Transport and the Department of Main Roads have merged to form one large organisation — the Department of Transport and Main Roads.

Maritime Safety Queensland is a government agency of the Department of Transport and Main Roads. Our role is to protect Queensland's waterways and the people who use them — providing safer, cleaner seas.

Maritime Safety Queensland is responsible for:

- improving maritime safety for shipping and small craft through regulation and education
- minimising vessel-sourced waste and responding to marine pollution
- delivering essential maritime services such as pilotage for regional ports and aids to navigation
- encouraging and supporting innovation in the maritime industry.

Maritime Safety Queensland will retain current staff email addresses and the website address www.msq.qld.gov.au.

The draft of the first Corporate Plan for the combined department is now out for consultation. Mr David Stewart, Director-General of the new department said, 'the Corporate Plan will set the direction for our integrated department and be supported by a business planning framework to ensure we're all planning our work to achieve great outcomes for the community'.

Across the department audits are under way to ensure we prioritise our work activities, integrate processes and systems, and capture the savings and benefits of bringing together the two former departments. A major saving will be through reducing duplication of administration activities.

Mr Stewart has also said, 'integration is all about realising the benefits that having a combined transport and roads function brings for our customers'. One of the aims of the merger is to 'take the best of both former departments to build even stronger ways of working in the future'.

Throughout the changes and into the future, Maritime Safety Queensland will continue to provide excellent service and support to the boating community.

Recent events

Brisbane Boat Show



Left: Ross Caruso from the field compliance team.
Right: Maritime Safety Queensland's new compact boat show display unit.

Once again Maritime Safety Queensland was an exhibitor at the annual Brisbane International Boat Show, held from 27 to 30 August 2009.

Staff from the Marketing and Education unit, the Mooloolaba and Pinkenba regional offices and enforcement partners from the Brisbane Water Police provided information to the public throughout the four day event. Key messages were promoted on the new compact boat show display unit, and highlighted the role courtesy plays in boating safety.

The attendance number for this year's event was an encouraging 24,634 — an increase of 3757 when compared to 2008's attendance total, showing that recreational boaters were out in force.

Australian Boating Manual

The fourth edition of the *Australian Boating Manual* is now available. Captain Dick Gandy has revised the manual to keep up with changes in maritime training requirements.

It has been revised and expanded to meet the syllabus requirements of the Transport and Logistics 2007 training package with chapter two as a study guide for the requirements to obtain commercial certificates.

It now includes boat design, construction, watertight integrity and survey requirements. Codes of safe working practices, safety data sheets, SSM and ballast water management have also been added.

In addition to the regular boat operating and maintenance topics, the book includes sections on buying and insuring boats, nautical terminology, cyclone protection, sizes of mooring lines, winches, slings, onboard work practices, electronic fuel injection, four-stroke outboards, engine beds, exhaust systems, ventilation, soundproofing, solar power, electrical installations, pumps, valves and plumbing.

The *Australian Boating Manual* is the product of research into what boaters need to and want to know. It includes input from wide ranging experts and manufacturers. Whether you want to buy a boat, GPS, radar or sounder, this book tells you what to look for.

The manual is available for \$A89.95 at bookshops and chandlers or by contacting the publisher, Ocean Publications, on (02) 9986 0725.

For more information go to www.AustralianBoatingManual.com.



Independent Trawler Association

The Independent Trawler Association Sunshine Coast has worked very closely with Maritime Safety Queensland over the last two years on a number of important safety issues concerning commercial fishers. This organisation has now ceased operations but Maritime Safety Queensland would like to pass on a formal thank you to the Independent Trawler Association for its past support.

Mr Bill Henebery, Independent Trawler Association, Mr Michael Wood, Queensland Seafood Industry Association and Maritime Safety Queensland worked together to help communicate messages about the benefits of installing a 'float free' 406 MHz EPIRB on trawlers to facilitate quicker emergency response times.

'With the high risk nature of fishing operations, installation of a 'float-free' 406MHz EPIRB is a sensible move and recognises the importance of crew safety. The cost is small considering the lives it could save', said Mr Henebery.

The Independent Trawler Association, representing predominately the trawl sector, formed to ensure the views of trawler operators were heard. The organisation also supported moves for fishermen to receive similar benefits as farmers, for example assistance to cope with rising fuel prices and cheaper imports.

The Independent Trawler Association was concerned with issues of marine sustainability for the fishing industry, based on past, current and proposed water projects. One of the major focuses was the ecological functions between catchments, fresh water, estuarine, marine biodiversity and ocean currents in Queensland.

The law and you

New PFD standard

The National Marine Safety Committee has agreed to introduce the new Australian Standard for Personal Flotation Devices, AS 4758 into recreational boat legislation nationally by 1 July 2010. Although some jurisdictions may choose to adopt the standards earlier, PFDs made to AS 4758 should be legal around Australia by that date.

Remember, PFDs made to the old standards can still be sold after 1 July 2010.

Below are answers to some of the most commonly asked questions about the new PFD standard.

1. Why do we need a new standard?

Standards Australia carried out a review of the Australian Standard covering PFDs and developed a new standard to more closely align with international standards.

2. What does the new standard cover?

The levels to be introduced will be -

Level 100 — similar to PFD Type 1

Level 50 — similar to PFD Type 2

Level 50 Special Purpose (50S) — to replace PFD Type 3

3. Will retailers need to sell only PFDs made to the new standard by the time the legislation is introduced?

No. PFDs made to the old standards will still be recognised for some time so if a manufacturer or distributor is not able to supply adequate stocks by the date of legislation, they won't be disadvantaged.

4. When will stocks of PFDs complying with the new standards be available?

It could take another 12 months after the July 2010 date for full market availability of the new product.

5. When the stocks do become available, will everyone need to replace their existing PFDs?

No. PFDs made to the old standards will still be recognised for some time. If a changeover date is to be considered, a date won't be established until after thorough consultation and that could be some years from now.

6. I've seen a level 100 PFD with a CE mark; is that the same thing?

No. A level 100 PFD with a CE mark complies with the standards recognised in Europe. They are accepted in some states but not all, so you'll need to check with your local marine safety authority.

7. How will I keep up to date with the introduction of the new types of PFDs?

The National Marine Safety Committee will issue regular updates as the situation develops and education campaigns explaining the new PFDs such as what the changes are and how they're marked will be coordinated by the National Marine Safety Committee.

