2. Marine incident trends

2.1 Australian marine fatality trends

To provide the broadest initial view of Queensland's relative maritime safety performance, the 2004 review commences with a comparison of Queensland's maritime fatality involvement per million of population with that of other Australian states and territories—based on Australian Bureau of Statistics (ABS) coroners' report data. While the ABS scope and definitions of water transport-related deaths may vary slightly from those used by Maritime Safety Queensland for fatal marine incidents, the ABS data nonetheless allows a nationwide comparison from a common point of reference. For example, the ABS data may include water transport deaths that do not meet the 'marine incident' definition which relates specifically to the operation of a vessel. ABS data also is based on the year that coroners' reports are registered, rather than the year in which an incident may have occurred, therefore making reconciliation of fatality numbers impossible.

The ABS data nonetheless resolves issues of comparability between individual jurisdictions' maritime incident data collections and definitions. Figure 1 shows that over the past 25 years, all states and territories in Australia have shown a marked improvement in maritime fatality rates per million of population. Table 1 at Appendix 1 provides comparative interstate water transport death rates for the period 1976 to 2003.

During the period 1994 to 1999, the data shows that the Queensland maritime fatality rate per capita exhibited both an absolute and a relative decrease compared with other jurisdictions. From ranking sixth of the eight jurisdictions in the 1990-94 period, Queensland's ranking improved to fourth over the period 1995-99. Queensland ranked second in Australia with a maritime fatality rate of 1.78 per one million of population for the period 2000 to 2003. This represents a fall of more than 31 per cent over the previous five-year average of 2.59 fatalities per million of population. Comparatively, the maritime fatality rate per million of population for all of Australia for 2000 to 2003 was 2.05. Coronial data for the 2004 calendar year was not available from the ABS at the time of printing this report.

Figure 1

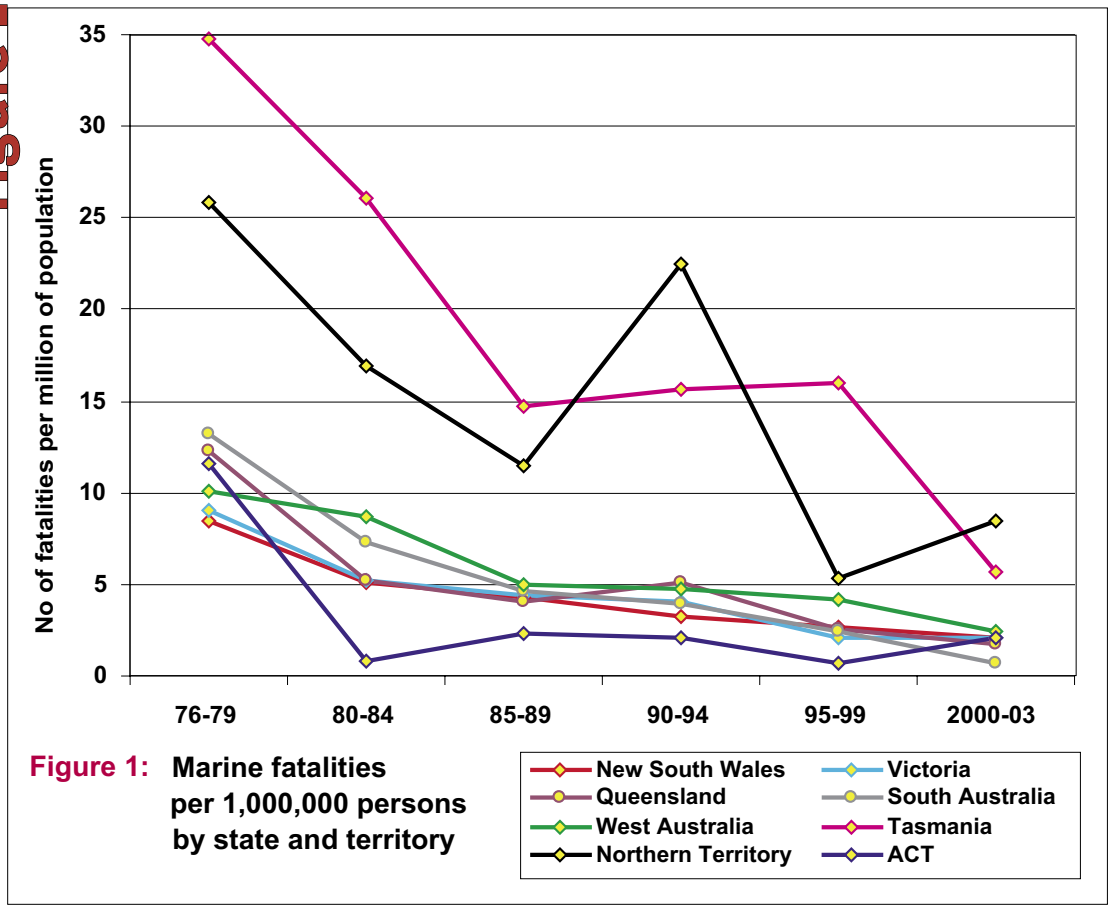


Figure 1: **Marine fatalities per 1,000,000 persons by state and territory**

Over the last three decades numerous marine safety initiatives have been introduced at both the national and state levels, including:

- Compulsory boating safety equipment (1976)
- Introduction of annual recreational boating safety education campaigns (1978)
- Formal training courses for commercial marine licensing (1980)
- Voluntary training courses for recreational boating (1985)
- On-water random breath testing (1989)
- Introduction of electronic positioning radio beacons (EPIRBs) (1992)
- Introduction of formal recreational boat licence training option (1993)
- Positive flotation for vessels (1996)
- Introduction of boating weather service (1998)
- Introduction of on-water speed detection devices (1999)
- Know, Know, Know Your Boat education campaign (2000)
- Boat Smart education campaign (2003-2004)
- Introduction of BoatSafe recreational boat licence training and assessment scheme (2004)
- Commencement of major commercial boating industry 'safety culture' program (2004)
- Torres Strait Boating and Alcohol Program (2004)

A number of specific recreational boating safety initiatives are presently being implemented in Queensland. These include:

- Extended recreational boat licensing requirements for displacement hull vessels
- A jet ski management plan including the introduction of mandatory jet ski licensing requirements
- Full implementation of the BoatSafe training and assessment scheme for recreational boat licensing

Extended recreational boat licensing requirements for displacement hull vessels – Previously the necessity to hold a recreational boat licence in Queensland depended on several factors relating to the vessel being operated, including the power of the vessel, the vessel's top speed and the vessel's hull type. From 1 September 2005, a recreational boat licence will be required to operate a vessel powered by an engine of greater than 4.5 kW (6 horsepower), regardless of the top speed of the vessel or its hull type. This new regulation means that many displacement hull vessels such as motor cruisers and larger sailing vessels will now require a licensed operator.

Jet ski management plan including the introduction of mandatory jet ski licensing requirements – Following a major review of jet ski operations in Queensland in 2004 and in recognition of the increasing involvement of jet skis in marine incidents, the government in late 2004 announced the implementation of a jet ski management plan. The plan includes a range of initiatives aimed at addressing and improving jet ski safety, noise and amenity concerns. From a safety perspective, mandatory jet ski licensing requirements will become effective from 1 January 2006, with a six month transition period commencing on 1 July 2005.

Full implementation of the BoatSafe training and assessment scheme for recreational boat licensing – A new competency-based training and assessment scheme for recreational boat licensing in Queensland was introduced on 1 July 2004. By 30 June 2005 the new scheme will completely supersede existing recreational boat licence training and testing arrangements. From 1 July 2005 all recreational boat licence applicants will need to formally demonstrate their boating competence by undertaking a full competency-based training and assessment program or seeking formal recognition of prior learning (RPL) through an approved BoatSafe training organisation. The BoatSafe scheme will also incorporate a mandatory jet ski training and assessment module to accommodate the earlier mentioned jet ski licensing requirements from 1 January 2006.

2.2 Marine incidents in Queensland

2.2.1 Introduction

The analyses included in this report draw on data from 'reported' marine incidents. While the overall level of reporting of marine incidents is considered robust, there is an acknowledged indeterminate level of underreporting of marine incidents in any given year. Maritime Safety Queensland continues to look for ways to improve incident reporting levels and is presently liaising with the marine insurance industry to explore opportunities for leveraging off the marine insurance claims process to improve marine incident reporting. A comprehensive set of tables showing time-series trends for reported marine incidents from 1999 to 2004 is provided at Appendix 1.

