



Annual Marine Safety Report

April 2010 to March 2011



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Aim

The aim of the Annual Marine Safety Report is to appraise the Board of the work that has been undertaken in the Harbour Master's Department in the last 12 months, with particular emphasis on marine safety.

The report will:-

- Consider the effectiveness of the Safety Management System.
- Summarise the achievements and improvements of the last 12 months.
- Set the targets for improvements for the forthcoming year.
- Consider the trends, if any, in accidents and incidents.
- Outline the outstanding concerns for safety and list the intended actions for improvement.



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1. Safety Management System (SMS)

The Safety Management System confirms the policies and procedures of Poole Harbour Commissioners within the structure of an integrated Safety Management Plan. This Plan is currently being reviewed following the restructure of the organisation. The Safety Management System has been applied in accordance with the standards as published in the plan, emergency plans and risk assessments.

The SMS is a series of dynamic documents that are sourced and updated regularly to minimise the risk of incident in Poole Harbour to As Low As Reasonably Practicable (ALARP).

The SMS is scheduled to be audited by an independent external consultancy to ensure that Poole Harbour Commissioners continues to be fully compliant with the Port Marine Safety Code and Guide to Good Practice on Port Marine Operations.

The SMS continues to work effectively, and I am pleased to report that there have been no serious accidents over the past 12 months.

All Commissioners, as Duty Holders of the Port Marine Safety Code have signed that they have read and understood the Port Marine Safety Code and as a Duty Holder will comply with the requirements of the code.

PHC confirmed, to Government, its compliance with the requirements of the Port Marine Safety Code in March 2009. This is a three yearly requirement.

2. Harbour Vessels



Herbert Ballam - Classed as a +100A1 tug, Limited European service area, LMC at Lloyd's Register and under the MCA Code of Practice for Small Commercial Vessels.

The risk assessments for commercial shipping in Poole Harbour include having a towage service that is available 24 hours a day as a control measure to assist in mitigation in the event of breakdowns, groundings and inclement weather.

Tasks

- Assisting ferries to maintain schedule.
- Assisting cargo vessels berthing and sailing as required.
- Assisting in dredge work
- Towage for Poole Bay Fuels
- Assisting Engineers as a working platform

C H Horn – Not classed under any survey regime, but all H.S.E. and L.S.A. requirements are overseen by the M.C.A.

Main role is the maintenance of the main channel navigation marks and maintenance dredging adjacent to quays. This past year she was used for further sediment management and local dredge contract work, including Poole Quay Boat Haven, the Backwater Channel (second bridge), Parkstone Yacht Club, Port of Poole Marina, B P Base and Furzey Island slipway.



Tasks

- Maintenance dredging, mainly New Quay, Ro/Ro 2, Ballast and Bulwark quays.
- Navigation buoys maintenance.
- Lifting/launching, Vigilant, Vixen, Viper, Survey 1 and Vanguard for repairs or maintenance.
- Assisting Engineers as work platform
- Backfill sand to Ro/Ro 3 to protect linkspan
- Mooring Maintenance
- Sediment Management
- Contract dredging
- Fuelling station for all PHC craft (marine diesel)



Rough Ryder - Coded under the M.C.A. Code of Practice for Small Commercial Vessels.

This vessel continues to be the workhorse of the organisation maintaining buoy lights, minor buoys and stakes as well as small moorings. This vessel requires a minor refit in 2011.

Tasks

- Principle light tender for buoys and beacons
- Maintenance of stakes and buoys in minor channels
- Pollution response
- Towing for boats adrift or in the wrong place
- General work platform for maintenance and repair
- Shellfish surveys for Borough of Poole Council
- Mooring maintenance

Creekmoor - Sold in 2010 as a result after department restructuring.

Vixen - Ex RNLI Atlantic 21. Not coded. Used as high-speed interception patrol craft and for general work through the season. Stored ashore out of season.

This craft continues to play a significant role in maintaining safety in the Harbour.



Tasks

- Harbour Patrols.
- Shellfish Surveys.
- General-purpose launch.
- Pollution response.
- Quick response through bridge.
- Mooring inspections.



Vigilant - The Targa 25 PHC patrol boat has performed well over the 6 month period April to September. As well as being a noticeable presence, she acts as a good deterrent and when necessary is an essential asset in the fight against Byelaw infringement. Most successful prosecutions are as a result of evidence collated from this vessel.

