

Appendix 1

Marine incident related tables

In this appendix, the major characteristics of reported marine incidents are presented in a time-series format. The sources for the majority of data are Maritime Safety Queensland's marine incident database, the commercial vessel registration database and Queensland Transport's recreational vessel registration database. Australian Bureau of Statistics data is also used.

For ease of reference, the following codes are used for the six Maritime Safety Queensland regional operations areas:

- Gold Coast (GC)
- Brisbane (BN)
- Gladstone (GL)
- Mackay (MK)
- Townsville (TV)
- Cairns (CN)

It should be noted that the Gold Coast region was only established for reporting purposes in 2000.

The acronym PWC is used throughout these tables and refers to personal watercraft, or jet skis as they are better known.

Wind forces used in these tables are based on the Beaufort Scale.

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Table 1 Marine fatalities per 1,000,000 persons 1976 to 2002 by state and territory

State / territory	76-79	80-84	85-89	90-94	95-99	2000-02
New South Wales	8.45	5.10	4.27	3.29	2.65	2.10
Victoria	9.03	5.16	4.37	4.10	2.04	2.07
Queensland	12.31	5.23	4.02	5.14	2.59	1.93
South Australia	13.18	7.35	4.59	3.99	2.43	0.23
West Australia	10.09	8.70	4.94	4.71	4.12	2.23
Tasmania	34.82	26.03	14.70	15.59	15.96	5.63
Northern Territory	25.81	16.94	11.52	22.53	5.38	8.47
Australian Capital Territory	11.63	0.86	2.27	2.05	0.65	2.07

Source: Australian Bureau of Statistics

Table 2 Incidents involving fatalities and serious injuries 1998 - 2003 and year 2003 by region

Incidents	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
No of incidents involving fatalities	8	9	12	9	9	7	0	2	3	1	1	0
No of incidents involving serious injuries	51	58	73	37	53	21	7	5	2	5	2	0
Fatality/serious injury incidents	59	67	85	46	62	28	7	7	5	6	3	0

Table 3 Fatalities and serious injuries 1998 - 2003 and year 2003 by region

Fatalities and serious injuries	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
No of fatalities	8	10	12	12	10	7	0	2	3	1	1	0
No of serious injuries	64	66	84	43	61	22	7	6	2	5	2	0
Total fatalities and serious injuries	72	76	96	55	71	29	7	8	5	6	3	0

Table 4 Environmental factors contributing to fatal and serious injury incidents 1998 - 2003 and year 2003 by region

Environmental factors	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Bar conditions	0	3	3	0	1	1	1	0	0	0	0	0
Floating or submerged object	2	1	1	1	1	0	0	0	0	0	0	0
Hazardous season (cyclones etc)	0	1	1	0	0	0	0	0	0	0	0	0
Hazardous waters - coral reefs	0	0	0	1	0	0	0	0	0	0	0	0
Hazardous waters - shifting channels	0	0	0	1	1	0	0	0	0	0	0	0
Hazardous waters - uncharted hazards	0	0	0	1	1	0	0	0	0	0	0	0
Heavy traffic area	1	0	0	0	1	1	1	0	0	0	0	0
Other	0	0	4	2	0	1	1	0	0	0	0	0
Poor visibility	1	0	1	1	5	0	0	0	0	0	0	0
Sea state	4	6	16	7	19	5	0	1	2	2	0	0
Wash of passing vessel	4	3	1	1	3	1	1	0	0	0	0	0
Wind	2	1	1	3	20	1	0	0	1	0	0	0
Total environmental factors attribution	14	15	28	18	52	10	4	1	3	2	0	0

Table 5 Human factors contributing to fatal and serious injury incidents 1998 - 2003 and year 2003 by region

