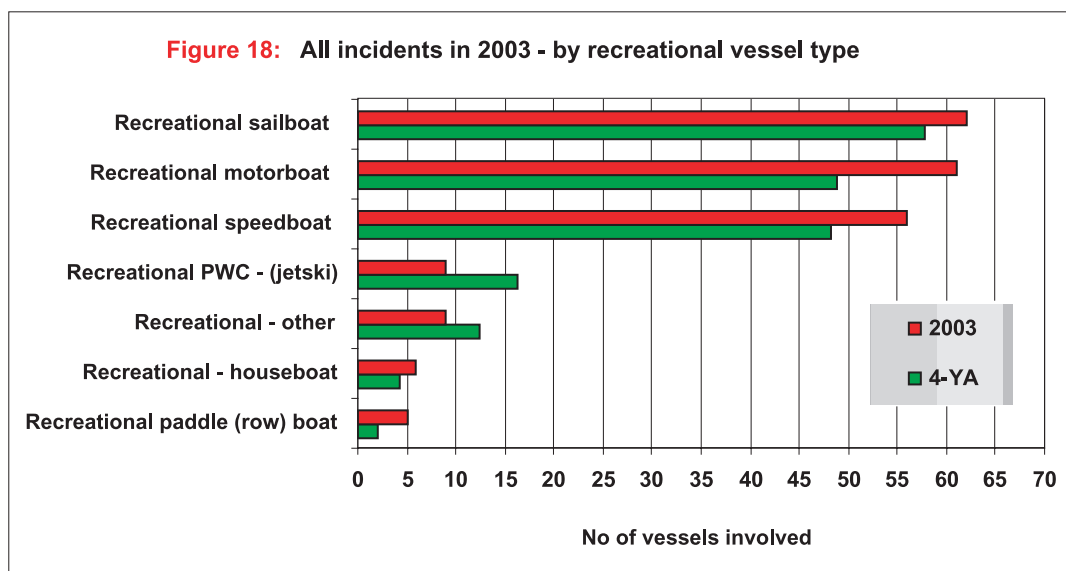


### 3. Selected marine incident profiles

#### 3.1 Incidents involving recreational vessels

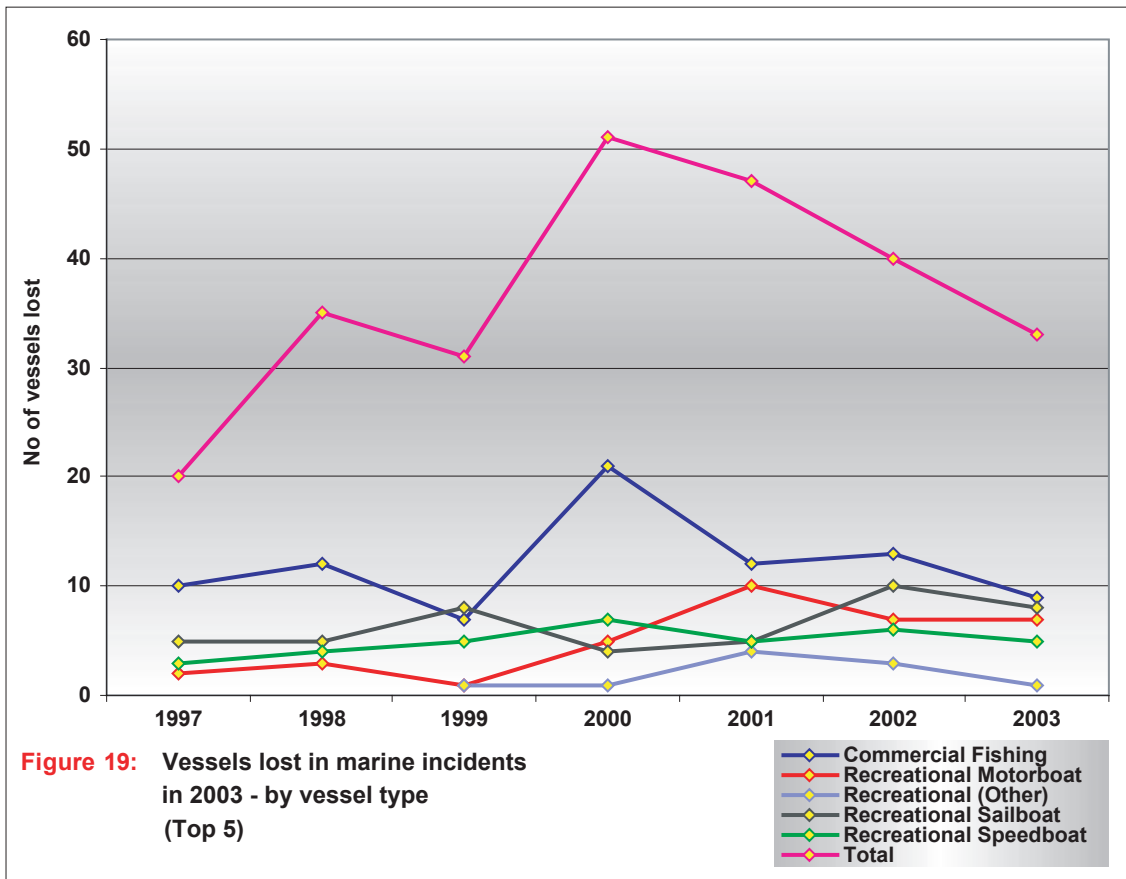
To provide a context for considering the involvement of recreational vessels in marine incidents, there were 180,304 recreational vessels registered in Queensland as at 31 December 2003, an increase of 4.88 per cent in the year. Recreational vessels represent 96.9 per cent of Queensland's total registered vessel fleet. Recreational speedboats, that is, boats capable of planing, make up 84 per cent of all registered recreational vessels. It is also noted that while recreational personal water craft (jet skis) represent only 3.7 per cent of all registered recreational vessels, their numbers grew in 2003 by more than 20 per cent compared to an overall increase in registered recreational vessel numbers of around five per cent. Recreational sailing vessels make up approximately 3.2 per cent of all registered recreational vessels in Queensland. Recreational motorboats make up approximately 12.7 per cent of all registered recreational vessels in Queensland.

