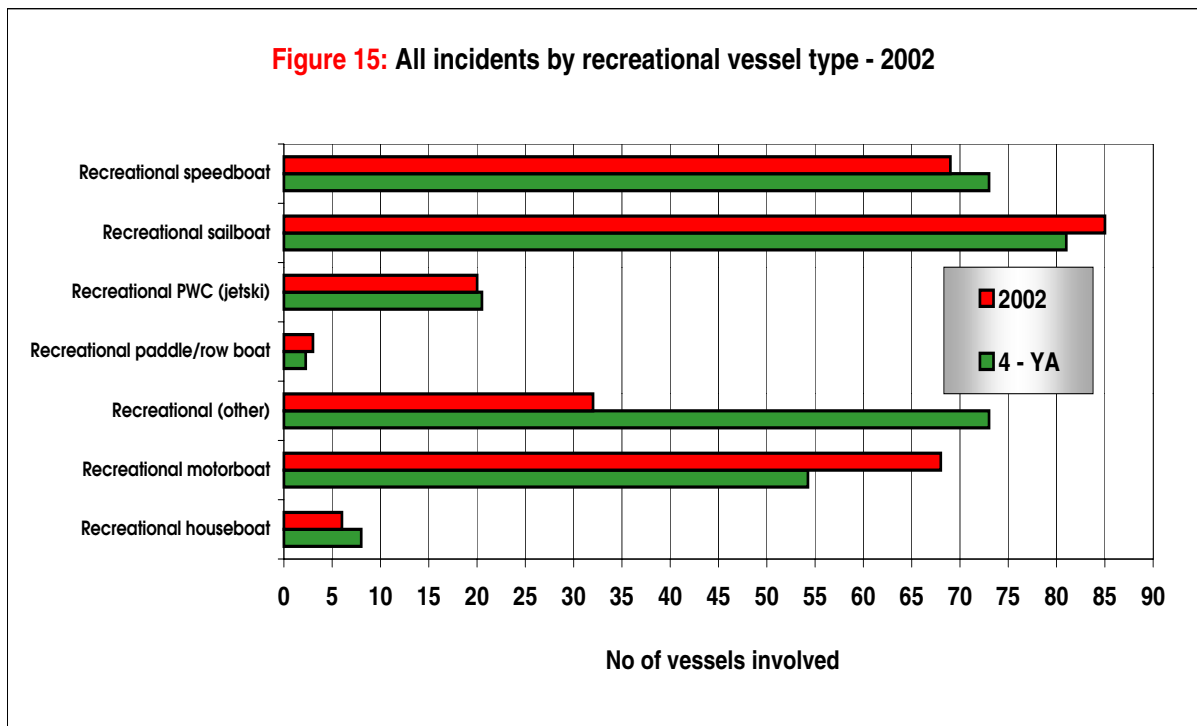


### 3. Selected marine incident profiles

#### 3.1 Incidents involving recreational vessels

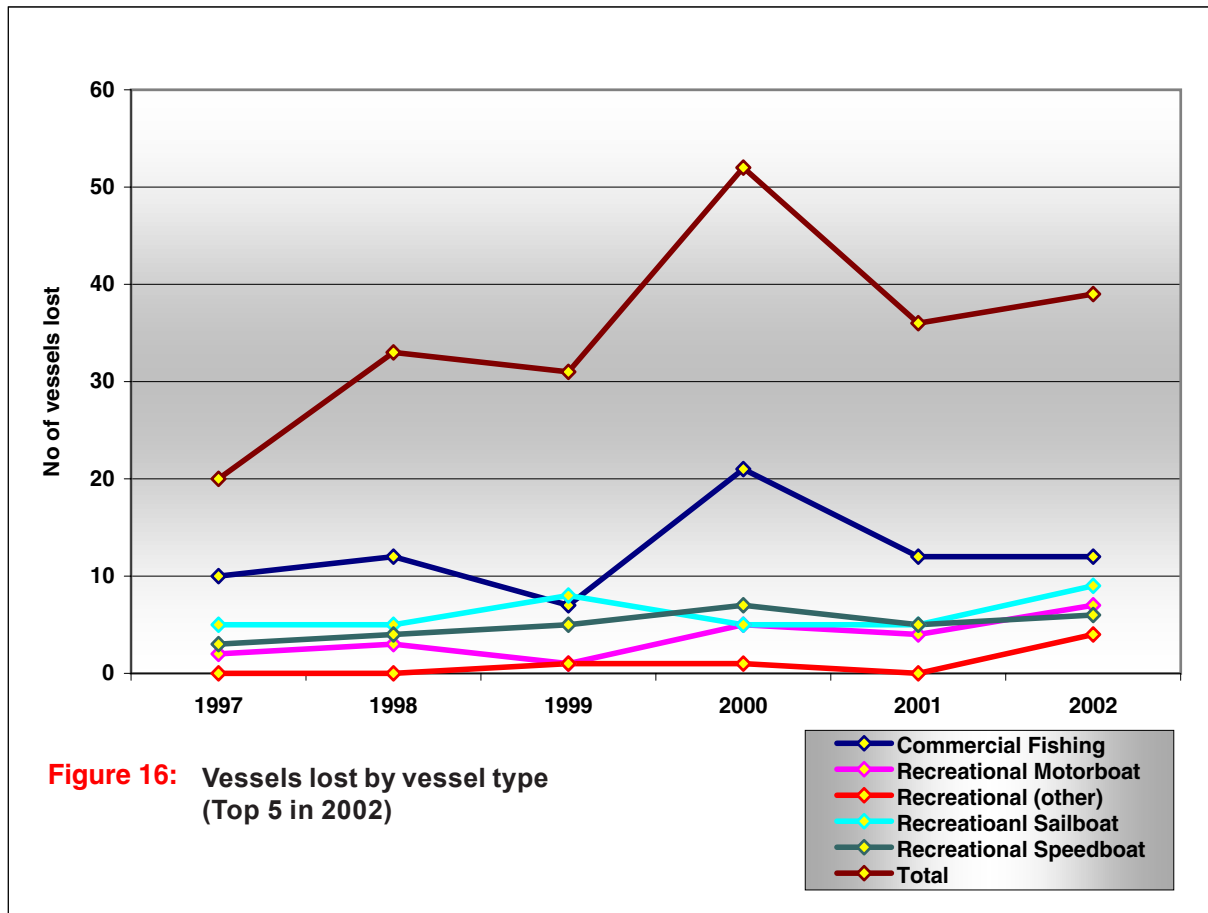
To provide a context for considering the involvement of recreational vessels in marine incidents, there were 171,915 recreational vessels registered in Queensland as at 31 December 2002, an increase of 6.02 per cent in the year. Recreational vessels represent 96.8 per cent of Queensland's total registered vessel fleet. Recreational speedboats, that is, boats capable of planing, make up 83.9% of all registered recreational vessels. It is also noted that while recreational personal water craft (jet skis) represent only 3.2 per cent of all registered recreational vessels, their numbers grew in 2002 by more than 24 per cent compared to an overall increase in registered recreational vessel numbers of six per cent. Recreational sailing vessels make up approximately 3.1 per cent of all registered recreational vessels in Queensland.

In 2002, recreational vessels were involved in 206 (32.7 per cent) of the 629 reported marine incidents in Queensland—well up on their four-year average involvement in 176 incidents. Figure 15 shows the relative involvement of the different types of recreational vessels in the 206 recreational marine incidents, together with their previous four-year average involvement in incidents.



More than 65 per cent of the incidents involving recreational vessels occurred in the daytime, in clear weather and good visibility. Fifty per cent of the incidents resulted in the vessels being damaged. Nearly 40 per cent of the incidents occurred in smooth waters, 23 per cent in inland waters and the remaining 37 per cent in partially smooth and offshore waters. A little over 58 per cent of the incidents occurred in the Brisbane and Gold Coast regions.