8. So what do I need to do right now?

If you're a manufacturer, plan on the basis that July 2010 is the time when PFDs compliant with the new standard will be accepted. If you're a distributor or importer, it's business as usual for the time being.

The National Marine Safety Committee aims to achieve nationally uniform marine safety practices and is made up of an independent Chair and the CEOs of Australia's Commonwealth, State and Northern Territory marine agencies.

Commercial registration renewal

Every year, commercial and fishing ship owners are sent registration renewals to keep their ships registered within Queensland. Whilst the current registration renewal process has been in place for some time, Maritime Safety Queensland has recently received some questions regarding who is the appropriate person to complete the registration renewal form.

A vessel's owner, master or alternatively an accredited surveyor, are all able to complete the registration renewal form. The completed form allows Maritime Safety Queensland to easily identify those owners who have obtained an accredited surveyor's independent assessment. Other risk factors being equal, those ship owners who have not used an accredited surveyor are monitored more frequently than those who have.

Maritime Safety Queensland also requires a copy of the surveyor's certificate of compliance to be submitted within five business days of issue. This information is captured on the ships register and is used to determine monitoring priorities.

The registration renewal form was recently amended to remove the false impression that an owner's self declaration was anything other than input to Maritime Safety Queensland's risk-based monitoring priorities.

Further information on commercial vessel registration can be found at www.msq.qld.gov.au under the 'Registration' link.

New port management structure

On 1 July 2009 a new management structure for Queensland ports was implemented. This is the result of a review undertaken by the Queensland Government in 2008 in parallel with the sale process for the Cairns International Airport and the Mackay Airport.

The aim of the review was to ensure that the seaport network was able to meet the development, supply chain and trading needs of the state on a sustainable basis.

The new port structure consists of the following Port Authorities and ports managed by them:

Far North Queensland Ports Corporation Limited is responsible for the ports of Cairns, Burketown, Cape Flattery, Cooktown, Karumba, Mourilyan, Port Kennedy (Thursday Island), Quintell Beach, and Skardon River.

Port of Townsville Limited is responsible for the ports of Townsville and Lucinda.

North Queensland Bulk Ports Corporation Limited is responsible for the ports of Abbot Point, Hay Point, Weipa, Mackay and Maryborough.

Gladstone Ports Corporation Limited is responsible for the ports of Gladstone and Rockhampton.

Port of Brisbane Corporation is responsible for the ports of Brisbane and Bundaberg.



The new port structure.

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The law and you

Seven commercial vessel standards to enter national law in October

Vessel under construction. Austal/Onezthree 23m Queensland Police Patrol Catamaran. Photo courtesy of Austal Tasmania.

The National Marine Safety Committee (NMSC) is progressively working towards achieving nationally uniform marine safety standards.

The National Standard for Commercial Vessels (NSCV) is the principal technical standard for commercial vessels and will gradually replace the Uniform Shipping Laws (USL) Code. It provides a common national standard for the design, construction, crewing and operation of vessels.

The National Marine Safety Committee has reminded the marine industry that the next raft of national standards for commercial vessels enters legislation nationally on October 1 this year through an amendment to the USL Code (Amendment 7).

This round of reform sees six sections of the National Standard for Commercial Vessels (NSCV) come into force for new vessels. The relevant standards are:

- Construction (NSCV Part C Section 3)
- Stability Information (NSCV Part C Subsection 6A)
- Stability Tests (NSCV Part C Subsection 6C)
- Communication Equipment (NSCV Part C Subsection 7B)
- Navigation Equipment (NSCV Part C Subsection 7C)
- Anchoring Systems (NSCV Part C Subsection 7D).

A seventh section, Operational Practices (NSCV Part E) will apply to all new registrable vessels in Queensland. It includes new requirements that cover safer operating practices, emergency planning and ship management systems.

National Marine Safety Committee CEO Margie O'Tarpey explained that the USL Code was widely, although not universally, implemented by state, territory and commonwealth marine safety agencies as the standard for commercial vessels.

'This amendment provides a convenient way to replace the old USL requirements — developed nearly 30 years ago — with a much more modern and flexible set of standards,' Ms O'Tarpey said.

For those jurisdictions that currently allow vessels to comply with the USL Code, a new vessel which submitted an application prior to 1 October 2009 can be built to these existing requirements, provided construction work begins within a three-year period. However, design approvals submitted after

1 October 2009 must comply with the new standards.

'This allows a transitional period for vessel builders over the next couple of months,' Ms O'Tarpey said. 'The transition period applies in all jurisdictions except those which already require compliance with only the NSCV.' For most of the design sections, jurisdictions which have already brought in the NSCV — Queensland and Tasmania — generally apply the design and construction sections in addition to the USL Code.

NMSC will be placing a helpful guide, entitled the Combined NSCV/USLCode 2009, on its website to allow industry around the country to understand what sections of the USL Code have been replaced by the NSCV.

NSCV C3 — Construction references Lloyds Special Service Class Rules and is a key standard for national marine safety consistency.

Industry representatives welcoming the next phase of standards entering legislation nationally include naval architect Graham Taylor. Mr Taylor, who is also the Secretary of the Royal Institution of Naval Architects Australia, views the completion of the stability standards (**C6A — Intact Stability Requirements and C6C — Stability Tests and Information**) as another important step toward the ultimate completion of the NSCV.

‘These parts of the NSCV are a major upgrade reflecting current international standards,’ Mr Taylor said. ‘They provide a consistent approach, application and terminology for all types of vessels — something that was missing from the previous USL Code.’

‘Gaps and lack of detail in parts previously meant that the naval architect often needed a knowledge of what was left unsaid to allow proper application — the thorough coverage means that even the novice can confidently apply the new standards.’

‘This detailed, consistent approach should also ensure consistent application by all state authorities and their ready acceptance of vessels when transferring interstate.’

The national standard for **Navigation equipment (NSCV C7C)** reflects the latest in marine navigational technology.

The Australian Maritime Safety Authority’s AIS project manager Jillian Carson-Jackson said that Section 7C of the NSCV delivers, for the first time, a uniform national standard for nautical charts and associated navigation systems — and particularly Electronic Chart Systems scaled for vessel size and operating areas.

‘Its introduction will foster improvements to navigation safety comparable to those achieved by larger vessels administered under the SOLAS Convention while recognising that the circumstances and needs of operators of smaller commercial vessels may differ,’ Ms Carson-Jackson said.