In 2003, recreational vessels were involved in 208 (32.2 per cent) of the 645 reported marine incidents in Queensland—up marginally on their four-year average involvement in 190 incidents. Figure 18 shows the relative involvement of the different types of recreational vessels in the 208 recreational marine incidents, together with their previous four-year average involvement in incidents.



More than 66 per cent of the incidents involving recreational vessels occurred in the daytime, in clear weather and good visibility. Fifty three per cent of the incidents resulted in the vessels being damaged. Approximately 40 per cent of the incidents occurred in smooth waters, 15 per cent in inland waters and the remaining 43 per cent in partially smooth and offshore waters. A little over 59 per cent of the incidents occurred in the Brisbane and Gold Coast regions.

The number of recreational vessels lost in marine incidents in 2003 is also noteworthy. Figure 19 shows clearly the over-representation of recreational vessels in the 'ship lost' incident outcomes for 2003. Of the 33 vessels lost in all reported marine incidents in 2003, 22 (66.6 per cent) were recreational vessels—seven recreational motorboats, one recreational (other), eight recreational sailing vessels, five recreational speedboats and one recreational houseboat. The number of recreational vessels lost is consistent with the previous four-year average of 21.5 recreational vessels lost. Recreational sailing vessels lost continue to be over-represented compared with the previous four-year average for lost sailing vessels.



Recreational vessels were involved in 15 FSI incidents in 2003—53.5 per cent of all the reported FSI incidents in Queensland compared with 45 per cent in 2002. However, the number of recreational vessel FSI incidents was well down on the four-year average of 29 units of involvement. Recreational vessel incidents resulted in five (71.5 per cent) of the seven marine incident fatalities recorded in 2003. Of the 22 serious injuries recorded in 2003, 10 (45.5 per cent) resulted from incidents involving recreational vessels.

### Incident study 1 - Grounding and loss of recreational sailing boat

#### *The vessel*

Recreational sailing boat and tender

#### *The incident*

On a clear day, two friends went sailing on an inland reach of the Mary River. While one was an experienced boatie the other had never operated a sailing vessel.

On becoming aware the vessel's tender had broken free, they set out to retrieve it. The skipper left the vessel in the hands of his inexperienced companion, while he briefly went below deck. He did not give his companion any guidance or instruction on navigating the vessel.

The sailing boat ran aground on rock, started taking water and soon sank. While neither of the friends sustained injury, the ship was declared lost. The skipper was subsequently charged with unsafe operation of the ship and unlawful use of the ship.