Tasks

- Harbour patrols through 6 month season
- Byelaw enforcement
- Stakeholder education
- Available as HM launch as required out of season

Survey One - This vessel is used for essential hydrographic survey work throughout the year for conservancy purposes. Contract work is also undertaken.

This is a hard working vessel that performs well with routine maintenance. It is occasionally used as a patrol vessel and escort vessel subject to availability.



Tasks

- Surveys harbour to determine best navigable channels.
- Produces data for Admiralty charts.
- Standby harbour patrol and escort vessel at week-ends.
- External survey work.



Viper - This craft was purchased in July 2010 and is an essential patrol vessel in PW byelaw enforcement with comparative speed and draft. Viper performs well with routine maintenance. A second PW (Vasco), owned and manned by the Maritime Voluntary Service (MVS), is used at weekends when required.

All operators are suitably qualified.

Tasks

- Harbour patrols
- PW byelaw enforcement
- Education

Vandyke - The MCA Pilot Boat Certificate was renewed in July 2009 and is therefore valid until July 2014. In July this year she will be due an in house annual survey and before July 2012 an out of water intermediate MCA survey. By the end of the next renewal cycle (2019) she will be over 40 years old and it is likely a replacement vessel will need to be procured. She is the vessel of choice in heavy weather and for pilot service of the Condor fast cats.



Vanguard - Pilot Boat Certificate is due for renewal in March 2012. Therefore an MCA (YDSA) out of water survey will be due at that time. The vessel continues to be a valuable asset, especially in the role of rapid response patrol boat where she excels.

Occasional minor defects on all vessels were reported immediately and dealt with in a timely fashion through our defect reporting system.



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3. Personnel

There were three injuries over this period with none being reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR).

Jan	2011	Tug Skipper slipped whilst carrying a mop and bucket in M Shed.
Feb	2011	Deckhand caught hand on metal post on CH Horn.
Mar	2011	Deckhand twisted ankle on CH Horn which resulted in a fracture and ligament damage reported to MAIB. No investigation by MAIB.

4. Training

Dredger skipper has completed four elements of safety training towards obtaining a STCW masters certificate for vessels < 500 grt near coastal. With a towage endorsement this will enable him to command the tug following in house training.

Harbour Masters Department staff refreshed in level 2P Oil Pollution Response.

Four employees successfully completed a PW operators certificate. (Jetski)

Two pilots successfully completed a Bridge Resource Management (BRM) course which included simulator training.

All Harbour Controllers are qualified to V103/1 standard as required by the MCA with Harbour Master qualified as instructor V103/4. All the mandatory refresher training is up to date.

Two employees completed first aid refresher course.

Two employees completed B1 forklift course.

Three employees completed B3 forklift course.

Harbour control officers and assistant harbour masters completed CCTV data protection course.

5. Aids to Navigation

Since the last report the maintenance regime for Aids to Navigation has been reviewed due to departmental changes following an organisation restructuring.

Due to the increased workload on the dredger the North Channel marks have had their mooring gear adjusted to enable Rough Ryder to undertake that maintenance work.

The majority of navigation buoys are being brought back to the workshop for a complete overhaul when previously they were being serviced on station.

Marks in the Wareham Channel and South Deep have also been similarly adjusted.



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PHC are audited by Trinity House annually which involves a full inspection of maintenance records and a daylight and darkness physical inspection of Aids to Navigation.

6. Surveying

All surveys have been completed in accordance with the planned programme. The plan as of March 2011 is at Table 9 and shows the timescale, frequency and priority.

All data is sent to the Admiralty Hydrographic Office for inclusion in the local charts.

7. Incidents

Reported incidents are down 14% on last year with none resulting in serious injury.

Once again the harbour entrance has remained incident free (reported) which has been the trend for the past 5 years. This area can be very congested with a wide variety of harbour users. The statistics are encouraging but we should never be complacent. Marine activity risk assessments have been internally reviewed after stakeholder consultation and will be merged into a new software package before the next report. The external risk assessment for the harbour entrance will be postponed until 2013 when it is proposed that all risks be reviewed by independent auditors.

Reported collisions have increased by 25% from 4 to 5 which is the average over the past 5 years. No collision resulted in a serious injury and all were fully investigated. In all incidents where both vessels were underway and making way the cause has been non compliance with the International Regulations for Preventing Collisions at Sea (IRPCS).

Aids to Navigation deficiencies are down 15% on last year and the cyclic trend continues as can be seen from table 4. As previously mentioned a more robust maintenance regime is being implemented. The majority of deficiencies are due to lights being reported dim or extinguished and this is mainly in the winter months when solar light is reduced.

