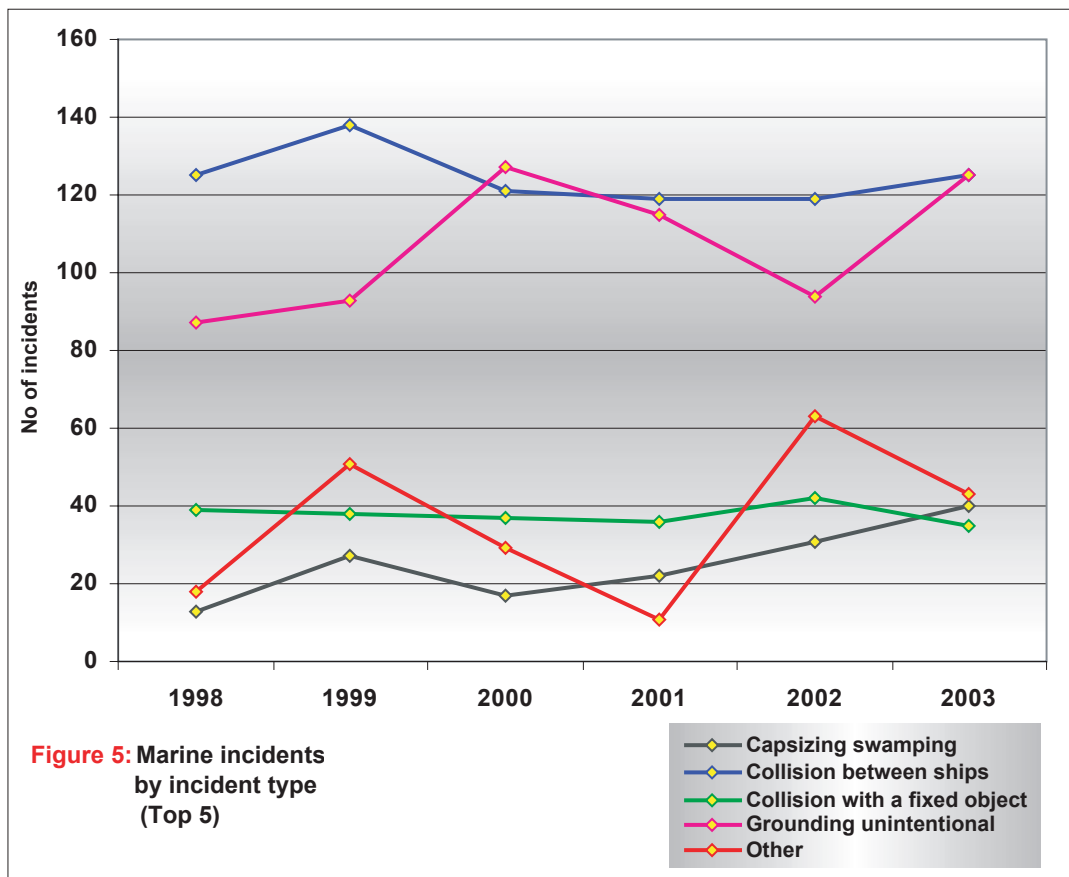


2.2.5 Marine incidents by incident type

Figure 5 shows the trends for the five most frequently occurring types of marine incident reported in 2003. These five incident types accounted for 368 of the 645 recorded incidents in 2003.

Three of the top 5 incident types have shown increases in involvement in 2003.

The most frequent marine incident types in 2003 were 'collision between ships' and 'unintentional groundings', with 125 such reported incidents for each incident type. While 'collisions between ships' are in line with their previous four-year average of 124.25 reported marine incidents, 'unintentional groundings' are over-represented when compared with the 94 reported in 2002 and their previous four-year average of 107.25.



2.2.6 Marine incidents by vessel type

Figure 6 shows the five vessel types that figured most frequently in reported marine incidents in Queensland in 2003 and their comparative representation since 1998. With the exception of commercial fishing vessels, the remaining four of the top five vessels have shown increases in involvement in marine incidents in 2003.

Commercial passenger vessels (162) are significantly over-represented when compared with their involvement in both 2002 (137) and their previous four-year average involvement in 134 marine incidents. The involvement of commercial non-passenger vessels in marine incidents in 2003 (93) has jumped significantly when compared with the 69 vessels involved in incidents in 2002 and their previous four-year average involvement in only 44.75 marine incidents.

In terms of recreational vessel involvement, both recreational sailboats and recreational motorboats are significantly over-represented when compared with their involvement in incidents in 2002 and their previous four-year average involvement in marine incidents. It is worth noting that the majority of vessels falling into these two recreational vessel categories do not presently require operators to be licensed.

