

## 2.0 Marine incidents in Queensland

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 level of underreporting of marine incidents in any given year. Maritime Safety Queensland continues to look for ways to improve compliance with statutory incident reporting requirements.

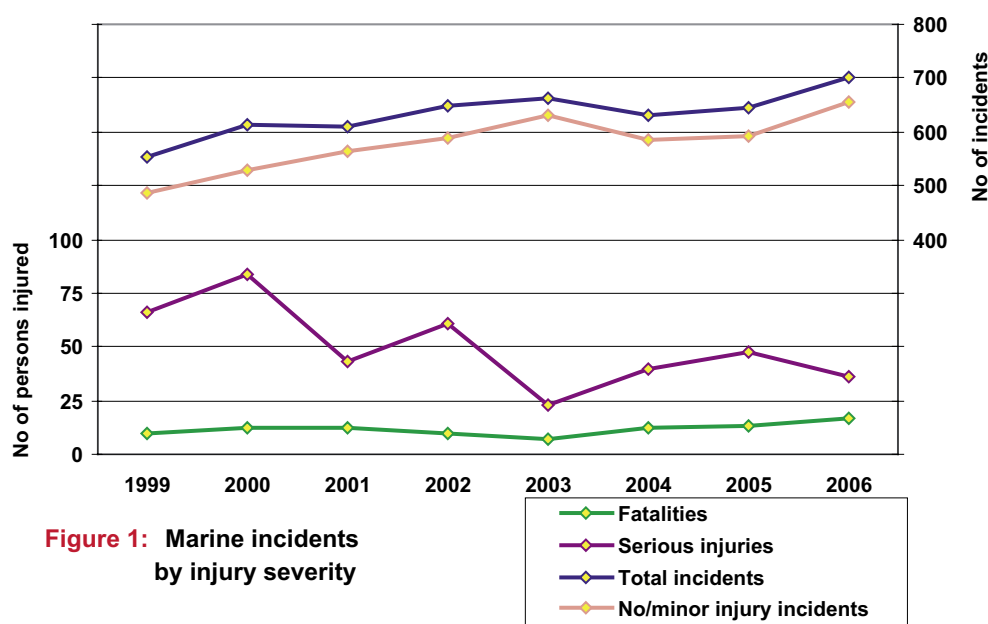
### 2.1 Reported marine incidents

In 2006, 701 marine incidents were reported in Queensland—8.7 percent higher than in 2005. The number of incidents reported in 2006 is also significantly higher than the previous four-year average number of reported marine incidents (646.5). 17 fatalities and 36 serious injuries were reported as resulting from 47 of the reported marine incidents in 2006.

### 2.2 Marine incidents by severity

In this section reported marine incidents in Queensland are analysed from the perspective of personal injury outcomes and property damage outcomes.

Figure 1 shows that total reported marine incidents in 2006 has increased when compared with the number reported in 2005. While the aggregate numbers of reported marine incidents over the past five years suggest an annual baseline in the low-to-mid six-hundreds, the number of reported incidents jumped significantly in 2006. It is not clear whether this is due to improved levels of reporting or whether it represents a spike in incident occurrence. As mentioned earlier, there is an acknowledged level of underreporting of marine incidents in any given year. Analyses in subsequent years will continue to monitor this aspect.