Section 7C also includes carriage requirements for Automated Identification Systems (AIS*) on certain vessels, including reference to either Class A or Class B units, depending on vessel size and area of operation.

Ms Carson-Jackson pointed out that AIS has been recognised by the International Maritime Organization as a means to enhance safe navigation, ‘however, it will only work when vessels are transmitting, as well as receiving, the information’.

Navigation equipment supplier Coursemaster Autopilots Managing Director Richard Chapman agrees on the importance of a nationally uniform navigation equipment standard.

‘Vessel safety and navigation is paramount and with the introduction of the new standards even safer navigation of the waterways should be achievable,’ Mr Chapman said.

‘This will become especially apparent with the installation of AIS transponders and receivers’.

Anchor Right’s owner/manager Rex Francis began testing his company’s anchors against the requirements of the new standard for **Anchoring equipment (NSCV C7D)** before it came into force. Anchor Right introduced a new method for pre-proof testing and field testing anchors for their development and strength.

‘The benefit from my point of view is that now the commercial industry can purchase an Australian anchor design that has ticked all the boxes. To have an Australian anchor design — not just mine but all Australian anchor designs — tested in Australia to comply with the revised USL Code handbook rules is simply great,’ Mr Francis said.

Ian Ford, Managing Director of major Sydney ferry company Bass and Flinders, said the requirements for **Operational Practices (Part E)** of the NSCV are a giant leap for marine safety, especially through the Safety Management System.

‘Of course many years ago, a mariner like me could build up enough knowledge and experience from being around boats to intuitively know how to operate safely — now we are in a different age where not all operators have this solid background, so this standard is all-important,’ Mr Ford said.

‘Just as airlines have safety check systems, Part E allows the marine industry to have an inbuilt national safety checklist so everyone around the country is able to do the right thing to operate our vessels safely.’

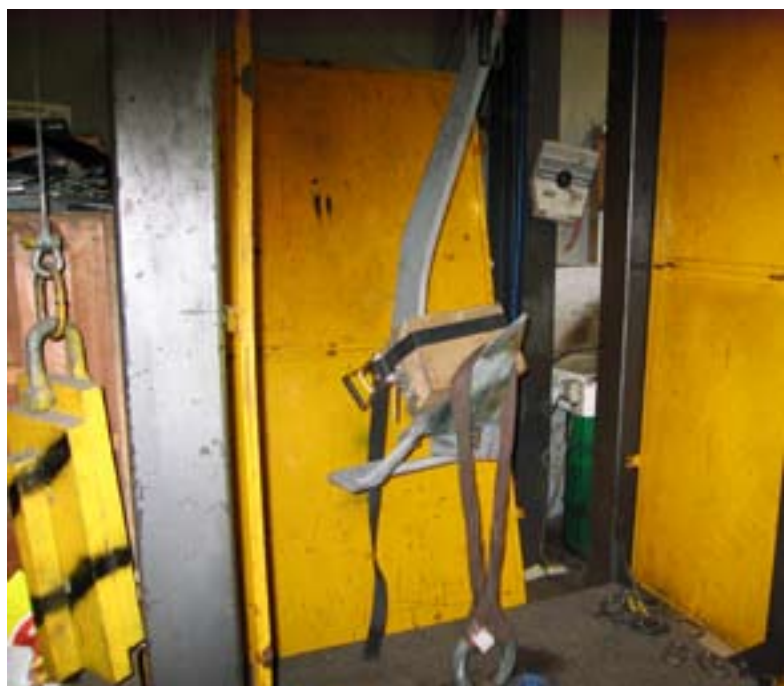
‘I’m particularly looking forward to the time when there is a national standard so that the Safety Management System requirements are the same between states.’

Upon effect, the seven standards will join the first raft of standards which entered legislation nationally in October 2008. Fire Safety (NSCV C4); Engineering (NSCV C5), Safety Equipment (NSCV C7A) and Fast Craft (NSCV F1) were adopted successfully last year.

Find out more

For more information on the Combined NSCV/USL Code 2009 please contact the NMSC Secretariat on 02 9247 2124 or visit website: www.nmsc.gov.au — click on ‘Legislated Standards 2009’. Copies of published standards can also be downloaded from this website.

*More information on AIS, including an interactive tutorial on the system, can be found at www.amsa.gov.au — look under vessel tracking and then follow the links to AIS.



Anchor tested against the standard NSCV C7D. Photo courtesy Anchor Right.

Pollution prevention

Audits of declared ships for compliance with sewage legislation

Maritime Safety Queensland is responsible for the management of ship-sourced pollution under the *Transport Operations (Marine Pollution) Act 1995* (act) and the associated *Transport Operations (Marine Pollution) Regulation 2008* (regulation).

From a general boating perspective, the major pollutants covered under this legislation are oil, garbage and sewage. The remainder, noxious liquid substances in bulk and packaged harmful substances are predominately related to commercial shipping activities.

The sewage requirements of the legislation commenced on 1 January 2004, with a phased implementation of requirements up to and including 1 January 2010.

Due to their greater sewage generating capability, declared ships commercially registered as class 1B, 1C, 1D, 1E and 1F (passenger carrying ships with a fixed toilet), such as ferries and tourist vessels, are subject to more stringent discharge restrictions and operational requirements.

These requirements regulate where treated/untreated sewage can and can't be discharged, and include specific onboard record keeping and equipment requirements that can be appropriately audited by relevant compliance/enforcement staff (authorised officers).

Authorised officers from Maritime Safety Queensland's regional offices, as well as enforcement partner Queensland Boating and Fisheries Patrol are now conducting statewide audits of declared ships for compliance with the sewage requirements of the act and regulation.

Development

To assist authorised officers when carrying out sewage compliance audits, Maritime Safety Queensland's Maritime Services Branch developed a sewage audit checklist for declared ships, to help guide authorised officers through the audit process.

The checklist was trialled on the Gold Coast with officers from that region. The purpose of the trial was to test the practical



Electric macerator pump for marine toilets.

implementation of the audit process, which proved successful both operationally and administratively.

Maritime Services Branch also developed a *Marine Pollution Non-Compliance Notice* (form F4339), to support compliance aspects of the legislation. If required, the form will be issued to the owners/masters of vessels that are found to be non-compliant with their sewage management obligations.