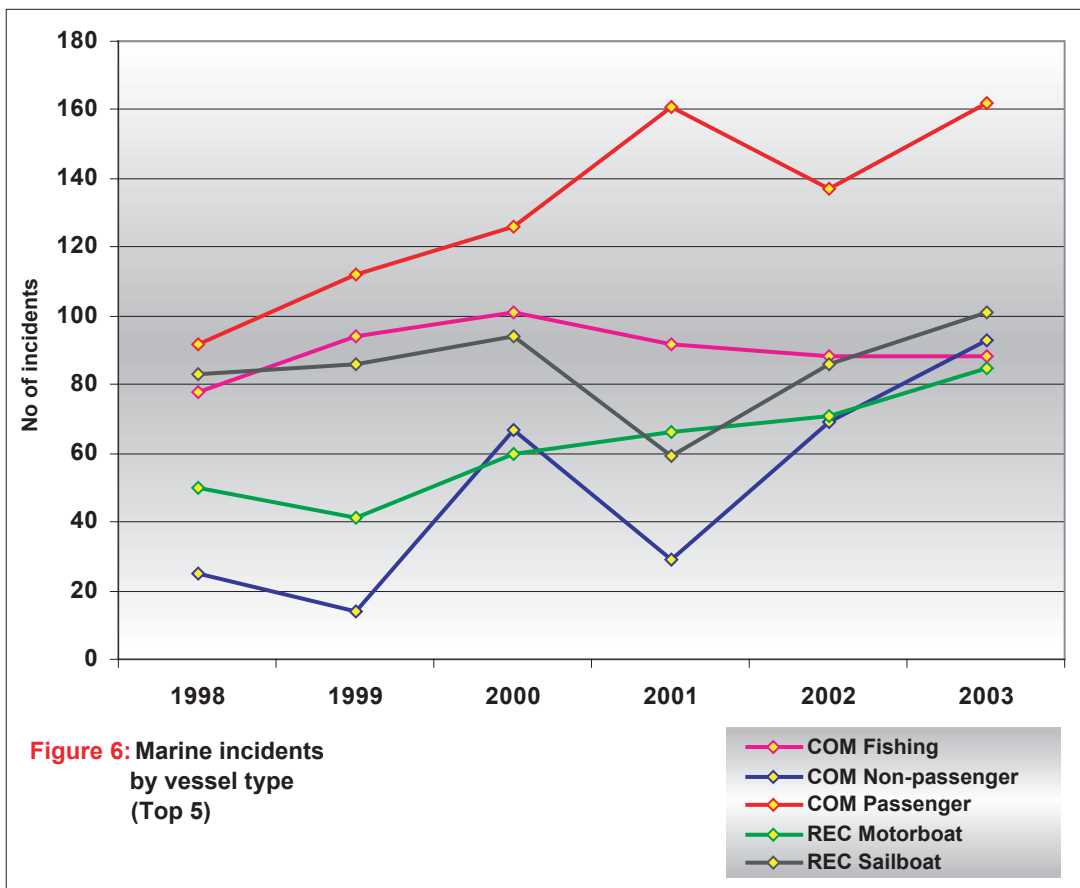
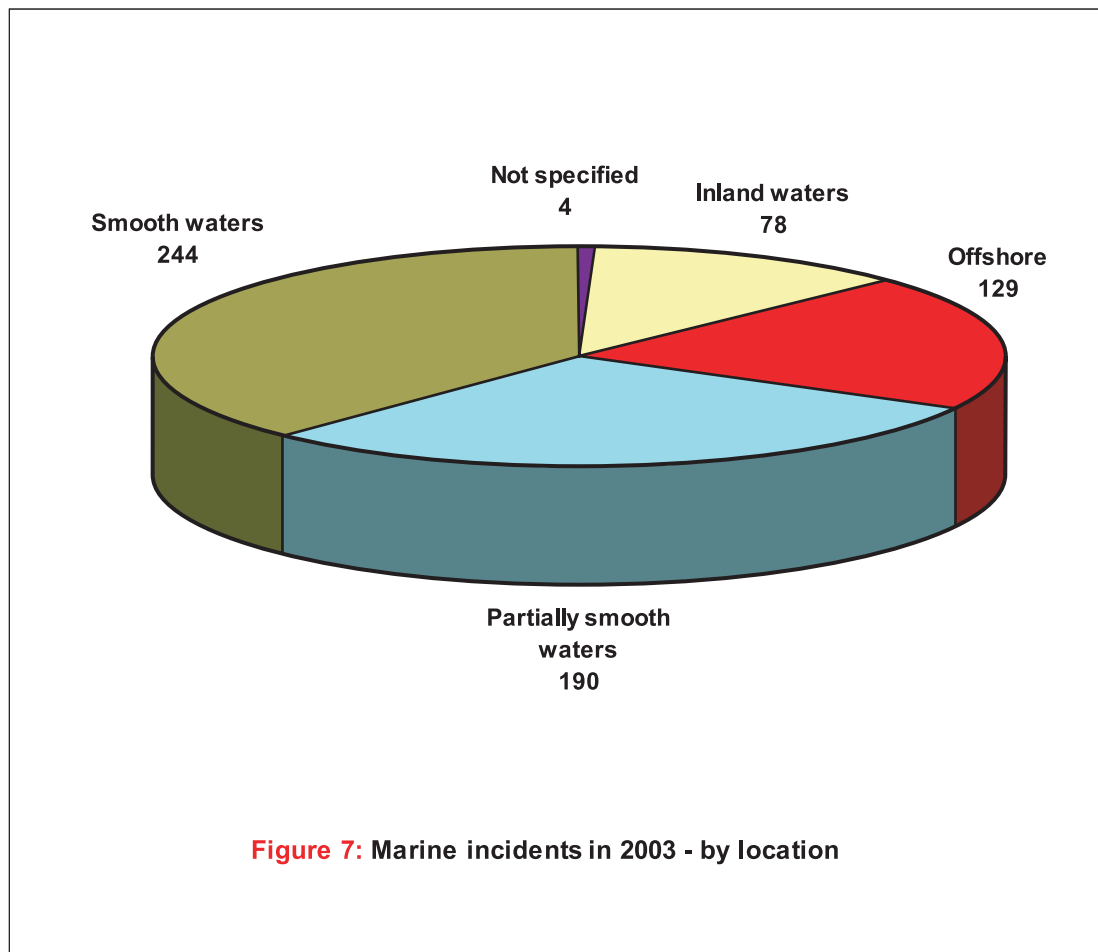


Figure 6: Marine incidents by vessel type (Top 5)

- ◆ COM Fishing
- ◆ COM Non-passenger
- ◆ COM Passenger
- ◆ REC Motorboat
- ◆ REC Sailboat

2.2.7 Marine incidents by location

563 of the 645 reported marine incidents in 2003 occurred in smooth, partially smooth and offshore waters, with all three locations showing increases compared with their previous four-year average involvement. Incidents occurring in inland waters (78) fell in 2003, from 101 in 2002 and a previous four-year average of 110.25 reported incidents. This could in part be due to more rigorous location definition of incidents occurring in non-tidal streams and catchments. It could also be attributable to reduced boating activity on inland waters as a result of extreme drought conditions. Figure 7 shows the location of reported marine incidents in 2003.



