# Annex 4 – Sensitive Areas and Coastal Information

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## **Sensitive Areas classification**

The sensitive sites identified in this plan are identified for their environmental, cultural or economic significance for the region and the potential effects of an oil spill on these sites.

## **Oil Spill risk**

## Overview of spill risk

Historical records show that most significant spills that occur in the Bay of Plenty region, occur in Tauranga Harbour during bunkering of ships, tank loading/discharge operations or the internal transfer of oil within a ship.

Spills that occur in other harbours or the coastal area of the region are generally very small, are of a non-persistent oil nature (petrol, diesels) and occur during pleasure/fishing boat refuelling operations. However, international shipping casualties in over the years illustrate the potential for a large spill.

#### **Risk sites**

The following oil transfer sites, types of oil, and orders of magnitude are considered to be representative of the risk within the Bay of Plenty region.

| Strike through = Site blocked of                   |                |                |                             |  |  |  |  |  |  |
|--|----------------|----------------|-----------------------------|--|--|--|--|--|--|
| Location   | Transfer type  | Oil type       | Expected order of magnitude |  |  |  |  |  |  |
| Mount Maunganui Wharf: 15 m                        | Bunkering      | Heavy fuel oil | 3 tonnes                    |  |  |  |  |  |  |
| Mount Maunganui Wharf: 170 m                       | Bunkering      | Heavy fuel oil | 3 tonnes                    |  |  |  |  |  |  |
| Mount Maunganui Wharf: 355 m                       | Bunkering      | Heavy fuel oil | 3 tonnes                    |  |  |  |  |  |  |
| Mount Maunganui Wharf: 525 m                       | Bunkering      | Heavy fuel oil | 3 tonnes                    |  |  |  |  |  |  |
| Mount Maunganui Wharf: 1243 m                      | Bunkering      | Heavy fuel oil | 3 tonnes                    |  |  |  |  |  |  |
| Mount Maunganui Wharf: 1488 m                      | Bunkering      | Heavy fuel oil | 3 tonnes                    |  |  |  |  |  |  |
| Mount Maunganui Wharf: 2056 m                      | Bunkering      | Heavy fuel oil | 3 tonnes                    |  |  |  |  |  |  |
| Tanker berth                                       | Bulk Transfer  | Petrol-bitumen | 15 tonnes                   |  |  |  |  |  |  |
| Tug berth  | Bunkering      | Diesel         | 250 litres                  |  |  |  |  |  |  |
| Sulphur Point                                      | Slops Transfer | Admixtures     | 500 litres                  |  |  |  |  |  |  |
| Bridge Marina refuelling jetty                     | Bunkering      | Diesel/petrol  | 180-200 litres/min          |  |  |  |  |  |  |
| Ice plant between Cross Road boat ramp and slipway | Bunkering      | Diesel         | 180-200 litres/min          |  |  |  |  |  |  |