The number of recreational vessels lost in marine incidents in 2002 is also noteworthy. Figure 16 shows clearly the over-representation of recreational vessels in the ‘ship lost’ incident outcomes for 2002. Of the 39 vessels lost in all reported marine incidents in 2002, 26 (66.6 per cent) were recreational vessels—seven recreational motorboats, four recreational (other), nine recreational sailing vessels and six recreational speedboats. While the total number of vessels lost for 2002 is consistent with the previous four-year average for all ships lost (38), the 26 recreational vessels lost is well over-represented compared with the previous four-year average of 16.25 for recreational vessels lost. There were nine recreational sailing vessels lost in 2002, more than 56 per cent over-represented compared with the previous four-year average for lost sailing vessels.



**Figure 16: Vessels lost by vessel type (Top 5 in 2002)**

Recreational vessels were involved in 26 FSI incidents in 2002—44.8 per cent of all the reported FSI incidents in Queensland. This was in line with the four-year average of 25.75 units of involvement. Of the 10 marine fatalities recorded in Queensland in 2002, 5 (50 per cent) resulted from incidents involving recreational vessels - a decrease in fatal involvement of 44 per cent over 2001. Of the 59 serious injuries recorded in 2002, 26 (44 per cent) resulted from incidents involving recreational vessels.

Recreational speedboats and recreational motorboats were the two recreational vessel classes most involved in FSI incidents in 2002. There were 17 recreational speedboats involved in FSI incidents, slightly over-represented when compared with their previous four-year average involvement of 13.75. Five recreational motorboats were involved in FSI incidents, marginally under their previous four-year involvement of 5.50. Recreational speedboat incidents resulted in 3 fatalities and 14 serious injuries in 2002. Recreational motorboat incidents resulted in one fatality and five serious injuries in 2002.

Analysis shows that the major factors associated with recreational vessel incidents involving fatality and/or serious injuries in 2002 were, as expected, incidents involving good visibility, daylight hours and clear conditions. These factors were involved in more than 65 per cent of recreational vessel FSI incidents.

Given the proportion of the state's total boating activity concentrated in South-East Queensland, this area contributed to more than 69 per cent of total recreational vessel incidents involving fatality and/or serious injury in Queensland.

The increased involvement of recreational vessels in FSI incidents in 2002 and their concentration in South-East Queensland will continue to be monitored with a view to targeting compliance and educational initiatives in this area.

### Recreational speedboat serious injury incident

#### The vessel

3.7 metre aluminium recreational speedboat

#### The incident

The sole elderly master of the vessel was drift fishing in smooth waters in fine conditions. When he started the tiller-controlled outboard motor to move position, the motor revved and the vessel lurched forward. The master was thrown overboard leaving the vessel to make repeated tight 360-degree turns at a speed considerably faster than idle speed. While treading water, the master was run over by the circling vessel on at least three occasions. A nearby angler manoeuvred his vessel near to the circling vessel and cannoned it away from the stricken master in the water. A nearby hire boat operator eventually came alongside the masterless vessel and was able to disengage the outboard motor's 'kill switch'. Meanwhile, the angler lifted the stricken master from the water into his vessel and took him to a nearby bait shop where an ambulance and the Police were called.