Human factors	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Alcohol or drugs	3	2	1	1	0	1	0	0	1	0	0	0
Commercial pressure	0	1	1	1	0	0	0	0	0	0	0	0
Excessive speed	3	6	3	4	3	3	2	1	0	0	0	0
Fatigue	0	2	0	2	0	1	0	0	0	1	0	0
Inadequate training of crew	2	1	4	2	4	2	2	0	0	0	0	0
Inappropriate instructions to crew - other	1	0	0	0	2	1	0	0	1	0	0	0
Poor communication of instructions to crew	0	0	0	0	3	0	0	0	0	0	0	0
Inattention	6	5	20	9	18	5	0	4	0	0	1	0
Insufficient maintenance	0	1	0	0	0	0	0	0	0	0	0	0
Insufficient planning	0	0	2	1	4	0	0	0	0	0	0	0
Navigation error-failure to keep proper lookout	5	2	2	1	7	1	1	0	0	0	0	0
Navigation error-lack of knowledge/experience	5	1	3	1	5	0	0	0	0	0	0	0
Navigation error-other	0	4	1	1	3	2	0	2	0	0	0	0
Navigation error-violation of Collision regs	3	1	1	2	3	2	0	0	0	0	2	0
Operational error-other	2	6	11	14	27	11	4	2	2	3	0	0
Poor communications	0	1	0	1	3	0	0	0	0	0	0	0
Violation of standard procedures	4	1	0	1	10	1	0	0	0	1	0	0
Violation of statutory rules or standards	1	0	2	0	9	1	0	0	0	1	0	0
Total human factors attribution	35	34	51	41	101	31	9	9	4	6	3	0

Table 6 Material factors contributing to fatal and serious injury incidents 1998 - 2003 and year 2003 by region

Material factors	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Bridge or navigation failure	0	0	2	0	0	0	0	0	0	0	0	0
Electrical failure	0	0	1	1	0	0	0	0	0	0	0	0
Equipment failure - other	2	5	0	1	1	0	0	0	0	0	0	0
Fuel or gas leak	0	0	1	1	0	0	0	0	0	0	0	0
Hull failure	0	1	0	1	1	0	0	0	0	0	0	0
Inadequate stability - other	0	0	1	1	0	0	0	0	0	0	0	0
Inappropriate hull or equipment-design fault	0	0	3	1	1	0	0	0	0	0	0	0
Insufficient maintenance of hull/equipment	0	2	0	0	3	0	0	0	0	0	0	0
Insufficient safety equipment	0	0	0	0	0	0	0	0	0	0	0	0
Machinery failure	3	1	0	0	5	1	0	0	0	0	1	0
Other	1	2	9	1	1	1	0	0	1	0	0	0
Shore structure badly designed/maintained	0	0	1	0	0	0	0	0	0	0	0	0
Total material factors attribution	6	11	18	7	12	2	0	0	1	0	1	0

Table 7 Fatal and serious injury incident type 1998 - 2003 and year 2003 by region

Incident type classifications	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Capsizing	0	1	1	1	2	0	0	0	0	0	0	0
Capsizing flooding	0	1	1	0	0	0	0	0	0	0	0	0
Capsizing sinking	1	0	3	0	1	0	0	0	0	0	0	0
Capsizing swamping	2	4	2	2	3	0	0	0	0	0	0	0
Collision between ships	12	11	8	2	10	3	0	1	0	0	2	0
Collision with a fixed object	2	2	4	3	2	0	0	0	0	0	0	0
Collision with an animal	0	0	0	0	0	0	0	0	0	0	0	0
Collision with floating object	3	0	0	1	0	0	0	0	0	0	0	0
Collision with overhead obstruction	0	0	1	0	0	0	0	0	0	0	0	0
Collision with submerged object	0	0	2	0	1	0	0	0	0	0	0	0
Collision with a wharf	0	0	0	0	0	0	0	0	0	0	0	0
Explosion	1	2	1	2	1	0	0	0	0	0	0	0
Fire	0	2	0	0	1	1	0	0	0	1	0	0
Grounding intentional	1	1	1	0	0	0	0	0	0	0	0	0
Grounding unintentional	1	2	5	1	0	1	0	1	0	0	0	0
Loss of ship	1	0	0	0	2	1	0	1	0	0	0	0
Loss of stability	0	0	0	0	0	0	0	0	0	0	0	0
Onboard incident crushing or pinching	3	5	4	0	3	1	0	1	0	0	0	0
Onboard incident falls within ship	1	10	7	6	4	3	1	1	1	0	0	0
Onboard incident other onboard injury	8	5	16	5	5	2	1	0	0	1	0	0
Other	1	0	0	2	0	0	0	0	0	0	0	0
Other - Close Call	0	0	0	0	0	0	0	0	0	0	0	0
Other - Crime Issue	0	0	0	0	0	0	0	0	0	0	0	0
Other - Ship Adrift	0	0	0	0	0	0	0	0	0	0	0	0
Other personal injury caused by operation of ship	7	2	7	1	8	4	2	2	0	0	0	0
Other personal injury diving incident	1	1	1	0	1	0	0	0	0	0	0	0
Other personal injury hit by propellor or ship	3	1	2	3	3	4	1	0	1	2	0	0
Other personal injury parasailing incident	2	1	0	1	0	0	0	0	0	0	0	0
Other personal injury water ski incident	3	3	5	5	4	2	2	0	0	0	0	0
Person overboard	5	11	11	8	9	6	0	0	3	2	1	0
Structural failure	0	0	1	1	0	0	0	0	0	0	0	0
Incident types distribution	58	65	83	44	60	28	7	7	5	6	3	0

