



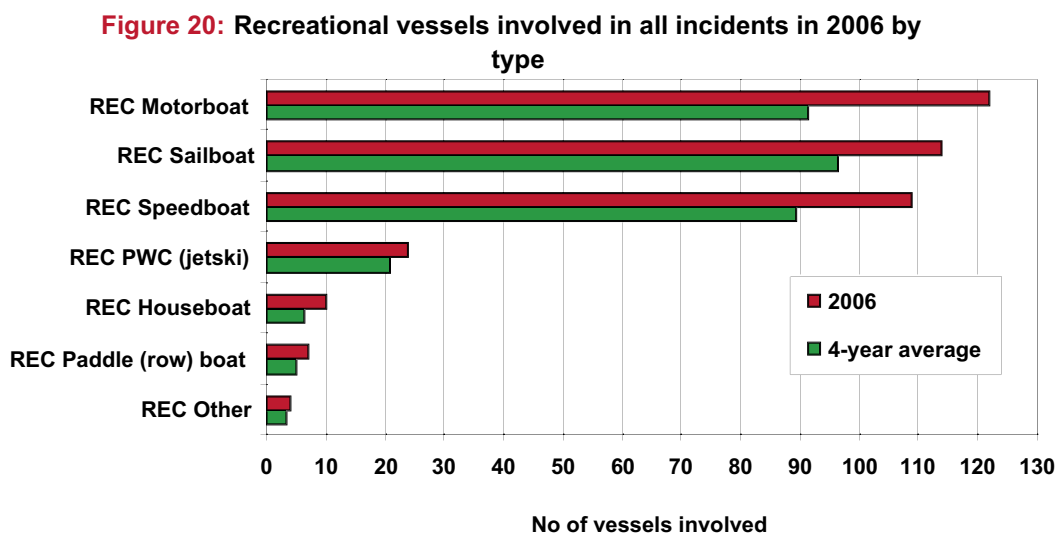
6.0 Selected marine incident profiles

6.1 Incidents involving recreational vessels

To provide a context for considering the involvement of recreational vessels in marine incidents, there were 208,301 recreational vessels registered in Queensland as at 31 December 2006—an increase of 9,163 (4.6 per cent) in the year, down marginally in percentage terms on the comparative increase in 2005 of 4.9 per cent and down markedly on the previous four-year average annual increase of 5.27 per cent. Recreational vessels represent 97.4 per cent of Queensland's total registered vessel fleet.

Recreational speedboats, that is, boats capable of planing, make up 84.7 per cent of all registered recreational vessels. It is also noted that while recreational personal water craft (jet skis) represent only 4.62 per cent of all registered recreational vessels, their numbers grew in 2006 by a little over 8 per cent compared with an overall increase in registered recreational vessel numbers of 4.6 per cent. Recreational motorboats make up approximately 12.03 per cent of all registered recreational vessels in Queensland. Recreational sailing vessels make up approximately 3.23 per cent of all registered recreational vessels in Queensland.

In 2006, recreational vessels were involved in 335 (47.8 per cent) of reported marine incidents in Queensland—up by 28 per cent on their four-year average involvement in 261.25 incidents. Figure 20 shows the relative involvement of the different types of recreational vessels in marine incidents together with their previous four-year average involvement in marine incidents.



All recreational vessel types were over-represented in marine incidents in 2006 when compared with their average involvement over the previous four-year period. Recreational motorboats were significantly over-represented in 2006 with 122 vessels involved in incidents. This compares with a previous four-year average involvement of 91.25 recreational motorboats in reported incidents.

Likewise, recreational speedboats (109) were significantly over-represented in incidents in 2006 in both relative and absolute terms. In 2005 there were 87 recreational speedboats involved in reported marine incidents. Over the four years 2002 to 2005 an average of 89.5 recreational speedboats were involved in incidents each year.

In terms of vessel length, 38.5 per cent of the recreational vessels involved were greater than eight metres in length. This constitutes a significant over-representation when only 5.4 per cent of the registered recreational vessel fleet in Queensland is over eight metres in length. The majority of recreational vessels over eight metres in length involved in marine incidents were recreational sailing vessels and recreational motorboats.

More than 60 per cent of the incidents involving recreational vessels occurred in the daytime, in clear weather and good visibility. 50.7 per cent of the incidents resulted in the vessels being damaged.