When disaggregated, incidents numbers are often small and random variations can be large. For this reason, Maritime Safety Queensland generally assesses marine incident trends in terms of their rate of occurrence in the year under review compared with the average of the previous four years of data.

2.2.2 Reported marine incidents

In 2004, 618 marine incidents were reported in Queensland. This represents a decrease of 27 from the 645 incidents reported in 2003. The number of incidents reported in 2004 is marginally below the trend in recent years and the previous four-year average of reported marine incidents.

2.2.3 Marine incidents by severity

This section examines all reported marine incidents in Queensland. Incidents are analysed from two perspectives:

- The severity of resultant personal injury (Figure 2), and
- The severity of resultant property damage (Figure 3)

Figure 2 shows that total reported marine incidents fell by a little over four per cent in 2004. The aggregate numbers of reported marine incidents in recent years suggest an annual baseline in the low-to-mid six-hundreds in terms of reported marine incidents. Analyses in subsequent years will continue to monitor this aspect.

Figure 2 also shows reported marine incidents according to the severity of the personal injury outcome. Incidents resulting in fatality have fallen from 12 in 2000 to 10 in 2004. This is in line with the previous four-year average of 9.25 fatality incidents per year. Reported serious injury incidents increased in 2004 to 33 compared with 21 in 2003, but still well below the previous four-year average of 46. This rise in 2004 can be attributed in part to increased vigilance in the reporting, capture and recording of information about marine incidents which involved serious injuries.

Figure 2

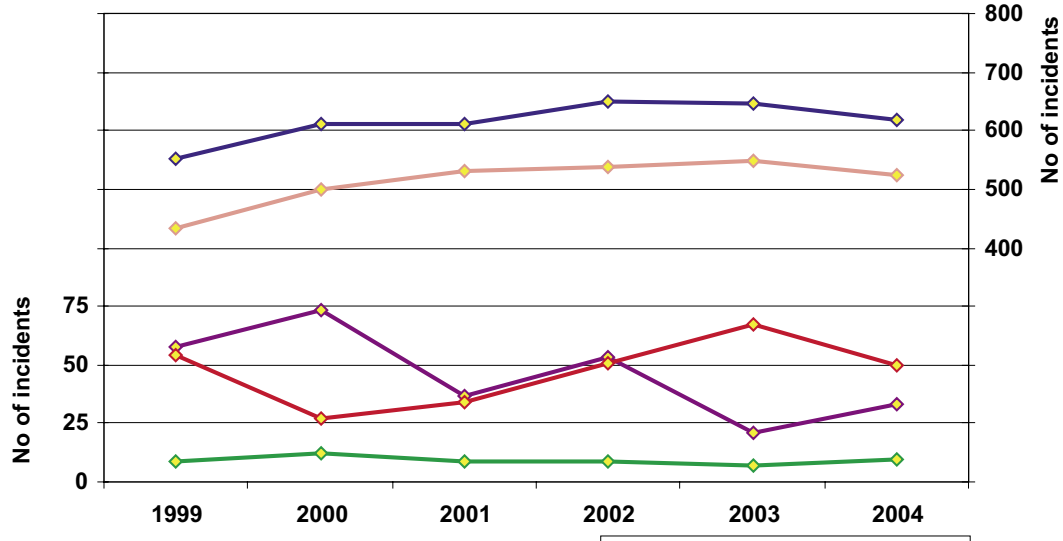


Figure 2: **Marine incidents by injury severity**

Incidents resulting in minor injuries have also been included in Figure 2. Minor injury incidents and the associated minor injuries appear to be generally consistent with recent trends – down on the number reported in 2003, but marginally up on the previous four-year average. The fall in the number of 'no injury' incidents has been offset by a rise in the number of serious injury incidents in 2004.

The second view of incident severity relates to property damage and loss. The various dimensions of property damage and their relative involvement in marine incidents between 1999 and 2004 are shown in Figure 3.

Figure 3

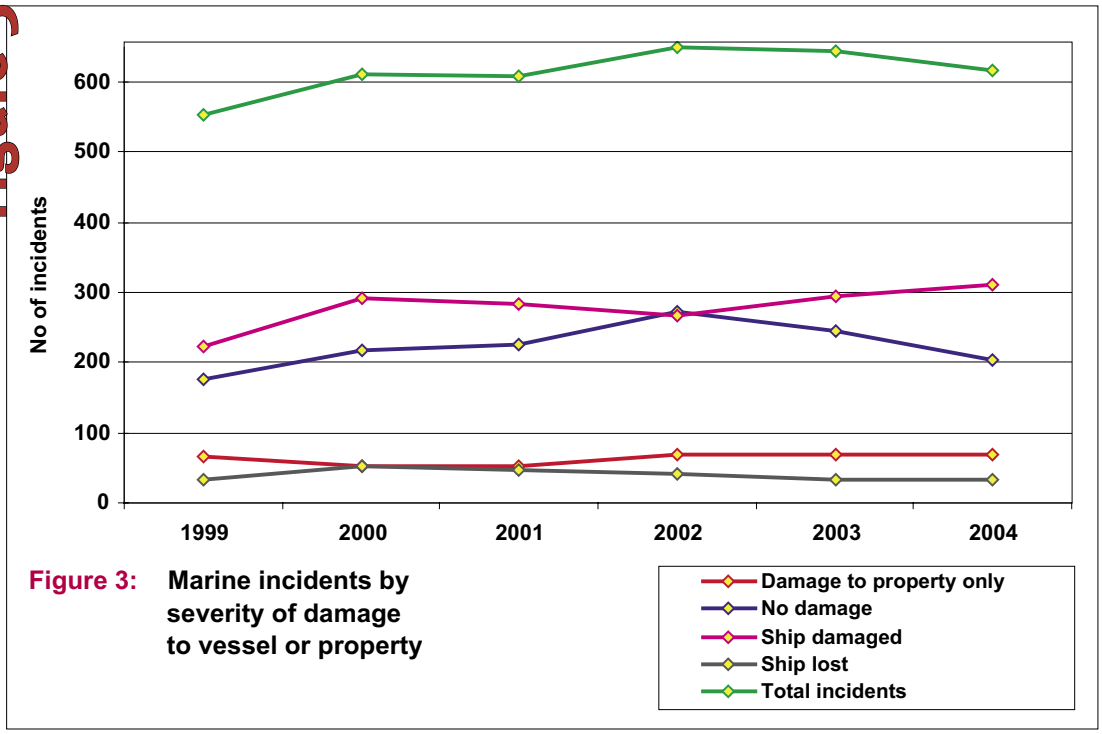


Figure 3: **Marine incidents by severity of damage to vessel or property**

The number of vessels deemed a total write-off/loss in terms of property damage (34) is up by one on the reported number of ships lost in 2003, but well below the previous four-year average of 42.75 ships lost per year. The number of ships damaged rose from 295 in 2003 to 309 in 2004, higher than the previous four-year average of 284.75. There was a corresponding fall in 2004 in the number of incidents where 'no damage' was reported.

2.2.4 Marine incidents by region

The Brisbane region recorded the greatest number of reported marine incidents (196) in 2004, while the Townsville region recorded the least number of reported incidents (44). Reported marine incidents in all regions are generally in line with their respective four-year averages. Figure 4 shows the number of reported marine incidents according to the region in which the incident occurred.

Map 1 shows spatially and by region where each of the reported marine incidents in 2004 occurred, together with the comparative numbers of commercially and recreationally registered ships for each region.