Reports of speeding/wash have increased by 9% despite signage, education, publications, Local Notices, warning letters and prosecutions. A survey of harbour signage will be undertaken this year to identify areas where speed limit awareness could be improved.

It is encouraging to note that reported yacht racing incidents in the harbour have reduced by 70% from 7 to 2. All incidents are investigated both by the Harbour Masters Department and the yacht club organising the race. One near miss incident in August prompted a review of internal and external yacht racing risk assessments and the racing criteria that is agreed between PHC and the Poole Yachting Association (PYA). Some ten months later this review is nearing completion which ultimately should reduce further the risk of Yacht Racing in the harbour using the ALARP principle of As Low As Reasonably Possible.

Once again there is a good safety record for the chain ferry operation with no recorded incidents for the year, effectively a 100% improvement on last year.

There has been a 26% reduction in reported oil pollution incidents over the past year and a 61% reduction since 2008. As well as the CCTV coverage improvements mentioned last year, further



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control measures have been put in place for bunkering of fishing vessels. This may be a contributing factor. These incidents have been minor and non-attributable.

Close quarters incidents have reduced by 17% from 12 to 10. It is encouraging that these incidents are being reported and ideally it would be preferable to receive reports regarding all close quarter's situations or indeed any accident/incident near miss. A large increase in the number of these reports will not necessarily mean that safety in the harbour has deteriorated but rather that the safety culture has improved. These reports can provide vital information when assessing trends and reviewing risk assessments. Harbour users will be further encouraged to report all near misses going forward.

A kite surfing Code of Conduct was produced last year due to concerns about increased kite surfing activity in Whitley Lake. It is hoped that further controls can be introduced through liaison with the Council and local training schools.

Paddle boarding is a relatively new water sport to Poole Harbour and there are concerns regarding this activity especially for the sole participant. The early stage of a Code of Conduct for this activity is being progressed.

8. Harbour Control

Harbour Control is the focal point for all marine operations in the Harbour and is recognised as being a vital 24 hour Information Service for commercial shipping and other harbour users as determined by risk assessment. The vast majority of incidents and complaints are reported direct to Harbour Control and entered into the incident log. This in turn is interrogated to identify trends and produce statistics for the monthly and Annual Marine Safety Reports. The log system has been updated to allow participation in the DfT National Pilot study of maritime incidents.

CCTV continues to be an effective tool when investigating Byelaw offences. An additional camera was added to the network in 2010 covering the Fisherman's Dock and adjacent harbour area. During 2011 Harbour Control will be connected to the new Poole Borough Council cameras monitoring the two-bridge operation.

The current designation of Information Service (INS) will be reviewed before the next annual report.

9. Actions / Targets before this report

• Carry out POOLSPILL major exercise (MCA requirement)	Completed
• Annual assessment procedure for HCO's (in-house)	Completed
• Review HCO operating procedures	Completed
• Assess the new HM Department structure to ensure ability to comply with statutory requirements	Completed
• Review PHC Oil Response Plan (POOLSPILL)	Completed
• Introduce Kite Surfing Code of Conduct	Completed
• Review VTS designation for Harbour Control	On-going
• Review Waste Management Plan (due Oct 2011)	On-going
• Complete external audit of SMS & implement recommendations	On-going
• Review Marine Safety Management Plan	On-going
• Complete external risk assessment for Harbour Entrance and implement recommendations	Removed

Note: Harbour entrance risk assessment removed as all risk areas in the harbour are being internally reviewed with a view for a complete external risk assessment audit in 2013.

Post Note: External SMS audit completed in May 2011.

10. Actions / Targets before next report

• Continue/complete all on-going targets
• Review Moorings Policy
• Introduce Paddle Boarding Code of Conduct
• All risk assessments transposed to new software
• Review Pilotage Manual
• Review Harbour Control Procedures
• Review MOU with SBS and Royal Marines
• Review of Harbour Safety Signage
• Review of Yacht Racing Criteria



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11. External Audits

OPRC

On the 22nd March 2011 PHC were audited by the MCA for Oil Preparedness, Response and Co-Operation Convention (OPRC) with no non conformities.

Incident Management Exercises (IME) must now be completed every 4 years. PHC completed carried out an IME on 15th October 2010 which will be due again in 2014.

The PHC Oilspill Contingency Plan "POOLSPILL" was reviewed in 2010 and approved by the MCA.