Table 8 Location of fatal and serious injury incidents 1998 - 2003 and year 2003 by region

Location classifications	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Not specified	3	1	1	1	0	0	0	0	0	0	0	0
Inland waters	19	17	18	12	13	2	0	0	1	1	0	0
Offshore	11	10	20	10	19	5	0	2	1	1	1	0
Partially smooth waters	10	27	19	10	10	6	1	0	0	3	2	0
Smooth waters	15	10	25	12	18	15	6	5	3	1	0	0
Distribution by location classifications	58	65	83	45	60	28	7	7	5	6	3	0

Table 9 Fatal and serious injury incidents by month 1998 - 2003 and year 2003 by region

Months	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
January	10	7	14	3	11	2	1	0	0	1	0	0
February	7	5	4	0	4	2	1	0	0	1	0	0
March	1	5	14	5	2	1	1	0	0	0	0	0
April	2	11	10	4	5	1	0	0	1	0	0	0
May	9	7	7	3	5	2	0	0	0	1	1	0
June	10	4	6	2	5	2	1	1	0	0	0	0
July	3	2	7	6	8	2	0	2	0	0	0	0
August	0	5	8	6	3	2	0	1	0	1	0	0
September	5	6	4	1	8	3	3	0	0	0	0	0
October	4	2	4	6	2	4	0	0	1	2	1	0
November	2	5	2	5	1	2	0	0	2	0	0	0
December	5	6	3	4	6	5	0	3	1	0	1	0
Fatality/serious injury incidents	58	65	83	45	60	28	7	7	5	6	3	0

Table 10 Fatal and serious injury incidents 1998 - 2003 by region

Region	1998	1999	2000	2001	2002	2003
Gold Coast	0	0	10	10	14	7
Brisbane	30	27	29	13	20	7
Gladstone	9	17	16	5	4	5
Mackay	7	11	15	7	8	6
Townsville	5	7	7	1	2	3
Cairns	7	3	6	9	12	0
Not specified	0	0	0	0	0	0
Fatality/serious injury incidents by regions	58	65	83	45	60	28

Table 11 Fatal and serious injury incidents by time of day 1998 - 2003

Time of day	1998	1999	2000	2001	2002	2003
Not specified	1	1	5	4	2	1
Dawn	0	3	3	1	1	2
Day time	40	52	62	33	44	19
Dusk	3	3	3	1	5	2
Night time	14	6	10	6	8	4
Fatality/serious injury incidents by TOD	58	65	83	45	60	28

Table 12 No. of ships involved in fatal and serious injury incidents 1998 - 2003 by ship type