Figure 4

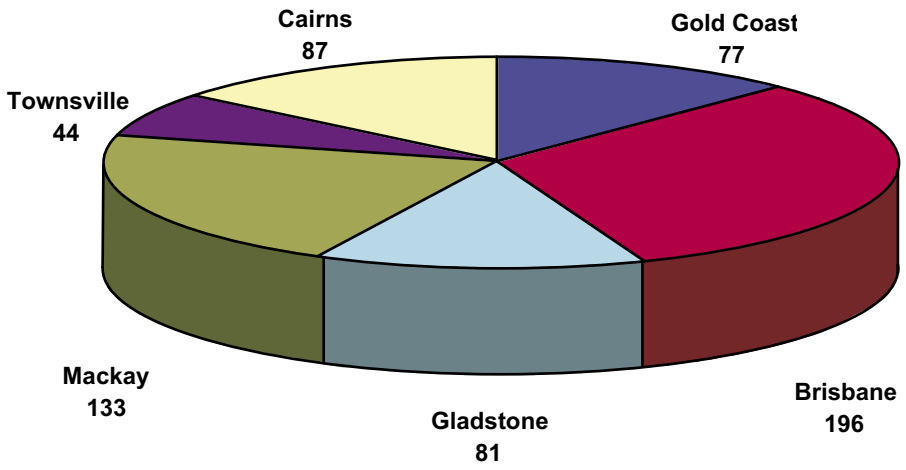
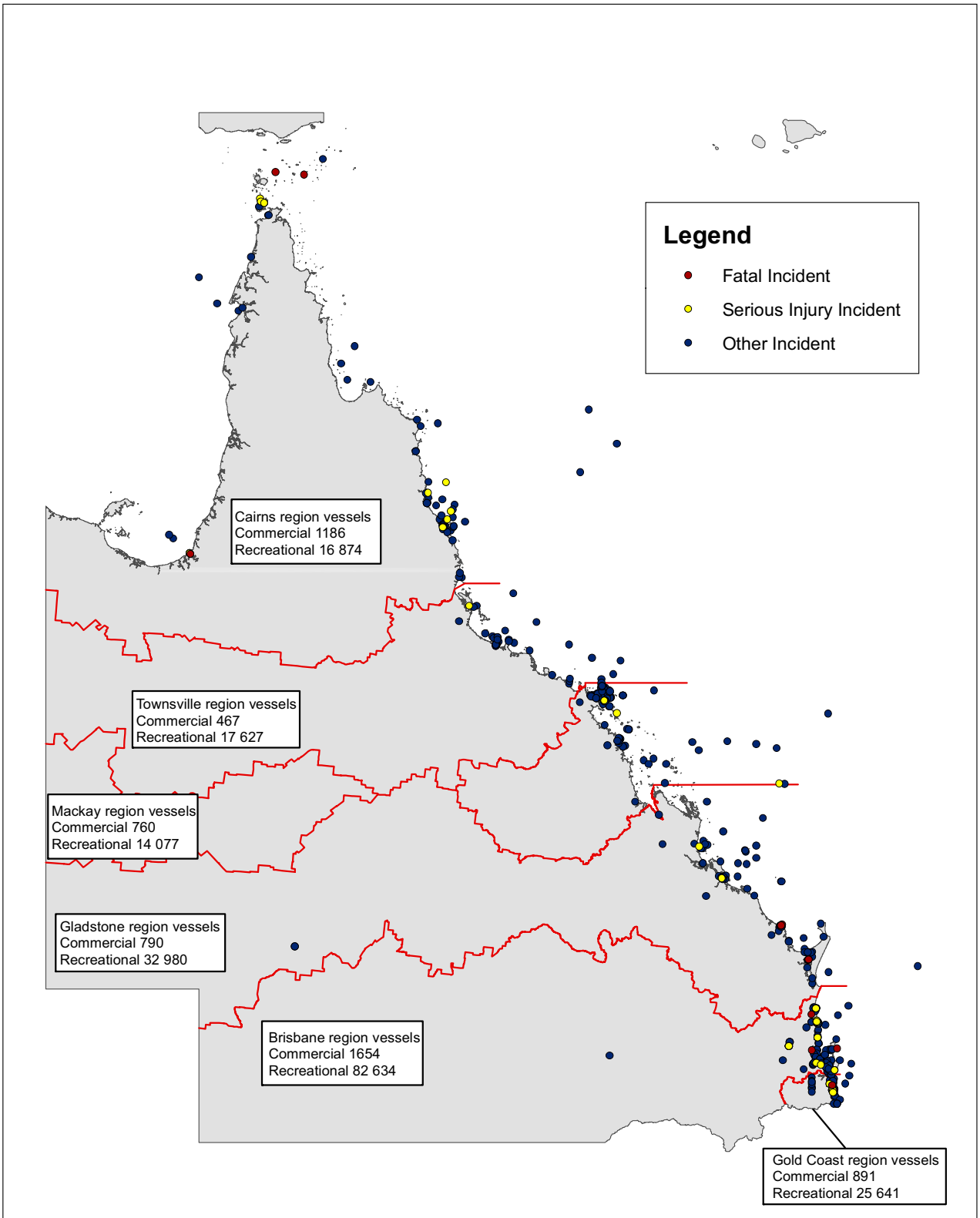


Figure 4: Marine incidents in 2004 - by region



Map 1: Marine incidents by incident type, Queensland 2004 including registered vessel numbers by region

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 2004. These five incident types accounted for 369 of the 618 recorded incidents in 2004.

Three of the top 5 incident types have shown increases in involvement in 2004.

The most frequent marine incident types in 2004 were 'collision between ships' and 'unintentional groundings', with 127 and 120 reported incidents respectively. 'Collisions between ships' are marginally over-represented in terms of their previous four-year average proportion of reported marine incidents. 'Unintentional groundings' are also marginally over-represented in reported marine incidents in 2004, despite a small decrease in the number of unintentional grounding incidents reported during the year.

Figure 5

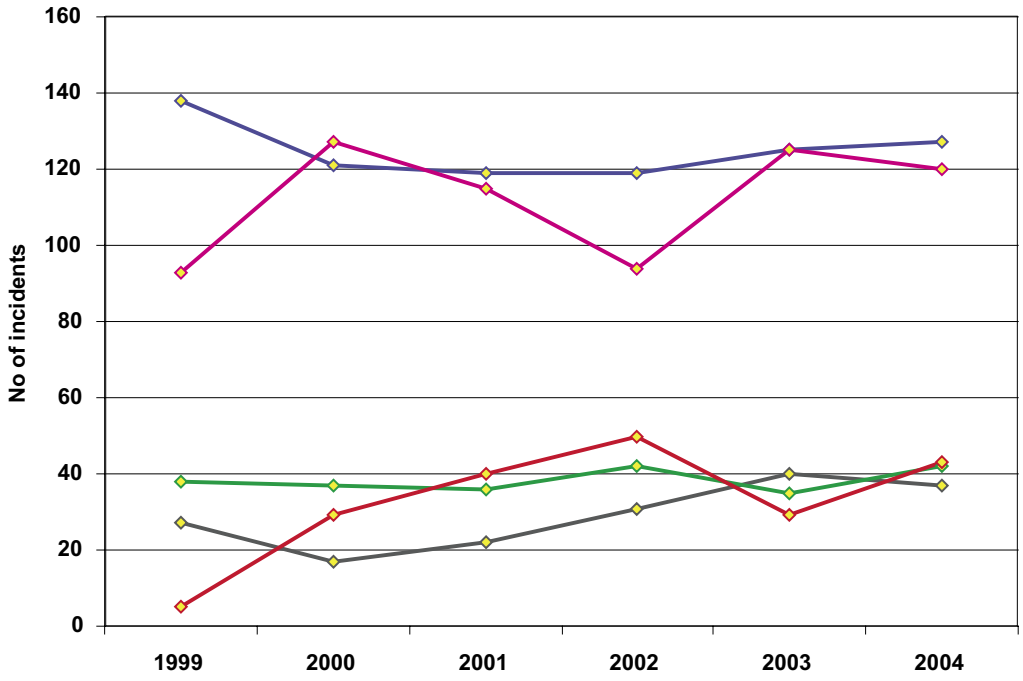


Figure 5: **Marine incidents by incident type (Top 5)**

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 2004 and their comparative representation since 1999. Four of the top five vessel types show decreases in their proportional involvement in marine incidents in 2004 compared to 2003.

Commercial passenger vessels (122) are significantly under-represented when compared with their involvement in 2003 (145) and their previous four-year average involvement in 132.5 marine incidents. Recreational motorboats (79) are over-represented when compared with a previous four-year average involvement of 55.25 incidents.