Trinity House

The Aids to Navigation were inspected by Trinity House on the 8th June 2010 and were "found to be in a good and efficient order".

Table 1

PROSECUTIONS

Date	Name	Reported By	Byelaw Offence	Fine
03/06/10	John Isik	Vigilant	2aa & 2e	£600/£175 costs/£15 victim support
22/06/10	Mr Andrew Huff	Vigilant	2aa & 2e	£500/£300 costs/£15 victim support
22/06/10	Mr Karl White	Vigilant	2aa & 2e	£500/£300 costs/15 victim support
25/06/10	Mr Christopher Skinner	Vigilant	2aa	£300/£400 costs/£15 victim support
30/06/10	Mr Andrew Huff	Vigilant	2aa & 2e	£1,200/£200 costs/£15 victim support

Note:

- 2aa** Speeding 10 knots
- 2e** No valid PW permit

Table 2

MEAN DAILY RECREATIONAL ACTIVITY

AVERAGE NUMBER OF VESSEL MOVEMENTS AT THE VARIOUS LOCATIONS

Mean Number of Vessels Passing	2003	2004	2005	2006	2007	2008	2009	2010
Harbour Entrance	560	525	574	535	521	No Survey	No Survey	578
Lake Pier	223	215	212	234	202	No Survey	No Survey	186
Brownsea Island								159

Recreational Surveys are usually carried out annually over a 28 day period during the summer, although no surveys were carried out in 2008 or 2009. In 2010 the survey has also covered vessels passing Brownsea Island.

The 2011 survey will follow a similar pattern of dates as previous surveys, starting on the 18th June and finishing the day after the August Bank Holiday. Surveys are undertaken from 0900 hours to 1630 hours, and will be carried out on 4 Mondays, 3 Tuesdays, 5 Wednesdays, 5 Thursdays, 5 Fridays, 2 Saturdays and 4 Sundays.

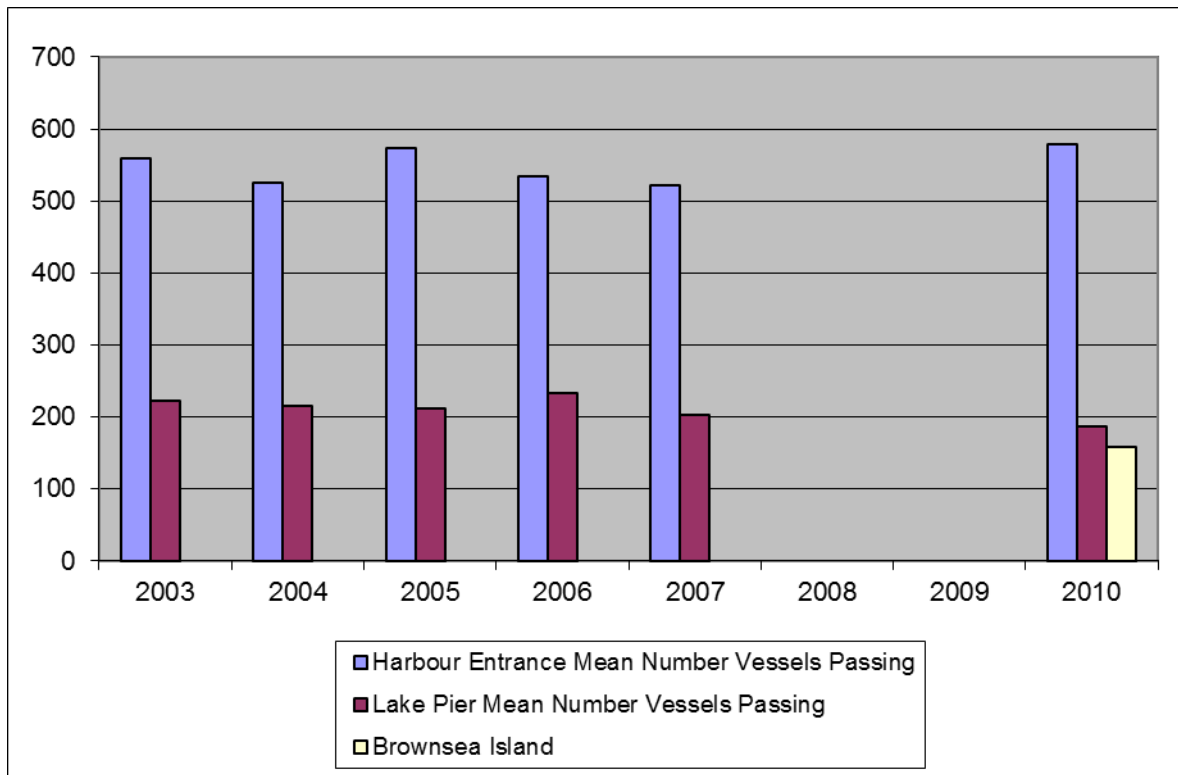


Table 3

POOLE BRIDGE MEAN NUMBER OF VESSELS PASSING

	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Poole Bridge	81	81	81	115	102	136	198	203

