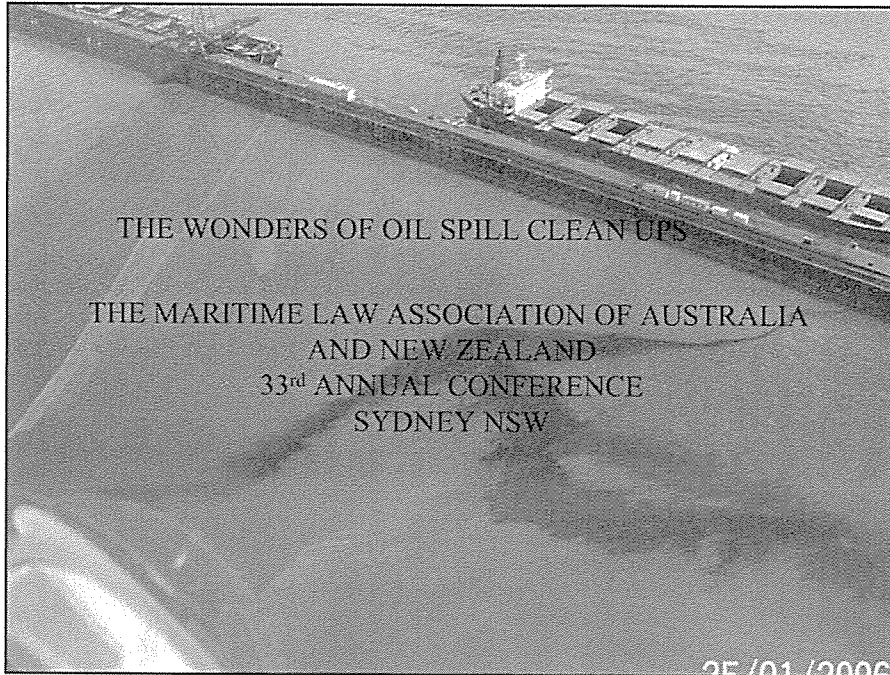


The wonders of oil spill clean ups

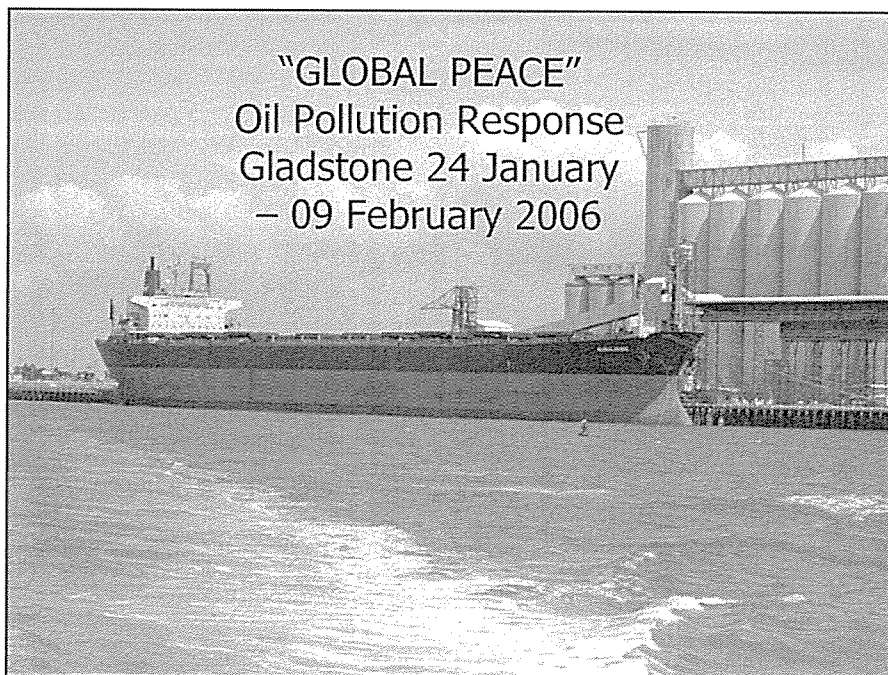
Captain Mike Lutze
Regional Harbour Master
Gladstone



THE WONDERS OF OIL SPILL CLEAN UPS

THE MARITIME LAW ASSOCIATION OF AUSTRALIA
AND NEW ZEALAND
33rd ANNUAL CONFERENCE
SYDNEY NSW

25 / 01 / 2006



"GLOBAL PEACE"
Oil Pollution Response
Gladstone 24 January
– 09 February 2006

Overview of Incident

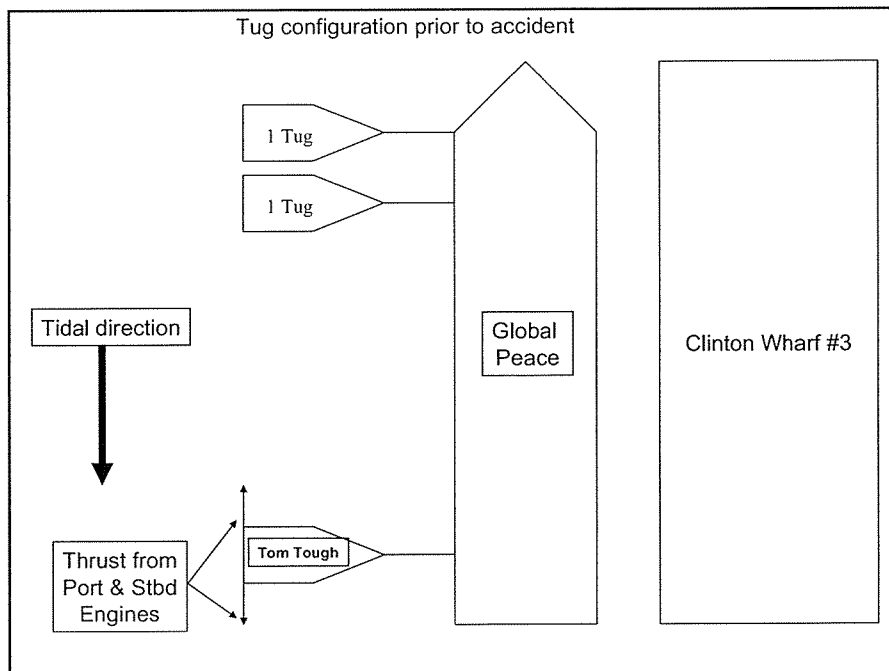
24th January 2006

At 23:54 the Tug "Tom Tough" apparently suffered an engine failure and came into collision with the hull of the bulk carrier "Global Peace" during berthing operations at RG Tanna Coal Loading Facility.