The form will stipulate a date that the authorised officer will revisit the vessel to confirm the necessary rectification measures have been undertaken. In the event that known instances of non-compliance are not rectified in an appropriate timeframe (in accordance with the requirements of the non-compliance notice as issued), Maritime Safety Queensland may elect to prosecute the owners and masters of such vessels under the relevant provisions of the act and/or regulation.

Presently, the maximum penalty for offences under the act is \$85,000.

An overarching administrative framework for the audit process has been developed. This framework provides a set of reference documents including Maritime Safety Queensland's policy, procedures, guidelines and an enforcement directive that describe the overall implementation regime for auditing declared ships for compliance with sewage legislation. While these documents are intended for internal use, interested parties may obtain copies from their regional Maritime Safety Queensland office for their information.

Other reference documents and studies associated with onboard sewage management include:

- Requirements for the Ongoing Assessment of Treatment System Performance: Procedural Guidelines for Owners & Masters of Ships Fitted with Sewage Treatment Systems (Guideline); and
- Ship-Sourced Sewage and Wastewater Treatment Plants: Acceptance by Local Government Authorities (Report).

These documents can also be obtained from Maritime Safety Queensland's regional offices upon request.

Rollout

In July 2009, each Maritime Safety Queensland regional office received copies of the audit checklist and triplicate booklets of form F4339 (non-compliance notice), in order to implement the audit regime for declared ships.

Individual vessels in each region are expected to be audited over the next 12 months.

Where instances of non-compliance are detected, the information from the corresponding non-compliance notice is then entered into the Commercial Information and Registration Management System (CIRMS) database, operated by Maritime Safety Queensland, to enable electronic tracking of non-compliances.

This information will assist with the compilation of risk profiles for each registered vessel and each region, which will in turn assist with appropriate intervention planning and the prioritisation of operational effort to prevent pollution.

On a monthly basis Maritime Safety Queensland's regional offices and enforcement partners will forward copies of all completed audit checklists (and any corresponding non-compliance notices) to Maritime Services Branch for central record keeping purposes and data analysis.

Future directions

Analysis of data collected during this process will serve several purposes. It will result in the development of a statewide risk profile for declared ships, in terms of potential risks to the marine environment from sewage pollution. Consequently, it will help identify problem areas with regard to ship-sourced sewage compliance and aid in the development of appropriate strategies and risk mitigation efforts to address such pollution risks. It is envisaged that the process will also give increased public confidence in Maritime Safety Queensland's ability to suitably manage the discharge of ship-sourced sewage in Queensland waters.

At present, Maritime Safety Queensland's focus on sewage compliance is one of education and the provision of information for both declared ships and recreational vessels. While auditing is currently being rolled-out for declared ships, it is envisaged audits of recreational vessels for compliance with sewage legislation will also be undertaken in due course. For example, recreational vessels fitted with a toilet will be inspected to ensure that the toilet is fitted with a macerator and that the macerator is unable to be by-passed, in accordance with the legislative obligations. Maritime Safety Queensland intends to ensure compliance with sewage legislation is achieved by all vessels for the protection of the marine environment.

Sewage is a known pathogen which contains bacteria, viruses

Pollution prevention



What kind of waterways do we want?

and parasitic micro-organisms. The discharge of sewage into a waterway has the potential to cause harmful impacts to natural ecosystems as well as create a disease risk to humans. Discolouration caused by sewage discharge also decreases the visual aesthetics of waterways.

Queensland's ship-sourced sewage legislation is aimed at protecting the marine and coastal environment from the potential impacts of sewage discharge (both deliberate and negligent), for the benefit of all waterway users. Owners and operators of declared ships are encouraged to do their part to keep Queensland's waterways clean and safe into the future, for the benefit of generations to come.

Additional information regarding Queensland's ship-sourced sewage legislation including vessel types, discharge types, waterways types, discharge maps, fact sheets, sewage management options and treatment systems. can be obtained from www.msq.qld.gov.au/Home/Environment/Sewage/.

History



Celebrating 150 years of Separation

On 10 July 1859, the paddle steamer *Clarence* arrived in the Port of Brisbane with a large banner lining the side of its hull which proclaimed 'SEPARATION'. This moment in history was recreated on Saturday 11 July 2009 with a Community Garden Party at historic Newstead House. The Maritime Safety Queensland vessel, *Champion* re-enacted the scene with the greeting party in full historical dress for the day.

Newstead House was open to the public with a number of activities including a pageant of fashion, historical vignettes and re-enactments, free concert, and the opening of new displays within Newstead House.

As part of the event, Maritime Safety Queensland's model of the QGSY *Lucinda* was loaned to Newstead House for the '50 years of maritime services to Queensland' display. It was on board the QGSY *Lucinda* that the draft Australian Constitution was framed and ratified. You can visit a replica of the QGSY *Lucinda* Smoking Room at the law courts complex in Brisbane.



The QGSY *Lucinda* model was popular with visitors.



The re-enactment was complete with the greeting party in period costumes.



Maritime Safety Queensland's historical display depicted 150 years of maritime services in Queensland.



The display featured the lantern that was raffled to provide funds for the Queensland Maritime Museum.

The Marine Board

The Marine Board was an advisory board established under the *Transport Operations (Marine Safety) Act 1994*. The board advised the former Minister for Transport, Trade, Employment and Industrial Relations, the Chief Executive of Queensland Transport and the General Manager of Maritime Safety Queensland about significant issues affecting the maritime industry. The board was composed of six members who represented a broad cross-section of the maritime industry. Each member possessed relevant knowledge and experience of the industry. Members did not represent particular bodies or companies.

The Chair was Col McKenzie (marine tourism and diving sectors). Members were Mike Bartlett (shipping and transport), Liz Hay (shipbuilders), Maria Dwyer (marine insurance), Mick Carr (maritime unions and shipping) and Robin Hansen (fishing industry). The Marine Board met eight times during 2008 and provided advice on the following issues:

- national maritime jurisdiction reform
- maritime training in Queensland
- Wunna Board of Inquiry findings
- Boat Share
- Recreational Boating Discussion Paper.

Prior to the 1990s an earlier iteration of the Marine Board (known as the 'Marine Board of Queensland' and constituted under the legislative regime that existed prior to the *Transport Operations (Marine Safety) Act 1994*), had considerable administrative powers including the issue of marine certificates of competency and the licensing of pilots.

The charter of the newly-formed Marine Board in the 1990s became 'To promote partnerships between government and the marine community to develop and maintain a safe and effective marine industry in Queensland'.