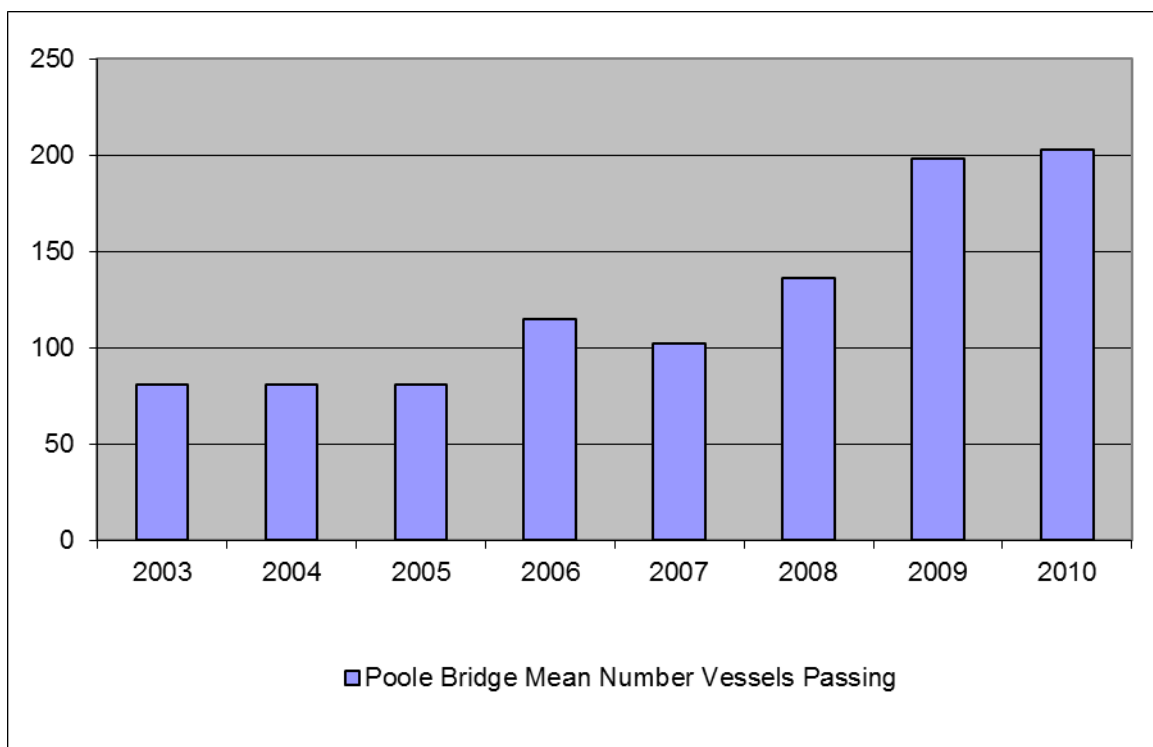
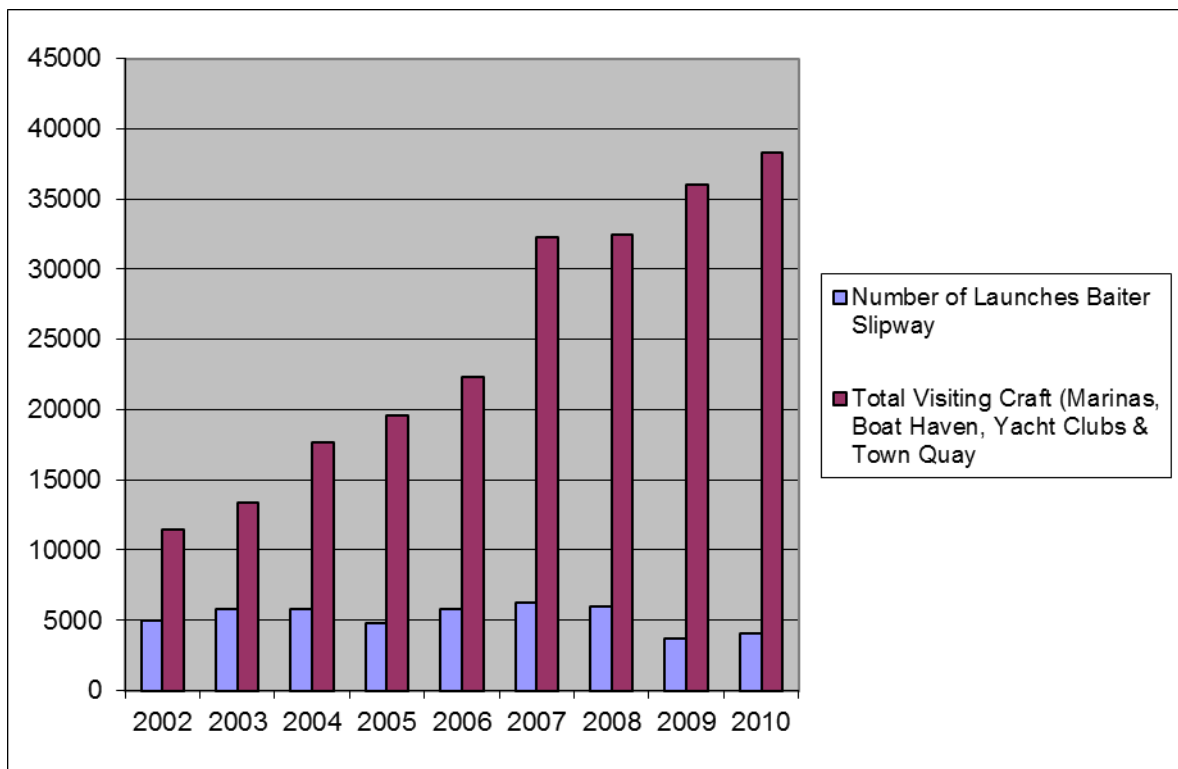