Approximately 44 per cent of the incidents occurred in smooth waters, 11 per cent in inland waters and the remaining incidents in partially smooth and offshore waters. A little over 51 per cent of the reported recreational incidents occurred in the Brisbane and Gold Coast regions. This level of recreational vessel incident involvement in these two regions is in line with their 56 plus per cent share of the state's registered recreational vessel fleet and the concentration of recreational boating activity in the South-east of the state.

The number of recreational vessels lost in marine incidents rose from 16 in 2005 to 31 in 2006—a rise of 94 per cent. Figure 21 shows the involvement of three recreational vessel types in the 'ship lost' incident outcomes for the period 1997 to 2006. Of the 48 vessels lost in all reported marine incidents in 2006, 29 (60.4 per cent) were recreational vessels—16 recreational motorboats, 11 recreational speedboats and two recreational sailing vessels. The number of recreational vessels lost is well above the previous four-year average of 21.5 recreational vessels lost.

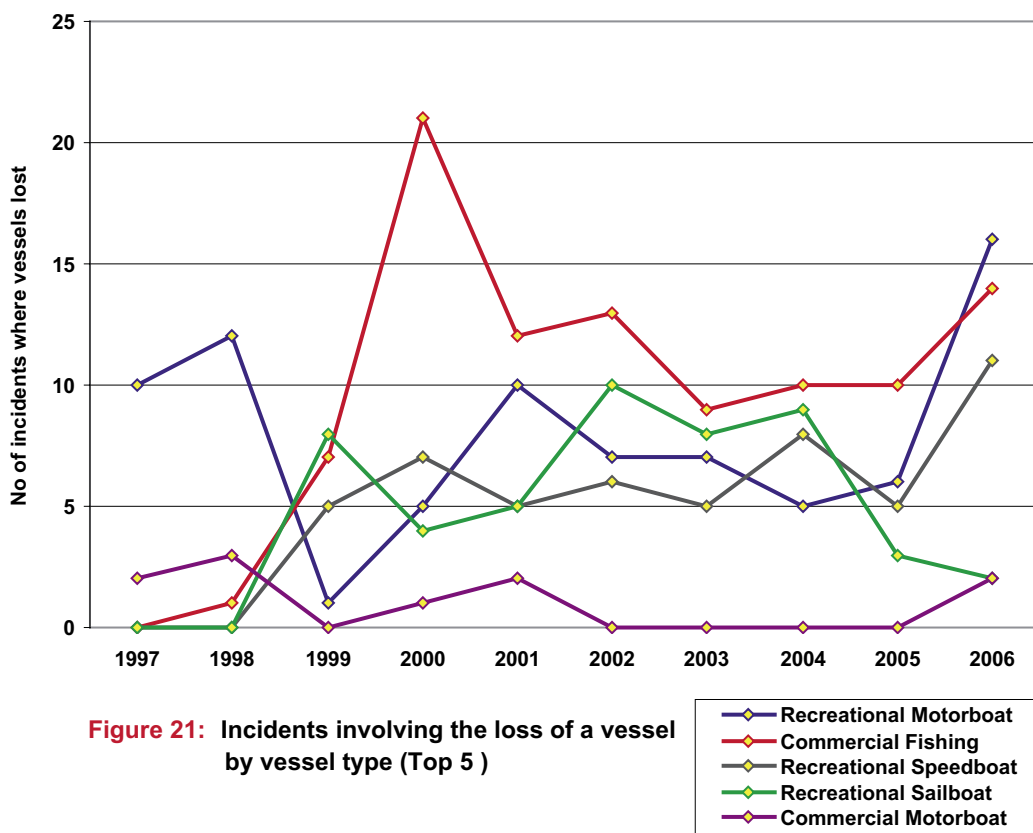


Figure 21: Incidents involving the loss of a vessel by vessel type (Top 5)

Recreational vessels were involved in 20 FSI incidents in 2006—42.5 per cent of all the reported FSI incidents in Queensland compared with 53.8 per cent in 2005. The number of recreational vessel FSI incidents (25) was also marginally under-represented when compared with the four-year average of 28.5 units of involvement.

Recreational vessel incidents resulted in 11 (64.7 per cent) of the 17 recorded fatalities in 2006. Of the 36 serious injuries recorded in 2006, 14 (38.9 per cent) resulted from incidents involving recreational vessels.