As well as giving information and advice to the Minister about marine safety issues and the referral of marine incidents to a board of inquiry, the Board could also give advice to the Chief Executive on proposals to prepare standards, on draft standards and on marine safety issues, including exemptions either on its own initiative or, if asked, by the Minister or Chief Executive Officer.

From 1998 the Marine Board broke with the tradition of holding meetings only in Brisbane and commenced meeting in regional maritime centres ranging from Thursday Island in the north to the Gold Coast in the south, including Port Douglas, Cairns, Innisfail, Townsville,

Hamilton Island, Airlie Beach, Mackay, Gladstone, Hervey Bay, Mooloolaba, and Brisbane. Board meetings were attended by the General Manager and key Maritime Safety Queensland personnel, and were supplemented by industry forums. Over the years this interaction led to building up of relationships and team work between industry and government.

Maritime Safety Queensland is now committed to maintaining and strengthening these relationships.

In recent years the Board provided significant advice and support on numerous important maritime issues including:

- compulsory wearing of life jackets
- implementation of Record of Practical Experience at Sea (ROPES)
- marine safety policy and legislation proposals
- ship-sourced sewage proposals
- national towage and salvage capacity
- promotion of careers in the maritime industry with a strong focus on marine training and crew skills and competencies
- registered training organisation handbook
- review into maritime legislation
- safety radio provision on the Queensland coast
- the development of state and national marine safety standards
- surveyor's liability insurance
- the Boatsafe project
- the findings of the Board of Inquiry into the Sun Paradise collision with Pride of Airlie leading to the development of the Safety Culture Program.

In May 2009 the Government considered the contents of *Government Response to Part B Report – Brokering Balance: A Public Interest Map for Queensland Government Bodies – An Independent Review of Queensland Government Boards, Committees and Statutory Authorities* and the 210 recommendations presented. The report achieved the Government's reform aim and recommended 103 bodies be abolished including the Marine Board. Full details of the report can be found at <http://www.premiers.qld.gov.au/government/boards-committees/review.aspx>.



Col McKenzie.
Chairman 2006-2009.
Diving and marine tourism industries.



Maria Dwyer.
Marine insurance industry.



Liz Hay.
Ship building and repair industries.



Mick Carr.
Maritime workers and unions.



Mike Bartlett.
Chairman 1999-2006.
Marine, transport, port and marina industries.



Robin Hansen.
Fishing Industry.

History of tidal recording and prediction in Queensland

The use of waterways for industry and recreation has always been an important part of the Queensland lifestyle.

Tidal heights have been noted and recorded since the early days of settlement, when people realised that there was sometimes insufficient depth of water to permit ships to enter the ports along the Queensland coastline. To gain the most benefit from our waterways, it was important to know the pattern of the tides.

By 1878, six gauges were installed between Brisbane and Lytton. These were primitive devices, piles driven into the ground and marked at the level of the high water line of spring tides. From the recording of tides against these markings, the Portmaster's report of 1878 contained information about the mean tide level at the Brisbane Bar for each month between September 1877 and 1878.

Beginning in the latter part of the nineteenth century, the first significant work in tidal prediction was undertaken. The Engineer in Chief of the Harbours and Rivers Department from 1875 to 1889, William Nisbet, established permanent tide gauges in the Brisbane River relating to river works and dredging projects.

In 1890 work undertaken by Marine Surveyor, Edward Cullen, was successful enough to produce an accurate tide table. In March 1891, tables were issued containing the predicted heights and times of high water for the remainder of that year. From the continuance of this work, Cullen produced more tables in 1892 that gave both the times and heights of high and low water for the whole year. Documents verified the accuracy of these predictions for the purposes of navigation, and were well received by the public and business involved in shipping.

With the success of the tidal recording program at Brisbane, special instructions were issued by the Department of Ports and Harbours in January 1892 for all offices located along the coastline to observe and record the tides in a similar manner to that being done in Brisbane. With the records being uniform in their observation and noting, it provided a reliable data bank of information. When these were systematically analysed, they were made available to the public.

No further advance in technology occurred world wide until 1976. This coincided with the access to computer facilities and graphics digitising system that greatly boosted the capacity to convert the state's tidal records from analogue to digital form. Additionally, it meant that all the records were stored digitally and were able to be retrieved rapidly and accurately processed.

In 1982 the observing of tides altered dramatically. The 'Tidata', a precise digital tide recording and telemetry system, was designed and constructed by the Department of Harbours and Marine staff based in Brisbane. The first installation was on a beacon near Bishop Island, from which readings were transmitted to the Lytton Hill signal station for display, transmission to users, and recording.



Above: Tide recorder, Hay Point. Below: Close up of tide recorder.



History



Left: This Maritime Museum Gauge was original installed as the Port Office gauge in 1927 and is now a working exhibit at the Maritime Mueum.

A gauge similar to this was operating at the Brisbane Pile Light from 1884 and is typical example of the automatic tide recorder using paper charts to record the tidal movements that were transferred from a float in a stilling well by system of gears and pulleys to the chart pen, used at most Queensland ports until the 1980s when they were replaced by digital tide recorders.



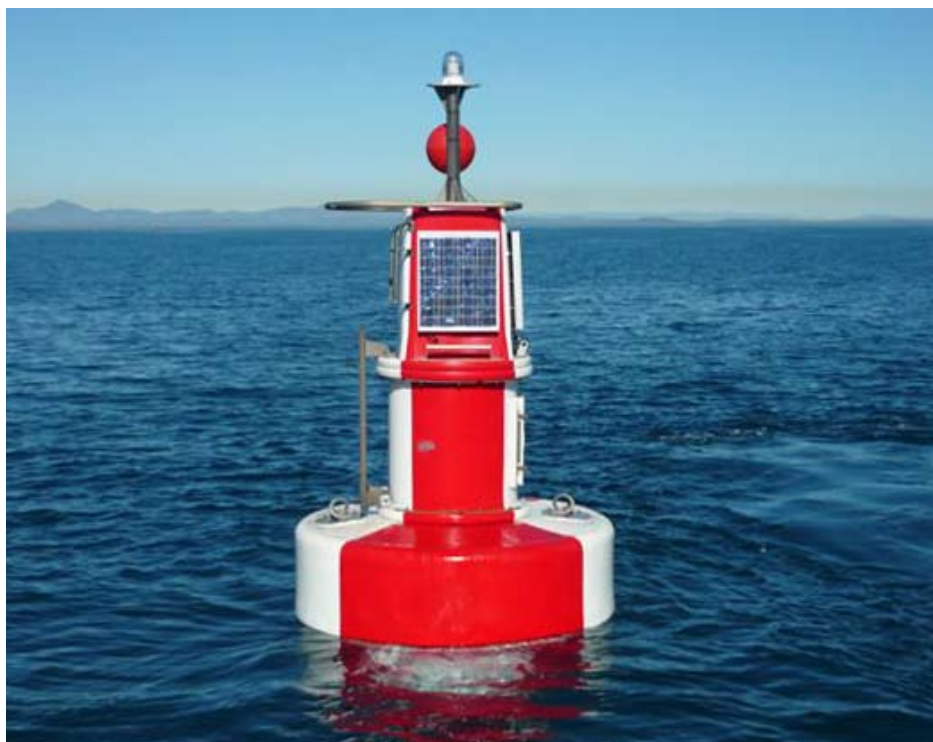
Above: Old pile light c.1910.
Left: New digital radar tide gauge, Hay Point.