Table 4

POOLE HARBOUR - VISITING CRAFT

	<u>Number of Launches Baiter Slipway</u>	<u>Total Craft at Marinas, Boat Haven, Yacht Clubs and Town Quay</u>
2001	6250	5950
2002	5000	11500
2003	5800	13400
2004	5800	17700
2005	4775	19611
2006	5803	22350
2007	6254	32300
2008	5965	32454
2009	3707	35998
2010	4,054	38,327



Note: The above figures for craft are taken from harbour dues receipts and Council records.



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Table 5

REPORTED INCIDENTS

	<u>Yacht Racing Table 7</u>	<u>Oil Pollution</u>	<u>Nav Aids</u>	<u>Chain Ferry</u>	<u>Speeding Wash</u>	<u>Collision Table 9</u>	<u>Grounding</u>	<u>Harbour Entrance</u>	<u>Close Quarters Incidents</u>	<u>Totals</u>
2005/2006	18	35	54	4	26	15	2	2	11	167
2006/2007	15	37	76	2	41	5	8	0	15	199
2007/2008	2	44	49	2	24	5	9	0	17	152
2008/2009	3	22	60	3	15	8	2	0	7	120
2009/2010	7	23	74	2	32	4	0	0	12	154
2010/2011	2	17	63	0	35	5	1	0	10	133