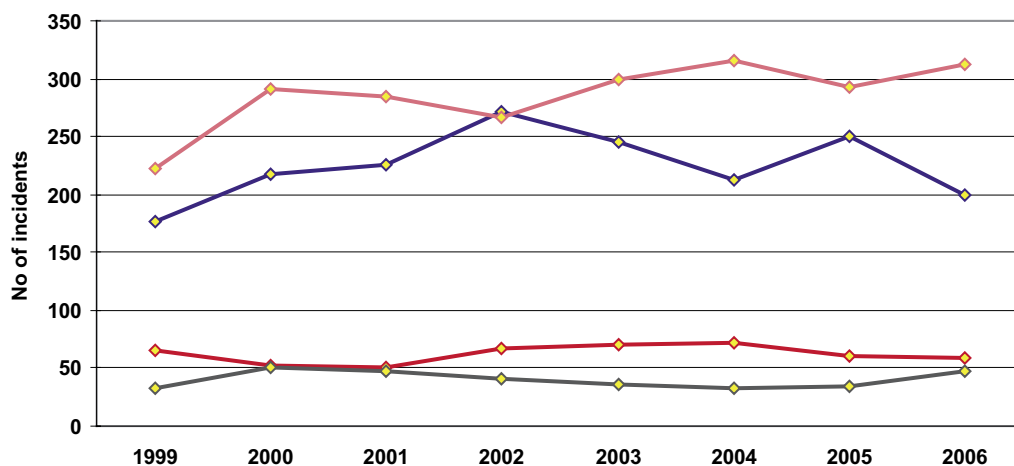


**Figure 1: Marine incidents by injury severity**

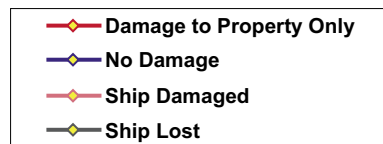
Figure 1 also shows reported marine incidents according to the severity of personal injury outcomes. Fatalities have risen from a low of seven in 2003 to 17 in 2006—significantly above the previous four-year average of 10.5 fatalities per year. Reported serious injuries fell in 2006 to 36 compared with 48 in 2005—below the previous four-year average of 43.

The second overall view of incident severity relates to property damage and loss. A range of property damage outcomes and their relative involvement in marine incidents between 1999 and 2006 is shown in Figure 2.

The numbers of incidents where vessels were deemed a total write-off/loss in terms of property damage in 2006 reversed the recent downwards trend. There were 48 incidents where vessels were lost in 2006—up by 41 per cent on the reported number of ship lost incidents in 2005 and well above the previous four-year average of 36 ship lost incidents per year.



**Figure 2: Marine incidents by severity of damage to vessel or property**

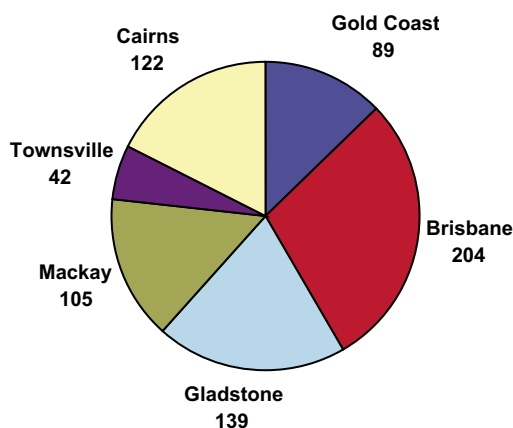


Of the 48 vessels lost in 2006, 33 were recreational vessels and 15 were commercial vessels, including ten commercial fishing vessels.