In terms of recreational vessel involvement generally, recreational vessels make up a little over 36 per cent of all vessels involved in incidents. Recreational sailboats and recreational motorboats account for 56 per cent of these. It is worth noting that during 2004 operators were not required to be licensed to operate the majority of vessels falling into these latter two recreational vessel categories. New recreational licensing provisions requiring operators of any recreational vessel powered by an engine of more than 4.5kW will come into effect from 1 September 2005.

Figure 6

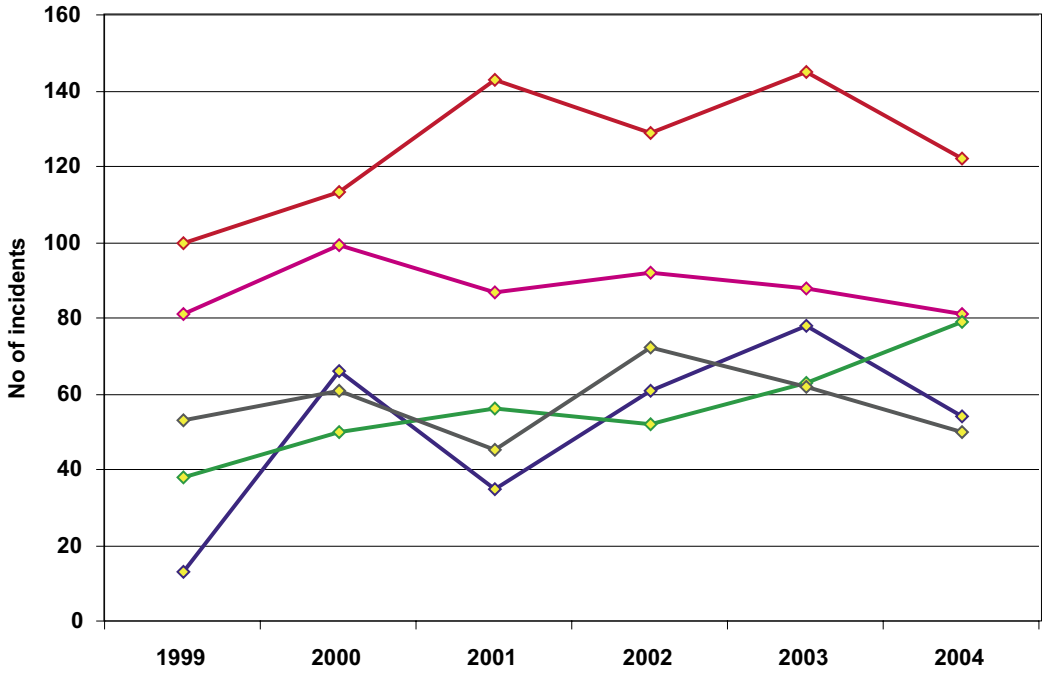


Figure 6: **Marine incidents by vessel type (Top 5)**

2.2.7 Marine incidents by location

271 (43.8 per cent) of the 618 reported marine incidents in 2004 occurred within smooth water limits. This compares with 244 incidents in smooth waters in 2004 and a previous four-year average involvement of 241.25. Incidents reported as occurring in the three remaining locations – partially smooth waters, offshore waters and inland waters showed decreases in both their absolute and relative representation in 2004. Incidents occurring in partially smooth waters (153) decreased by more than 35 per cent on the 190 partially smooth water incidents reported in 2003. Inland water incidents (71) also fell again in 2004. This could be due in part to more rigorous application of the location definition for incidents occurring in non-tidal streams, impoundments and catchments. It could also be the result of impoundment closures due to low water levels. A number of major inland impoundments were closed to boating during 2004. Figure 7 shows reported marine incidents in 2004 according to the location in which they occurred.

Figure 7

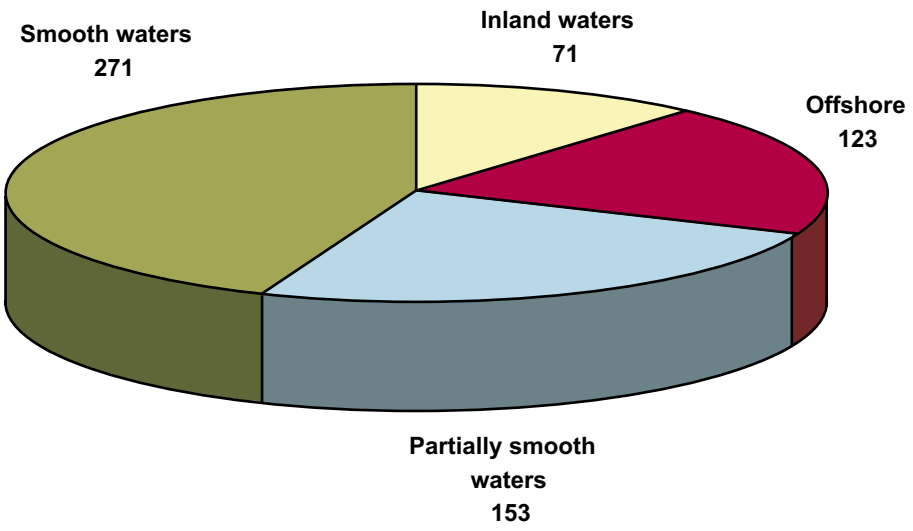


Figure 7: Marine incidents in 2004 - by location

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. Fatality rates relative to both vessels on register and total population rose in 2004 going against the recent downward trends.

Figure 8

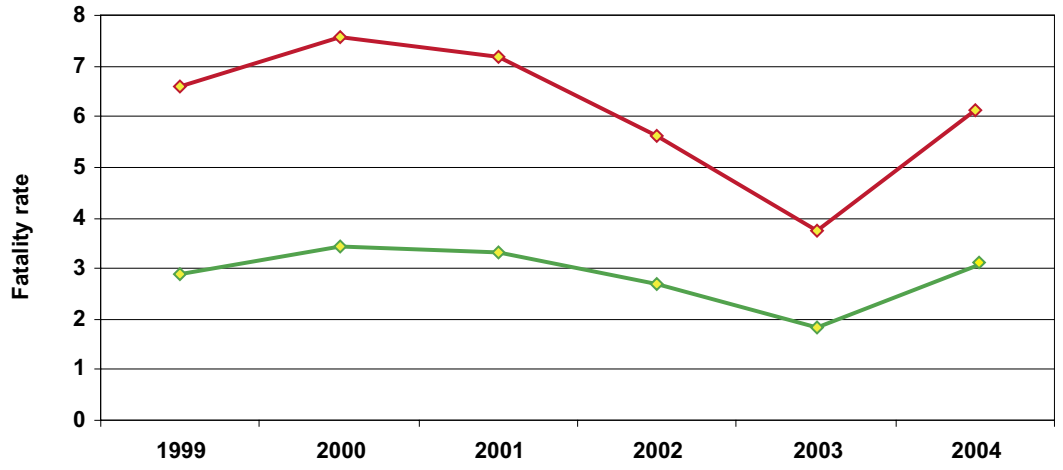


Figure 8: **Fatalities per 100,000 registered vessels and fatalities per million of population by year**

Figure 9 compares trends in Queensland marine fatalities with both vessel registration and population trends since 1997 (index 1997 = 100). Despite a rise in marine incident fatalities in 2004 (12 compared with 7 in 2003), the annual fatality trend since 1997 has been flat-lining. Over the same period, Queensland's vessel registration numbers have grown by more than 44.5 percent and its population has increased by more than 16.5 per cent.