Recreational speedboats, recreational jet skis and recreational sailboats were the three most involved classes of recreational vessel in FSI incidents in 2006. There were 15 FSI incidents involving recreational speedboats, marginally above their previous four-year average of 13.25. Recreational speedboat incidents in 2006 resulted in eight fatalities and 12 serious injuries. The eight fatalities resulting from incidents involving recreational speedboats included three double fatalities.



There were only three reported FSI incidents involving recreational jet skis in 2006. These incidents resulted in five serious injuries. The number of FSI incidents involving recreational jet skis was down in 2006 compared with five incidents reported in 2005 and a previous four-year average involvement in 5.25 FSI incidents per year.

Recreational sailboat involvement in FSI incidents (3) in 2006 was only marginally above their previous four-year average involvement in 2.5 FSI incidents per year. There were three fatalities and one serious injury resulting from recreational sailboat incidents in 2006.

Analysis shows that the predominant characteristics of recreational vessel incidents involving fatality and/or serious injuries in 2006 were, as expected, incidents occurring in good visibility and clear conditions. These factors were involved in more than 50 per cent of recreational vessel FSI incidents. 45 per cent of recreational vessel incidents involving fatality and/or serious injuries in 2006 occurred in smooth water limits.

A significant proportion of the state's total boating activity is concentrated in South-East Queensland. Combined, the Brisbane and Gold Coast regions account for more than 56 per cent of the state's registered recreational vessel fleet. Despite this concentration and the extensive associated recreational boating activity in the south-east sector of the state, only 35 per cent of total recreational vessel incidents involving fatality or serious injury occurred in South-East Queensland—down markedly when compared with 62 per cent involvement in 2005. There were four recreational boating fatalities recorded in 2006 in South-East Queensland. A further six people were hospitalised as a result of reported recreational boating incidents in South-East Queensland in 2006—all from the Gold Coast region. With such concentrated boating activity, the involvement of recreational vessels in FSI incidents in South-East Queensland will continue to be monitored with a view to targeting compliance and educational initiatives in this area.

6.2 Incidents involving commercial vessels

While the number of registered commercial vessels had been steadily increasing over the period 2000 to 2004 (7.8 per cent over the five-year period), registered commercial vessel numbers fell again in 2006 by 1.31 per cent, as shown earlier in Figure 11. In 2006, commercial vessels represented 2.64 per cent of Queensland's registered vessel fleet, but were involved in 429 (61.2 per cent) of the year's reported marine incidents (n=701). Figure 22 shows the relative involvement of the different types of commercial vessels in marine incidents in 2006, together with their previous four-year average involvement in incidents.

As was indicated in the 2005 report, the capsizing of commercial fishing vessels and fire onboard commercial passenger vessels have been identified among the highest ranked potential marine safety hazards. These types of incidents have the potential for catastrophic safety outcomes and present real safety management challenges.

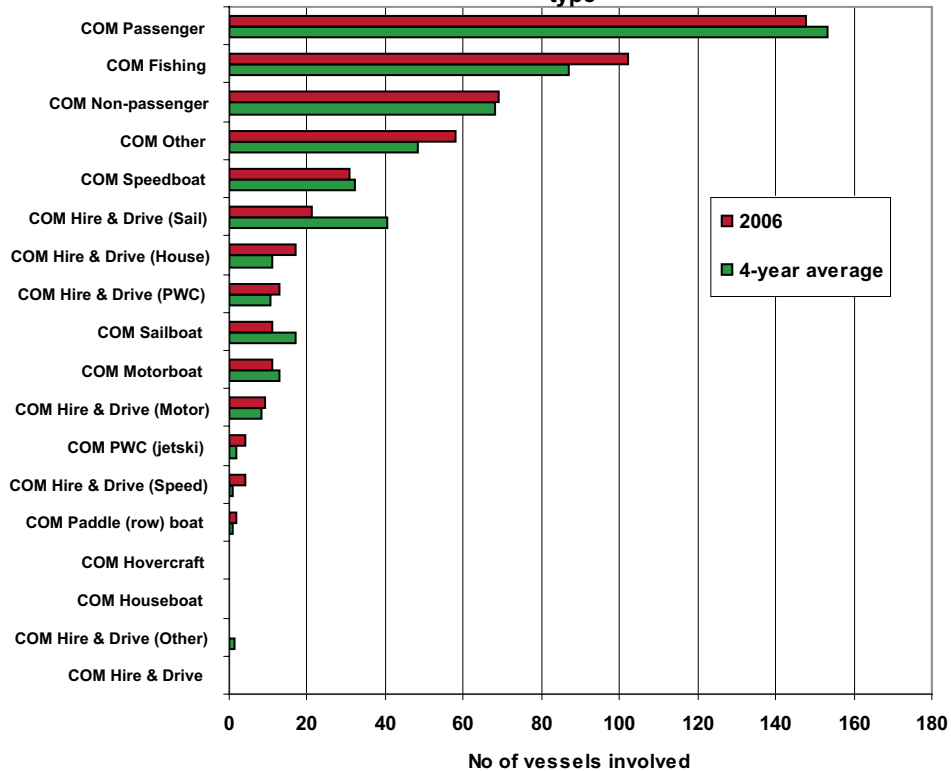
There were 90 (12.8 per cent) reported incidents involving commercial fishing ships in 2006 (n=701), resulting in five fatalities and two serious injuries. Only 14 of the commercial fishing ship incidents involved the capsizing of vessels, with one fatality resulting from one of these incidents. There were no reported serious injuries from commercial fishing ship capsizing incidents. The four remaining commercial fishing fatalities were the result of a crew member being lost overboard. Of the 138 reported commercial passenger vessel incidents in 2006, only four involved a fire onboard. None of these four incidents resulted in loss of lives or serious injuries.