The hull was holed about 1 metre above the water line, the hole was 10 – 12 cm. in diameter in a crescent shape on the portside in way of the Deep Fuel Oil Tank. This tank was believed to have held approx 150 tonnes of heavy fuel oil.

The ship immediately started transferring oil into another tank to limit the outflow of oil. At 00:40, the outflow from the holed vessel ceased. Quantity of oil spilled was unknown at this time.

Weather at the time of the incident: - Wind SE'ly 10/15 knots
Tide: LW: 22:45 1.38m, HW: 05:45 3.54m
(Approaching highest tides of the year EG: Monday 30 Jan, HW: 4.69m)



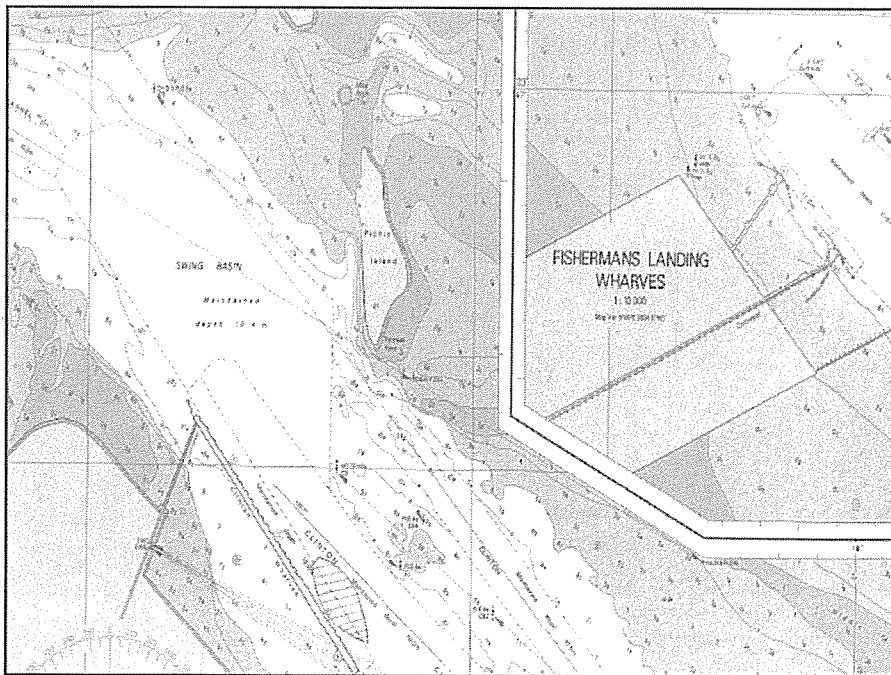
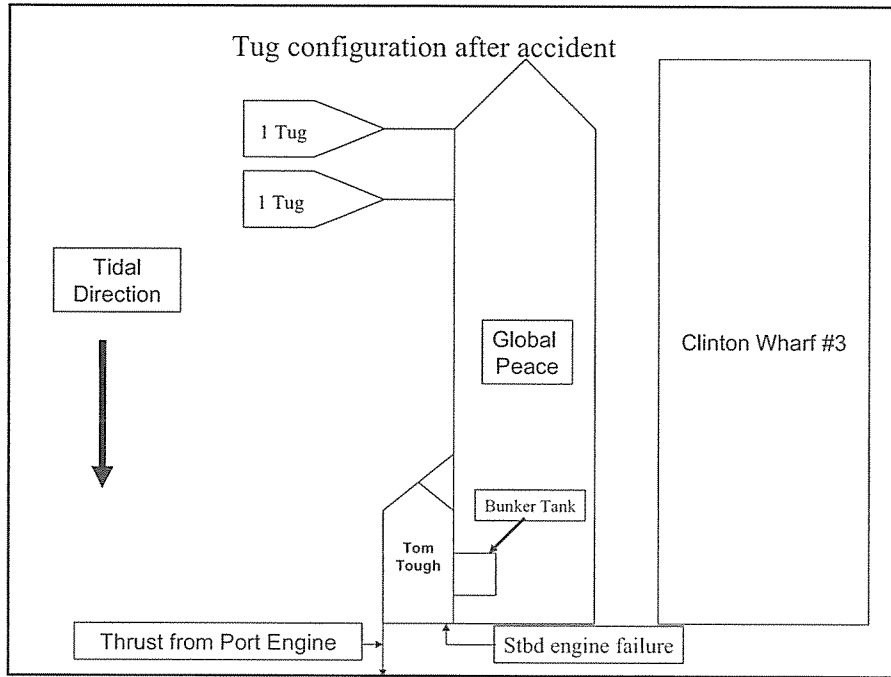
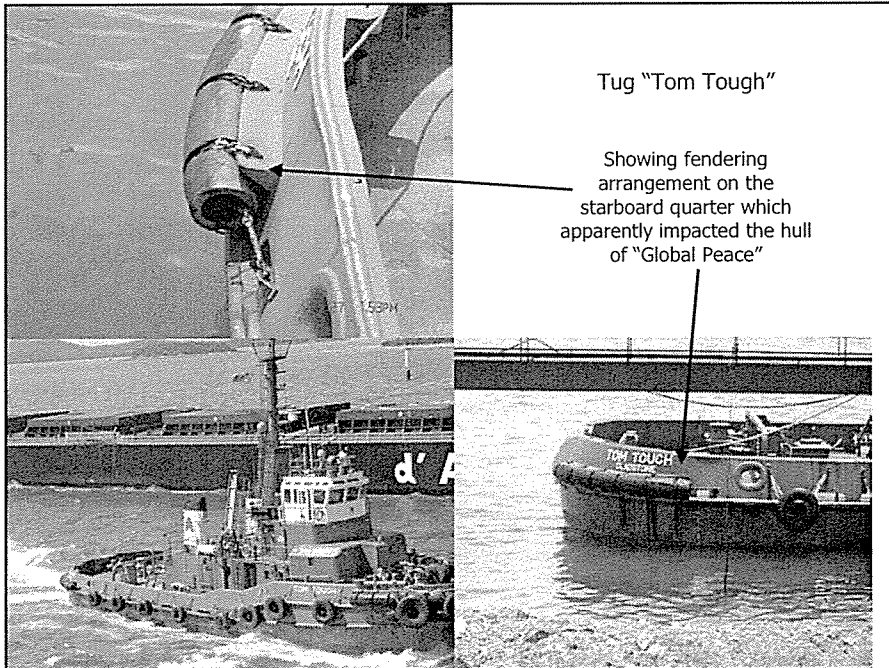
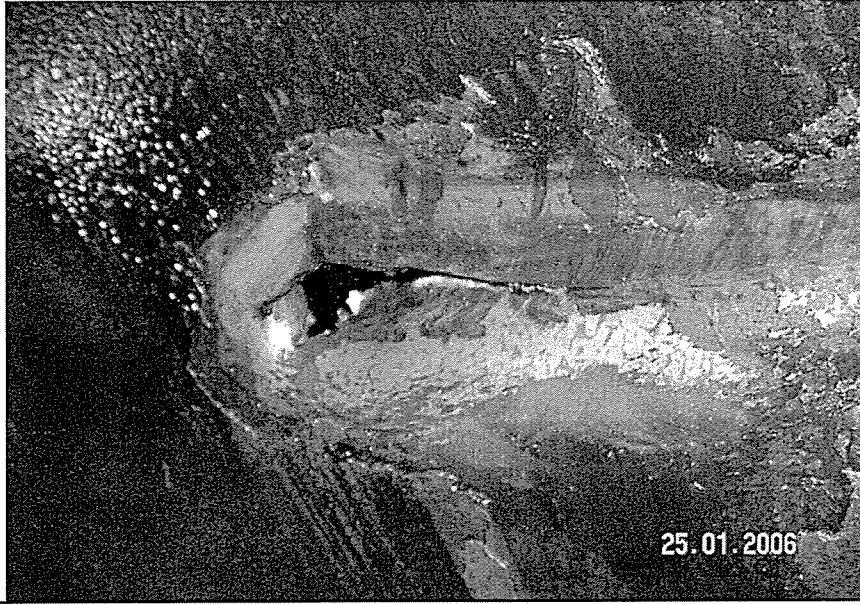