In addition to the recording and storage of the state's tidal data, the preparation of the annual official tide tables for Queensland continued to be a function of the state government. From the first edition of the tide tables which contained predictions for Brisbane only, the tide tables have now expanded to include tidal predictions for 30 Queensland ports and tidal information for over 200 secondary places.

Maritime Safety Queensland, Queensland port authorities and the Department of Environment and Resource Management now jointly operate the tidal gauge network around the Queensland coast. The network records the movement of the tide and storm surge events.

The photos of the tide gauges at Hay point show typical installation used today. The gauges record the tide movements by bouncing a radar beam off the sea surface. The tidal recordings are stored in a data logger at the gauge and this data is transmitted to VTS centre for real time display.

Regional boating



New marine buoy on trial in Gladstone

On 1 July the old 'K' class steel buoy on station at the Fairway location in Gladstone was removed and replaced with a new type of buoy made of synthetic material as part of a trial of new technology.

The new Fairway buoy is a Tideland SB2200 'Sentinel' made entirely of virgin UV stabilised polyethylene. It displays a flashing white light at night and contains a radar reflector.

The perceived advantages of this type of material are that it does not rot, rust or need painting. Even antifouling paint is not required, which is better for the environment and saves time and money. The buoy is filled with polystyrene foam beads which will keep it floating even if it fills with water as the result of a collision. The trials will determine the visibility, stability, user acceptance and maintenance requirements over a period of years. If successful then use of polyethylene buoys may extend to other regions.

With a diameter of 2.2metres, the buoy is one of several made by a growing number of manufacturers worldwide. If mariners have any comments on the new Gladstone Fairway buoy Maritime Safety Queensland would love to hear from you.



Airlie Beach hosts marine teachers conference

The Marine Teachers Association of Queensland is a professional group of marine studies teachers throughout primary and secondary levels. The group is a non-profit organisation which coordinates activities to support over 400 marine studies teachers within the Queensland education system.

Each year during the September school holidays, the Marine Teachers Association of Queensland holds a conference with the aim of gaining valuable professional development to pass on to its students. The conference is a program of workshops, presentations and fieldwork sessions which promote and reinforce the value of marine studies education as one of the essential areas of learning.

This year, the Mackay branch hosted the conference with an overarching theme of 'Linking Estuaries, The Great Barrier Reef and the Ocean' (LEGO). The four day conference was held at Club Crocodile in Airlie Beach from 20 September to 24 September.

Over 40 members participated in the conference and attended presentations on various topics such as boating safety for schools, available marine careers and courses and marine monitoring programs. Guest speakers included representatives from Maritime Safety Queensland, Australian Underwater Federation Queensland, Great Barrier Reef TAFE, Australian Maritime College and GBRMPA.

Members also had the opportunity to participate in workshops covering several diverse matters including writing criteria for assessments, links between catchments and the reef and making fishing equipment. Site visits, a day trip to Knuckle Reef and a Daydream Island living reef display were also included as a part of the conference.

Simone Baker, a marine studies teacher from Mackay said that the conference was a great opportunity to gain valuable teaching resources. "The conference is highly educational and provides hands on experience" Ms Baker said.

For more information on the Marine Teachers Association of Queensland go to www.marineteachers.org.au.



SeaSwift's MV *Trinity Bay*.

Competency-based training

Maritime Safety Queensland, in supporting and promoting competency-based training (CBT) for masters and engineers, has over the past four years developed a suite of Model Assessment Tools and Resources which are being used by 12 registered training organisations across Queensland. These tools include a workplace based task book, workplace focused assignments and written and practical assessments.

The focus of the assessment material and the registered training organisations training and assessment strategies is to promote skilling in the workplace through mentoring and workplace supervision with theoretical support provided by the registered training organisations through lectures and tutorials. The success of competency-based training requires a commitment from the candidate, registered training organisation, employer, industry and Maritime Safety Queensland.

David Ellem recently completed his Master Class 4. He undertook the training in partnership with his employer, SeaSwift Pty Ltd, and the registered training organisation e-Campus Australia, both Cairns based companies. David continued to work while undertaking his study. SeaSwift supported David's training and he completed his workplace based taskbook and assignments while working on *Trinity Bay* under the ship's master Tony Gofton, and *Newcastle Bay* under the ship's master Clinton Miles. Both vessels are 80 metre general cargo vessels.

David has also contributed feedback on the competency-based training system. He was very positive, and although

he gave himself a tight six month time frame to complete his course, he said he found it a very practical way to study. He could see the benefit in starting the task books early. 'As soon as someone is considering a higher level licence, they should start talking with a registered training organisation and commence work on the task book', David said. David had high praise for the support he received from SeaSwift and their qualified masters, and the flexibility and support he received from e-Campus Australia. David also gave feedback on the assessment material itself, offering a number of very good suggestions which will be taken to the Continuous Improvement Panel for the material to be revised.

SeaSwift now has a second candidate working through the his Master Class 4 qualification towards his commercial marine licence.



Maritime Safety Queensland endorses the assessment tools and resources used in the competency based training course.



Multi-agency emergency response

Above L to R: Vessels involved in the exercise included the new police vessel 'Brett T Handran', CityCat 'Beenung Urrang', 'GJ Olive' and 'Newstead'.

A multi-agency exercise designed to test response to a fire on board a commercial passenger vessel was held at Colmslie in the Brisbane River on 18 August 2009.