#### The outcome

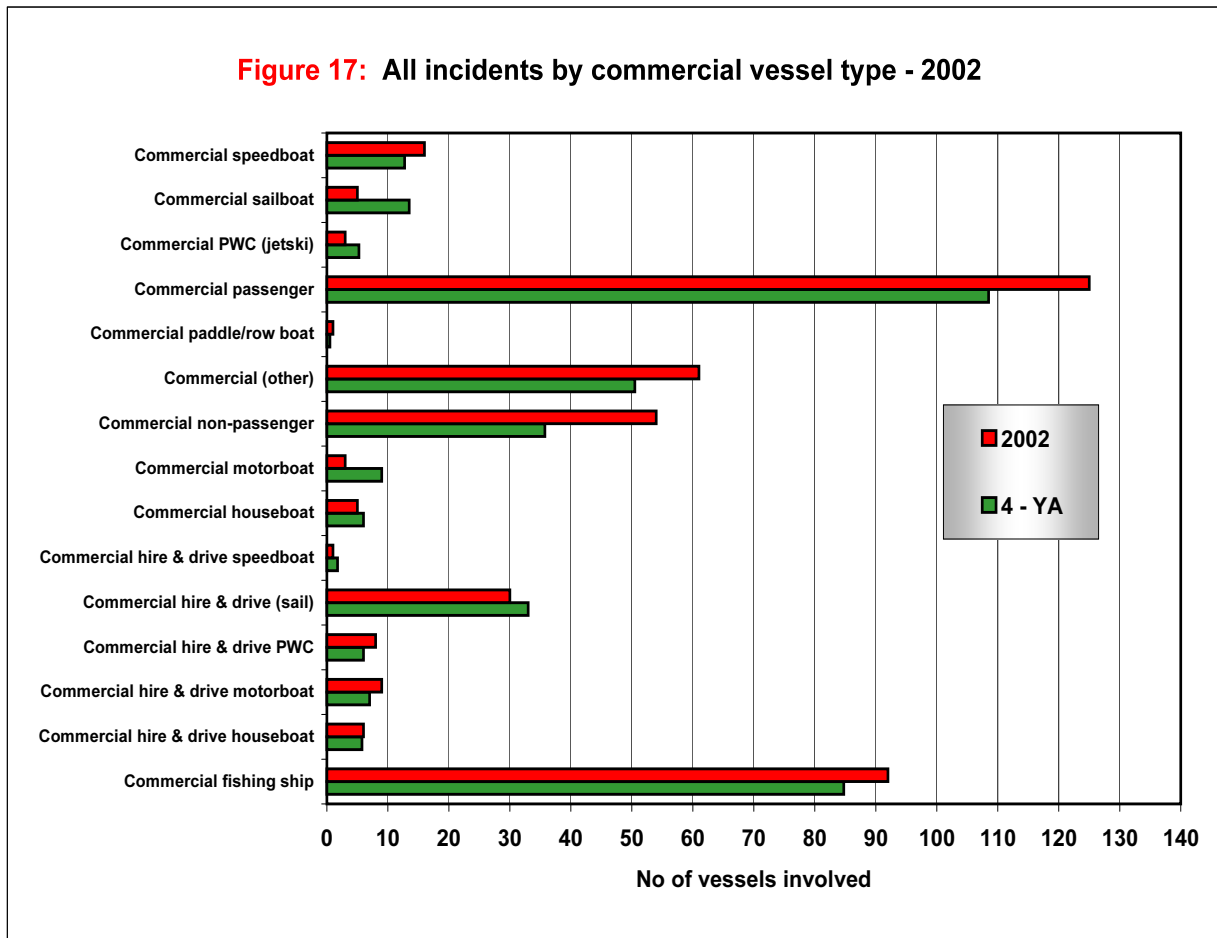
The elderly master suffered a broken arm and extensive lacerations to his arms, face and torso from the outboard propeller. He was hospitalised for three months. Investigations suggest that the main contributing factor to this incident was operator error. There is also evidence that the outboard's throttle/choke may have been set at a fast idle speed.

## 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 6 (2.4 per cent growth in 2002). In 2002, commercial vessels represented 3.12 per cent of Queensland's registered vessel fleet, but were involved in 66 per cent of the year's 629 reported marine incidents. Figure 17 shows the relative involvement of the different types of commercial vessels in 419 marine incidents in 2002, together with their previous four-year average involvement in incidents.



Commercial vessels were involved in 32 (55 per cent) of the State's 58 FSI incidents in 2002—marginally below their four-year average involvement in 36.75 FSI incidents. These 32 incidents resulted in five fatalities and 33 serious injuries.



From the perspective of regional involvement in commercial vessel FSI incidents in 2001, a number of features can be highlighted. Three regions showed a sizeable involvement in FSI incidents. Gold Coast and Cairns regions recorded the highest level of commercial vessel involvement with eight FSI incidents each. Cairns region recorded one more FSI incident in 2002 than the seven recorded in 2001—100 per cent over-represented compared with the region's four-year average involvement in four FSI incidents. The Gold Coast region was also significantly over-represented—up from four in 2002 and well above their previous yearly average of 3.50 FSI incidents involving commercial vessels. Brisbane region recorded six FSI incidents involving commercial vessels in 2002—up from four in 2001, but well below the region's four-year average of 11 units of involvement.