Looking at the incidents that resulted in fatalities or serious injuries, commercial vessels were involved in 27 (57.5 per cent) of the State's 47 FSI incidents in 2006—marginally above their four-year average involvement in 23.5 FSI incidents.

Six fatalities resulted from marine incidents involving commercial vessels in 2006, compared with two fatalities in 2005 and a previous four-year average fatality rate of four. Of the 27 FSI incidents in 2006, 15 involved onboard incidents, six involved other personal injuries, five involved a person overboard and one involved a vessel capsizing. Of the 15 onboard incidents, five involved falls, four



Figure 22: Commercial vessels involved in all incidents in 2006 by type



involved crushing or pinching and the remaining six involved some other form of onboard injury. Of the other personal injury incidents, two were caused by the operation of the vessel, three involved a person being struck by the vessel or its propeller and one involved a water skiing injury.

The most frequently represented commercial vessels in FSI incidents in 2006 included commercial fishing vessels (seven), commercial speedboats (seven), commercial passenger vessels (six) and commercial–other (six). The seven commercial fishing vessel incidents resulted in five fatalities and two serious injuries. This compares with six commercial fishing vessel FSI incidents in 2005 and a previous four-year average of 6.5 commercial fishing vessel FSI incidents.

There were also seven commercial speedboats involved in FSI incidents in 2006. These seven incidents resulted in eight serious injuries. The incidents included five incidents involving onboard injuries and two personal injury incidents. One of these involved a person falling overboard from a water taxi and being hit by the vessel’s propeller.

There were 18 commercial vessels lost as a result of marine incidents in 2006. Notably, 13 (72 per cent) were commercial fishing vessels. One person lost his life as a result of the loss of one of these commercial fishing vessels.

From the perspective of regional involvement in the 27 reported commercial vessel FSI incidents, Cairns region recorded ten commercial vessel FSI incidents in 2006, compared with a previous four-year average of 5.25. Gold Coast region recorded six commercial vessel FSI incidents in 2006, the same number as recorded in 2005. Brisbane and Gladstone regions each recorded five commercial vessel FSI incidents in 2006.

Almost 60 per cent (16) of the commercial vessel FSI incidents occurred in offshore waters in 2006. This is over-represented when compared with the relative involvement of commercial vessels in FSI incidents in offshore waters in the previous four-year period (10). Seven of these incidents involved commercial fishing vessels and resulted in five fatalities and two serious injuries.



Incident study 9

Surf rescue – over and out!

The vessel: 3.75m commercial inflatable rescue boat (IRB)

The incident

Due to adverse conditions a popular Gold Coast beach had been closed by the local surf life saving club. When considering whether to reopen the beach to the public, it was decided to send two life savers out in one of the club's inflatable rescue boats to assess the surf conditions first hand.

While heading out through the breaking waves the IRB became airborne and in the words of one of the lifesavers was in a 'vertical position'. The female lifesaver in the front of the IRB fell backwards, colliding first with the head of the lifesaver driving the IRB before crashing heavily into the outboard motor.