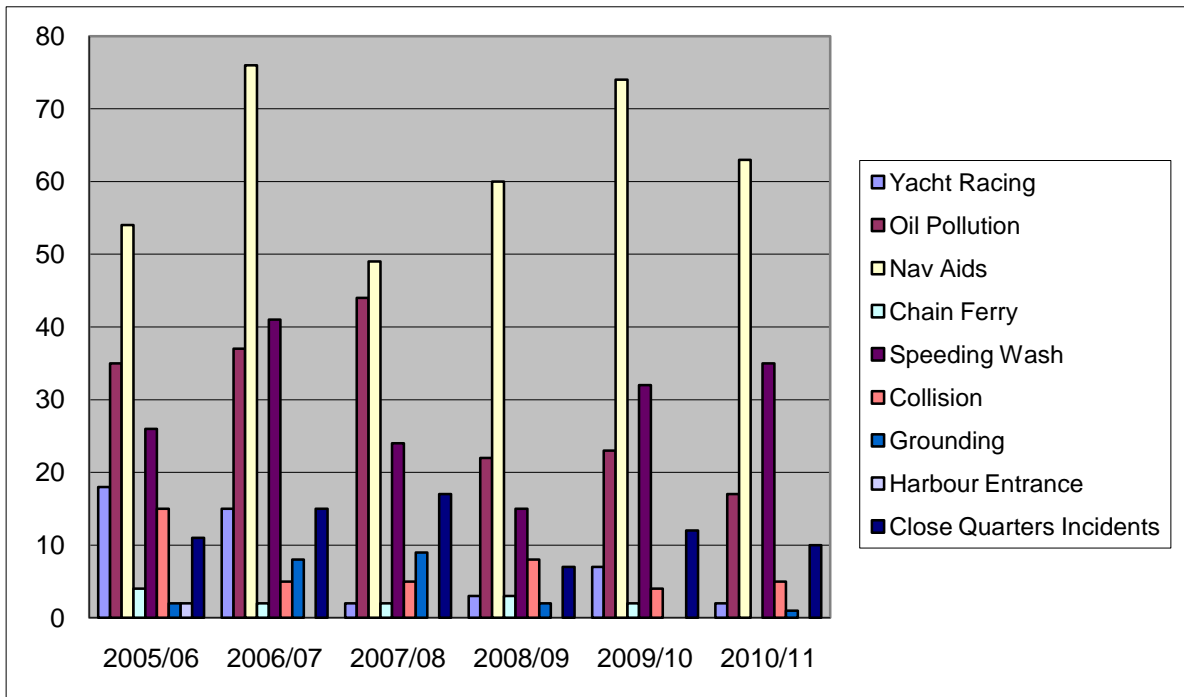


Table 6

SUMMARY OF PILOTAGE MOVEMENTS

1st April 2010 to 31st March 2011

TOTAL MOVEMENTS:

Recorded 5,197
Compulsory Pilotage 3,111



		<u>As a % of Total Recorded</u>	<u>As a % of Compulsory Pilotage</u>
Piloted Movements	718	13.8	23.1
PEC Movements	2,393	46.0	76.9

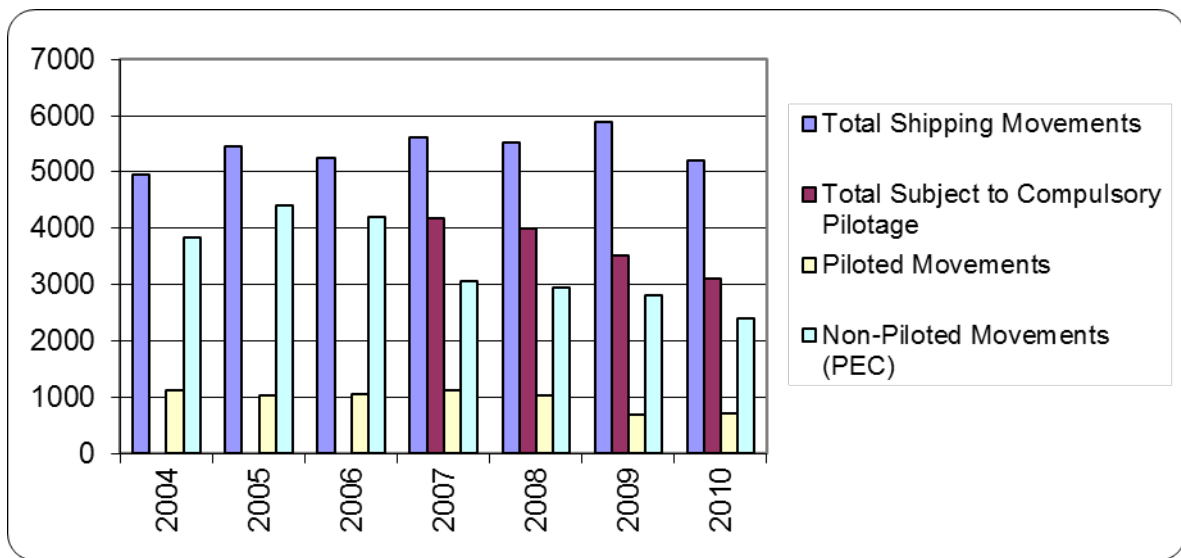


Table 7

LIST OF INCIDENTS INVOLVING YACHT RACING

<u>Month</u>	<u>Date</u>	<u>Club</u>	<u>Incident</u>
August	9th	Parkstone YC	'Whitchallenger' v racing yacht
October	13th	Parkstone YC	Racing yacht v 'Purbeck Pride'