The location descriptors used for recording marine incidents in Queensland are defined below:

- Inland waters – any navigable water that is not tidal, for example, non-tidal rivers, creeks, lakes and dams
- Smooth waters – any enclosed navigable tidal water other than waters defined by legislation as partially smooth waters, for example, tidal creeks, rivers, estuaries, harbours and bays
- Partially smooth waters – open stretches of water defined by legislation as partially smooth waters where wave heights under normal conditions do not exceed 1.5 metres, for example, open sections of Moreton and Hervey Bays
- Offshore waters – those waters that are beyond smooth and partially smooth waters including exposed coastal waters.

2.3 Queensland marine fatality trends

Figure 8 shows Queensland's maritime fatalities per million of population and per 100,000 registered vessels. In the absence of more definitive exposure data, these represent two surrogate but objective measures of exposure for maritime fatalities. Fatalities relative to both vessels on register and total population continue to trend downwards.

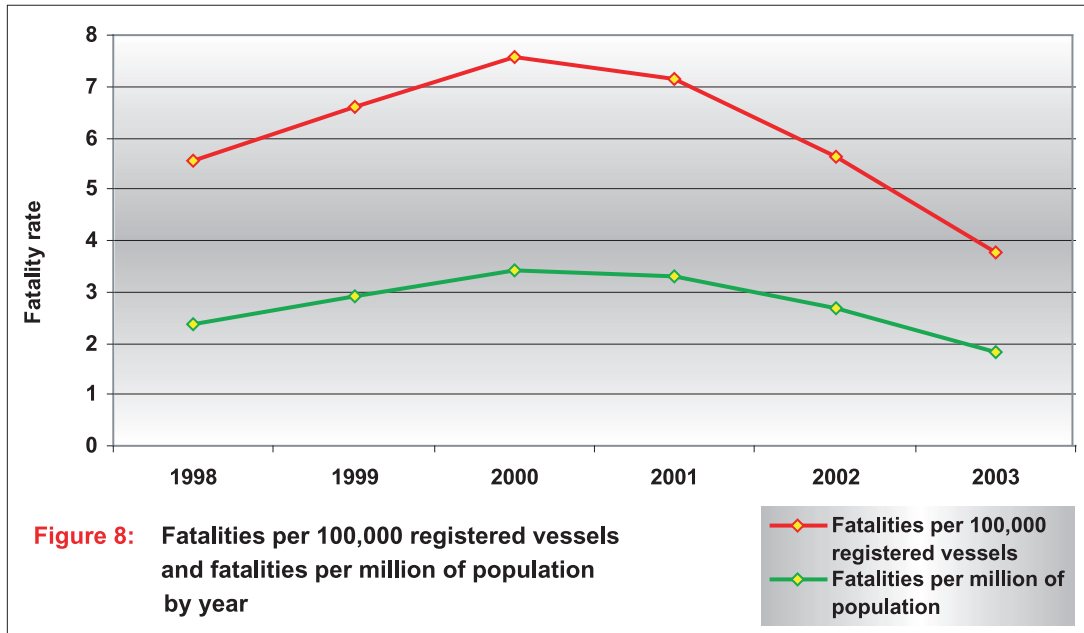
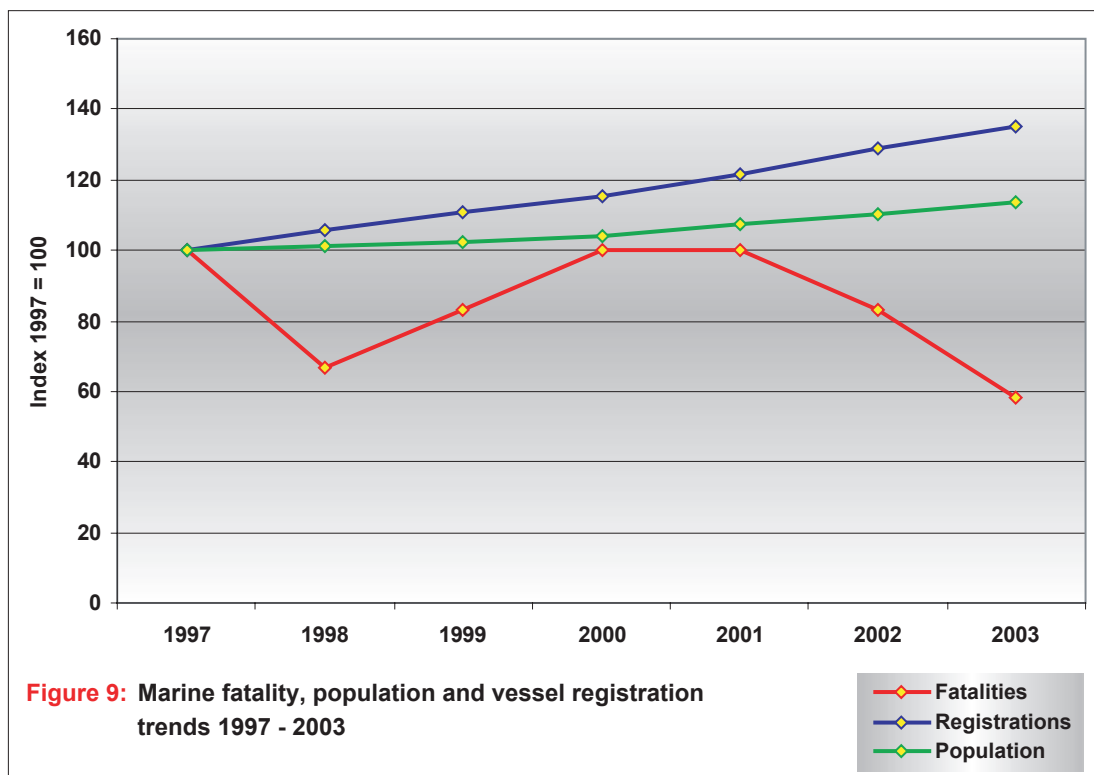