Photo taken by CQPA shortly after the incident. Punctured hull of "Global Peace".



Tug "Tom Tough"

Showing fendering arrangement on the starboard quarter which apparently impacted the hull of "Global Peace"

Overview of Initial Response

24th January, 2006

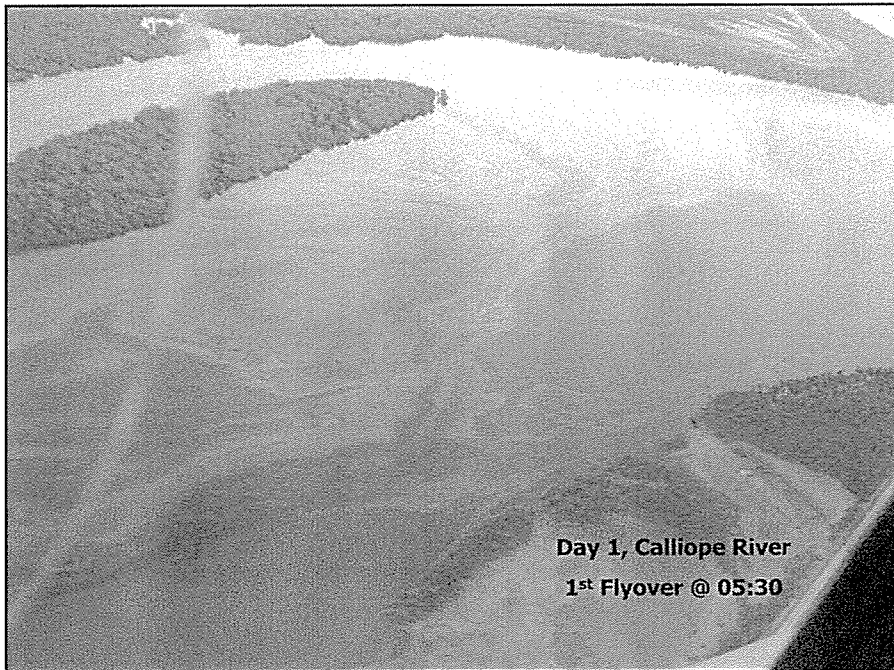
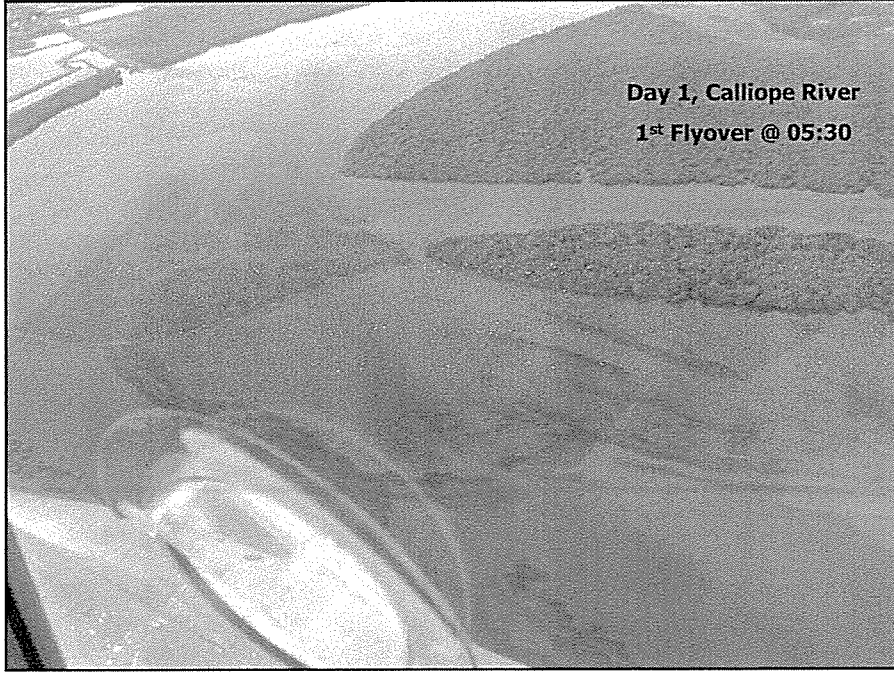
- 23:54 - Pilot on board the vessel "Global Peace" advised VTS that the tug had impacted on side of the vessel and had apparently holed a fuel tank.
- 23:57 – VTS advised the Regional Harbour Master that the Tug "Tom Tough" had penetrated the hull of "Global Peace" in way of Deep Fuel Oil Tank portside.
- 23:59 – RHM advised General Manager MSQ of the incident