Ship type	1998	1999	2000	2001	2002	2003
Not specified	0	0	0	0	0	0
COM Fishing	10	6	10	6	10	3
COM Hire & Drive	0	0	0	0	0	0
COM Hire & Drive (House)	3	0	0	0	0	0
COM Hire & Drive (Motor)	0	0	0	2	2	0
COM Hire & Drive (PWC)	4	3	3	0	3	1
COM Hire & Drive (Sail)	1	0	3	0	0	0
COM Hire & Drive (Speed)	2	1	0	0	0	0
COM Houseboat	0	0	1	0	0	0
COM Hovercraft	1	0	0	0	0	0
COM Motorboat	1	0	0	1	0	0
COM Non-passenger	0	2	11	1	5	1
COM Other	0	7	3	1	5	3
COM Passenger	13	11	16	11	8	9
COM PWC (jetski)	1	1	1	1	0	0
COM Sailboat	0	7	0	0	0	1
COM Speedboat	4	5	7	5	6	0
REC Houseboat	3	2	1	0	1	0
REC Motorboat	7	5	4	6	5	2
REC Other	0	0	0	2	1	0
REC Paddle (row) boat	1	0	0	1	1	0
REC PWC (jetski)	4	8	10	4	4	1
REC Sailboat	0	3	4	2	4	5
REC Speedboat	15	16	18	6	17	11
No of ships by ship types	70	77	92	49	72	37

Table 13 Visibility in fatal and serious injury incidents 1998 - 2003 and year 2003 by region

Visibility	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Not specified	9	9	13	5	14	5	0	3	1	0	1	0
Poor	4	1	3	3	2	1	0	0	1	0	0	0
Fair	12	8	12	3	2	2	0	0	1	1	0	0
Good	33	47	55	34	42	20	7	4	2	5	2	0
Fatality/serious injury incidents	58	65	83	45	60	28	7	7	5	6	3	0

Table 14 Weather in fatal and serious injury incidents 1998 - 2003 and year 2003 by region

Weather	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Not specified	13	7	14	5	10	4	0	3	1	0	0	0
Clear	37	46	46	32	40	20	7	3	2	6	2	0
Cloudy	3	5	16	6	4	3	0	0	2	0	1	0
Flood	0	0	0	0	0	0	0	0	0	0	0	0
Hazy	2	1	2	1	1	0	0	0	0	0	0	0
Other	1	0	1	0	2	1	0	1	0	0	0	0
Rain	2	6	4	1	3	0	0	0	0	0	0	0
Fatality/serious injury incidents	58	65	83	45	60	28	7	7	5	6	3	0

Table 15 Wind in fatal and serious injury incidents 1998 - 2003 and year 2003 by region

Wind	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Not specified	20	7	15	4	12	5	0	3	2	0	0	0
No wind	8	6	9	5	9	1	0	0	0	0	1	0
Light (up to force 2 / 1-7 knots)	12	25	22	22	16	7	4	2	0	1	0	0
Moderate (force 3-4 / 8-16 knots)	11	16	20	7	14	13	3	2	2	4	2	0
Strong (force 5-7 / 17-33 knots)	6	11	15	7	9	2	0	0	1	1	0	0
Gale (force 8 and above / more than 33 knots)	1	0	2	0	0	0	0	0	0	0	0	0
Fatality/serious injury incidents	58	65	83	45	60	28	7	7	5	6	3	0

Table 16 Environmental factors contributing to marine incidents 1998 - 2003 and year 2003 by region

Environmental factors	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Abnormal tidal conditions	24	17	7	15	5	4	1	0	1	0	1	1
Bar conditions	5	9	3	2	12	18	9	7	0	0	0	2
Floating or submerged object	17	24	25	17	11	7	1	3	2	0	0	1
Hazardous season (cyclones etc)	6	15	5	1	0	3	0	1	0	2	0	0
Hazardous waters - coral reefs	6	2	24	30	23	22	1	0	0	15	0	6
Hazardous waters - lack navigation aids	0	1	2	1	1	1	1	0	0	0	0	0
Hazardous waters - shifting channel	1	1	3	9	5	6	1	5	0	0	0	0
Hazardous waters - uncharted hazards	3	0	2	7	4	2	0	2	0	0	0	0
Heavy traffic area	5	5	5	2	7	3	1	1	0	0	0	1
Other environmental contributing factor	3	5	27	35	23	17	3	9	2	3	0	0
Poor visibility	14	18	16	16	16	10	0	3	1	4	1	1
Sea state	31	61	68	78	75	70	3	27	13	15	7	5
Wash of passing vessel	22	19	7	13	14	9	1	4	2	0	0	2
Wind	44	24	21	60	42	66	8	23	6	17	6	6
Total environmental factors attribution	181	201	215	286	238	238	30	85	27	56	15	25