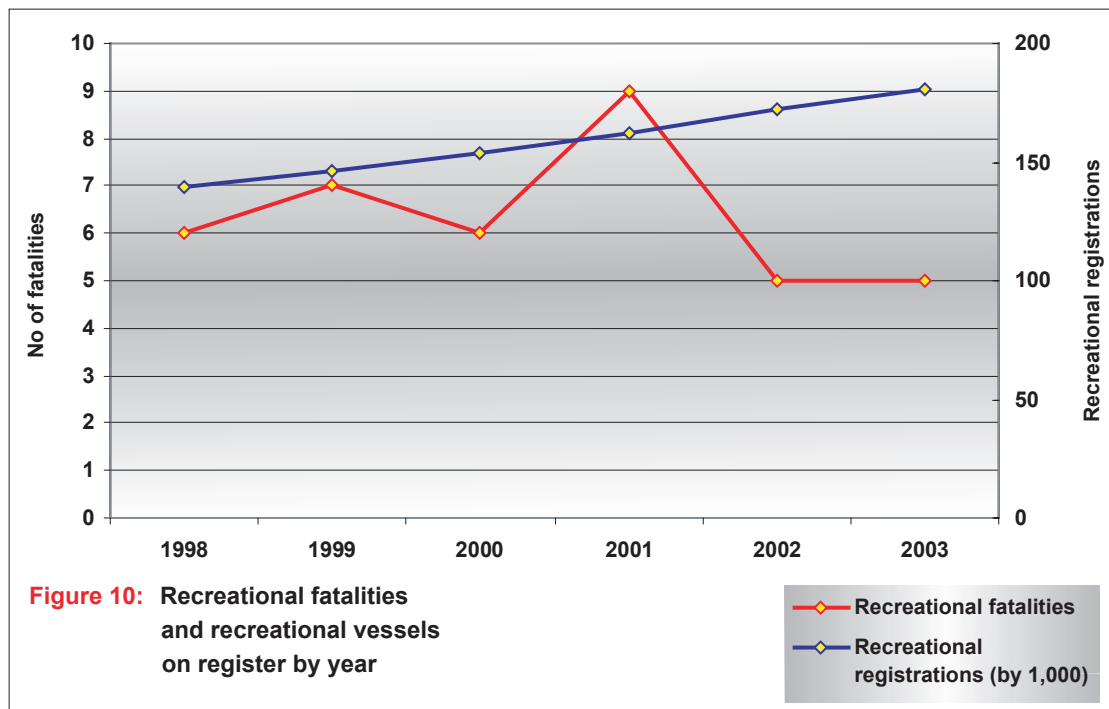
Figure 9 compares trends in Queensland marine fatalities with both vessel registrations and population since 1997 (index 1997 = 100). Fatalities in 2003 are 41.6 per cent lower than in 1997. Over the same period, Queensland's vessel registration numbers have grown by more than 35 per cent and its population has increased by more than 13.7 per cent.



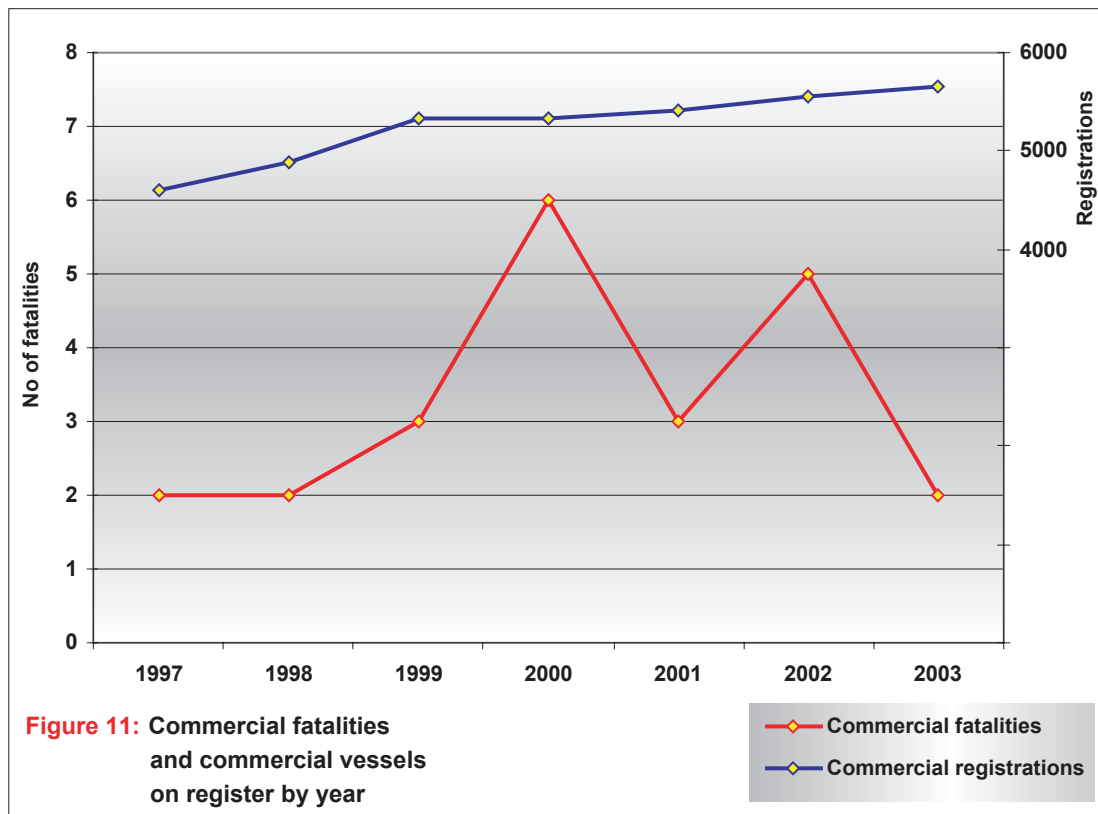
2.3.1 Marine fatalities by vessel type

In Figures 10 and 11, marine incident fatality figures are broken down according to the two major vessel registration categories—recreational and commercial.