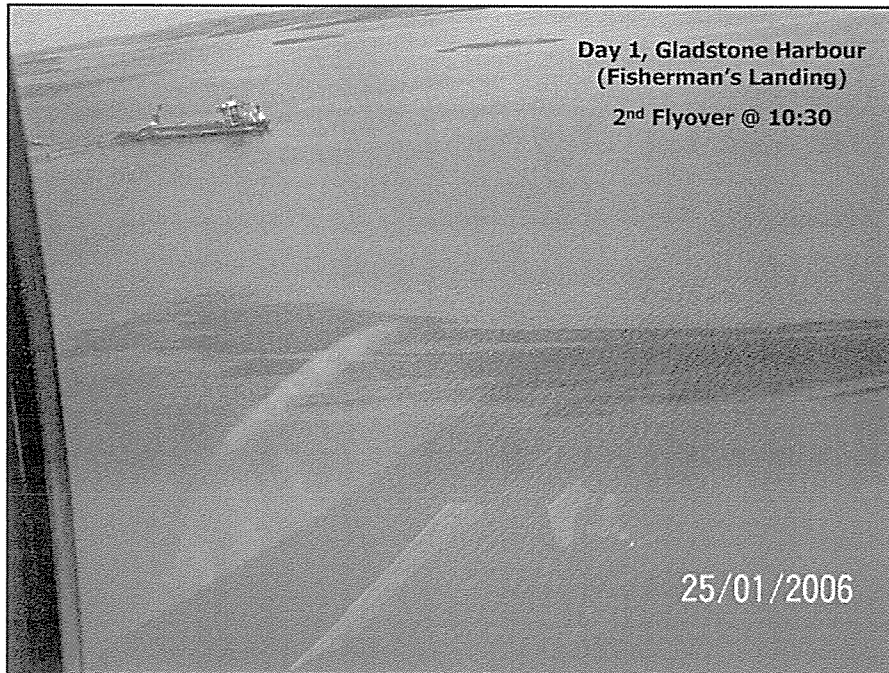
25th January, 2006

- 00:20 – RHM arrived at the office
- 00:30 – AHM and Manager Corporate Support arrived at the office.
- 00:55 – CQPA First Strike Response Team on standby.
- 01:00 – MSQ Boatcrew arrived at the boatshed and readied oil response gear. Helicopter booked for first light overfly of the harbour at 5:00am.
- 01:01 –RHM contacted Marine Pollution Section in Brisbane and gave update – one person requested to attend from Brisbane ASAP
- 01:05am – No accurate soundings taken of bunker tanks prior to vessel's arrival at the berth and the accident, so the amount of oil spilled was unknown
- 01:15am – AHM called ship's agent ,HKSA and requested that draft surveyors attend on board "Global Peace" to get an accurate assessment of how much oil had been spilt, the extent of damage to the vessel and an estimate of time to carry out repairs

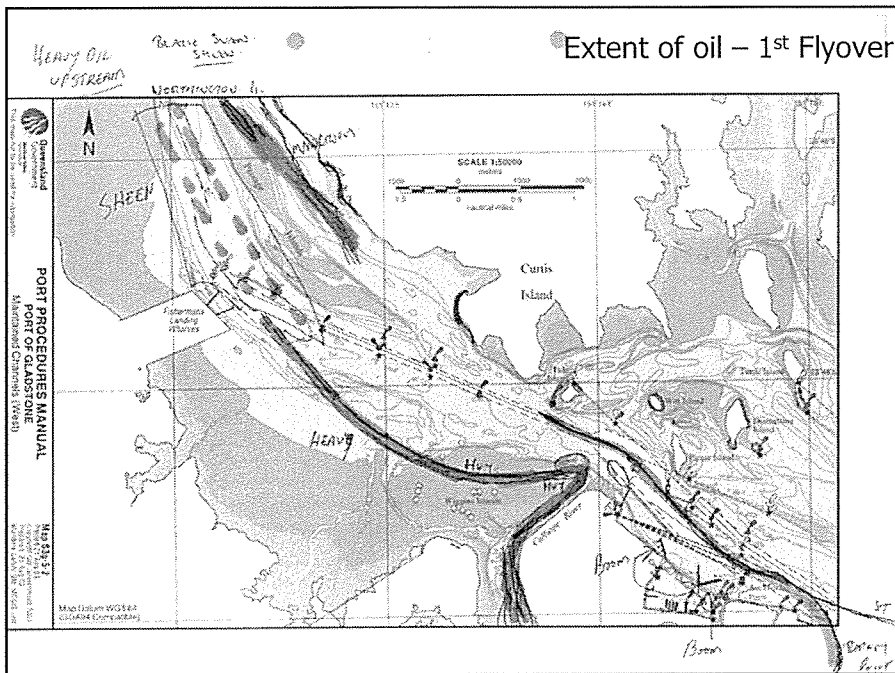
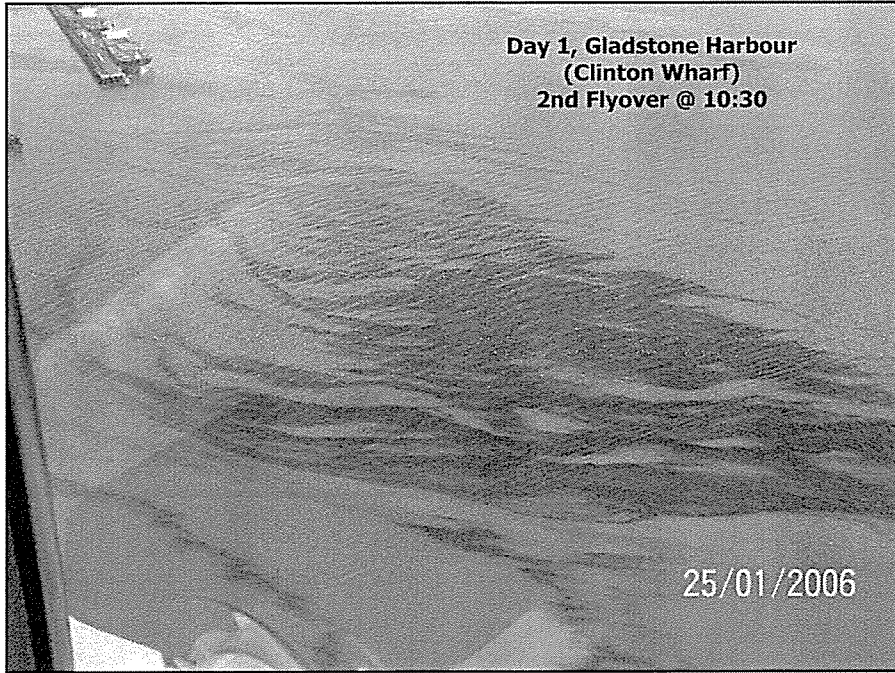
Overview con't.