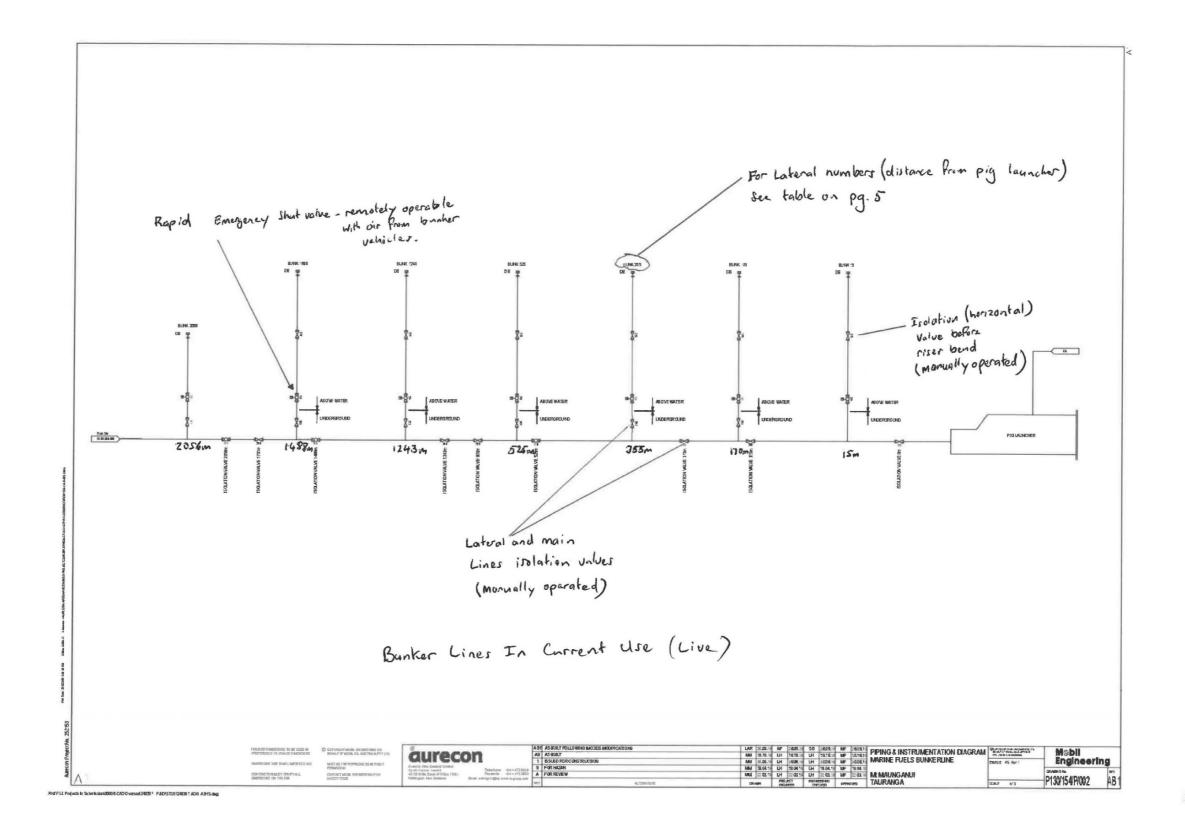
 Table 1
 Tier 1 Transfer Sites in Bay of Plenty

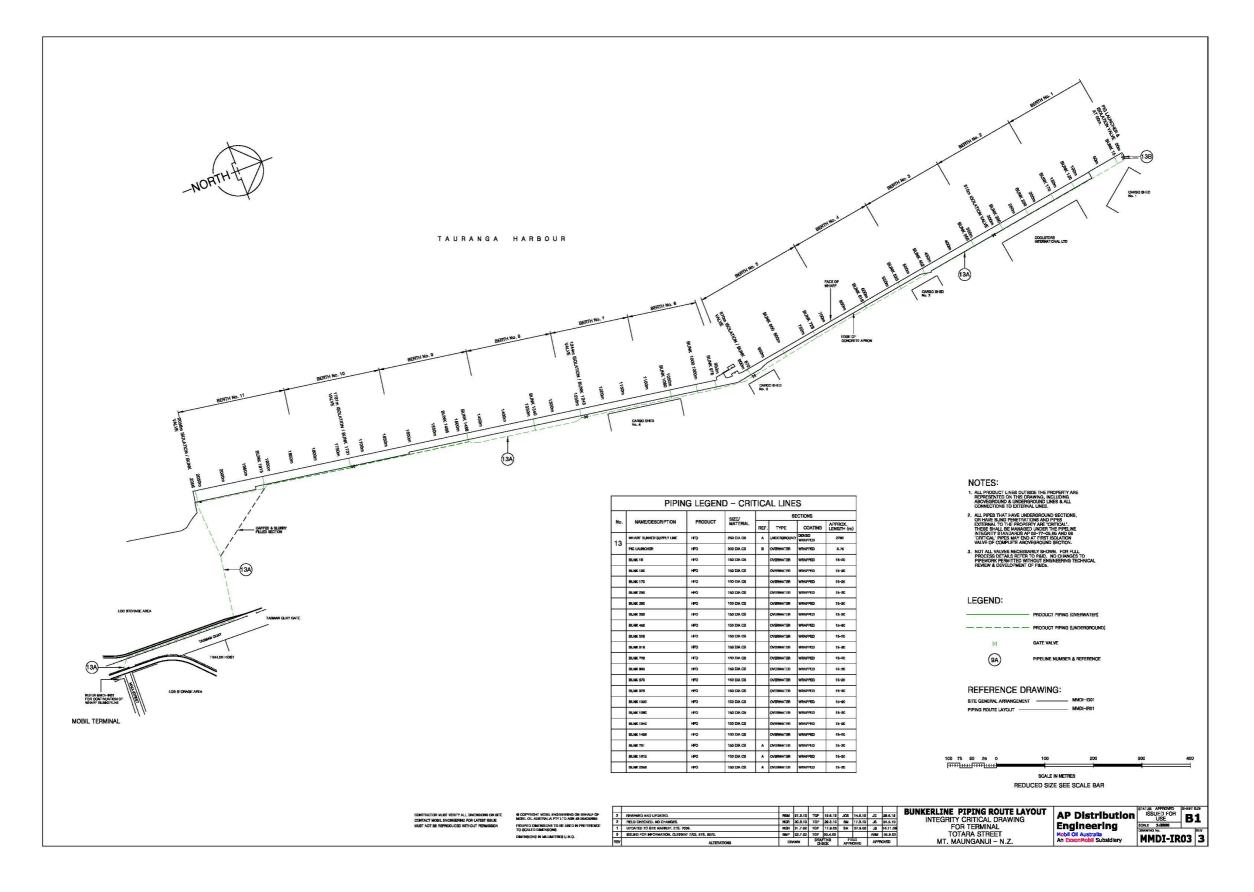
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| Location                         | Transfer type | Oil type        | Expected order of magnitude |
|----------------------------------|---------------|-----------------|-----------------------------|
| Tauranga Marina refuelling jetty | Bunkering     | Diesel/petrol   | 180-200 litres/min          |
| Sanfords                         | Bunkering     | Diesel/Lube Oil | 180-200 litres/min          |
| Lake Rotorua                     | Bunkering     | Diesel          | 180-200 litres/min          |
| Port Whakatàne                   | Bunkering     | Diesel/petrol   | 180-200 litres/min          |
| Port Ohope Wharf                 | Bunkering     | Diesel          | 180-200 litres/min          |