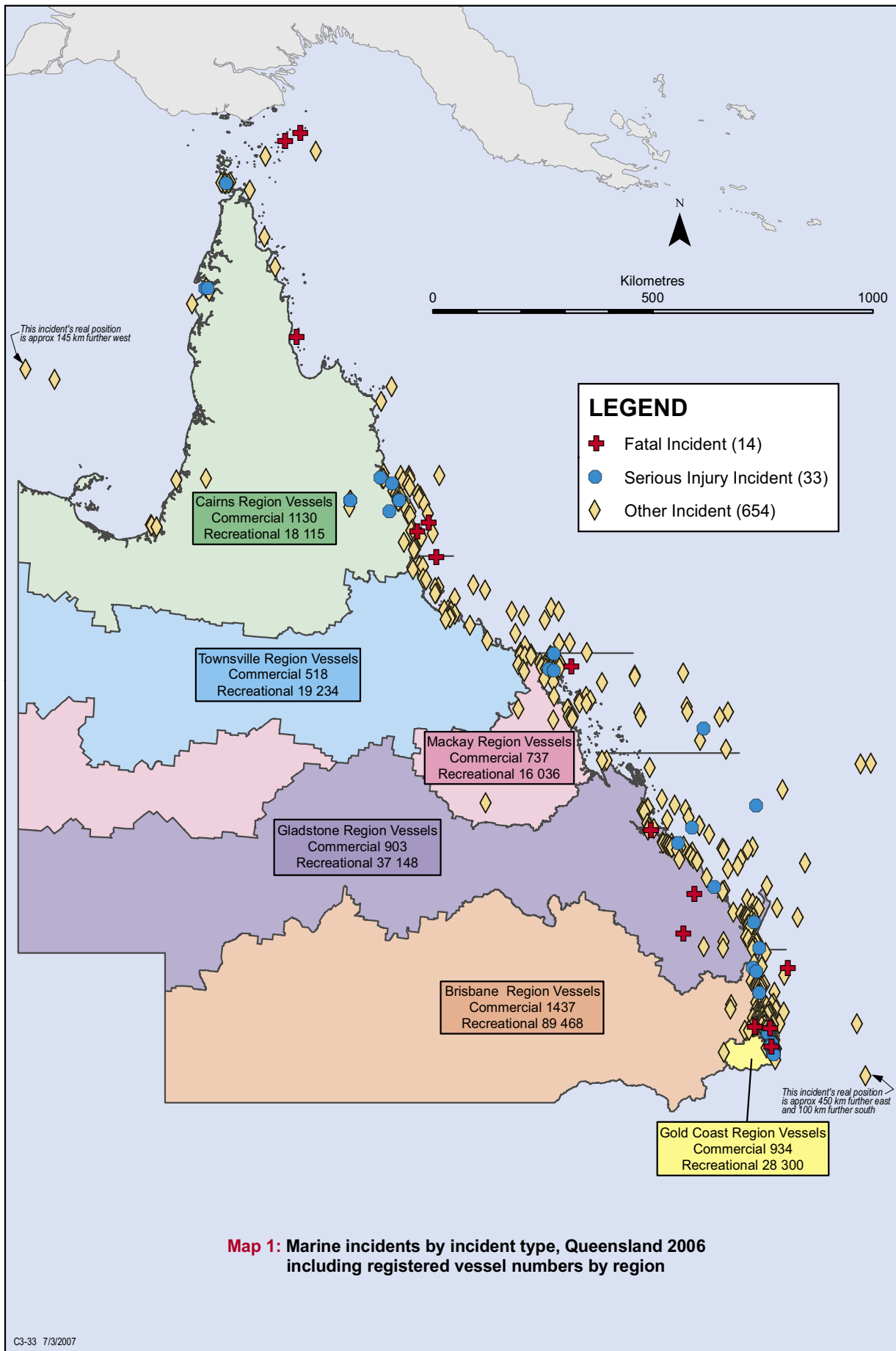
The number of incidents that resulted in vessel damage increased from 292 in 2005 to 312 in 2006—marginally up on the previous four-year average of 293.25. There were 59 reported incidents where there was ‘damage to property only’ compared to 61 in 2005, below the previous four-year average of 67.5. The number of incidents in which there was no reported damage is down from 251 in 2005 to 199 in 2006—well below the previous four-year average of 244.75.

### 2.3 Marine incidents by region

The Brisbane region recorded the highest number of reported marine incidents (204) in 2006, while the Townsville region recorded the least number of reported incidents (42). Figure 3 shows proportionately the number of reported marine incidents according to the region in which the incidents occurred.