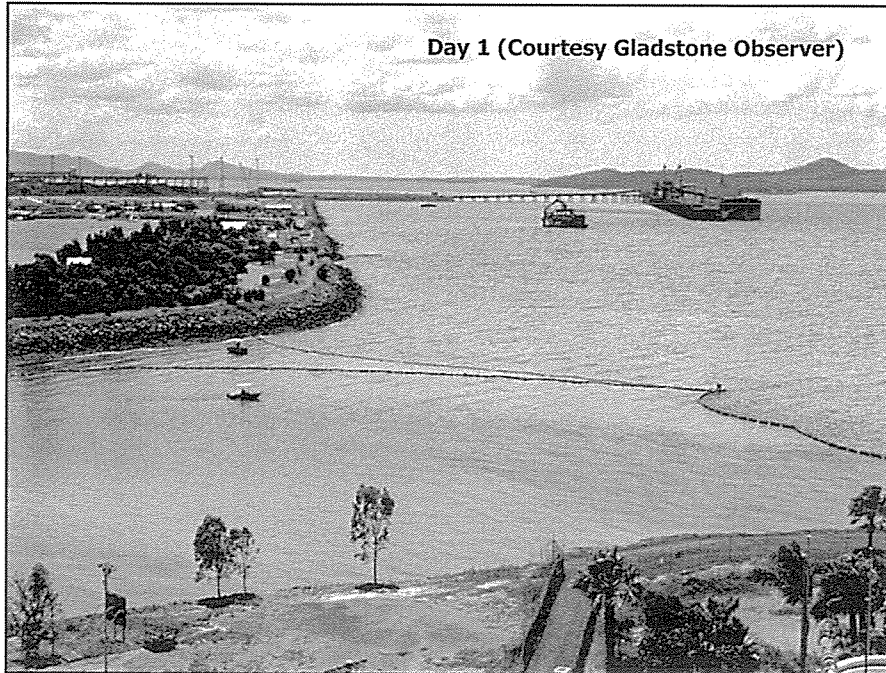
- 01:32 – RHM meet with the Chief Executive, Central Queensland Ports Authority at the coal terminal and assessed the situation
- 01:41 –EPA advised . QPWS may need to be involved as well re sensitive areas which may be affected.
- 01:59 – RHM called AHM from the wharf– dip indicated it could be 3 tonne. May need to contact QAL for extra boom & IBS re: what gear they may be able to supply
- 02:00 – Advice received that 2 line launches available at 05:00am mouth of Auckland Creek
- 02:15 – Marine pollution Unit from Brisbane phoned and advised that personnel from Pinkenba are getting gear ready and will await further instructions. RHM's Mackay/Pinkenba had been notified and advised that assistance may be required.
- 02:45 – All vessels refuelled and ready, Turbo, Rapa, Colloseum & Maxon. All absorbent boom from Port Alma would be transferred to Gladstone and ready for 0500 start
- 03:10 – RHM returned from wharf. Told agent to get draft surveyor to sound all bunker tanks aboard "Global Peace" to determine the exact quantity of bunker fuel spilled. Estimated loss approx 25 tonnes
- 03:45 – Discussions with Senior operational staff– Commence boom deployment 0430. Security at boatshed to be arranged, CQPA have closed Spinnaker Park
- 04:50 – AHM left for Helicopter flight to overfly the harbour