Table 17 Human factors contributing to marine incidents 1998 - 2003 and year 2003 by region

Human factors	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Alcohol or drugs	6	4	6	6	6	7	0	2	5	0	0	0
Commercial pressure	1	4	11	9	6	3	0	1	0	1	0	1
Excessive speed	10	21	15	17	16	10	2	4	1	2	1	0
Fatigue	4	8	4	9	2	6	0	2	1	2	0	1
Inadequate training of crew	8	6	14	20	13	13	4	1	1	4	1	2
Inappropriate Harbour/Port Authority advice	0	0	2	2	0	0	0	0	0	0	0	0
Inappropriate advice to ship - Pilot	0	4	0	0	2	0	0	0	0	0	0	0
Inappropriate Vessel Traffic System advice	1	0	0	1	1	0	0	0	0	0	0	0
Inappropriate instructions to crew - other	2	1	1	3	4	6	1	2	1	1	0	1
Poor communication of instructions to crew	3	0	3	4	4	1	0	1	0	0	0	0
Inattention	22	30	64	73	64	55	2	31	7	7	3	5
Insecure mooring	15	10	33	28	19	25	4	4	3	8	1	5
Insufficient crew numbers	0	1	0	1	0	1	0	0	1	0	0	0
Insufficient fuel	3	2	2	1	3	0	0	0	0	0	0	0
Insufficient maintenance	3	6	6	10	5	8	0	0	3	4	1	0
Insufficient planning	5	9	11	12	9	17	0	5	1	8	0	3
Navigation error-failure to keep proper lookout	24	33	17	37	25	45	3	4	7	24	1	6
Navigation error-lack of knowledge/experience	66	58	33	36	14	37	0	11	1	21	0	4
Navigation error-other	20	33	29	37	24	20	2	7	1	6	1	3
Navigation error-violation of Collision regs	28	15	5	22	13	20	2	5	2	5	3	3
Operational error-other	40	45	66	122	118	133	35	18	24	40	6	10
Overloading	0	0	2	4	0	1	0	0	0	0	0	1
Poor communications	6	3	3	6	7	1	0	0	0	1	0	0
Poor ship to shore communications	0	0	0	2	2	3	0	1	1	1	0	0
Violation of standard procedures	27	3	1	26	16	22	0	10	1	6	0	5
Violation of statutory rules or standards	4	7	9	21	22	16	3	6	0	1	0	6
Total human factors attribution	298	303	337	509	395	450	58	115	61	142	18	56

Table 18 Material factors contributing to marine incidents 1998 - 2003 and year 2003 by region

Material factors	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Bridge or navigation failure	0	4	5	2	1	3	0	0	0	1	0	2
Electrical failure	3	3	9	19	13	9	0	0	1	4	1	3
Equipment failure - other	28	33	33	25	22	29	0	7	1	12	4	5
Fuel or gas leak	6	3	1	10	2	4	0	1	0	1	2	0
Hull failure	12	8	12	16	16	12	2	4	2	0	2	2
Inadequate stability - other	2	1	3	6	0	1	0	0	0	1	0	0
Inadequate stability - overloading	0	0	2	1	0	1	0	0	1	0	0	0
Inadequate stability - shifting cargo	1	0	0	1	1	2	0	0	0	1	0	1
Inappropriate hull or equipment-construction fault	2	0	2	5	6	1	0	0	0	0	1	0
Inappropriate hull or equipment-design fault	2	2	7	9	3	7	0	0	0	4	0	3
Insufficient maintenance of hull or equipment	5	12	10	6	5	3	0	0	1	2	0	0
Insufficient safety equipment	1	0	0	0	5	2	0	0	0	0	0	2
Machinery failure	21	25	25	41	47	49	0	17	10	8	3	11
Other material contributing factor	2	14	36	32	28	22	1	10	5	3	2	1
Shore structure badly designed/maintained	5	5	4	4	5	4	0	1	0	1	2	0
Total material factors attribution	90	110	149	177	154	149	3	40	21	38	17	30