Figure 10 shows that five fatalities resulted from marine incidents involving recreational vessels in 2003. Recreational fatalities in 2003 are marginally below the previous four-year average of 5.25 fatalities per annum. This compares with growth in registered recreational vessel numbers in 2003 of nearly five per cent and 30 per cent over the period 1998 to 2003. The number of fatalities per registered recreational vessel continues to fall, despite both increasing numbers of recreational vessels on the waters and apparent increasing levels of recreational boating activity.



The growth trend in the number of commercially registered vessels is shown in Figure 11. There has been an increase in the number of commercially registered vessels of approximately 16 per cent over the period 1998 to 2003. Figure 11 shows there were two fatalities resulting from marine incidents involving commercial vessels in 2003. This represents a 60 per cent fall from 2002 and is well below the average of 4.25 fatalities per year for the previous four-year period.



2.3.2 Out-of-scope marine fatalities

For a number of years Maritime Safety Queensland has captured data on incidents which occur in the maritime environment but are outside the scope of marine incidents as defined in the Act. They include fatality incidents where the death is attributable to natural causes, where the incidents fall directly within the scope of Queensland workplace health and safety or other Commonwealth legislation, or where the incident is not clearly connected with or attributable to the operation of a vessel.

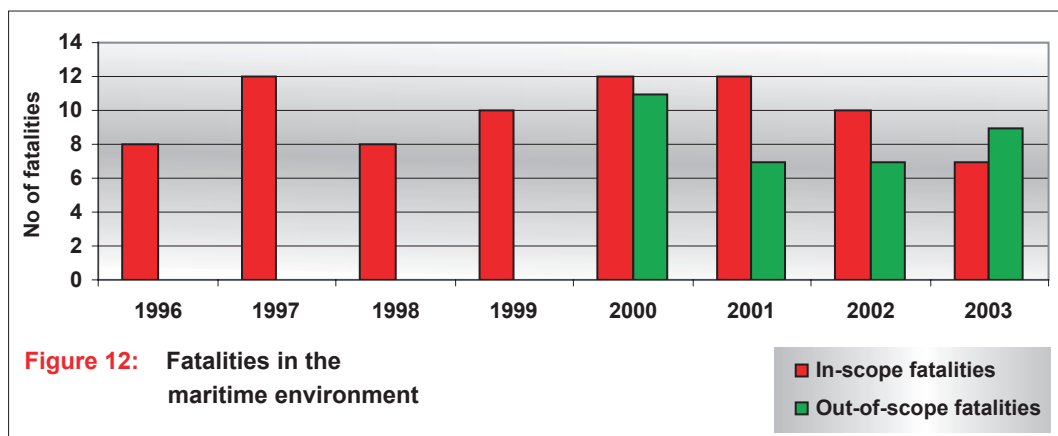
As part of its marine incident case management system, Maritime Safety Queensland monitors these incidents to ensure that any necessary remedial action, which may include legislative changes, is taken. The data also enables the presentation of a fuller picture of safety in the maritime environment.

Figure 12 shows the number of fatalities resulting from both in-scope and out-of-scope incidents in the maritime environment for the period 2000 to 2003. Queensland’s combined maritime fatalities, including out-of-scope fatalities, were 23 in 2000, 19 in 2001, 17 in 2002 and 16 in 2003.

The 2003 fatalities classified as out-of-scope included:

- four men who died while snorkelling—two were from commercial dive boats
- a woman who was found dead while participating in an introductory dive course
- a man who suffered a seizure and fell from his boat and drowned
- a passenger from a charter vessel who died while attempting to swim ashore

Out-of-scope maritime fatality data was not recorded before 2000.



2.4 Fatal and serious marine incidents in Queensland

The following sections examine marine incidents resulting in fatalities and serious injuries (FSI incidents).

2.4.1 Reported fatal and serious injury incidents

In 2003, Maritime Safety Queensland received reports of 28 FSI incidents—34 less than in 2002. This outcome is significantly below the previous four-year average of 65 FSI incidents per year. Part of the fall in FSI incident numbers in 2003 can be attributed to rigorous application of the ‘hospitalisation’ criterion outlined earlier in section 1.2.

Despite the significant fall in FSI incident numbers in 2003, Maritime Safety Queensland acknowledges that there is likely to be an indeterminate level of under-reporting of non-fatal marine incidents. Recent independent studies of hospital admissions data by Flinders and Monash Universities suggest a higher level of serious injuries from ‘water transport’ accidents than is reflected in Maritime Safety Queensland’s reported marine incident data. Maritime Safety Queensland is examining options for monitoring Queensland hospital admissions data to more accurately determine the extent of serious injuries resulting from marine incidents.

There were seven fatalities resulting from marine incidents during 2003—three fewer than in 2002. This represents a 30 per cent fall from the number of fatalities recorded in 2002 and a 41.6 per cent fall from the number of fatalities recorded in both 2000 and 2001. Recorded fatalities in 2003 are also well below the previous four-year average of 11 fatalities per annum.

2.4.2 FSI incidents by region

Figure 13 shows the number of FSI incidents reported in each region during 2003.

All regions recorded falls in the number of reported FSI incidents in 2003 compared with their respective previous four-year average FSI incidents.