#### *Safety insights*

- Vessel operators should not allow inexperienced persons to operate a vessel unsupervised
- Crew need to be competent for the tasks to be performed
- Vessel masters are responsible for charting and navigating a safe course

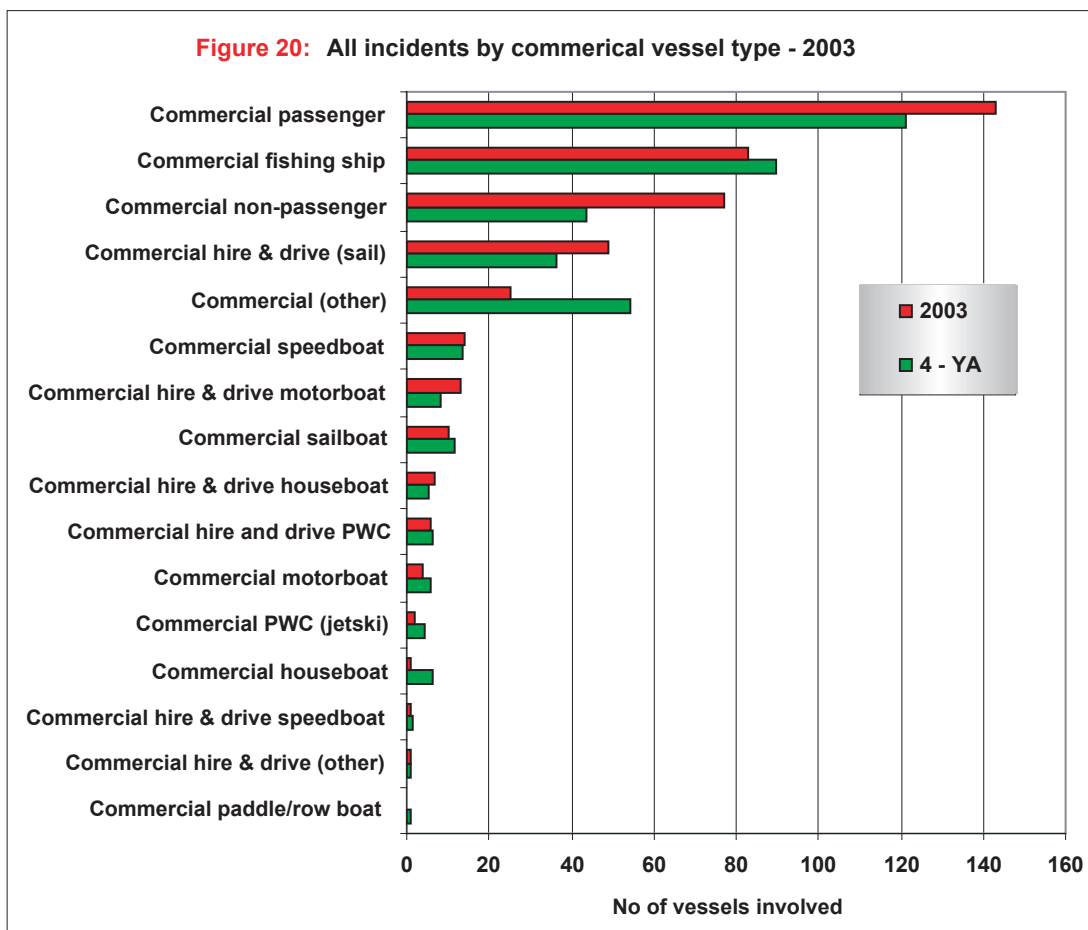
Recreational speedboats and recreational sailboats were the two recreational vessel classes most involved in FSI incidents in 2003. There were 11 recreational speedboats involved in FSI incidents, marginally under-represented when compared with their previous four-year average involvement of 14.25. Recreational speedboat incidents in 2003 resulted in four fatalities and seven serious injuries. While there were five recreational sailboats involved in FSI incidents in 2003, only one serious injury resulted. Recreational motorboat involvement in FSI incidents was down in 2003, with only two recreational motorboats involved. This compares with five in 2002 and a previous four-year average involvement of five. Recreational motorboat incidents resulted in one fatality and one serious injury in 2003.

Analysis shows that the major factors associated with recreational vessel incidents involving fatality and/or serious injuries in 2003 were, as expected, incidents involving good visibility, daylight hours, smooth waters and clear conditions. These factors were involved in more than 60 per cent of recreational vessel FSI incidents.