In 2002, 13 commercial vessel FSI incidents occurred in offshore waters compared with a four-year average of 9.25. Six of the FSI incidents involving commercial vessels resulted in serious injury as a result of an onboard incident. A further five incidents resulted in serious injury caused by the operation of the ship. Of the five commercial vessel FSI incidents where the incident involved a person overboard, two fatalities resulted. The other three fatalities involving commercial vessels resulted from two incidents where the vessels (both commercial fishing vessels) capsized.

In terms of involvement of differing commercial vessel types, commercial fishing ships were involved in 11 FSI incidents in 2002—up from six in 2001 and above the four-year average for commercial fishing vessels of seven. A more in-depth study of commercial fishing vessel involvement in marine incidents is included below. Commercial passenger vessels were involved in seven FSI incidents, down significantly on their four-year average involvement of 12.25.

Commercial speedboats were involved in five FSI incidents, up from three in 2001, but in line with their four-year average involvement in 4.50 incidents.

### Commercial passenger charter fatality incident

**The vessel:** 23.8m commercial passenger - sailing charter boat

**The incident:** After a full day's sailing, the vessel was moored in partially smooth waters with a full complement of charter passengers bunked down for the night. The weather and sea conditions were good. It appears that a male passenger came topside in the early hours of the morning and accidentally fell overboard. The master of the vessel who was sleeping topside heard a splash and on investigation and a muster of passengers and crew, established that a passenger was missing.

**The outcome:** The crew of the ship subsequently recovered the body of the male passenger from the bottom near the vessel. A coronial inquiry into the fatality is pending.

### 3.3 Incidents involving commercial fishing vessels

In 2002 there were 92 reported marine incidents involving commercial fishing vessels, up slightly on the previous four-year average involvement in 84.75 incidents. While less than 0.001 per cent of all registered vessels in Queensland in 2002 were commercial fishing vessels, these vessels were involved in:

- 14.6 per cent of all reported marine incidents
- 33.3 per cent of incidents involving a fatality
- 16.3 per cent of incidents resulting in serious injuries
- 30.7 per cent of incidents where the vessel was a total loss



## Commercial fishing vessel fatality incident

**The vessel:** 14.6m commercial fishing trawler

**The incident:** A commercial fishing vessel engaged in trawling in offshore waters in the Great Barrier Reef region appears to have snagged its nets on the seabed. The crew attempted to winch the snagged nets free. However in doing so, the vessel rolled to the port side and capsized. It is understood that the skipper may have been trapped in the wheelhouse. The two remaining crewmembers managed to hang onto the upturned hull of the vessel for several hours until it sank. They then clung to an upturned, damaged dinghy. One of the crew decided to try to swim for land and presumably perished at sea. Another ship subsequently rescued the remaining crewmember approximately 40 nautical miles from the location of the incident.

**The outcome:** Two lives were lost in this incident. Operational error appears to have contributed to the incident. The matter is still subject to a coronial inquiry.

It is acknowledged that there is an indeterminate number of commercial fishing vessels under ten metres in length that are not currently required to be registered with Maritime Safety Queensland. Even if these unregistered commercial fishing vessels were included in the overall registered commercial fishing vessel numbers, commercial fishing vessels would still be significantly over-represented in marine incidents, particularly those incidents with serious outcomes such as fatality, serious injury and loss of vessel.

Of the five fatalities that resulted from incidents involving all commercial vessels in 2002, four resulted from three incidents involving commercial fishing vessels. All three incidents occurred in offshore waters with two of the three vessels involved, capsizing and sinking. These two incidents resulted in three fatalities. The fourth fatality resulted from a crew member falling overboard.

Of the 92 incidents involving commercial fishing vessels, more than 43 per cent occurred in offshore waters and 13 per cent resulted in the total loss of the vessel. Figure 16 shows the ongoing over-representation of commercial fishing vessels in the 'ships lost' incident outcome.

### 3.4 Incidents occurring in offshore waters

The offshore category is one of four incident location descriptors and includes waters beyond designated smooth and partially smooth waters off the Queensland coast. In 2002, 130 (20.6 per cent) of the state's 629 reported marine incidents occurred in offshore waters. Of these incidents, 18 resulted in fatality or serious injuries. This represents a significant over-representation in the proportion of FSI incidents in offshore waters compared with the ten offshore FSI incidents reported in 2001 and the previous four-year average of 12.75 for offshore FSI incidents.