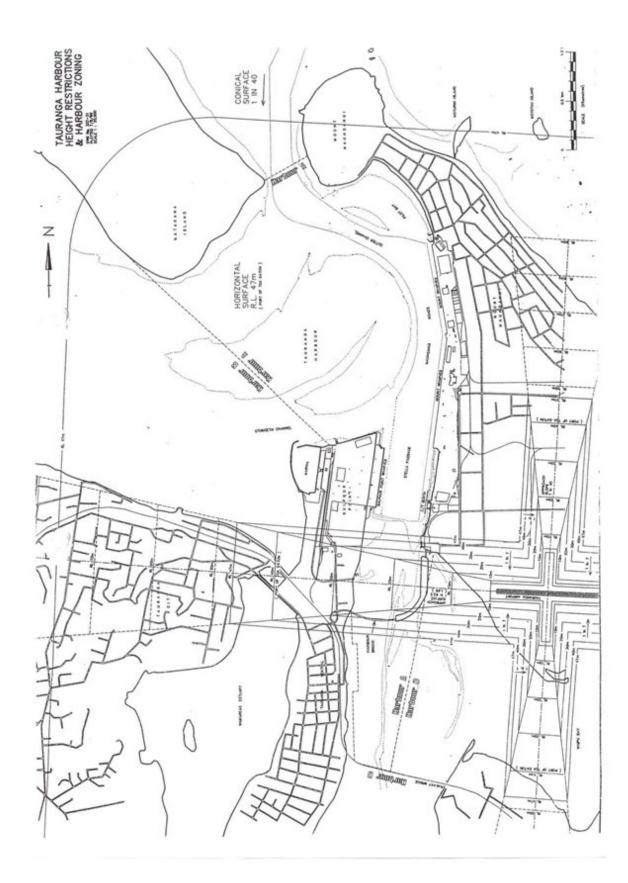
## Notated Bunker Line lateral layout Mount Maunganui – 2020-12-15