| GLADSTONE REGION ~ SHIPPING SCHEDULE | | | | | | | | | | | | Publish on GPA Web | | |
|--------------------------------------|-------|------|-----|----------|------|--------|------|--------|--------|-------|---------------------------|--------------------|----------------------|-----------|
| VESSEL | Draft | ETA | LOA | Movement | POB | ENT/LL | Tugs | Agent | PL/H | Pilot | Remarks | HP | DATE: | 25-Jan-06 |
| WEDNESDAY 25TH | | | | | | | | | | | | | | |
| ENDEAVOUR RIVER | 12.2 | 0415 | 255 | FW-STW | X | 0630 | 2 | PAT | X | X | | | | |
| MARITIME FRIENDSHIP | 6.5 | FW* | 175 | FW-STW | 1100 | 1115 | 2 | OMS | H-1045 | IW | MD TIDE EBB | SBNE | TIME: 1000 | |
| MANDARIN GLORY | 11.16 | X | 180 | STE-FW | 1200 | 1215 | 2 | INCH | H | RQ | NMOGS | SBNE | Scheduler: M Vaughan | |
| BREMEN MAX | 7.24 | X | 225 | FW-CCF2 | 1245 | 1300 | 2 | OMS | H-1230 | GZ | OSF BYPASS | SBNE | Duty Pilot: I. Hales | |
| MEDI VICTORIA | 14.14 | X | 225 | CCF2-FW | 1415 | 1430 | 2 | MON | H | DJ | | SBNE | Co'n: DY JN MB | |
| NORD STREAM | 8.15 | X | 180 | AP3-FW | 1745 | 1850 | 2 | INCH | PL | AB | | | | |
| DORIC CHALLENGE | 12.25 | X | 229 | BPT-FW | 2345 | 2359 | 2 | INCH | H | ED | AGENT BOOKED T&E MON 23RD | FBCH | Agents: LB | |
| RUBIN OAK | TBA | 0600 | 225 | SEA-FW* | X | X | X | INCH | X | X | | SEA | MI | |
| PENGUIN ARROW | TBA | 2359 | 200 | SEA-FW* | X | X | X | BAR | X | X | TBC | MCA | Cal HKSA | |
| THURSDAY 26TH | | | | | | | | | | | | | | |
| SHIN KENRYU | 15.67 | X | 300 | CCF1-FW | 0145 | 0200 | 3 | OMS | H | | TBC/CHK LKIC DEP 26/01/06 | | | |
| CEMTEX HUNTER | 7.00 | X | 230 | FW-CCF1 | 0145 | 0200 | 2 | OMS | H-0130 | ED | TBC / PILOT EX PENGUN | | WED 25 | |
| CEMENTCO | 5.70 | 0230 | 148 | SEA-FL4 | X | 0230 | 1 | MASTER | X | X | BEK | | 0545 | 3.54 |
| RTS PIONEER | 7.30 | X | 225 | FL2-FW | 0530 | 0545 | 2 | PAT | H | | TBC | | 1211 | 1.52 |
| CHENG TU | 8.10 | X | 182 | AP4-FW | 0530 | 0545 | 1/ST | OMS | PL | | | | 1756 | 3.02 |
| C COLUMBUS | 5.50 | 0615 | 145 | FW-KR* | 0615 | 0630 | X | OMS | PL | ML | | | 2349 | 1.21 |
| PENGUIN ARROW | TBA | FW* | 200 | FW-BSW | 1200 | 1215 | 2 | BAR | TBA | | PSI | | | |
| MARITIME FRIENDSHIP | 9.89 | X | 175 | STE-FW | 1415 | 1445 | 2 | OMS | H | | TBC | | THURS 26 | |
| CEMENTCO | 8.90 | X | 148 | FL4-SEA | X | 1700 | 0 | MASTER | X | X | BEK | | 0643 | 3.86 |
| ENDEAVOUR RIVER | 10.6 | X | 255 | STW-FW | X | 1800 | 2 | PAT | X | X | TBC | | 1310 | 1.23 |
| S. PARTNER | 4.20 | X | 145 | PA1-FW | 1745 | 1800 | X | BAR | PL | | 500 KW bow thruster | | 1902 | 3.18 |
| C COLUMBUS | 5.50 | X | 145 | KR*FW | 1915 | 1930 | X | OMS | PL | ML | | | FRID 27 | |
| STAR BIRD | TBA | 1100 | 95 | FW-ST* | TBA | TBA | X | OMS | H | | BUNKERS ONLY | | 0048 | 1.01 |
| STAR BIRD | TBA | TBA | 95 | ST*FW | TBA | TBA | X | OMS | H | | BUNKERS ONLY | | 0733 | 4.16 |
| DOCECAPE | 8.49 | 0600 | 277 | SEA-FW* | X | X | X | HKSA | X | X | COF | | 1402 | 0.56 |
| | | | | | | | | | | | | | 1956 | 3.37 |



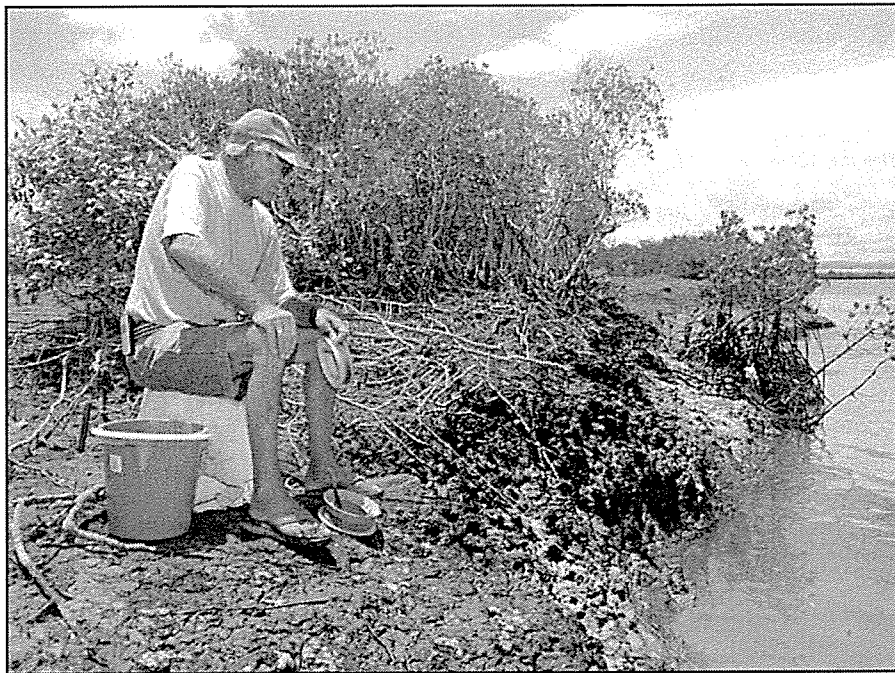


Overview of Response - Day 1

- Incident Control Room activated @ 00:30
- VHF Channel 8 was isolated as the main channel for communication.
- Aerial Assessments completed at 05:00, 10:30 & 14:30 to assess the impact of the flow of oil.
 - Initial location of oil: Oil up to Black Swan all over the eastern side of the narrows
 - Heavy Concentration from Clinton around Mud & Wiggins Islands and in the mouth of the Calliope River
- Planning session held after each flyover.
- MSQ & CQPA Personnel deployed booms at Spinnaker Beach, Auckland Creek mouth and Calliope River mouth. Marco Skimmer worked continuously at the area around Auckland Creek mouth and Spinnaker Beach.
- Additional MSQ Operational Personnel sourced from Brisbane, Mackay, Townsville & Cairns. All additional personnel arrived by evening.
- Additional Personnel from the National Plan Response Team arrived from Canberra.
- Replenishment equipment & additional Marco Skimmer arrived from Mackay.
- Replenishment equipment & additional Marco Skimmer arrived from Brisbane.
- 2 x additional Admin Personnel to arrive Thursday morning to assist in the Incident Control Room.
- Oil Samples taken from the vessel and Gladstone Harbour
- EPA deployed 2 vessels to check for oiled wildlife & also conducted a land based search.
- Media Liaison officer arrived from Brisbane.
- Accommodation, Food, Health & Safety Requirements for all personnel were managed through the Incident Control Room.