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 56.9 per cent of the state’s registered recreational vessel fleet. Despite this concentration and activity level, only 46 per cent of total recreational vessel incidents involving fatality or serious injury in Queensland occurred in South East Queensland—down from more than 69 per cent in 2002. 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.

### 3.2 Incidents involving commercial vessels

The number of registered commercial vessels has been steadily increasing over the last five years as shown earlier in Figure 11 (1.8 per cent growth in 2003). In 2003, commercial vessels represented 3.03 per cent of Queensland’s registered vessel fleet, but were involved in 436 (67.6 per cent) of the year’s 645 reported marine incidents. Figure 20 shows the relative involvement of the different types of commercial vessels in marine incidents in 2003, together with their previous four-year average involvement in incidents.



Looking at the more serious marine incidents, commercial vessels were involved in 13 (46.4 per cent) of the State's 28 FSI incidents in 2003—well below their four-year average involvement in 37.75 FSI incidents. This under-representation is consistent with the significantly smaller overall number of reported FSI incidents in 2003.

Two fatalities resulted from marine incidents in 2003 involving commercial vessels—one from a collision between a trading ship and a fishing vessel, and the other from a person who fell overboard from a commercial passenger vessel. There were also 12 serious injuries sustained as a result of incidents involving commercial vessels.

#### **Incident study 2 - Fatal collision between two commercial vessels**

##### *The vessels*

Commercial fishing trawler and a commercial bulk carrier

##### *The incident*

A commercial fishing trawler was operating at night in offshore waters. While sea conditions were rough, winds moderate and there was substantial cloud cover, visibility was reported as good.

The deckhand was considering winching-up given the prevailing conditions and the fact that a bulk carrier was understood to be moving through the area.

He was about to begin winching at the stern of the trawler when he noticed the trawler had changed course. He immediately headed for the wheelhouse – only to see the bow of a bulk carrier smash over the stern of the trawler.

The trawler sank quickly and the trawler's master was declared missing and later confirmed as dead as a result of the collision. The deckhand was recovered from the sea by another trawler in the vicinity and was subsequently transported by helicopter to hospital. Following a coronial inquest the second and third officers of the bulk carrier were charged with manslaughter.

##### *Safety insights*

- Extreme care must be taken and lookout maintained when operating in or near major shipping channels
- All vessel operators need to understand the manoeuvring limitations of large trading vessels
- Trading vessel operators are bound by the same safety obligations as all other vessel operators

From the perspective of regional involvement in commercial vessel FSI incidents, it is noteworthy that the Cairns region did not record any fatalities or serious injuries in 2003. All other regions had relatively low commercial vessel FSI incident numbers, consistent with the overall low number of FSI incidents reported in 2003.

In 2003, four (30.7 per cent) commercial vessel FSI incidents occurred in offshore waters. This is consistent with the relative involvement of commercial vessels in FSI incidents in offshore waters in the previous four-year period (29.5 per cent).

There were 11 marine incidents in 2003 involving commercial vessels where the incident type was defined as 'person overboard'. Three of these incidents resulted in one fatality and two serious injuries. Three of the commercial vessel FSI incidents resulted in serious injury caused by the operation of the ship. A further three commercial vessel FSI incidents resulted in serious injury as an outcome of onboard incidents.

### Incident study 3 - Passengers injured in commercial vessel bar crossing

#### *The vessel*

Commercial passenger vessel

#### *The incident*

A commercial passenger vessel on the Gold Coast set out in the morning to travel offshore through the Southport Seaway. The seas were rough and the vessel operator and crew ensured all passengers were seated prior to entering the Seaway.

On impacting the first wave as the vessel proceeded through the Seaway one passenger was thrown from his seat and injured his ankle - later confirmed as a broken ankle. Unable to safely change the vessel's course, the master continued to navigate the vessel through the Seaway.

When negotiating the next wave a second passenger was thrown from his seat, injuring his back. The vessel was hit by two further waves. When the master considered it safe to turn the vessel around, he returned to base. The injured passengers were then transported to hospital for treatment. The vessel did not sustain any damage.

#### *Safety insights*

- Bar crossings present unique operational challenges and should only be undertaken by experienced operators with local knowledge – when it is safe to do so
- Sea, weather and bar conditions can change quickly and need to be carefully considered in trip planning
- It is sometimes more prudent to postpone offshore boating trips than risk people's lives

In terms of involvement of differing commercial vessel types, commercial passenger vessels were involved in five FSI incidents in 2003, other commercial vessels such as trading and bulk ships were involved in three FSI incidents and commercial fishing ships were involved in two FSI incidents.