## Objective ID: A3703087





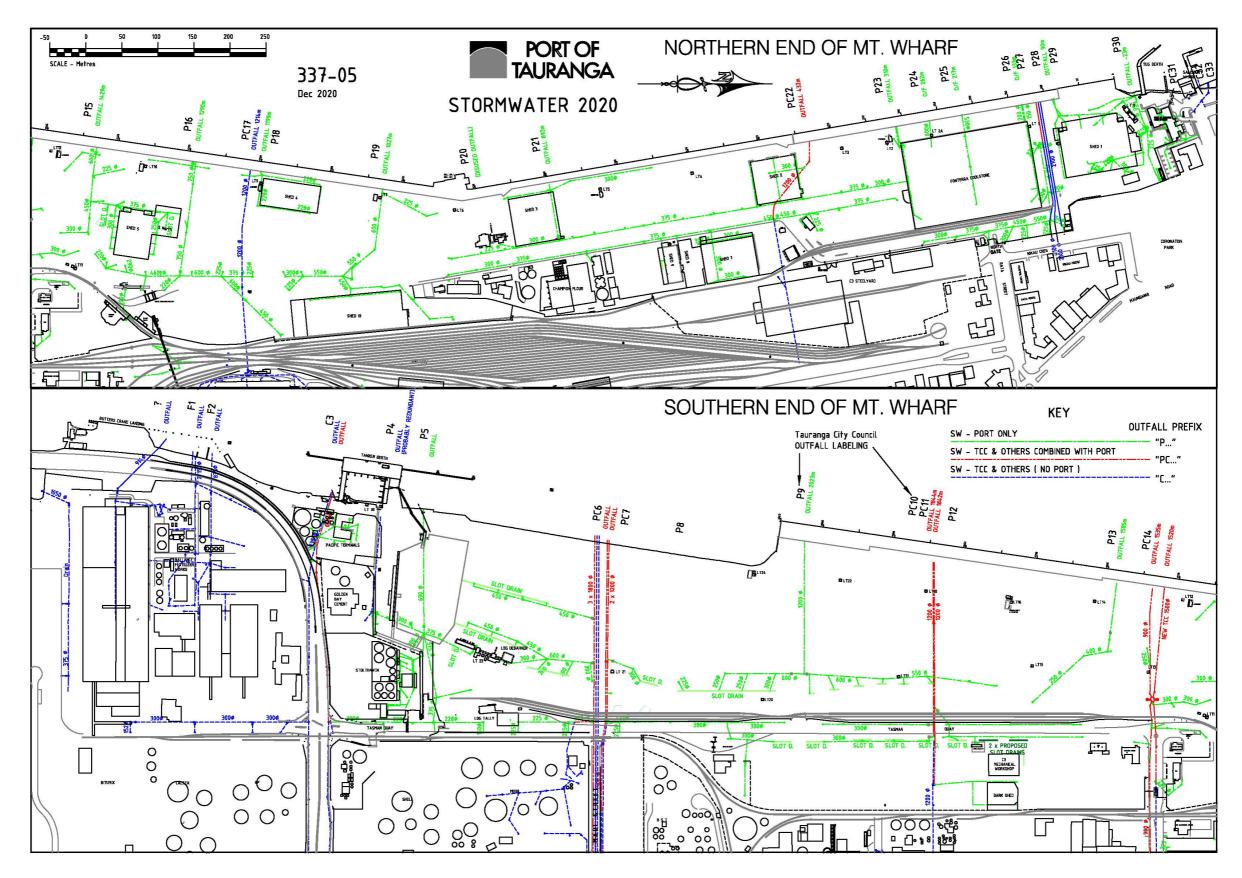
## Harbour limits

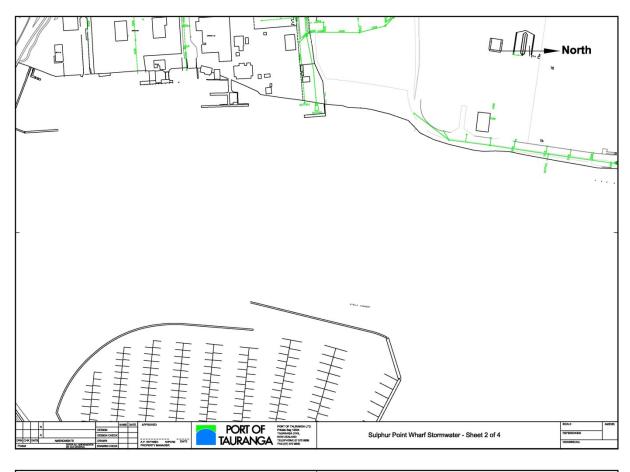


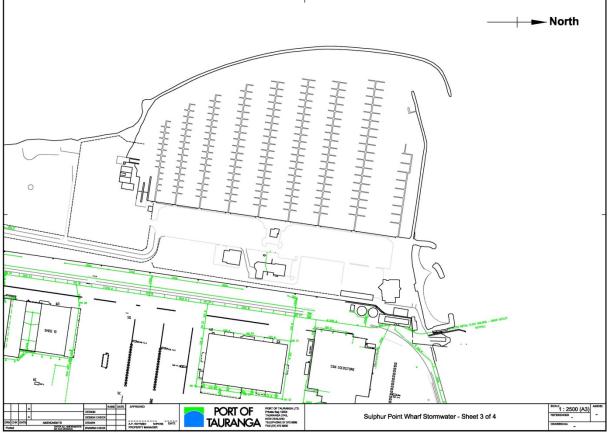
For an up to date Port/Industry Booming Plan see:

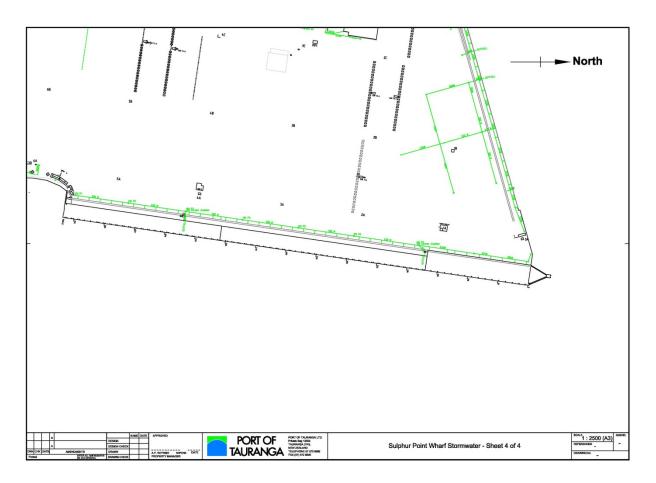
Objective folder ID: fA959926 entitled 2020-12-15 Final Approved Mobil OTS Plan: (This text is not a link to the document – please open from Objective at the above reference).

Objective ID: A3703051









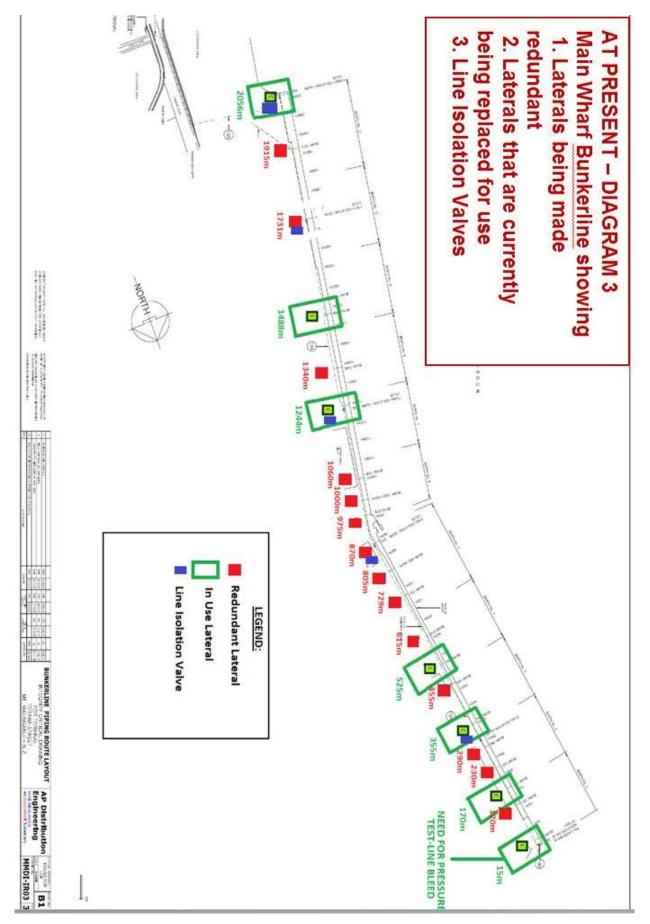
Staff entering the Port of Tauranga must first complete a Port Health and Safety Induction which can be found at:

#### https://www.port-tauranga.co.nz/health-safety/port-inductions/

(Note: this link opens a page with the link for Port Inductions)

All staff must observe Port Health and Safety procedures at all times. This includes carrying photo identification and evidence of completion of the induction, observing speed limits and access rules, as well as the wearing of the proscribed Personal Protection Equipment (PPE) at all times.

## Tauranga Port pipelines



## **First Containment Response for specific situations**

Tanker Berth - Heavy Bunker Fuel Oil Pipeline or hose leak during transfer Minimal spillage - Containment by Oil Sorbent Boom (as per Diagram 1)

#### If safe to do

- Complete the Initial Response Checklist.
- Place sorbent pads/boom or zeolite in area where leak is flowing into water to curb flow.
- Throw soak up pads onto product on water if they can be contained and recovered.
- If any product tracks to drains or outside bunded area, contain with sorbent fill/sand.
- Lay more booms if Port/Contractor/Regional Council vessel arrives.
- Apply pipeline clamps if possible.
- Use sandbags to stop any flow to other areas or keep product off rocks etc.
- If spill escapes containment area, review location of sensitive areas. Determine which of these may be threatened and direct response personnel to proceed with boom to divert any remaining spill.