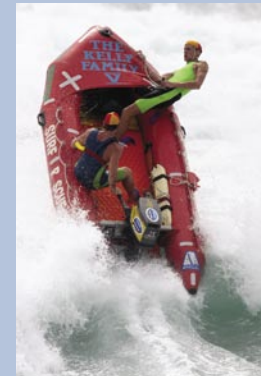
In the process, both life savers fell from the IRB into the surf. On witnessing the incident from the beach, a second IRB was deployed and attended to the two lifesavers in the surf.

The injured woman was taken to the beach where lifesavers stabilised her and provided first aid to a gash on her head pending the arrival of an ambulance. She was then transported to hospital, admitted, and operated upon immediately to correct internal and external injuries.

This was one of five serious injury incidents involving IRBs in 2006.

Safety insights

- Ongoing training of IRB crew is critical to the safe operation of IRBs, particularly in adverse or emergency conditions.
- Masters should not push their vessel beyond its operational limits or capabilities.
- Special care needs to be taken when operating vessels in conditions such as broken surf.



6.3 Incidents involving jet skis

Registered jet ski numbers in Queensland have risen by 175 per cent since January 2002. At the end of December 2006 there were 9,648 recreationally registered jet skis and 243 commercially registered jet skis in Queensland. Growth in registered jet ski numbers in 2006 alone was 8.3 per cent, compared with 4.44 per cent for registered vessels generally. Despite this rate of growth jet skis still only make up approximately 4.62 per cent of all registered vessels in Queensland.

According to historical reported marine incident data, jet skis have not figured significantly in reported marine incidents. This is attributable in some measure to under-reporting rather than an absence of incidents. Despite extensive media coverage about jet ski incidents and related injuries, there was a small decrease in the number of reported jet ski incidents during 2006.

In 2006, there were only 29 reported marine incidents involving jet skis in Queensland. This compares with the 31 jet ski incidents reported in 2005 and a previous four-year average of 25 jet ski incidents. Human factors were identified as contributing to more than 75 per cent of the 29 reported jet ski incidents in 2006. Inattention, operator error and excessive speed accounted for 77.3 per cent of the identified human contributing factors.

More than 50 per cent of the reported jet ski incidents involved a collision with another vessel. 31 per cent of jet ski incidents in 2006 occurred in offshore waters and approximately 27.5 per cent of the incidents occurred in smooth waters. This compares with more than 63 per cent of jet ski incidents occurring in smooth waters in 2005. Almost 80 per cent of the reported jet ski incidents occurred in clear weather conditions and in good visibility. 90 per cent of the incidents occurred in South-East Queensland. Of the 41 jet skis involved in the 29 reported incidents the majority (24) were recreationally registered jet skis. 17 were commercially operated jet skis including 13 commercial hire jet skis.

Incident study 10

Out of sight, but only for a moment!

The vessels: 6m recreational speedboat and a recreational jetski

The incident

While boating in the Southport Broadwater the master of a recreational speedboat noticed a jetski freestyling ahead of him. In an attempt to avoid the jetski the master altered the course of his boat away from the jetski. As he banked his boat to change course he lost sight of the jetski. Realising that he could no longer see the jetski he immediately cut the throttle. As he did so the jetski collided with the right side of his boat. As a result of the collision the jetski operator sustained a broken pelvis and both the master and a passenger on board the speedboat sustained neck and chest injuries requiring hospitalisation.



Safety insights

- Freestyling can be fun but carries with it the inherent risk of collisions.
- Maintaining a proper lookout and a safe and manageable speed are critical, especially when boating in close proximity to other vessels and in congested waterways.
- When boating, always expect the unexpected.

Turning to the more serious marine incidents, there were only three jet ski incidents reported in 2006 that resulted serious injuries. These three reported incidents resulted in five serious injuries requiring hospitalisation. There were no fatalities recorded from jet ski incidents in 2006. While jet skis currently comprise only 4.62 per cent of all registered vessels in Queensland, in 2006 jet ski incidents made up 7.3 per cent of reported incidents resulting in fatality or serious injury—down from 10.2 per cent involvement in 2005.

Of the three jet ski incidents that resulted in the hospitalisation of five persons, two involved collisions with other recreational vessels—one jet ski and one recreational speedboat. Four persons were hospitalised as a result of these two collisions—three from the collision with a stationary recreational speedboat. The third incident involved a passenger on a commercial hire and drive jet ski involved in an “ocean tour” off Noosa. The passenger sustained an undisclosed back injury while wave jumping off the Noosa bar entrance.