### 3.3 Incidents involving a person overboard

In 2003 there were 19 reported marine incidents involving a person overboard. Despite being marginally under-represented when compared with the previous four-year average involvement of 23, these incidents are significantly over-represented in terms of their outcome. While the 19 reported 'person overboard' incidents represent only 2.9 per cent of the 645 reported marine incidents in 2003, they account for more than 57 per cent of the marine incident fatalities recorded in 2003.

Six of the 19 person overboard incidents in 2003 occurred in inland waters and a further six occurred in smooth waters. Two of the inland water person overboard incidents resulted in two fatalities. One fatality resulted from person overboard incidents in smooth waters.

Eleven of the 19 person overboard incidents reported involved commercial vessels and eight involved recreational vessels. However, three of the four recorded fatalities from person overboard incidents in 2003 resulted from recreational vessel incidents.

Human factors such as operational error, inattention and alcohol and drugs were identified as contributing to more than 73 per cent of the 19 reported person overboard incidents. More than 63 per cent of the reported person overboard incidents occurred in clear weather, good visibility and light to moderate winds.

#### Incident study 4 - Person overboard from a recreational speedboat

##### *The vessel*

4 metre aluminium recreational speedboat

##### *The incident*

Two friends set out from Reliance Creek in a recreational speedboat late in the afternoon, en route to Green Island. The seas were choppy, with winds varying between eight and 16 knots.

Near Shoal Point a wave hit the vessel and the operator fell overboard and was struck by the propeller of the vessel's outboard motor. He sustained major lacerations to his face and throat.

His companion hauled him back into the boat and headed to a nearby beach where help was summoned and initial first aid applied until an ambulance arrived. The boat operator was taken to hospital for treatment.

##### *Safety insights*

- Maintaining a proper lookout and a safe and manageable speed are critical, particularly in adverse or deteriorating conditions
- Offshore sea and weather conditions can change quickly and need to be carefully considered in trip planning and timing
- Safety equipment such as lifejackets should be deployed whenever conditions begin to deteriorate

### 3.4 Incidents occurring on inland waters

One of the priority outcome areas identified following the 2002 marine incident analysis was reducing the number and severity of marine incidents on inland waters. In 2002 there were 101 inland water incidents reported, representing 15.5 per cent of all reported marine incidents. Of these 101 incidents, 13 resulted in serious injuries. There were no inland water fatalities in 2002. In 2003, only 78 or 12.1 per cent of a total of 645 reported marine incidents were reported as inland water incidents. This represents a substantial fall when compared with the previous four-year average of 110.25 inland water incidents.

While only two of the 78 reported inland water incidents in 2003 were FSI incidents, both resulted in fatalities. The majority of the more serious 2002 inland water incidents involved water skiing or collisions with other boats or objects. The two fatal inland water incidents in 2003 resulted from a person falling overboard.

#### Incident study 5 - Recreational speedboat fatality on inland dam

##### *The vessel*

4.35 metre aluminium recreational speedboat

##### *The incident*

On a clear day with good visibility - a perfect day for boating at a major inland dam in central Queensland - two friends set out for a day of fishing onboard a side console speedboat. Winds were between eight and 16 knots.

In the early afternoon they motored in open water across the dam, closely following a line of dead trees that marked an old river bank.

One of the friends operated the boat from the starboard side console while the other fished from a fixed seat on the forward deck. When conditions began to deteriorate and surface conditions got rougher, the friend on the foredeck decided to retreat to the centre of the vessel.

As he made his way from the foredeck, a freak wave hit the boat. The combination of this and the sudden transfer of his body weight caused the boat to list to the starboard side and veer towards the dead trees. Both men were subsequently hit by overhanging limbs. The boat operator was injured and stunned momentarily but his friend was not so lucky. He was knocked overboard among the dead trees and fatally injured.

##### *Safety insights*

- Inland waters present unique operational challenges for vessel operators that need to be carefully considered, for example, submerged trees and snags, unpredictable wave heights due to varying water depths
- Maintaining a proper lookout and a safe and manageable speed are critical, particularly in adverse or deteriorating conditions
- Safety equipment such as lifejackets should be deployed whenever conditions begin to deteriorate