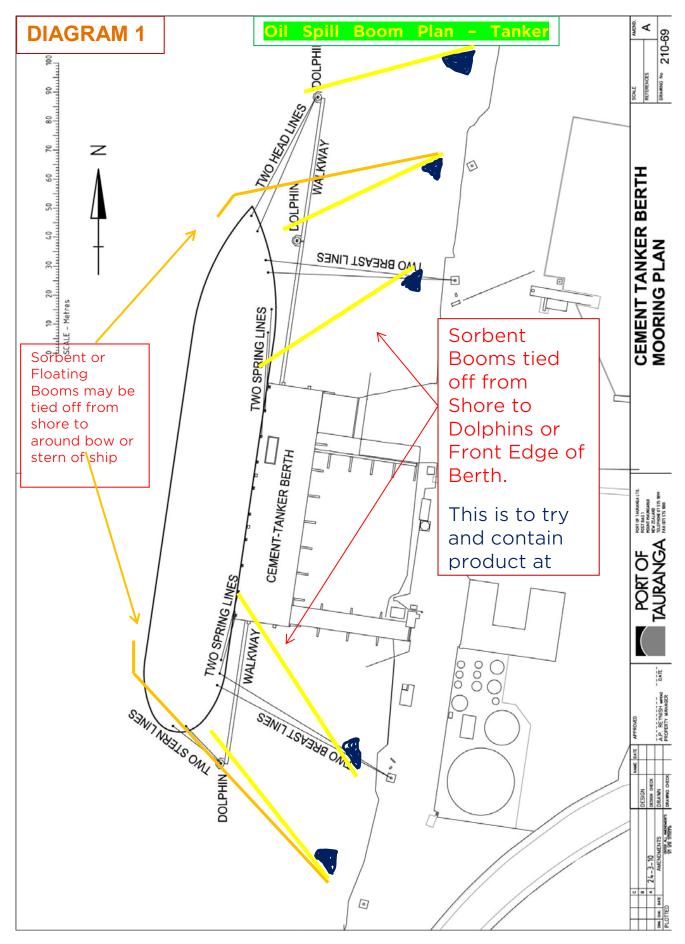
Evaluate tide direction and time of tide change to determine best location to contain oil. Place sorbent boom down current of spill but prepare for tide change and moving location of spill equipment.

## North end of tanker berth

- 1 Open the Boom Storage lid and the side blue doors. Take out the 20 m berth end rope and take to the berth pulley end.
- 2 Tie one end of the boom to the mooring line and place rubber mat on rocks as a guiding platform for the boom.
- 3 Once the boom is tied, begin to pull the pulley rope and let the boom coil out as the pulley is being utilised. The boom may need to be guided into the water.
- 4 Once the boom reaches the wharf end pulley, grab hold of the boom and tie the 20 m rope at the end of it and the other end of the rope to the walkway railings.
- 5 Untie the boom from the pulley and chuck it in the water so that it does not get caught/stuck to any pipes or pillars. Use the rope to manoeuvre the boom into place. Re-adjust rope on the walkway. The boom should be fully displaced on water.
- 6 Adjust position of boom using the ropes tied at the end as required.
- 7 When response vessel arrives and in position (close to the boom) untie the rope from the walkway and drop it in the water.
- 8 Vessel crew to gather the rope and tie it to the wharf edge ensuring no gap between boom and wharf edge.

## South end of tanker berth

- 1 Open the Boom Storage lid and the side blue doors. Take out the 20 m berth end rope and pass on to the response vessel.
- 2 Tie one end of the boom to the response vessel.
- 3 Once the boom is tied, begin to slowly steer the vessel to the tie off point.
- 4 The boom may need to be guided into the water as the vessel draws it out, to ensure the storage container does not tip over and the boom getting caught on sharp edges.
- 5 Shore crew to communicate to the vessel to stop before the entire length of the boom is drawn out, so that the end of the boom can be tied to the pulley stand.
- 6 Response vessel ties boom to wharf edge.