Figure 9

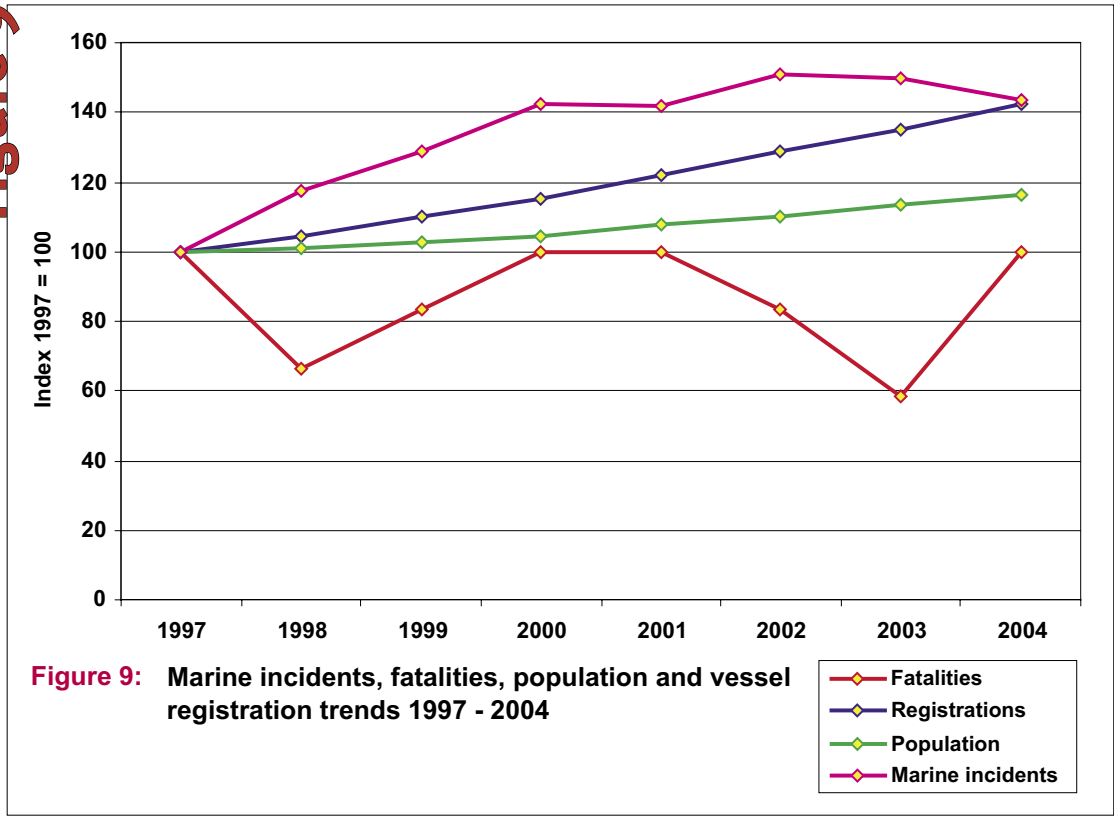


Figure 9: **Marine incidents, fatalities, population and vessel registration trends 1997 - 2004**

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 2004, the same number as in 2003 and below the previous four-year average of 6.25 fatalities per annum. This compares with growth in registered recreational vessel numbers in 2004 of 5.28 per cent and 45 per cent over the period 1997 to 2004. Despite increasing numbers of recreational vessels on the waters and increasing levels of recreational boating activity, the fatality rate per 1,000 registered recreational vessels continues to fall.

Figure 10

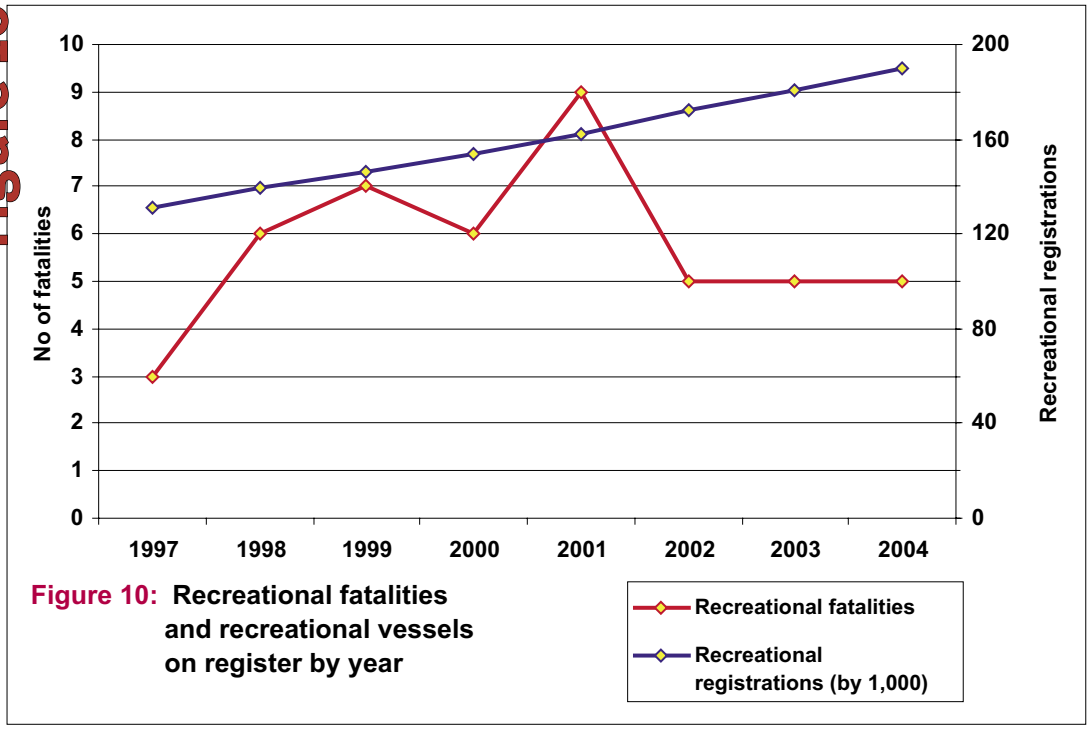


Figure 10: Recreational fatalities and recreational vessels on register by year

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 24.8 per cent over the period 1997 to 2004. Figure 11 shows there were seven fatalities resulting from marine incidents involving commercial vessels in 2004. This represents a significant rise from the two commercial vessel fatalities recorded in 2003 and is well above the average of four commercial vessel fatalities per year for the previous four-year period. Four of the seven recorded commercial vessel fatalities in 2004 resulted from incidents involving commercial fishing vessels.

Figure 11

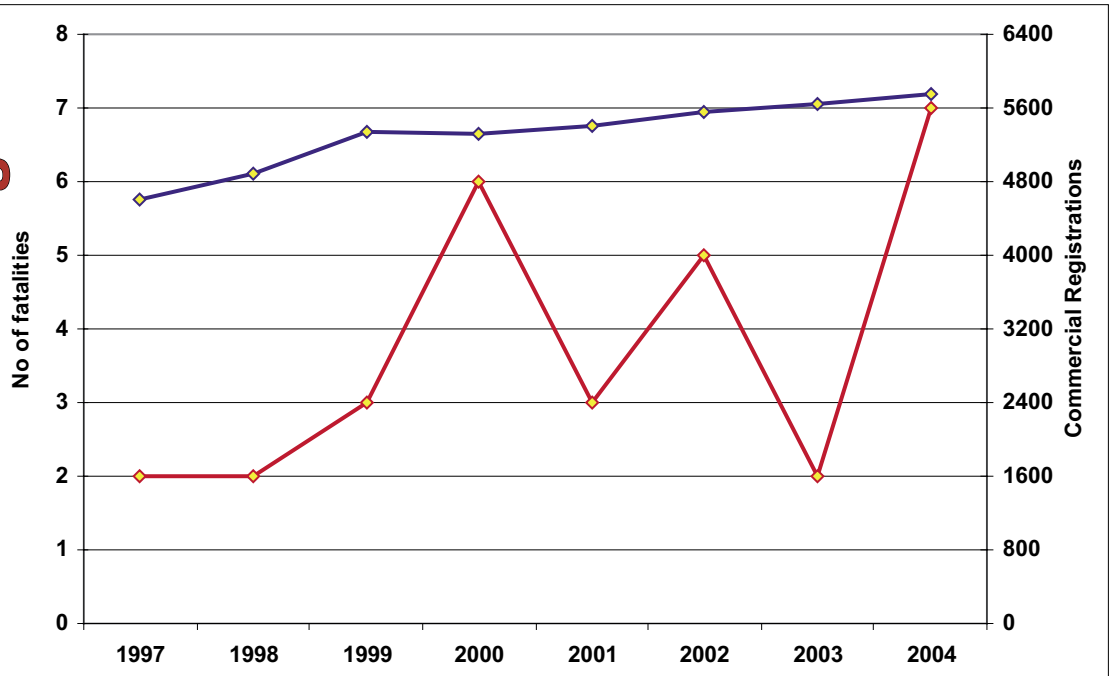


Figure 11: **Commercial fatalities and commercial vessels on register by year**

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 remedial action, including possible 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 2004. Queensland's combined maritime fatalities, including out-of-scope fatalities, were 23 in 2000, 19 in 2001, 17 in 2002, 16 in 2003 and 18 in 2004. Out-of-scope maritime fatality data was not recorded before 2000.