Table 8

LIST OF INCIDENTS INVOLVING COLLISIONS

April	1st	'Lizard' v Sunseeker	Yacht 'Lizard' collided with Sunseeker vessels
June	25th	'Therapy' v 'Lady Hamilton	'Therapy' collided with the 'Lady Hamilton' on her mooring near 16 buoy.
July	3rd	'Elbereth v 'Dolphin III'	'Elbereth' anchored between Arne & Round Island. 'Dolphin III' passed very close causing both vessels to come together.
July	24th	PW v 'Aldabra'	Collision in Swash Channel between PW and yacht 'Aldabra'
July	28th	'Slayer 4' v 'Maid of Poole'	Yacht 'Slayer 4' in collision with 'Maid of Poole' whilst she was moored at berth.



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SURVEY PROGRESS to MARCH 2011

Survey Area	Scale	Priority	Date Last Completed	Frequency Month	Date Due
<i>Backwater channel(ongoing works)</i>	1250	2	Jul-08	24 month	On comp
Baiter	2500	4	Dec-08	24	Dec-10
Between the Quays	1000	2	Feb-10	12	Dec-11
Blood Alley	2500	3	Feb-08	36	Feb-11
Brownsea East	2500	4	Nov-10	24	Nov-12
Chain Ferry-See Chap Peak	n/a	1	Sep-10	12	Sep-11
Chapman's Peak Incl Ch fer	1250	1	Dec-10	4	Apr-11
Poole Quay boat haven	500	2	Oct-07	12	Sep-10
Dump Ground	5000	4	Sep-09	12	Apr-11
East Looe	2500	2	Mar-11	12	Sep-11
Havens	2500	1	Sep-10	12	Aug-11
Holes Bay	2500	3	Jul-08	36	Jun-11
Hook Sands	2500	4	Jul-09	24	Jun-11
Little Channel/working Quays	500	1	Aug-10	6	Feb-11
Middle Channel (East)	2500	1	Dec-10	4	Mar-11
Middle Ground	2500	4	Nov-10	24	Oct-11
Middle Mud	2500	4	Nov-10	12	Oct-11
North Channel	2500	2	Oct-10	12	Sep-11
Parkstone Bay	2500	4	Oct-08	24	Sep-10
Ramshorn Lake	1250	3	May-08	24	Mar-10
Red Horn Lake	1250	3	Sep-08	36	Sep-11
Ro/Ros	500	1	Feb-11	4	Jun-11
Rockley Channel	1250	3	Mar-10	24	Mar-12
Sandbanks Inner shore	1250	4	Sep-07	48	Sep-11
Shell Bay	2500	4	Nov-10	12	Sep-11
Silt deposit area A	500	3	Feb-10	6	Aug-11
South Deep East/White Gnd	2500	2	Jan-10	24	Jan-12
South Deep West	2500	3	May-08	36	May-11
Stone Island Lake	2500	4	Jun-08	36	Apr-11
Swash Channel (North)	2500	1	Dec-10	4	Mar-11
Swash Channel (South)	2500	1	Dec-10	4	Mar-11
Turning Basin and MSCW	2500	1	Dec-10	4	Mar-11
Wareham Channel (lower)	2500	2	Oct-08	36	Oct-11
Wareham Channel (middle)	2500	3	Oct-08	36	Oct-11
Wareham Channel (upper)	2500	3	Oct-08	36	Oct-11
Whitley Lake	2500	4	Sep-08	36	Sep-11
Wills Cut	1250	3	Dec-10	24	Dec-12
Wych Channel (Lower)	2500	3	Apr-09	36	May-12
Wych Channel (Middle)	2500	3	Nov-08	36	Jul-11
Wych Channel (Upper)	2500	3	Mar-10	36	Mar-13

Colour Key:

* MB denotes Multibeam Survey

PENDING

IN PROGRESS

UP TO DATE

OVERDUE

Becomes overdue 2 months after due date
priority 1&2 only

Work has been ongoing with the programmed navigation and dredge monitoring surveys of the shipping channels and harbour. Surveys have also been undertaken to support the in harbour silt disposal monitoring programme and PHC dredging works for the new Port of Poole Marina. In addition to the busy routine schedule, we have also just completed a full Multi beam survey of the shipping channels and approaches to ensure we continue to comply with safety regulations.

A product of this full seabed scanning method is the very detailed and colourful imagery. Below is an image, superimposed on the Admiralty chart, showing the section of shipping channel passing Chapman's peak, in the harbour entrance. This clearly and accurately shows the extensive mobile sand wave formations present here.