## **First Containment Response for specific situations**

## Main wharf (Berth 1 to 11) - Heavy fuel oil Pipeline or hose leak during bunker transfer

#### If safe to do

- Complete the Initial Response Checklist.
- Ensure no ignition sources in area.
- Place sorbent pads or boom or kitty litter in area where leak is flowing into water to curb flow.
- Throw soak up pads onto product on water if they can be contained and recovered.

#### Place sorbent boom and/or floating boom down tide of spill.

- Tie off at first available point past any berthed vessels.
- If able, tie up under wharf with access from pipeline lateral walkways.
- If not possible, tie off at Pilot boat area north end of wharf.
- If not possible, tie off at Berth 11 South end past all vessels berthed.
- Lay boom out to front edge of wharf.
- Take rope from boom and take onto ship and lay boom around bow or stern of ship.
- If possible, arrange for boat crew to take boom and lay at bow/stern of boat.
- Lay out more than one if possible.
- If any product tracks to drains or outside bunded area, contain with sorbent fill/sand.
- Lay more booms if Port/Contractor/Regional Council vessel arrives.
- Advise boats operating in area of potential danger and direct them away from area.
- Apply pipeline clamps if possible.
- Use sump truck to recover any product.
- If spill escapes containment area, review location of sensitive areas. Determine which of these may be threatened and direct response personnel to proceed with boom to divert any remaining spill.

## **First Containment Response for specific situations**

Tanker berth and main wharf - heavy fuel oil

Pipeline or hose leak during transfer

Phase 2 - Containment by fixed floating boom (as per Diagram 2 and 3 and accompanying photos)

Evaluate tide direction and time of tide change to determine best location to contain oil. Place floating boom down current of spill but prepare for tide change and moving location of spill equipment.

## North end – Berth 1

- Move spill trailer into position.
- Unlock and open trailer doors.
- Take Tidal Compensator slider (fixed to boom) out and place into fixed Tidal Compensator.
- Take out anchor and float and hand to recovery vessel.
- Hand radio to vessel to enable good communication.
- Take out blank end of boom from trailer and throw into water close to recovery vessel.
- Recovery vessel to recover boom and attach anchor and float to seaward end.
- Vessel will tow boom out to harbour.
- Ensure all personnel stand out of way when assisting boom to move.
- All personnel to have Personnel Flotation Devices.
- Recovery vessel drops 13 kg Danforth sand anchor when positioned.
- Anchors will be attached to minimum 10 m of chain.
- Chain to be attached to minimum 65 m of anchor rope.
- If tide is running fast may need to lessen angle of boom.
- Extra booms available from BOPRC.
- Assist in laying more booms if Port/Contractor/Regional Council vessel arrives.

## South end – Butters Landing

- Unlock and open spill container doors.
- Take Tidal Compensator slider (fixed to boom) out and place into fixed tidal compensator.
- Take out anchor and float and hand to recovery vessel.
- Hand radio to vessel to enable good communication.
- Take out blank end of boom from trailer and throw into water close to recovery vessel.
- Recovery vessel to recover boom and attach anchor and float to seaward end.
- Vessel will tow boom out to harbour.
- Ensure all personnel stand out of way when assisting boom to move.
- All personnel to have Personnel Flotation Devices.

- Recovery vessel drops 13 kg Danforth sand anchor when positioned.
- Anchors will be attached to minimum 10 m of chain.
- Chain to be attached to minimum 65 m of anchor rope.
- If tide is running fast, may need to lessen angle of boom.
- Extra booms available from BOPRC.
- Assist in laying more booms if Port/Contractor/Regional Council vessel arrives.

If BOPRC supplies more boom, once fixed to shore, these may be taken out into the harbour or they can be taken around the bow or stern of the tanker to contain any product.



Diagram 2

## Main Berth Oil Spill Plan

Berth 1 with Self Floating Boom

75 m Self Floating Boom (from spill equipment trailer) off North End of wharf (Berth 1) by Recovery Vessel for outgoing tide.