**Figure 3: Marine incidents in 2006 - by region**



**Map 1: Marine incidents by incident type, Queensland 2006 including registered vessel numbers by region**

C3-33 7/3/2007



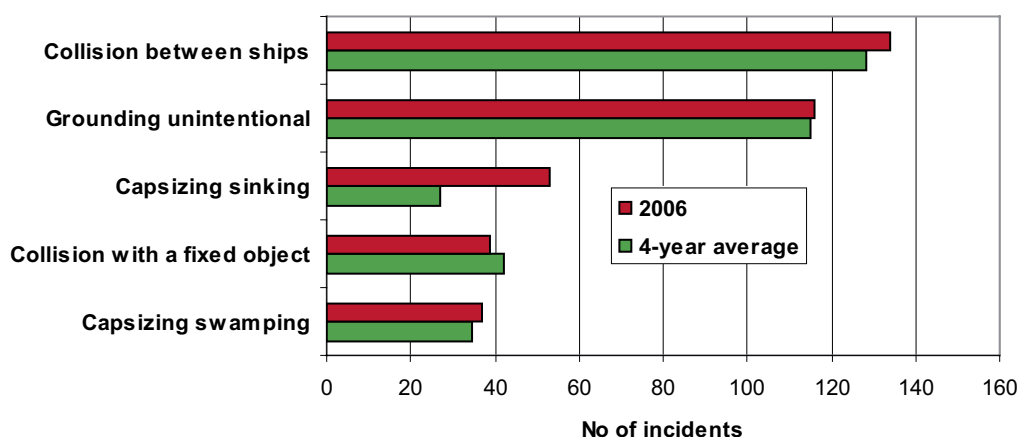
Map 1 shows spatially and by region where each of the reported marine incidents in 2006 occurred, together with the comparative numbers of commercially and recreationally registered vessels in each region.

## 2.4 Marine incidents by incident type

The five most frequently occurring types of marine incident reported in 2006 accounted for 379 (54 per cent) of all reported incidents (n=701). Figure 4 shows the top five incident types recorded in 2006 compared with their previous four-year average involvement.

The most significant incident types in 2006 were ‘collision between ships’ and ‘unintentional groundings’, with 134 and 116 reported incidents respectively. In 2006 ‘collisions between ships’ were marginally over-represented when compared with their previous four-year average involvement in reported marine incidents (128.25). ‘Unintentional grounding’ incidents were in line with their previous four-year average involvement in reported marine incidents.

**Figure 4: Marine incidents in 2006 by incident type (Top 5)**



Capsize incidents can be classified in four ways—capsize, capsize-sinking, capsize-flooding and capsize-swamping. ‘Capsize - sinking’ incidents showed a marked increase in 2006, with 53 incidents reported compared with 29 in 2005 and a previous four-year average of 26.75 incidents. Capsize incidents as a group have increased by 50.6 per cent in 2006—from 81 in 2005 to 122 in 2006. Capsize incidents are significantly over-represented when compared with a four-year average of 82.25.

## 2.5 Marine incidents by vessel type

Figure 5 shows the five vessel types that figured most frequently in reported marine incidents in Queensland in 2006 and their comparative representation since 1999. The top five vessel types account for 595 (66.3 per cent) of all the vessels involved in reported incidents in 2006 (n=898).

Four of the top five vessel types show increases in their involvement in marine incidents in 2006 compared to 2005. It is encouraging that commercial passenger ships (148) show a decrease in their involvement in marine incidents in 2006 compared to 2005 (161). Their involvement in 2006 is also below their previous four-year average involvement of 153.5.

Commercial fishing vessels (102) were appreciably over-represented when compared with their involvement in 2005 (69) and their previous four-year average involvement in marine incidents (87).

Likewise, recreational motorboats (122) were over-represented when compared with their involvement in 2005 (120) and their previous four-year average involvement in reported incidents (91.25). This may be in part to confusion about what is a recreational motorboat and what is a recreational speedboat. For registration purposes Queensland Transport defined a recreational speedboat as a powered recreational vessel capable of planing. A recreational motorboat is any powered vessel with

a displacement hull. It is evident that some people consider cabin cruisers and larger recreational vessels as motorboats when they may in fact be speedboats.

In terms of overall vessel involvement, commercial vessels accounted for 55.7 per cent of all vessels involved in incidents and recreational vessels made up 44.3 per cent of all vessels involved in incidents. This is generally in line with their proportionate involvement in 2005.