Table 19 Incident type 1998 - 2003 and year 2003 by region

Incident type	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Capsizing	10	11	19	16	14	13	0	8	1	3	0	1
Capsizing flooding	4	5	5	12	7	8	0	1	2	3	1	1
Capsizing sinking	30	23	19	23	29	21	4	5	4	1	4	3
Capsizing swamping	13	27	17	22	31	40	10	10	7	3	3	7
Collision between ships	125	138	121	119	119	125	31	35	18	13	9	19
Collision with a fixed object	39	38	37	36	42	35	4	8	6	7	3	7
Collision with an animal	0	0	0	1	2	2	0	0	0	2	0	0
Collision with floating object	17	6	12	7	11	8	0	4	1	0	1	2
Collision with overhead obstruction	1	0	3	0	2	0	0	0	0	0	0	0
Collision with submerged object	8	18	24	15	18	18	6	9	1	0	0	2
Collision with wharf	10	16	13	20	18	22	1	11	1	2	2	5
Explosion	9	2	2	5	1	1	0	1	0	0	0	0
Fire	9	22	18	28	17	31	1	10	5	6	3	6
Grounding intentional	4	3	10	2	2	2	0	1	0	1	0	0
Grounding unintentional	87	93	127	115	94	125	5	28	11	52	10	19
Loss of ship	14	10	23	1	7	13	0	4	6	1	1	1
Loss of stability	0	1	0	3	0	2	0	2	0	0	0	0
Onboard incident crushing or pinching	4	8	5	1	5	5	1	1	2	0	1	0
Onboard incident falls within ship	5	17	9	19	18	19	1	5	7	2	2	2
Onboard incident other onboard injury	26	12	20	15	10	10	1	3	1	5	0	0
Other	18	48	29	10	62	43	1	14	10	11	2	5
Other - Close Call	29	5	29	40	50	29	0	16	3	3	0	7
Other - Crime Issue	0	1	1	10	2	1	0	0	1	0	0	0
Other - Ship Adrift	2	0	6	20	10	12	0	1	0	5	1	5
Other personal injury caused by operation of ship	9	5	10	7	18	10	3	3	2	2	0	0
Other personal injury diving incident	1	1	3	1	2	2	0	0	2	0	0	0
Other personal injury hit by propellor or ship	3	1	3	5	6	10	2	5	1	2	0	0
Other personal injury parasailing incident	2	1	0	1	2	0	0	0	0	0	0	0
Other personal injury water ski incident	8	8	10	8	5	4	3	1	0	0	0	0
Person overboard	10	22	21	25	24	19	3	5	5	2	3	1
Structural failure	7	8	16	22	21	15	0	1	0	9	3	2
All incidents	504	550	612	609	649	645	77	192	97	135	49	95

Table 20 Locations of incidents 1998 - 2003 and year 2003 by region

Location	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Not specified	59	8	7	1	1	4	0	3	1	0	0	0
Inland waters	141	130	108	102	101	78	18	37	9	1	10	3
Offshore	81	72	114	115	138	129	12	35	30	15	12	25
Partially smooth waters	91	234	160	151	153	190	8	40	21	90	14	17
Smooth waters	132	109	223	241	257	244	39	77	36	29	13	50
All incidents	504	553	612	610	650	645	77	192	97	135	49	95

Table 21 Incidents by month 1998 - 2003 and year 2003 by region

Month	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
January	64	48	66	59	60	54	10	16	9	7	4	8
February	39	43	49	40	55	40	5	15	10	7	1	2
March	28	46	52	58	57	57	10	16	4	13	2	12
April	37	52	64	54	58	47	6	15	4	9	7	6
May	47	47	49	38	46	47	6	10	4	15	5	7
June	40	47	40	50	63	60	10	21	9	9	5	6
July	30	44	61	48	37	54	5	17	8	13	3	8
August	40	45	60	66	48	61	7	22	6	17	4	5
September	46	43	47	42	61	43	5	13	7	7	2	9
October	52	47	52	51	58	66	1	15	10	18	8	14
November	39	42	34	58	52	61	7	10	17	9	6	12
December	42	49	38	46	55	55	5	22	9	11	2	6
All incidents	504	553	612	610	650	645	77	192	97	135	49	95