Brisbane region, with 7 reported FSI incidents in 2003, is significantly down on the region’s previous four-year average of 22.25 FSI incidents.

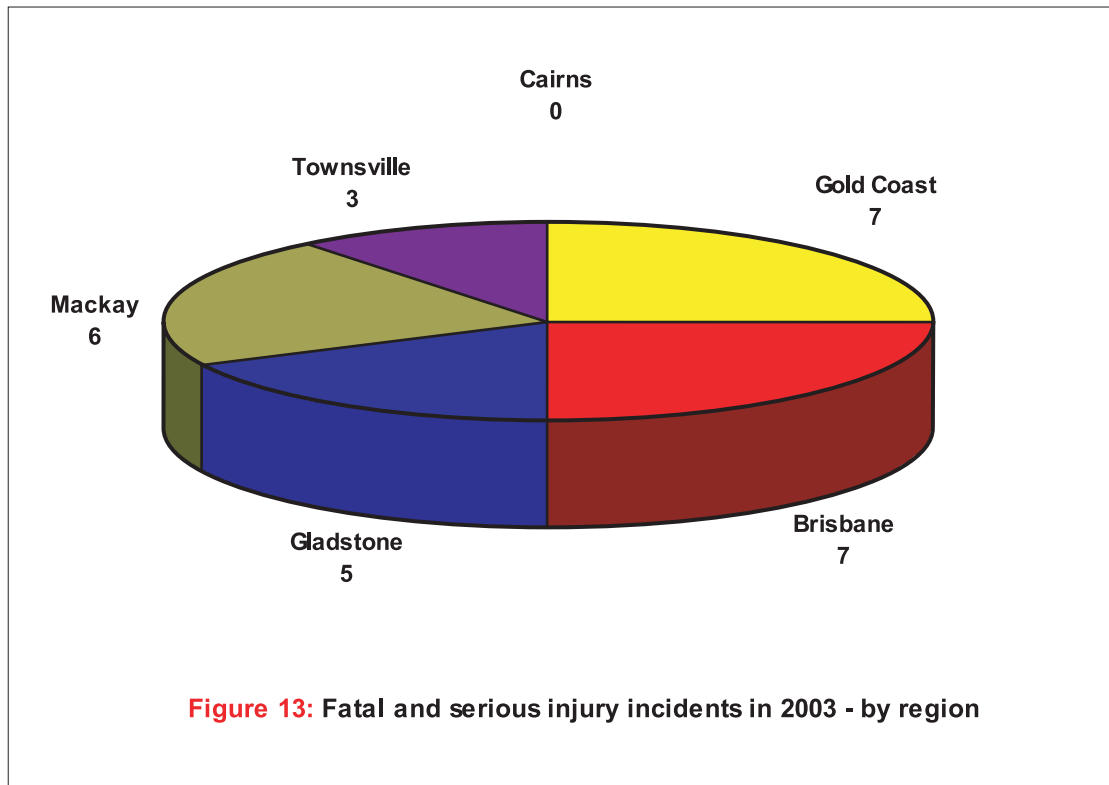
Cairns region did not have any reported FSI incidents in 2003. This is a significant improvement when compared with the 12 reported FSI incidents in 2002 and a previous four-year regional average of 7.5 FSI incidents.

Gladstone region has continued its recent downward trend in FSI incidents with only five FSI incidents in 2003, compared with a previous four-year regional average of 10.5 FSI incidents.

Likewise, Mackay region has continued its recent downward trend in FSI incidents with only six FSI incidents in 2003, compared with a previous four-year regional average of 10.25 FSI incidents.

Gold Coast region, after recording 14 FSI incidents in 2002, recorded only seven FSI incidents in 2003—below the region’s previous three-year average of 11.33 FSI incidents.

Townsville region recorded three FSI incidents in 2003, one more than in 2002, but still under-represented when compared with the region’s previous four-year regional average of 4.25 FSI incidents.



2.4.3 FSI incidents by incident type

Figure 14 shows the trends for the five most frequently-occurring types of marine incident that resulted in either fatalities or serious injuries. These five incident types accounted for 20 of the 28 recorded FSI incidents in 2003.

Four of the top 5 incident types have shown falls in involvement in 2003.

The most frequent FSI incident type in 2003 was ‘person overboard’, with six such incidents resulting in four fatalities and two serious injuries. While ‘person overboard’ incidents in 2003 are well down on 2002 (9) and their four-year average involvement (9.75), the outcome from these incidents is often severe—with many resulting in death.

FSI incidents involving ‘collisions between ships’ were down markedly from 10 in 2002 to three in 2003—well below their previous four-year average FSI incident involvement of 7.75.

The only ‘top 5’ FSI incident type to record an increase in involvement in 2003 was ‘personal injury – hit by propeller or ship’ with four such incidents recorded, up one on 2002 and above the previous four-year average involvement of 2.25.