The 2004 fatalities classified as out-of-scope included:

- Three males who died while scuba diving
- A female who suffered medical complications following a fall on a houseboat
- A male who died from a suspected heart attack while fishing alone
- A male international tourist who died while snorkelling with a Whitsunday tourist group

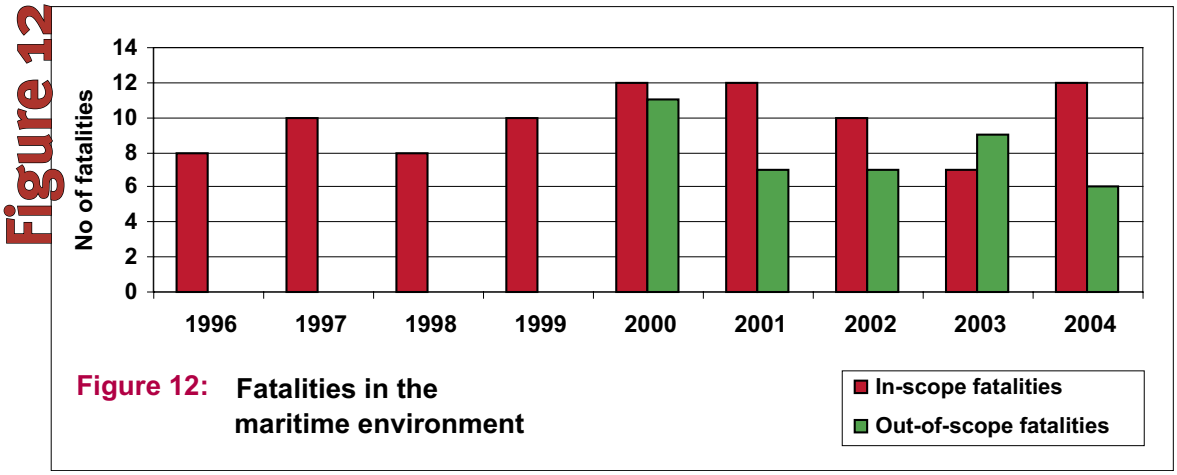


Figure 12: **Fatalities in the maritime environment**

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 2004, Maritime Safety Queensland received reports of 43 FSI incidents – 15 more than in 2003. Despite the increase in the number of reported FSI incidents, this outcome is significantly below the previous four-year average of 55.25 FSI incidents per year.

Based on recent independent studies of hospital admissions data which suggest a higher level of serious injuries from 'water transport' accidents, it is acknowledged that there is likely to be an indeterminate level of under-reporting of non-fatal marine incidents. Maritime Safety Queensland is examining options for monitoring both Australian and Queensland hospital admissions data to more accurately determine the extent of serious injuries resulting from marine incidents.

There were 12 fatalities resulting from marine incidents during 2004—five more than in 2003. This represents a significant increase over the number of fatalities recorded in 2003. Despite the rise in recorded fatalities in 2004, the fatality outcome is only marginally higher than the previous four-year average of 10.25 fatalities per annum.

2.4.2 FSI incidents by region

Figure 13 shows the number of FSI incidents reported in each region during 2004.

In 2004 five regions recorded FSI incident numbers below their respective previous four-year averages for FSI incidents. Cairns region recorded a sizeable increase in the number of recorded FSI incidents – with 12 recorded FSI incidents in 2004, up from 0 in 2003 and over-represented when compared with the region's previous four-year regional average of 6.75 FSI incidents.

When compared with 2003, Gold Coast, Brisbane and Gladstone regions each recorded increases in the number of FSI incidents in 2004. Despite these increases, all three regions are still below their respective previous four-year averages for FSI incidents.

The Brisbane region, with 13 recorded FSI incidents is well up on its 2003 result of seven FSI incidents, but well below the region's previous four-year average of 18.25 FSI incidents. While the Brisbane region has a liitle over 43 per cent of the state's registered vessel fleet, the 13 FSI incidents reported for the Brsibane region represent a little over 30 per cent of the total reported FSI incidents in 2004. The 13 incidents resulted in two fatalities and 12 persons seriously injured. Of the 13 FSI incidents, nine were recreational vessel incidents including three speedboat incidents and three jet ski incidents, and four were commercial vessel incidents, of which three were commercial fishing vessel incidents.

Cairns region recorded the next highest number of reported FSI incidents in 2004. The 12 recorded FSI incidents in Cairns resulted in five fatalities and nine persons seriously injured. While Cairns

region has a little over nine per cent of the state's registered vessel fleet, the 12 recorded FSI incidents represent approximately 28 per cent of the total FSI incidents in Queensland in 2004. Unlike Brisbane region, the Cairns region FSI incidents were predominantly commercial vessel related with eight commercial vessel incidents and four recreational vessel incidents reported.

The other region to record a significant number of FSI incidents in 2004 was the Gold Coast region. With nine recorded FSI incidents (21 per cent of the state's FSI incidents), the region is over-represented when compared with its proportion of the state's vessel fleet (13.5 per cent). The mix of FSI incidents included six recreational vessel incidents and three commercial vessel incidents. These incidents resulted in two fatalities and nine serious injuries.

Mackay and Townsville regions, with two and one recorded FSI incidents respectively in 2004, have maintained their downward trend in the number of recorded FSI incidents over the past five years.

Figure 13

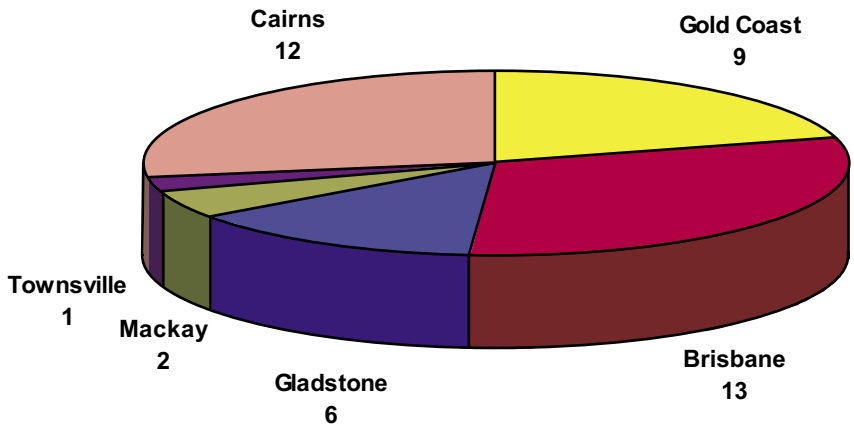


Figure 13: Fatal and serious injury incidents in 2004 - by region

2.4.3 FSI incidents by incident type

Figure 14 shows the trend over the past five years for the five most frequently-occurring types of marine incident that resulted in either fatalities or serious injuries in 2004. These five incident types accounted for 24 (55.8 per cent) of the 43 recorded FSI incidents in 2004.

Three of the top 5 incident types have shown increases in involvement in 2004. The two remaining top 5 FSI incident types had the same number of FSI incidents reported in 2004 as in 2003.

The most frequently-occurring FSI incident types in 2004 were 'person overboard' and 'collision between ships', each with six incidents reported. These 12 incidents resulted in four fatalities and ten serious injuries. There were 18 'person overboard' incidents reported in 2004, six of which resulted in three fatalities and three serious injuries. While marginally under-represented when compared with their previous four-year average FSI involvement (8.5), the 2004 outcome from these incidents confirms an historical pattern which suggests a higher probability that these incidents will result in death or serious injury.

FSI incidents involving 'collisions between ships' were up from three in 2003 to six in 2004— marginally above their previous four-year average FSI incident involvement of 5.75. These six incidents resulted in one fatality and seven serious injuries. Four of the six collision incidents involved recreational jet skis. These four incidents resulted in six persons being hospitalised with serious injuries. The single fatality resulted from a high speed collision between a commercial passenger vessel (water taxi) and a recreational motorboat.