Consistent with other major categories reviewed, the majority of offshore FSI incidents occurred in clear weather conditions, good visibility and in the daytime. That said, moderate winds, strong winds, adverse sea state and rain between them were identified as contributing factors on 14 occasions to these 18 offshore FSI incidents.



## Commercial fishing dory fatality incident

**The vessel:** commercial fishing dory

**The incident:** A commercial fishing dory with one crewmember on board, operating from a commercial fishing mothership, was engaged in fishing activities in very rough conditions in offshore waters when it appears the dory capsized. A five day search and rescue operation located the upturned dory but did not locate the missing crewmember.

**The outcome:** One male person was presumed drowned and the dory was not retrieved due to severe weather conditions. Contributing factors included hazy weather, poor visibility and very rough sea conditions combined with strong winds.

Twenty-two vessels were involved in the 18 offshore incidents in 2002. The vessels most frequently involved were:

- Commercial fishing vessels (8)
- Commercial non-passenger vessels (3)
- Commercial vessels—other (3)
- Commercial passenger vessels (2), and
- Recreational sailing vessels (3)

Commercial fishing vessels continue to be over-represented in offshore incidents—often with severe outcomes in terms of fatalities and ship losses, as identified in earlier studies. With three vessels involved, recreational sailing vessels were also over-represented in offshore FSI incident in 2002. The previous four-year average involvement of this class of vessel is only 0.50.

The ‘ships lost’ dimension of marine incidents in offshore waters also shows as marginally over-represented in 2002. Four (22.2 per cent) of the 18 offshore FSI incidents resulted in the vessels being lost, and a further 20 (15.4 per cent) of the 130 non-FSI offshore incidents resulted in loss of the vessel involved.

The Cairns region, with seven offshore FSI incidents in 2002, recorded the largest regional involvement. This compares with two offshore FSI incidents in the region in 2001 and a previous regional four-year average involvement of 2.75.

### 3.5 Marine incidents in the Cairns region

A study of the marine incidents occurring in the Cairns region in 2002 indicates that the region was over-represented in terms of marine incidents generally and FSI incidents in particular. It is of note that this over-representation occurred despite a fall in 2002 in the number of registered vessels within the region.

In 2001, there were 17,266 vessels registered within the Cairns region. At 31 December 2002, there were 17,007 registered vessels within the region—259 fewer than in 2001. This represents an annual decrease in registered vessel numbers of 1.5 per cent. In the same period registered vessel numbers statewide increased by 5.91 per cent. In 2002, Cairns region's registered vessels represented 9.58 per cent of the state total, compared with 10.3 per cent in 2001.



The Cairns region reported 100 (15.9 per cent) of Queensland's 629 reported marine incidents in 2002 compared with 81 (13.3 per cent) in 2001. This represents an increase in 2002 of some 23 per cent and continues to be well above the region's previous four-year average of 78 reported incidents.

### **Recreational sailing vessel fatality incident**

**The vessel:** 12m single hull foreign registered recreational sailing vessel.

**The incident:** Two overseas visitors were sailing in offshore waters in North Queensland when their vessel caught fire. The fire quickly spread the full length of the vessel and both crewmembers abandoned the vessel—one to a dingy, one to a liferaft. A passing trawler picked up the crewmember in the dinghy. The body of the other crewmember was later located floating in the sea. The dead man's liferaft was also located and appeared to have been holed, possibly by the yacht's mast. An EPIRB found in the possession of the dead man had not been activated.

**The outcome:** One person drowned and the yacht was a total loss. Investigations are continuing to determine the cause of the fire.

FSI incidents in the Cairns region were significantly over-represented in 2002, accounting for 11 (18.9 per cent) of the state's total FSI incidents. These 11 incidents resulted in five fatalities and seven serious injuries representing 50 per cent and 12 per cent respectively of the total fatalities and serious injuries recorded in Queensland in 2002. The region is also over-represented with fatalities and serious injuries when compared with the region's 2001 fatality and serious injury results.