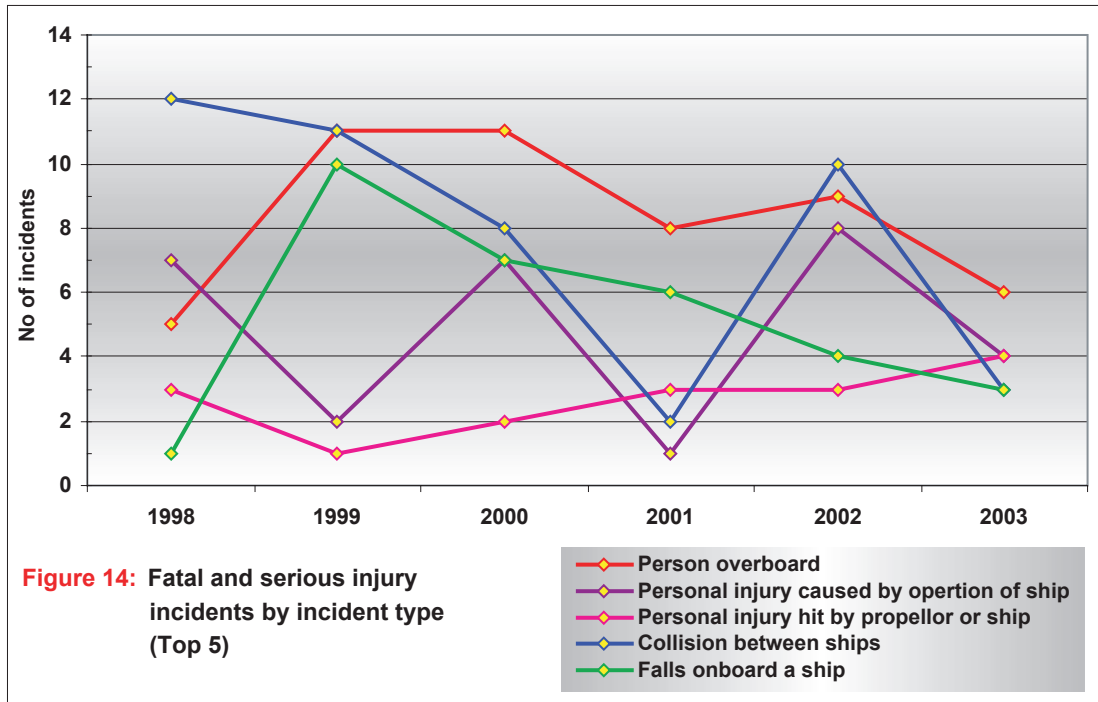


Figure 14: Fatal and serious injury incidents by incident type (Top 5)

2.4.4 FSI incidents by vessel type

Figure 15 shows the five vessel types that figured most frequently in FSI incidents in Queensland in 2003 and their comparative representation since 1998. Three of the vessel types have shown falls in FSI incident involvement in 2003—recreational speedboats, commercial fishing ships and other commercial ships.

Recreational speedboats and commercial fishing ships showed marked falls in involvement in 2003. Both vessel types are under-represented in 2003. The FSI incident involvement of recreational speedboats is down by some 35 per cent on involvement in 2002 and is under-represented compared with a previous four-year average involvement of 14.25. Incidents involving recreational jet skis are categorised separately, and are not included in recreational speedboat incident numbers. The FSI incident involvement of commercial fishing ships is down by 70 per cent on involvement in 2002 and is markedly under-represented compared with a previous four-year average involvement of eight.

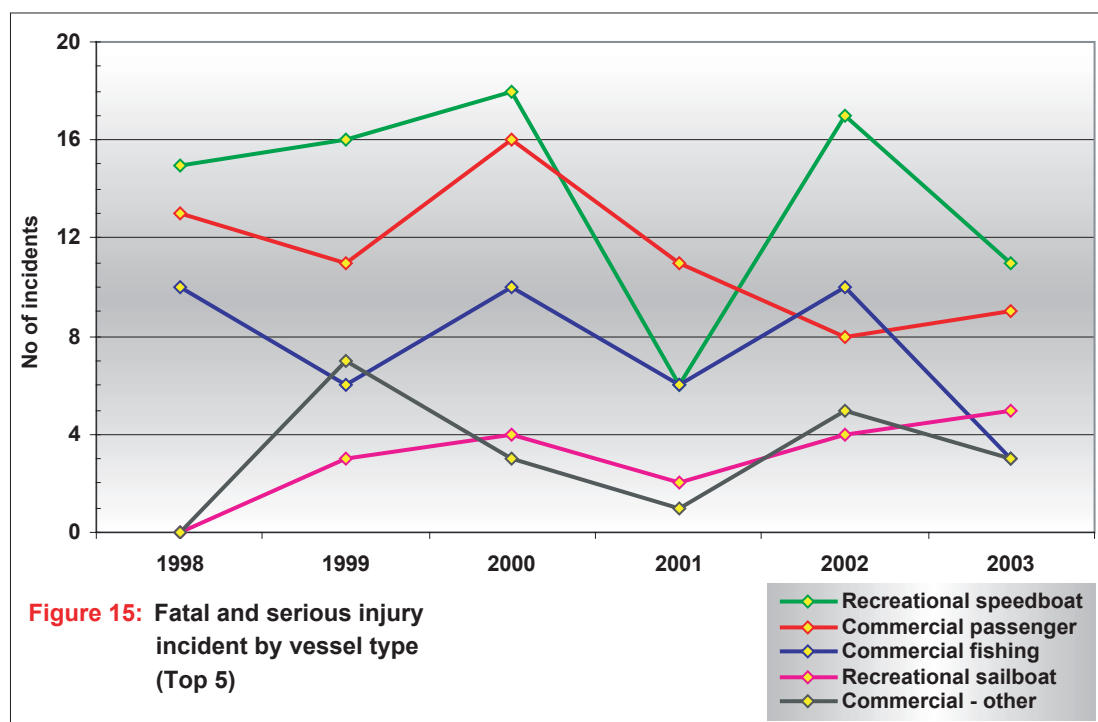
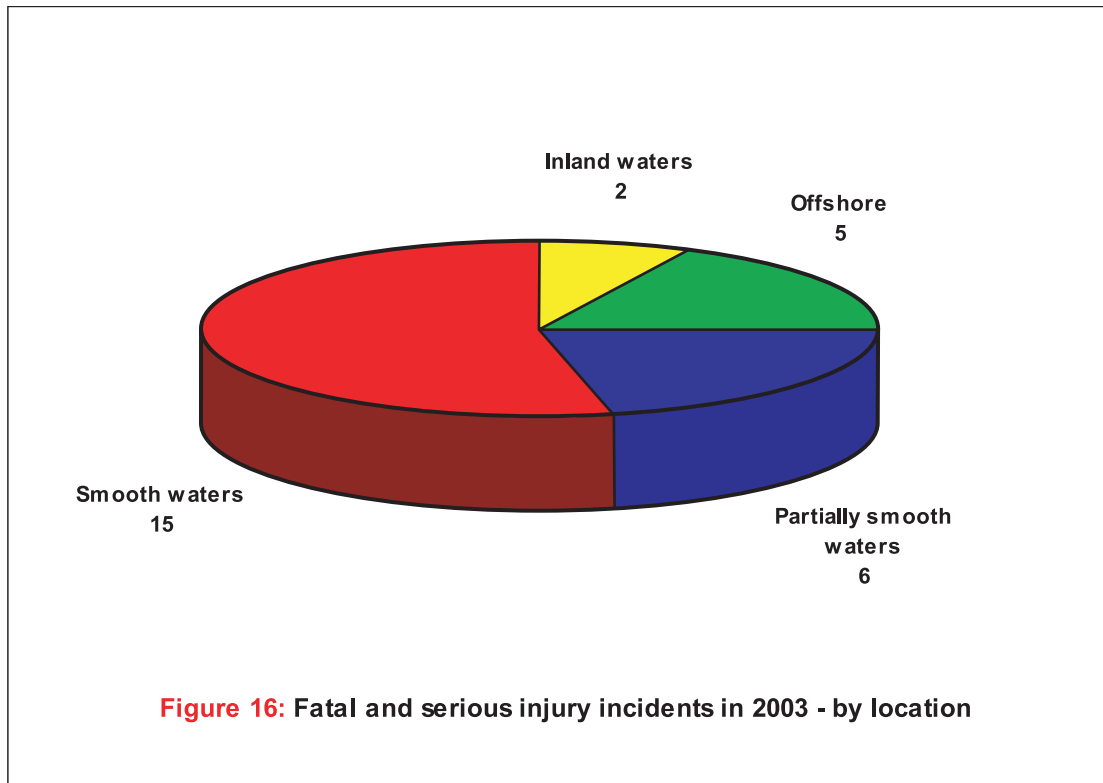