Figure 14

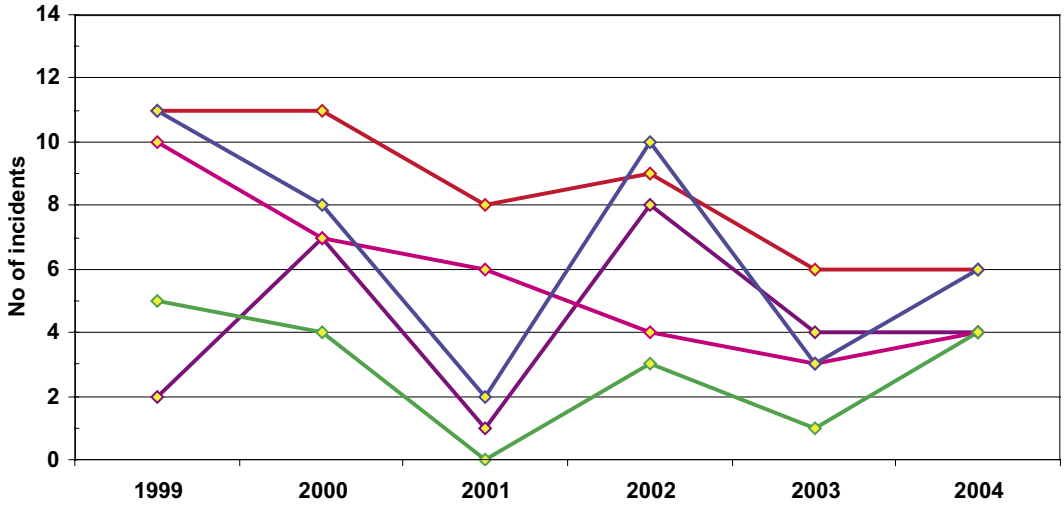


Figure 14: **Fatal and serious injury incidents by incident type (Top 5)**

2.4.4 FSI incidents by vessel type and length

Figure 15 shows the five vessel types that figured most frequently in FSI incidents in Queensland in 2004 and their comparative representation since 1999. Three of the vessel types have shown increases in FSI incident involvement in 2004—recreational jet skis, commercial fishing ships and recreational motorboats.

The 11 remaining FSI incidents comprised nine different vessel types including three commercial (hire and drive) vessels, two commercial non-passenger vessels and two recreational sailing boats.

The number of FSI incidents in 2004 involving commercial fishing ships (7) is up significantly on the two such incidents reported in 2003. The 2004 result is in line with the previous four-year average involvement. The seven reported commercial fishing ship incidents resulted in four fatalities and three serious injuries.

There was a 20 per cent fall in recreational speedboat incident numbers in 2004 and a corresponding fall in the number of recreational speedboat incidents that resulted in fatality or serious injury – eight FSI incidents, down from 10 in 2003. The eight reported recreational speedboat incidents resulted in four fatalities and seven serious injuries.

Recreational PWC (jet skis) showed a significant increase in involvement in FSI incidents in 2004. There were eight reported recreational jet ski incidents that resulted in ten persons being seriously injured in 2004. This compares with one such incident in 2003. Despite the increase in involvement of recreational jet skis in FSI incidents in 2004, there has only ever been one jet ski-related incident fatality recorded in Queensland (in 2000).

Following a major review of jet ski operations in Queensland in 2004 and in recognition of increasing involvement of jet skis in serious marine incidents, a jet ski management plan was announced by the government in late 2004. The plan includes a range of initiatives aimed at addressing and improving jet ski safety, noise and amenity concerns. From a safety perspective, new mandatory jet ski licensing requirements will become effective from 1 January 2006, with a six month transition period from 1 July 2005.

The same number of FSI incidents involving commercial passenger vessels (5) was recorded in 2004 as in 2003. Proportionately, commercial passenger vessel representation in FSI incidents has fallen – from 17.8 per cent in 2003 to 11.6 per cent in 2004.

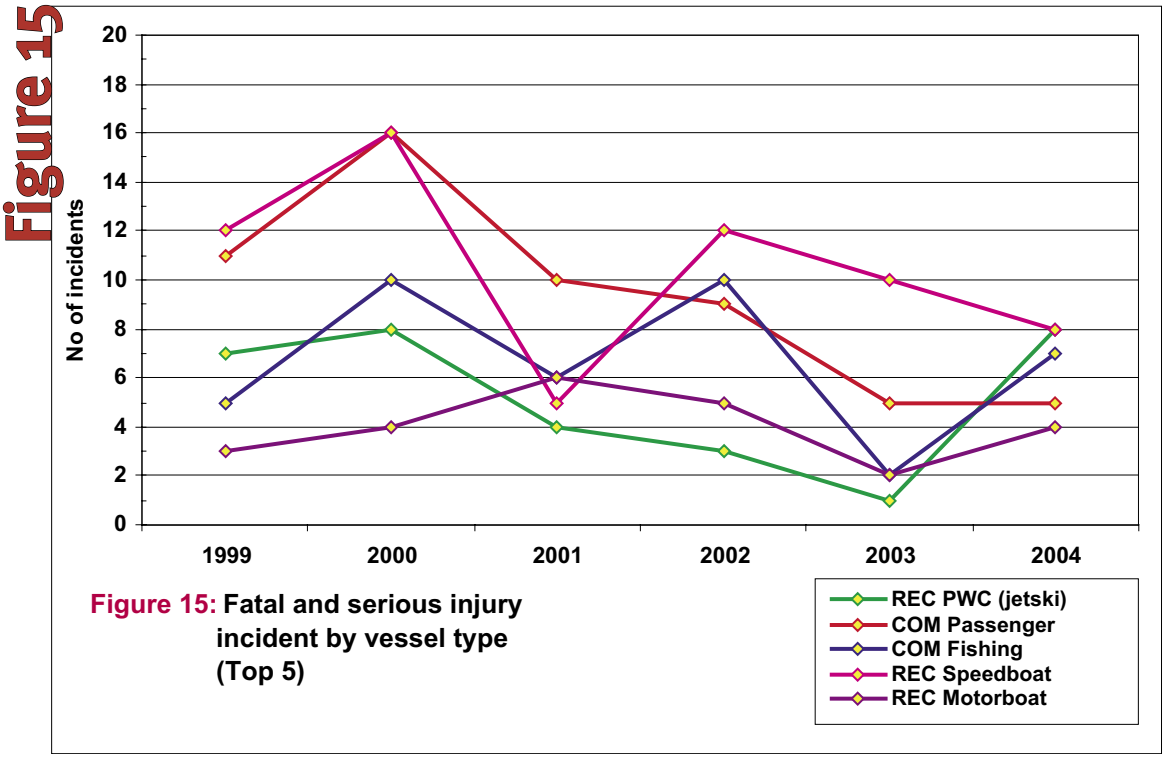


Figure 15: Fatal and serious injury incident by vessel type (Top 5)

Of the 50 vessels involved in the 43 FSI incidents in 2004, 33 (66 per cent) were under eight metres in length. 22 of these were recreational vessels and 11 were commercially registered vessels. Only five of the vessels involved in FSI incidents in 2004 were over 15 metres in length. Four were commercially registered and one was a recreationally registered sailing vessel. In terms of the incidents in 2004 that resulted in fatalities, there were ten vessels involved, six of which were less than 8 metres in length three were commercially registered and three were recreationally registered. The remaining four vessels were all commercially registered and ranged in length from 10 to 18 metres.

2.4.5 FSI incidents by location

Eighteen (41.9 per cent) of the 43 reported FSI incidents in 2004 occurred in smooth waters, three more than in 2003. A further sixteen (37.2 per cent) of the reported FSI incidents in 2004 occurred in offshore waters. Only seven per cent of FSI incidents in 2004 occurred in inland waters.

There were eight fatalities and 11 serious injuries that resulted from the 16 offshore FSI incidents compared with three fatalities and 17 serious injuries from the 18 FSI incidents in smooth waters. This reinforces that the outcome is likely to be more serious for incidents occurring in offshore waters.

Figure 16 shows the location of reported FSI incidents in 2004.