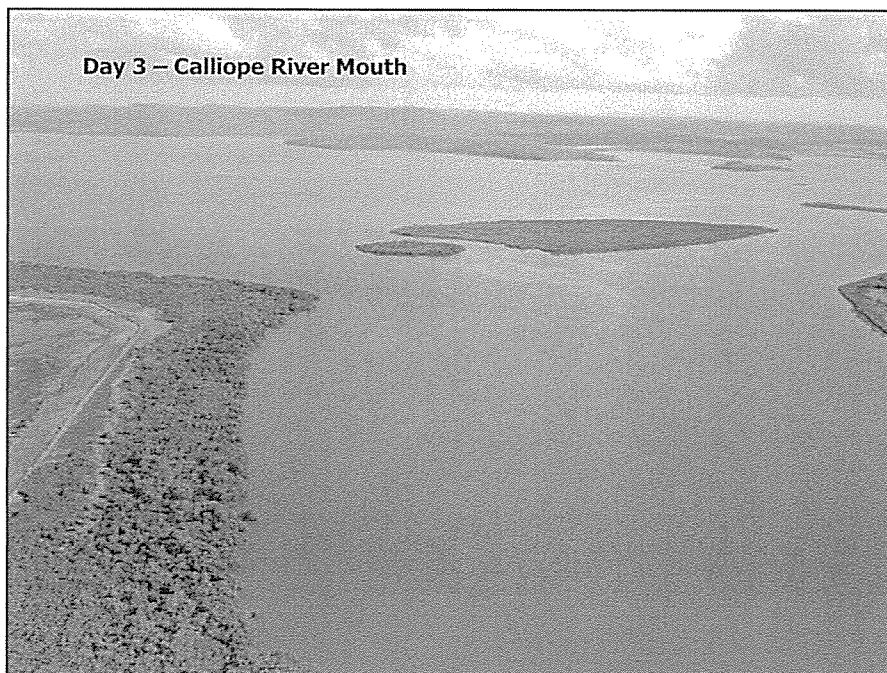


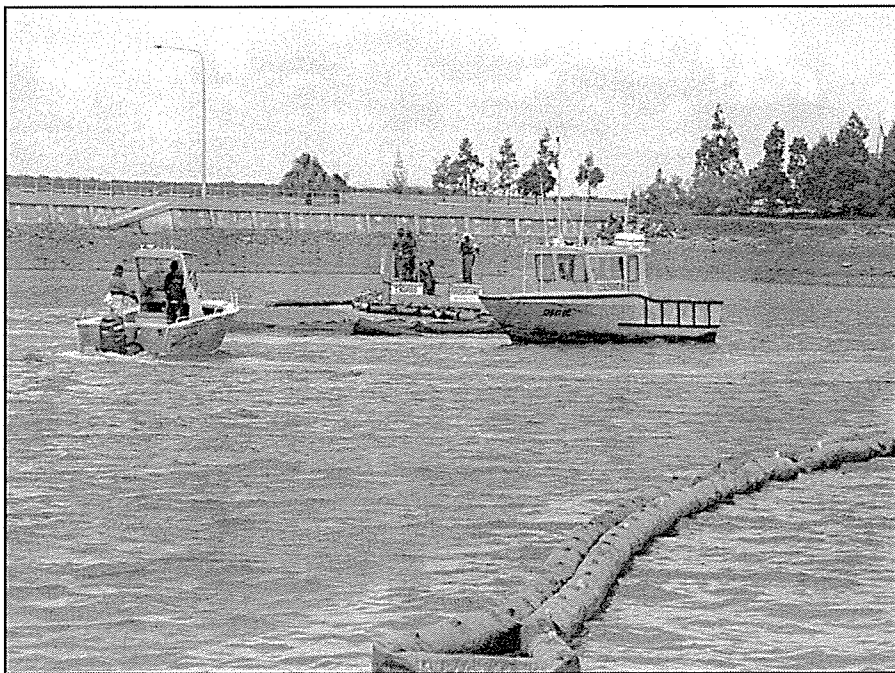
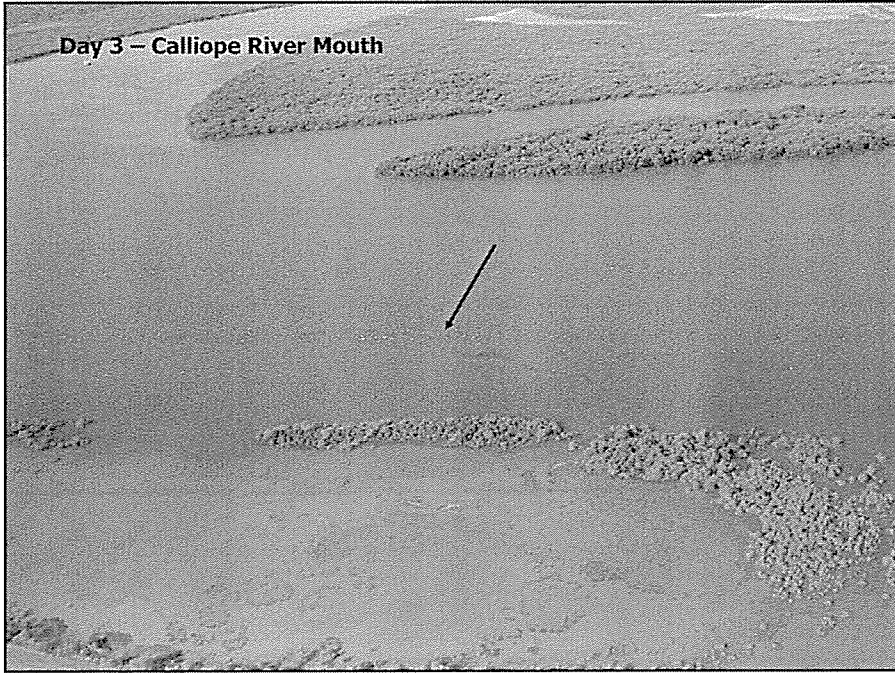




Overview of Response – Day 2

- Protection boom that was across the mouth of Auckland Creek broke overnight allowing an ingress of oil into the marina.
- Main concentration of oil is from Calliope River (Including Wiggins & Mud Islands) to the Tug Berths & in the Marina
- 2 Marco skimmers deployed between Clinton Coal Terminal & Calliope River
- 1 Marco Skimmer deployed in marina area
- 1 Marco Skimmer deployed at Auckland Point Wharves
- Aerial Assessments conducted at 05:30, 10:30 and 15:30
- EPA conducted Shoreline Assessments
- EPA continued monitoring for oiled wildlife. Some oiled wildlife has been sighted but none captured.
- **Estimate of oil recovered:**
 - 2 tonnes from skimming yesterday
 - 2 tonnes of solids and residues from boom & absorbent material
 - 3 tonnes from skimming today
- **Personnel involved:**
 - 41 x Operational Personnel
 - 18 x Environmental Issues
 - 10 x Incident Control Room
- Accommodation, Food, Health & Safety Requirements for all personnel were managed through the Incident Control Room.