The 2002 fatality outcome of five fatalities represents an increase of some 150 per cent over the two fatalities recorded in 2001 and a 233 per cent over-representation when compared with the previous four-year fatality average of 1.50 for the region.

There were a number of attributes that stand out in terms of their involvement in the Cairns region's 11 FSI incidents in 2002. Daytime, clear weather and good visibility each featured in more than 50 per cent of the 11 FSI incidents. However, the most frequently occurring attribute of the region's 11 FSI incidents was 'offshore' location. Seven of the incidents occurred in offshore waters compared with two in 2001 and a previous regional four-year average involvement of 2.75 FSI incidents in offshore waters.

Another significant attribute in the region's FSI incidents was the involvement of commercial fishing vessels. Five of



the 11 FSI incidents involved these types of vessels compared with a previous regional four-year average involvement of 1.75. Three fatalities resulted from these commercial fishing vessel incidents and three vessels were totally lost.

Recreational sailing vessels were also over-represented with two vessels involved in the region's 11 FSI incidents in 2002. These two incidents resulted in one fatality and the total loss of both vessels. There were no recorded FSI incidents involving recreational sailing vessels in the Cairns region for the period 1997 to 2001.

### 3.6 Marine incidents in the Gold Coast region

The Gold Coast region is the fastest growing region in Queensland in terms of boating activity and exposure. In 2002, the region experienced growth in registered recreational vessel numbers of 9.55 per cent compared with statewide growth of 6.02 per cent. The region's commercial vessel numbers also increased by 4.95 per cent compared with statewide growth of 2.47 per cent. At 31 December 2002, the region's registered vessels represented 12.86% of the state registered vessel fleet. Table 32 in Appendix 1 provides data on the region's increasing proportion of the state's registered vessel fleet.

#### Recreational speedboat fatality incident

**The vessel:** 5.3m half cabin recreational speedboat

**The incident:** The speedboat was occupied by three unlicensed persons towing a skier in smooth waters in fine weather and good conditions. The female operator of the vessel lost control and the vessel hit a mangrove at the water's edge. A female passenger suffered fatal injuries, the operator suffered spinal injuries and the male passenger suffered a broken leg. The three occupants were airlifted to hospital. The male skier was not injured.

**The outcome:** One person died in the incident and a further two persons were hospitalised with serious injuries. The vessel suffered extensive damage. While the matter is still under investigation, it appears that operational error was a major contributing factor.

Against this backdrop and the concentration of boating activity in a relatively small and densely populated geographic area, the region's overall marine incident performance has remained relatively stable. There were 77 marine incidents reported in 2002 compared to 75 in 2001 and an annual regional average of 74 incidents. The 77 reported incidents represent 12.24 per cent of the total marine incidents reported in Queensland. In terms of exposure based on regional registered vessel numbers, the region is slightly under-represented in its reported marine incidents.

Collisions between vessels continue to be a source of concern in the Gold Coast region with 21 incidents involving collisions between vessels in 2002. This represents more than 27 per cent of the region's total reported marine incidents compared with the 18 per cent of incidents statewide that involved collisions between vessels.

With 14 FSI incidents in 2002, representing 24.14% of the total FSI incidents in Queensland, the Gold Coast region is over-represented. These 14 incidents compare with ten FSI incidents in 2001 and an annual average of 12 FSI incidents.



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The 14 FSI incidents in 2002 resulted in two fatalities (compared with an annual average of one fatality) and 19 serious injuries (compared with an annual regional average of 11.50 serious injuries). Collisions between vessels were again the most frequently occurring FSI incident type with four incidents involving eight vessels in 2002.

Looking at the types of vessels involved, there were seven recreational speedboats and five commercial speedboats involved in FSI incidents in the Gold Coast region in 2002. Two recreational speedboat incidents resulted in two fatalities and two serious injuries. Both of these incidents involved collisions—one with another vessel and the other with a fixed object. Both recreational speedboats (7) and commercial speedboats (5) were significantly over-represented when compared with their annual average involvement in 1.50 and 0.75 incidents respectively.

The most frequently occurring attributes of the region's 2002 FSI incidents related to ambient conditions including clear weather, good visibility and the daytime period. These factors were each involved in more than 71 per cent of the region's 14 FSI incidents.