Table 22 Incidents 1998 - 2003 by region

Region	1998	1999	2000	2001	2002	2003
Gold Coast	-	1	73	75	79	77
Brisbane	226	221	179	198	198	192
Gladstone	64	89	94	76	87	97
Mackay	104	131	119	128	123	135
Townsville	46	45	46	51	59	49
Cairns	64	66	101	82	104	95
Region not advised	0	0	0	0	0	0
All incidents	504	553	612	610	650	645

Table 23 Damage category 1998 - 2003 and year 2003 by region

Damage	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Not specified	46	1	0	0	2	4	0	2	2	0	0	0
Damage to Property Only	44	66	53	51	68	68	12	27	6	7	8	8
No Damage	106	176	217	226	272	245	15	82	45	57	15	31
Ship Damaged	213	222	291	285	268	295	48	72	36	69	22	48
Ship Lost	35	32	51	47	40	33	2	9	8	2	4	8
All incidents	444	497	612	609	650	645	77	192	97	135	49	95

Table 24 Incidents by time of day 1998 - 2003 and year 2003 by region

Time of day	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Not specified	16	18	51	22	41	35	2	4	5	6	5	14
Dawn	22	35	19	22	26	26	3	10	5	1	3	4
Day	312	354	382	386	410	417	61	123	60	99	22	52
Dusk	48	31	34	58	59	55	5	18	5	8	4	14
Night	106	115	126	122	114	112	6	37	22	21	15	11
All incidents	504	553	612	610	650	645	77	192	97	135	49	95

Table 25 No. of ships in incidents 1998 - 2003 by ship type

Ship type	1998	1999	2000	2001	2002	2003
COM Fishing	78	94	101	92	88	88
COM Hire & Drive	0	2	0	0	0	0
COM Hire & Drive (House)	9	3	4	4	1	0
COM Hire & Drive (Motor)	6	7	8	10	10	11
COM Hire & Drive (Other)	11	0	0	2	0	1
COM Hire & Drive (PWC)	6	7	7	5	2	2
COM Hire & Drive (Sail)	17	27	43	46	30	48
COM Hire & Drive (Speed)	2	1	2	0	0	1
COM Houseboat	4	8	7	11	11	8
COM Hovercraft	1	0	0	0	0	0
COM Motorboat	15	5	11	8	6	6
COM Non-passenger	25	14	67	29	69	93
COM Other	79	113	46	66	89	48
COM Paddle (row) boat	1	0	1	0	3	0
COM Passenger	92	112	126	161	137	162
COM PWC (jetski)	12	6	6	9	10	11
COM Sailboat	15	47	8	15	14	20
COM Speedboat	15	16	8	12	22	14
REC Houseboat	8	8	7	9	5	8
REC Motorboat	50	41	60	66	71	85
REC Other	13	15	16	30	34	16
REC Paddle (row) boat	3	0	5	2	3	4
REC PWC (jetski)	14	26	27	17	21	11
REC Sailboat	83	86	94	59	86	101
REC Speedboat	71	82	84	56	69	75
Not specified	14	6	10	32	51	5
Unknown ship type	9	10	3	10	10	0
No of ships by ship type	653	736	751	751	842	818

Table 26 Visibility in incidents 1998 - 2003 and year 2003 by region

Visibility	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Not specified	60	67	89	33	92	89	1	37	21	1	13	16
Poor	57	53	64	61	50	52	6	8	13	14	2	9
Fair	74	73	96	112	67	70	8	13	9	21	9	10
Good	313	360	363	404	441	434	62	134	54	99	25	60
All incidents	504	553	612	610	650	645	77	192	97	135	49	95