Figure 15: Fatal and serious injury incident by vessel type (Top 5)

2.4.5 FSI incidents by location

Fifteen (53.6 per cent) of the 28 reported FSI incidents in 2003 occurred in smooth waters. Only seven per cent of FSI incidents in 2003 occurred in inland waters, compared with more than 21 per cent inland water FSI incidents in 2002 and a previous four-year average of 23.7 per cent. This could be due in part to more rigorous location definition of incidents occurring in non-tidal streams and catchments. Figure 16 shows the location of reported FSI incidents in 2003.



2.4.6 FSI incidents—incident characteristics by extent of involvement

This section analyses FSI incidents in 2003 to determine the extent to which individual incident characteristics such as human contributing factors, weather conditions and vessel type were involved in these more serious incidents. The analysis, which focuses on the twenty-five most frequently occurring characteristics in FSI incidents, measures:

- the number of times each characteristic was reported or identified during investigation as being involved in a FSI incident, and
- changes in the extent of involvement of these characteristics in 2003 compared with their average rate of involvement in FSI incidents in the previous four-year period

Figure 17 shows the extent of involvement in 2003 for the ‘top 25’ incident characteristics together with their average rate of involvement over the previous four-year period. With significantly fewer reported FSI incidents in 2003, the majority of the top 25 most frequently occurring attributes are well under-represented when compared with their previous four-year average involvement. The exception is the ‘Other personal injury—hit by propellor or ship’ category. While there were only four such incidents resulting in either a fatality or a serious injury in 2003, they are over-represented when compared with their previous four-year average involvement in 2.25 FSI incidents.

As has been the case in recent years, the three most frequently occurring attributes of FSI incidents in 2003 related to ambient conditions including clear weather, good visibility and the daytime period. These factors were each involved in approximately 70 per cent of the 28 FSI incidents in 2003.

Nineteen of the 28 incidents involving fatality or serious injury in 2003 did not involve any physical damage to the vessels involved, or damage to other property.

The next most frequently occurring attribute of FSI incidents in 2003 was the ‘smooth water’ location. While the proportion of FSI incidents occurring in smooth waters has fallen relative to both 2002 and the previous four-year average proportionate involvement, more than 53 per cent of FSI incidents occurred in smooth waters. When combined with the fact that approximately 70 per cent of FSI incidents occurred in clear weather, good visibility and daylight hours, it begs the question ‘why are so many serious incidents occurring in otherwise ideal boating conditions?’ This question may be answered in part by the fact that these are the times and conditions when most boats are on the water and also by the fact that human operational error was identified as contributing to some 40 per cent of FSI incidents in 2003. In 2002, human operational error was identified as contributing to more than 46 per cent of FSI incidents.

Recreational speedboats were the most frequently involved vessel type in FSI incidents in 2003. Eleven recreational speedboats were involved in the 28 FSI incidents reported in 2003—up more than 10 per cent on their proportionate 2002 involvement. It is noteworthy that recreational speedboats were the sixth most frequently involved vessel in all reported marine incidents in 2003. This suggests that when recreational speedboats are involved in marine incidents the outcome is likely to be more severe. The involvement of recreational vessels in marine incidents is examined in more detail later in this report.

The most frequently occurring FSI incident type in 2003 was ‘person overboard’. Six such incidents were recorded. These six incidents represent 21.5 per cent of all FSI incidents in 2003. This compares with a 15 per cent rate of involvement in FSI incidents in 2002. Less than three per cent of all reported marine incidents in 2003 were ‘person overboard’ incidents, indicating that when this type of incident occurs, the outcome is likely to be severe—resulting in death or serious injury.

Figure 17: Characteristics ranked by size of involvement in marine incidents resulting in fatalities and serious injuries - Queensland