The agencies involved were Maritime Safety Queensland, Emergency Management Queensland, Queensland Ambulance Service, State Emergency Services, Queensland Police Service (Water Police), Brisbane City Council, Port of Brisbane Corporation and Transdev TSL Brisbane Ferries.

The exercise highlighted several issues which could have been potentially dangerous in a real situation. One observation was that 'Tugulawa' incorrectly approached from the windward side of the 'burning' vessel, placing crew and the vessel in danger of catching fire. Other issues included the length of time it took for the passengers to don life jackets, and the length of time before the emergency and agency vessels were able to respond. On the positive side, Maritime Safety Queensland took a proactive role in engaging the tug 'Newstead' in cooperation with Svitzer tug company who kindly participated in the exercise.

As a result of the exercise, recommendations were made to improve emergency response efficiency. These included that CityCats should review onboard procedures in relation to fire fighting and passenger evacuation, and should also conduct a risk assessment of crew numbers in the event of an emergency. Queensland Fire and Rescue should ensure familiarisation with the tugs operated by Svitzer, and Maritime Safety Queensland should dispatch vessels immediately and arrange to collect Queensland Fire and Rescue Service officers at the scene. CityCat should also identify suitable and assigned locations to ground vessels in the event of an emergency to facilitate discharge of passengers and transfer of emergency service personnel.

The simulated emergency exercise took place as follows:

- 10.08 CityCat 'Beenung Urrang', situated at Colmslie, was advised of a fire on board with 22 passengers.
- 10.11 Call was made to 000 to advise.
- 10.24 Passengers were transferred to 'Tugulawa' and Brisbane Harbour notified fire was under control.
- 10.26 Maritime Safety Queensland vessel 'George Kerr' departed Pinkenba.
- 10.30 Notified that fire has flared up again and two passengers remain on board.
- 10.44 'George Kerr' arrived at scene.
- 10.45 'GJ Olive' arrived at scene.
- 10.48 'GJ Olive' delivered Queensland Fire and Rescue Service officers on board CityCat.
- 10.49 Tug 'Newstead' (engaged by Maritime Safety Queensland) with two Queensland Fire and Rescue Service officers on board was underway to the scene.
- 10.56 'Tugulawa' departed scene.
- 10.57 'Newstead' called to direct water off the stern of CityCat.
- 11.00 'Newstead' in action.
- 11.07 Exercise complete.
- 11.11 Display of fire fighting capabilities.



Above: Queensland Fire and Rescue Service officers demonstrating fire fighting equipment aboard Maritime Safety Queensland vessel 'George Kerr'.

Below: Passengers in life jackets being transferred from CityCat to 'Tugulawa'.



Regional boating

Savings from innovative plastic day marks

About 18 months ago at a boat show in Bundaberg the Maritime Safety booth happened to be located next to a plastic trailer manufacturer. The conversation turned to aids to navigation and the high maintenance required for the wooden day marks currently being used.

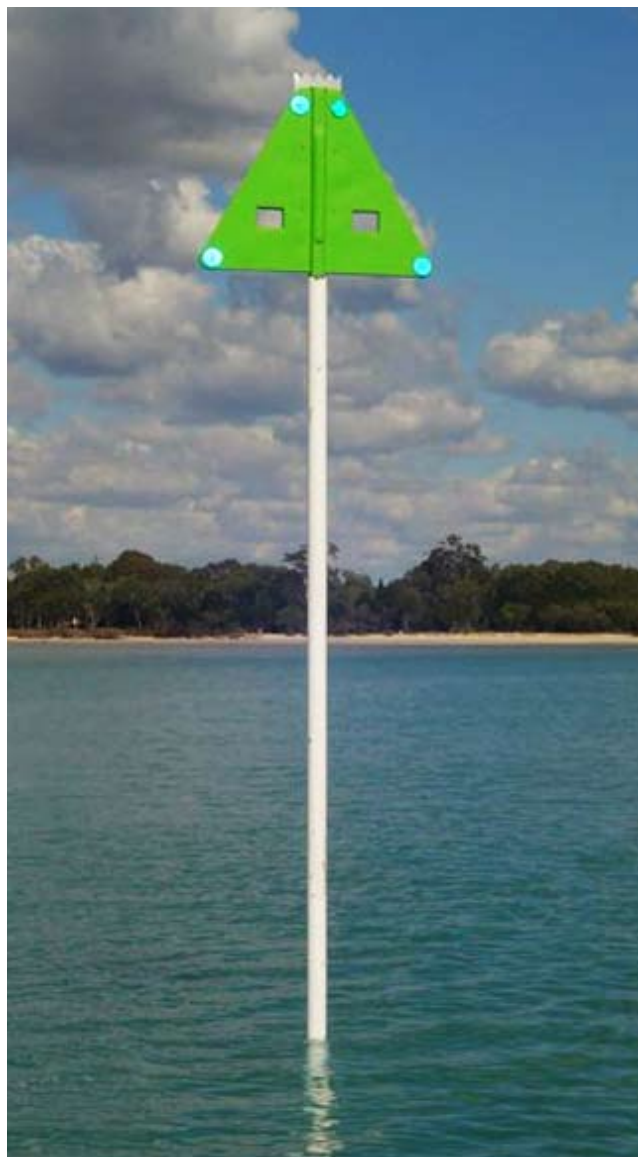
The manufacturer offered to make up a couple of 80 mm series day marks to the exact dimensions so they could be trialed. A red and a green were installed in Round Hill Creek and after 12 months showed no sign of deterioration. During this time the manufacturer, with the aid of Maritime Safety Queensland officer Glen Cunningham, made and modified moulds for further production of these day marks. Forty were ordered for the southern Gladstone region for installation in the Great Sandy Strait and a further six were ordered for the Brisbane region.

The advantages of these plastic day marks are:

- the same price as the raw materials for the wooden day marks
- they do not require painting
- they do not require maintenance every two years as wooden ones do
- bird fouling washes off in the rain
- they have a life expectancy in excess of 15 years
- they are about half the weight of the wooden marks, giving a significant workplace health and safety advantage.

Prototypes of the 150 mm series are currently being produced and interest has been shown from several other regions.

There is potential for significant savings in money and labour over the life of the day marks.





Claudine Ward's fishing vessel, FV Turtle.