Figure 16

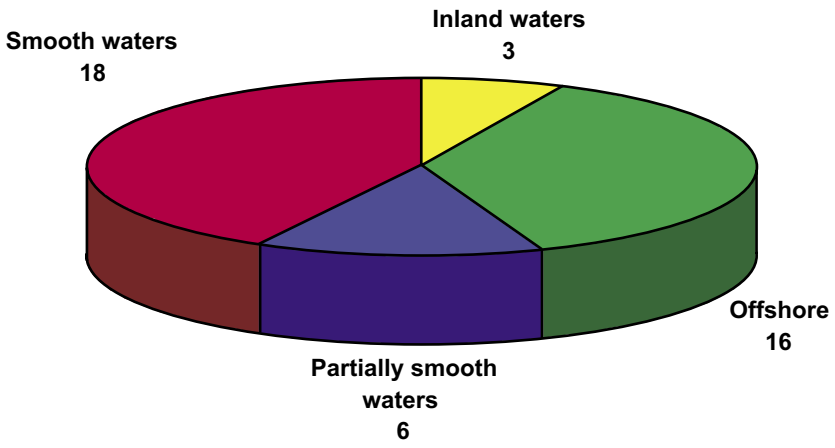


Figure 16: Fatal and serious injury incidents in 2004 - by location

2.4.6 FSI incidents—incident characteristics by extent of involvement

This section analyses FSI incidents in 2004 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 thirty 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 2004 compared with their average rate of involvement in FSI incidents in the previous four-year period

Figure 17 shows the extent of involvement in 2004 for the 'top 30' incident characteristics together with their average rate of involvement over the previous four-year period. Despite an increase in the number of FSI incidents reported in 2004, the majority of the 30 most frequently occurring attributes are under-represented when compared with their previous four-year average involvement.

The most notably over-represented attribute in FSI incidents in 2004 was the involvement of the human contributing factor 'inattention'. When compared with the previous four-year average involvement, there has been a 30 per cent increase in the identification of inattention as a contributing factor to FSI incidents in 2004. Inattention was identified as contributing to 17 (39.5 per cent) of the 43 FSI incidents reported in 2004.

As has been the case in recent years, the most frequently occurring attributes of FSI incidents in 2004 related to ambient conditions including clear weather, good visibility and the daytime period. These factors characterise more than 50 per cent of the 43 FSI incidents in 2004.

Of the 43 incidents involving fatality or serious injury in 2004, 23 did not involve any physical damage to either the vessels involved or to other property.

There has also been an absolute and relative increase in 2004 in the numbers of FSI incidents occurring in offshore waters. In 2003, five of the 28 of the reported FSI incidents occurred in offshore waters. In 2004, there were 16 FSI incidents in offshore waters. These 16 incidents resulted in eight fatalities and 11 serious injuries. Offshore marine incidents are examined in more detail later in this report.

In 2004, the proportion of FSI incidents occurring in smooth waters decreased relative to the number of smooth water FSI incidents in 2003. There were 18 smooth water FSI incidents reported in 2004 – 41.9 per cent of all FSI incidents in 2004. This compares with 15 (53.6 per cent) smooth water FSI incidents in 2003. The previous four-year average number of smooth water FSI incidents was 17.5.

While in 2003, recreational speedboats were the most frequently involved vessel type in FSI incidents, recreational jet skis and commercial fishing vessels have assumed the mantle of most involved vessels in reported FSI incidents in 2004. There were 13 recreational jet skis involved in the 43 FSI incidents reported in 2004—significantly over-represented when compared with the one recreational jet ski involved in a FSI incident in 2003 and a previous four-year reported average FSI incident involvement in 4.75 FSI incidents.

There were also eight commercial fishing vessels involved in the 43 reported FSI incidents in 2004, compared with three in 2003 and a previous four-year reported average FSI incident involvement of 7.25. The eight commercial fishing vessels were involved in seven FSI incidents in 2004 resulting in four fatalities and three serious injuries. Commercial fishing vessels have consistently been among the most frequently involved vessels in FSI incidents, particularly those incidents involving fatalities. The involvement of commercial vessels and in particular, commercial fishing vessels in marine incidents is examined in more detail later in this report.

The most frequently occurring FSI incident type in 2004 was again 'person overboard'. Six such incidents were recorded in 2004, resulting in three fatalities and three serious injuries. These six incidents represent only 14 per cent of all FSI incidents reported in 2004, but account for 25 per cent of all fatalities and 8.1 per cent of all serious injuries recorded in 2004. Considering that less than three per cent of all reported marine incidents in 2004 were 'person overboard' incidents, it suggests that when 'person overboard' incidents occur, the outcome is likely to be severe—resulting in death or serious injury.

Figure 17

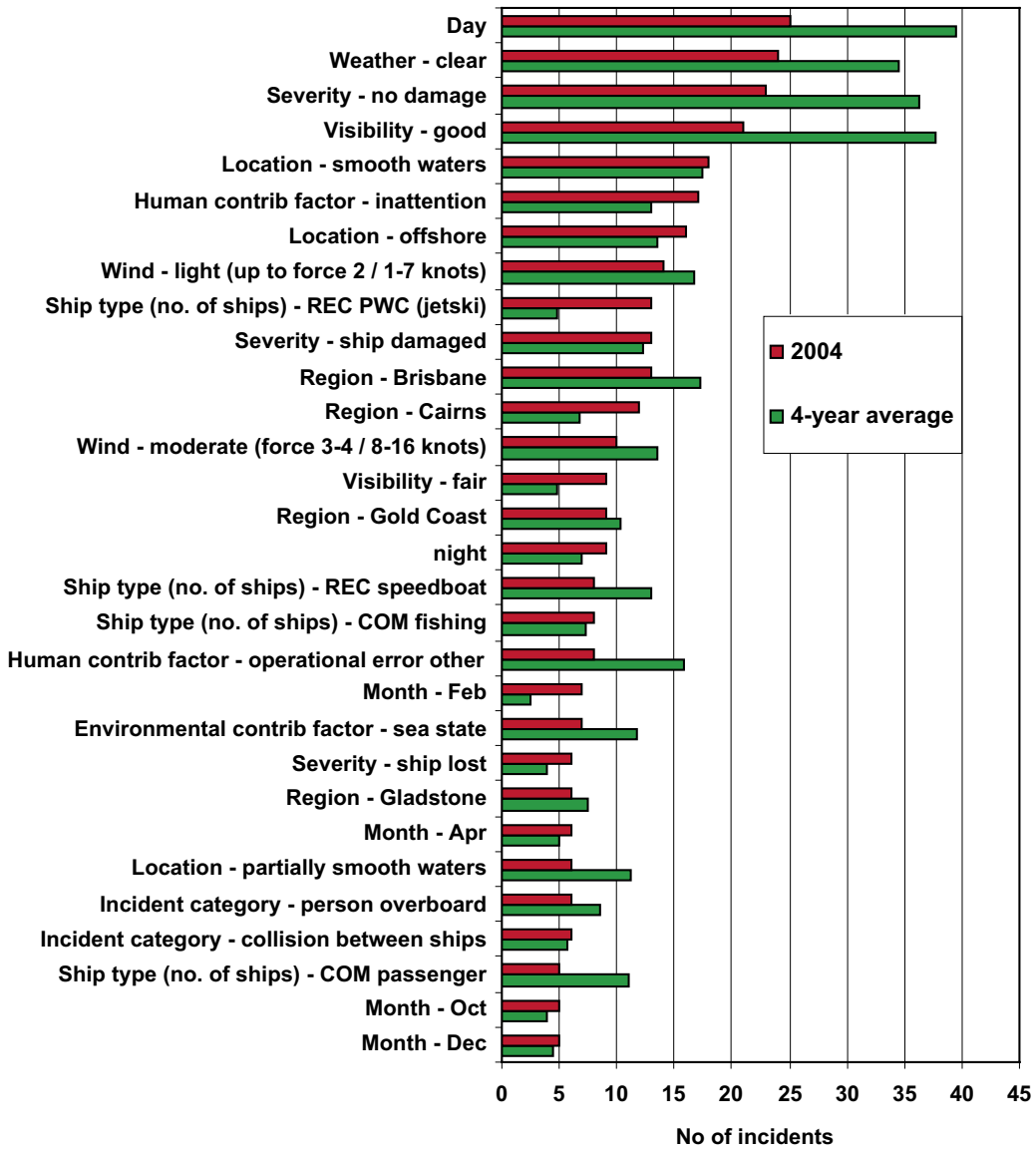


Figure 17: **Characteristics ranked by size of involvement in marine incidents resulting in fatalities and serious injuries - Queensland**