The incident resulting in the three serious injuries occurred in the Gold Coast region. This incident involved a collision between a recreational jet ski and a recreational speedboat. The jet ski was freestyling at the time. All three of the serious injury jet ski incidents occurred in what would be deemed ideal operational conditions—fine weather, good visibility and light winds. All three incidents occurred in the month of January, traditionally a peak recreational boating and jet skiing period.

Of the five persons seriously injured in jet ski incidents in 2006, four were male and one was female. Only two were operating the jet skis at the time. Of the three remaining seriously injured persons, one was a passenger on a commercial (hire and drive) jet ski and two were passengers on a stationary recreational speedboat.

Anecdotal evidence continues to indicate that there are significantly more serious injury jet ski incidents than are being reported. Jet ski marine incident data reported to Maritime Safety Queensland is therefore likely to be under-stating the true extent of serious injury jet ski incidents. This assumption is supported by recent national studies of fatal and non-fatal injury water transport incidents and an unpublished two-year study of jet ski injuries treated at the Gold Coast Hospital.

The involvement of jet skis in marine incidents will continue to be closely monitored and reported annually.



6.4 Boating safety in the Torres Strait

The 2005 annual marine incident report included a special feature on boating and related safety issues in the Torres Strait. The loss of seafarers in the Torres Strait is one of the highest ranked potential safety hazards identified by Maritime Safety Queensland as part of a recent strategic safety risk assessment.

As reported in 2005, the Australian Maritime Safety Authority in 2004/2005 recorded 45 marine EPIRB activations in the Torres Strait. Queensland Police sources indicate that there were a total of 117 search and rescue operations mounted in the Torres Strait in the same 12 month period, 36 for vessels reported as overdue.



A snapshot of reported marine incident data from Maritime Safety Queensland's marine incident database reveals a contradictory picture of boating safety in the Torres Strait. Between 1997 and 2006, there were 16 reported marine incidents in the Torres Strait that resulted in the loss of 11 lives and the hospitalisation of a further 10 people. The fatal incidents included the July 2004 Badu Island tragedy where two adults and a child lost their lives in one incident.



The data mentioned above does not include the tragic loss of the Commonwealth Immigration vessel 'Malu Sara' in the Torres Strait in October 2005. This incident alone resulted in the loss of four adults and one child.

Clearly the data does not reveal the real number of incidents occurring day-to-day in the region. The reporting of marine incidents in the region is generally poor, apart from those incidents that result in death.

Maritime Safety Queensland received only 16 reports of marine incidents having occurred in the Torres Strait area in 2006. Seven of these incidents occurred in the offshore waters of Torres Strait and two of the incidents resulted in two fatalities. Of the 16 reported marine incidents, six involved vessels grounding, four were collision incidents and two were person overboard incidents.



During the year work has continued on the development and implementation of the Torres Strait Marine Safety Program. In late 2006, Maritime Safety Queensland staff met with 11 Torres Strait Island Councils to discuss boating safety in the Torres Strait. Together they worked to identify community boating safety priorities and to refine the suite of activities under the Torres Strait Marine Safety Program. Island Council representatives unanimously raised access to training as one the most significant hindrances to improving local boating safety culture.



As a consequence, Maritime Safety Queensland is working collaboratively with TAFE to develop a special Torres Strait version of the recreational BoatSafe training program. This special training course will highlight key issues faced by seafarers in the Torres Straits such as motor maintenance and breakdown prevention, safety equipment and its use, emergency procedures at sea, vessel stability, and pre-trip planning. The longer two-day training course is expected to commence in June 2007 and will be progressively delivered across the Torres Strait region.

Maritime Safety Queensland is also working with Thursday Island State High School to develop a tailored school-based BoatSafe course for all Year 10 students. Students completing this course will be eligible for a recreational marine driver's licence. Work is also underway with Education Queensland to develop educational material on boating safety for Year Six students in the Torres Strait. This material is expected to be taught across the region from Term 3, 2007.

A census of community, recreational and fishing vessels is planned for mid 2007 to better



understand the Torres boating fleet. The information gathered during the census will assist in designing and customising training, education and other boating safety initiatives for the Torres Strait.

Work is also continuing with the Australian Maritime Safety Authority and with safety equipment wholesalers and retailers to determine the most equitable and cost effective strategy for supplying adequate boating safety equipment across the region, particularly the new generation 407 EPIRBs.