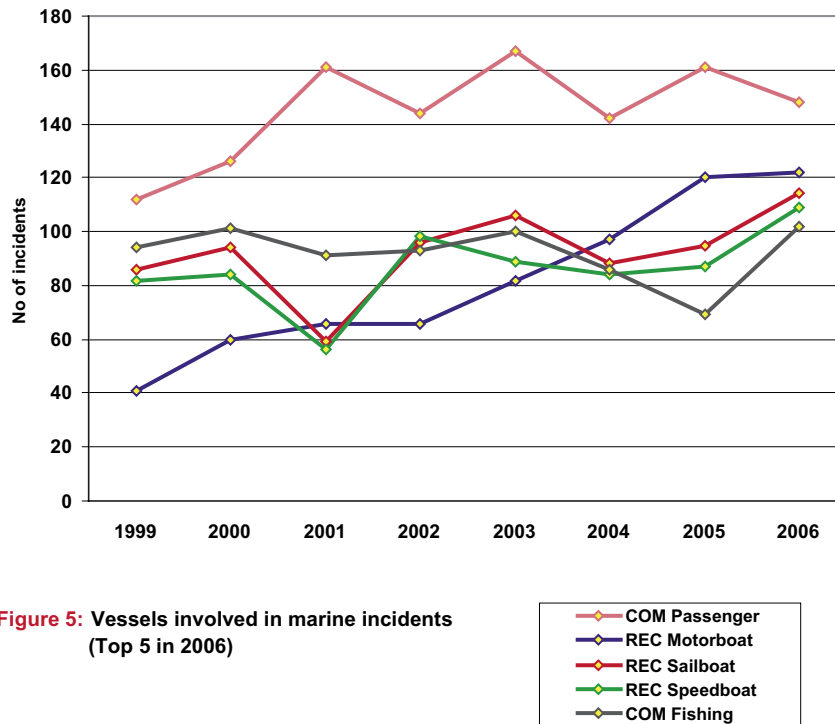


Figure 5: Vessels involved in marine incidents (Top 5 in 2006)

Recreational sailboats and recreational motorboats account for 25 per cent of all vessels involved in incidents and over 56 per cent of the recreational vessels involved in incidents respectively. New recreational licensing provisions requiring operators of any recreational vessel powered by an engine of more than 4.5kW to be licensed are expected to have a positive impact in the longer term on the involvement of recreational sailboats and motorboats.

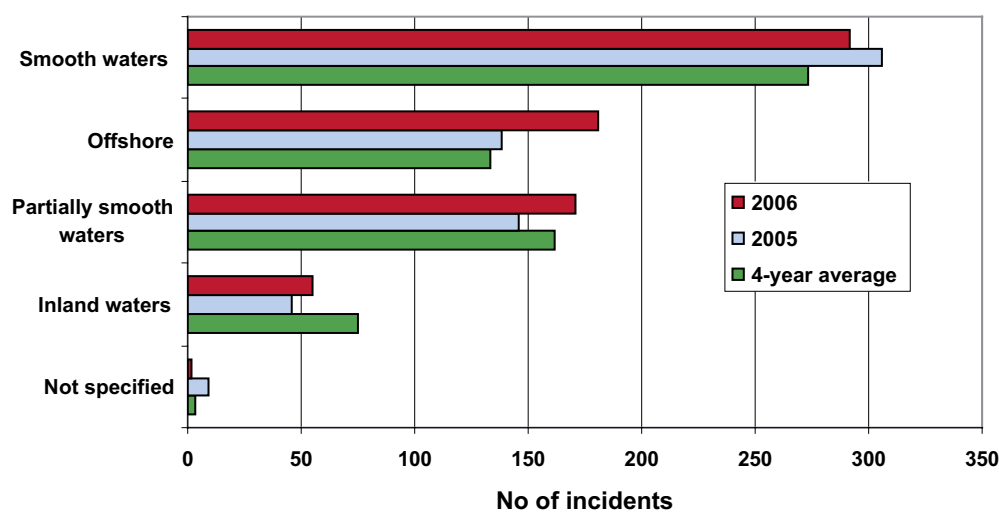
## 2.6 Marine incidents by location

292 (41.7 per cent) of the reported marine incidents in 2006 (n=701) occurred within smooth water limits. Incidents in offshore waters (181) were significantly over-represented when compared to 2005 (138) and a previous four-year average involvement of 133.5. Proportionately their representation rose from 21.4 per cent of incidents in 2005 to 25.8 per cent of incidents in 2006.

Incidents reported as occurring in inland waters and partially smooth waters also showed increases in their relative and absolute involvement in 2006. Figure 6 shows reported marine incidents in 2006 according to the location in which they occurred, compared with 2005 and the previous four-year average representation.



**Figure 6: Marine incidents in 2006 - by location**



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

- 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.