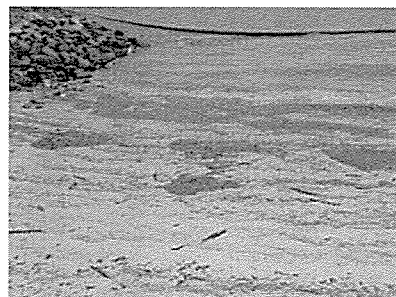




Continued response Day 3 - 7

- Continued skimming in the Marina & Auckland Point areas.
- Estimate of oil recovered:
 - 8100 litres of oily liquid
 - 61 cubic metres of oily waste
- Number of Operational Personnel scaled down on Sunday 29/1/06.
- Continued shoreline clean up in the Marina Area & Fisherman's Landing.
- EPA continued Shoreline & Wildlife Assessments. Numerous attempts to catch the oiled pelicans were unsuccessful. Oiled wildlife response wound up on Tuesday 07/02
- Initial Focus Group meetings were held with stakeholders.
- DPI have taken the lead role & initiated meetings with concerned fisher groups over concerns with possible damage to the various fish habitats. (These meetings commenced on Sunday 29 January)

Shoreline Assessments & Cleanup



EPA in conjunction with the other agencies conducted Shoreline Assessments daily throughout the response and identified the areas requiring clean-up.

The main areas identified:

- Marina Rock Walls, Marina Facilities & Spinnaker Park Beach
- Fisherman's Landing Mangroves
- Clinton Coal Terminal (Corner beach)



Extensive clean-up of the mangroves at Fisherman's Landing has been completed and was signed off by EPA on Tuesday 1st February, 2006. EPA will put together a monitoring and maintenance plan for ongoing regeneration of this area.

Update from CQPA as of 8th February 2006 after inspection was carried out by Jonathan Dalton (EPA)

Spinnaker Beach

A significant amount of spoil was removed to CQPA remedial area. Final dressing of sand was applied after the spring tides in February 2006 because no further oil was found.

Marina Entrance

No visible traces of oil remained. No further action warranted.

Clinton Corner

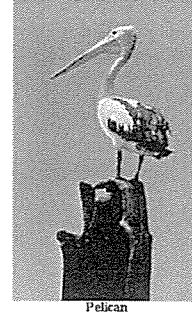
After February spring tides it was determined that no further remediation was required.

Fisherman's Landing

A further inspection was conducted even though EPA had already signed off on the clean-up. The result was satisfactory, with no further leeching and a "new" collection of mangrove material/vegetation is already forming on the gravel corner.



Oiled Wildlife



Qld Parks & Wildlife Services was in control of the wildlife rehabilitation plan.

List of wildlife affected:

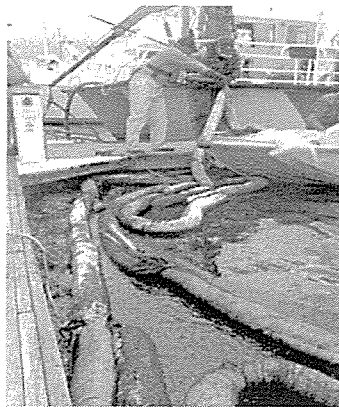
- 1 x Beachstone Curlew (Captured, cleaning attempted but bird died Tuesday 07/02)
- 2 x Cormorants
- 6 x Pelicans
- 1 x Black Kite
- 1 x Pied Oyster Catcher

FINAL FIGURES

✖ Quantity of Material recovered:
8100 litres of oily liquid
61 Cubic metres of oily waste

✖ Number of personnel involved:
41 Operational personnel
18 Environmental personnel
10 Incident control room

✖ Total estimated cost of cleanup:
About \$842,778-00



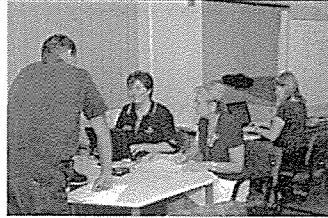
CONCLUSION

Strengths and Weaknesses

- Strengths:** Great team effort on the part of all personnel.
(Admin, Operational, Management).
- Good co-operation with all MSQ personnel and outside Agencies.
- Good communication links established early with all local participants.
- Good communications established early with Incident Commander and his team in Brisbane.
- Co-location of key agencies in the same building was a great asset in this response.

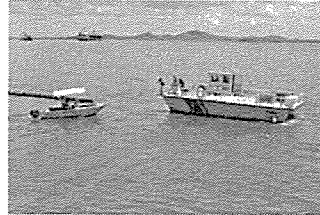
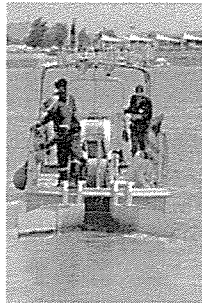
- Weaknesses:** Problems with catering (eg. lack of seating arrangements at boatshed, lack of toilet facilities at boatshed).
Possible solution: Appoint a Logistics officer whose sole responsibility is to ensure that all participants needs are met.
- Relieving arrangements for all personnel.
Possible solution: Very early in the response, Logistics to identify relieving arrangements necessary and draw up a plan to implement.
- Administration personnel. Insufficient trained administration personnel available in the State
Possible solution: Enhanced training of Admin personnel (and appropriate training packages to be available) to commence as soon as possible.
These training packages have now been developed and training has commenced with Admin personnel.

Thank you!!



Photos in this presentation have been supplied courtesy of:

- ❖ Maritime Safety Queensland
- ❖ Central Qld Ports Authority
- ❖ Murray Ware
- ❖ Gladstone Observer
- ❖ Jamie Storrie
- ❖ Environmental Protection Agency



QUESTIONS???