Regional boating

BoatSafe alive and well in remote areas of Queensland

The BoatSafe Training Association of Queensland (BTAQ), formed at the request of Maritime Safety Queensland, is recognised as the only BoatSafe industry association. Since its formation it has grown to represent the majority of Boatsafe training organisations.

Members are located from the New South Wales/ Queensland border along the east coast to Cairns. In the past remote areas of Queensland were serviced from the east coast, but in recent times that servicing has been switching to BoatSafe training providers who live in those remote areas. Many of the members can be found in areas such as Karumba and Longreach and others service remote areas like Weipa and Cooktown.

Long time Karumba resident Claudine Ward represents Australian BoatSafe Licence College in the Karumba, Normanton and Croydon areas. Claudine along with her husband Gary have been professional fishers on the east coast of Queensland and the Gulf of Carpentaria for 35 years. Claudine is the master of a fishing vessel, the FV Turtle and holds a Skipper Grade 3 and a Marine Engine Driver Grade 3 and unrestricted Coxswain. Claudine is also an authorised Maritime Communications Invigilator and a Justice of the Peace. In 2004 Claudine was awarded The Rural Industries Research and Development Corporation Queensland Rural Woman's Award. Claudine and her husband Gary have been training professional fishermen and women in Karumba for the last 20 years. Claudine can be contacted for BoatSafe Training and Assessment on 0417 926 367.



Chris Rumsey with his BoatSafe training vessel.

The BoatSafe Training Association of Queensland training provider in Longreach is long time resident Chris Rumsey. Chris arrived in Longreach in 1988 to work as a jackaroo on a cattle and sheep station. Chris is the local controller of the State Emergency Service, a Flood Rescue Boat Instructor, and a State Emergency Service volunteer since 1997. Chris is also owner/ operator of Outback Airboat Tours in Longreach and has trained Australian Defence Force personnel in the operation of military airboats. He holds a restricted Coxswain Certificate and a Marine Engine Driver Grade 3. The area covered by Chris conducting BoatSafe is north to Winton, east to Alpha, south to Quilpie and west to Windorah. Chris can be contacted for BoatSafe Training and Assessment on 0427 033 378.

Both the BoatSafe Training Association of Queensland and Maritime Safety Queensland have websites where the recreational boating public can find a BoatSafe training provider in their area, to conduct training and assessment for a recreational marine driver licence or a personal watercraft licence. For Maritime Safety Queensland visit www.msq.qld.gov.au. For BoatSafe Training Association of Queensland visit www.btaq.org.au.



Claudine Ward with her Boatsafe Training vessel.



Chris Rumsey's Air Boat Tours.

Bureau of Meteorology

Safe boating tools on weather website

The Bureau of Meteorology has recently added some new tools to the Marine Weather page (www.bom.gov.au/marine).

On each state page there are links to tide information, sunrise and sunset times as well as the usual forecasts and warnings.

The text forecast gives the wind, sea and swell information averaged over time and area.

For example, "SW/SE winds 15/20 knots, lighter winds inshore early. Seas 1.8 metres. E/SE swell 4 to 5 metres. Showers."

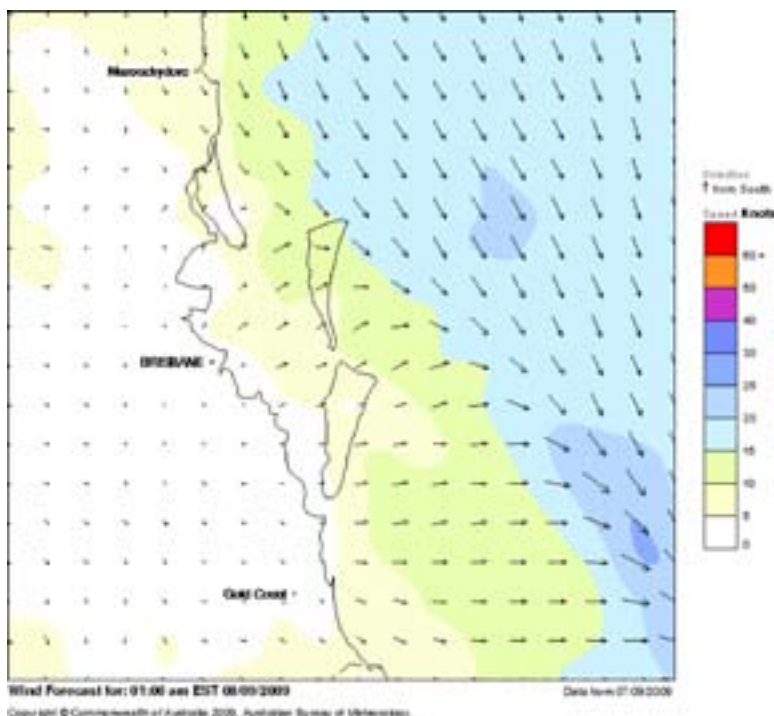
This forecast can cover a very large section of the coast and doesn't really show how the conditions are likely to vary throughout the day. You can find more localised information on the newly developed

wind forecast maps.

The forecast maps show how the conditions vary over time and area. The maps have more localised information and show the wind speed and direction every three hours.

The forecast maps should not replace the written forecast — they are computer generated and have not been checked by a forecaster so they should always be used in conjunction with the text forecast and the marine warnings.

For more information on wind forecasting, please go to www.bom.gov.au/marine/about/about-forecast-wind.shtml or for general marine weather information go to www.bom.gov.au/marine.



Updated handbook



The 2009-2010 edition of Maritime Safety Queensland's *Recreational Boating and Fishing Guide* is now available.

This small handbook includes invaluable information for boaties about safety equipment, buying a new boat, fishing (including a table showing bag limits), navigation rules and regulations. There are tips on trip preparation and driver safety, and chartlets which delineate smooth, partially smooth and open waters along the Queensland coast. There is also a section explaining how to read navigational marks.

The Guide is available free of charge from Maritime Safety Queensland regional offices and most Department of Transport and Main Roads customer service centres.

Upcoming events 2009

OCTOBER

- 4 River to Reef Festival, Mackay
- 4 Port of Gladstone Open Day
- TBA Mt Isa Fishing Classic
- TBA Gold Coast MAST Day

NOVEMBER

- 6-8 North Coast International Boat Show
- TBA Bundaberg Boat Show
- TBA Clermont Fishing Competition, Townsville

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Seascope online

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To see the latest and previous editions, go to <http://www.msq.qld.gov.au/Home/Publications/Seascope/>.

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