Table 27 Weather in incidents 1998 - 2003 and year 2003 by region

Weather	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Not specified	74	56	67	31	72	71	2	30	20	2	7	10
Clear	314	347	364	427	447	414	57	120	49	92	29	67
Cloudy	35	55	83	72	63	90	9	26	18	23	9	5
Flood	0	0	3	1	0	1	0	0	1	0	0	0
Hazy	12	7	15	16	27	19	2	6	2	3	1	5
Other weather	7	10	12	8	7	4	0	2	2	0	0	0
Rain	62	78	68	55	34	46	7	8	5	15	3	8
All incidents	504	553	612	610	650	645	77	192	97	135	49	95

Table 28 Wind in incidents 1998 - 2003 and year 2003 by region

Wind	1998	1999	2000	2001	2002	2003	GC	BN	GL	MK	TV	CN
Not specified	127	65	62	37	69	63	1	28	16	1	4	13
No wind	28	32	57	47	57	49	8	18	5	7	4	7
Light (up to force 2 / 1-7 knots)	128	140	168	217	196	176	30	58	22	26	7	33
Moderate (force 3-4 / 8-16 knots)	125	185	172	186	209	228	28	63	36	54	22	25
Strong (force 5-7 / 17-33 knots)	78	116	130	104	107	122	10	22	16	45	12	17
Gale (force 8 and above / more than 33 knots)	18	15	23	19	12	7	0	3	2	2	0	0
All incidents	504	553	612	610	650	645	77	192	97	135	49	95

Table 29 Boating incidents 1998 - 2003 by region

Region	1998	1999	2000	2001	2002	2003
South East Queensland	2174	1769	1845	n/a	n/a	n/a
Gold Coast	n/a	n/a	n/a	927	874	878
Brisbane	n/a	n/a	n/a	768	1005	1175
Gladstone	424	356	480	335	395	388
Mackay	121	65	40	68	17	7
Townsville	106	114	151	111	122	104
Cairns	118	147	216	160	146	145
Annual totals	2943	2451	2732	2369	2559	2697

Table 30 Boating incidents by callout reason 2003 by region

Region	Breakdown	Grounding	Fuel	Sinking	Not Specified	Drifting	Search	Medical	Flares	EPIRB
Brisbane	606	77	74	47	65	45	56	21	9	7
Cairns	100	6	14	4	2	6	3	1	1	3
Gladstone	238	22	27	16	18	15	14	7	7	6
Gold Coast	527	85	46	63	25	31	13	11	3	2
Mackay	5	0	2	0	0	0	0	0	0	0
Townsville	71	4	6	4	5	1	6	0	3	0
Callout reason totals	1547	194	169	134	115	98	92	40	23	18

Table 31 Commercial and recreational registrations 1998-2003 by region

Recreational registrations						
Region	1998	1999	2000	2001	2002	2003
Gold Coast	16392	17544	18695	20130	22052	23813
Brisbane	63662	66986	70310	74018	75514	78798
Gladstone	22469	23430	24391	25826	29270	31018
Mackay	9692	10055	10417	11046	12632	13270
Townsville	13065	13610	14154	14989	16618	17141
Cairns	13816	14693	15570	16143	15829	16264
Totals	139096	146318	153537	162152	171915	180304
Commercial registrations						
Region	1998	1999	2000	2001	2002	2003
Gold Coast	693	728	727	727	763	825
Brisbane	1434	1585	1569	1596	1580	1636
Gladstone	716	768	744	752	778	777
Mackay	641	700	711	751	765	776
Townsville	413	480	473	466	485	468
Cairns	983	1074	1105	1123	1178	1165
Totals	4880	5335	5329	5415	5549	5647
Total registrations						
Region	1998	1999	2000	2001	2002	2003
Gold Coast	17085	18272	19422	20857	22815	24638
Brisbane	65096	68571	71879	75614	77094	80434
Gladstone	23185	24198	25135	26578	30048	31795
Mackay	10333	10755	11128	11797	13397	14046
Townsville	13478	14090	14627	15455	17103	17609
Cairns	14799	15767	16675	17266	17007	17429
Totals	143976	151653	158866	167567	177464	185951