#### **Trailer positioning**



#### Spill Trailer opened and ready for response



## Tidal Compensator to be connected to compensator rail

Remove bolt on Tidal Compensator

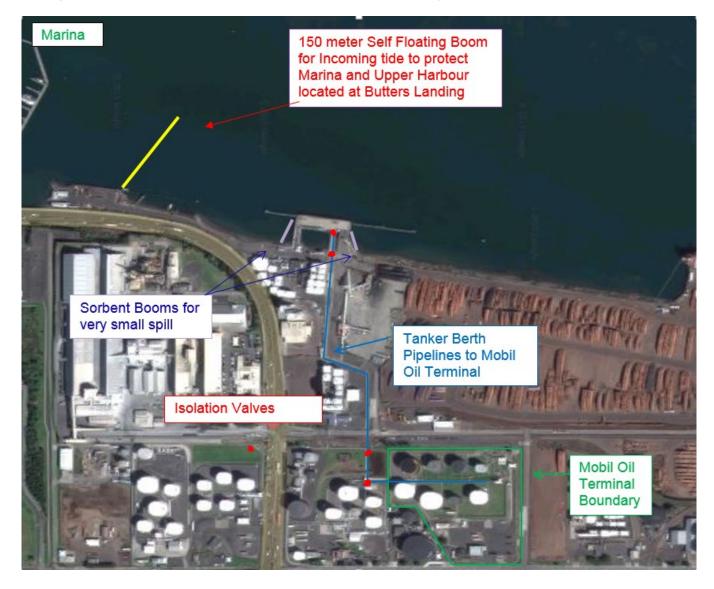
#### Two man task to fit slider into rail



#### **Boom deployment to Response Vessel**



## **Diagram 3 – Tanker Berth and terminal layout**





Butters Landing - Spill Equipment Container opened showing booms and equipment ready to be deployed

## Korimako Bunker Barge transfers

The Korimako is a bunker barge providing fuel transfers to vessels alongside berths at the Port of Tauranga. The transfer operation is controlled by Maritime New Zealand, with operations prescribed in the vessel's standard operating procedures. Spill response procedures are defined in the vessel's Ship On-board Pollution Emergency Plan or SOPEP. For relevant documentation, refer to Objective ID: A3817761.

## Sulphur Point container terminal spill

Bay Marine Works provides a rapid response capability to contain oil for Waste Management Oil Recovery and Waste Management Technical Services. These two companies transfer large volumes of waste oil products at Sulphur Point. For the latest version of the plans see:

#### Objective Links: fA1265038 and A3611516

Waste Management Oil Recovery FINAL Approved OTS Plan and signoffs

Waste Management Technical Services FINAL Approved OTS Plan and signoffs

(This text is not a link to the document – please open from Objective at the above reference).

## Stormwater plans and terrestrial oil spill response

Either call the Pollution Hotline (0800 884 883) or contact the relevant local council for up-to-date stormwater plans and shore-side spill response, in relation to discharges occurring from stormwater outlets. Fixed oil transfer sites are required to provide stormwater site layout plans as part of OTS Plan requirements.

## Shipping routes

Maritime New Zealand has initiated a voluntary navigation guideline, recommending that ships stay at least five (5) nautical miles away from any coastline. This guideline is targeted towards vessels laden with oil or other harmful liquid substances in bulk. Ships pose a risk of oil spill with low probability of occurrence but high potential effects on the environment.

## Places of refuge

Because of the nature of the coastline and the sensitive nature of the environment, there are no designated 'Places of Refuge' in the Bay of Plenty region.

## Guide for the collection of oiled wildlife for evidence

Objective link: A3718750 - Guide for the collection of oiled wildlife for evidence

#### End-point criteria for bulk oil removal and site sign-off procedures

Objective link: ID A3752596 - End-point criteria for bulk oil removal and site sign-off procedures

## Procedures for managing Archaeological Sites

Regionally there are many archaeological sites that could be conceivably discovered during an oil spill response. The following document provides a link to a procedure for managing such sites.

Objective link: A3816904 - Procedure for managing archaeological sites

## Other potentially oiled marine wildlife

The populations of some species, such as New Zealand Fur Seals for example, are rapidly recovering. Other species normally found in warmer waters, such as sea turtles for example, may also be becoming more prevalent in the region. Some of these species may also be declining or under threat.

In case of a marine oil spill affecting other marine wildlife, seek immediate advice from NOWRT, DOC and lwi specialists. All available measures to protect marine wildlife from exposure to oil spills is a first priority. This may include hazing and/or pre-emptive capture where that is practical. Where oiling has already occurred, work through practical options with all interested parties on a species and location-specific basis.

# Wildlife response information specific to the Bay of Plenty region

## Bay of Plenty wildlife likely to be threatened by an oil spill

| Priority<br>category | Species common<br>name | Regional<br>priority<br>code | NZ threat classification | IUCN<br>category | Status<br>code | Breeds<br>in BOP | Breeding<br>season             | Seasonal<br>distribution |
|----------------------|------------------------|------------------------------|--------------------------|------------------|----------------|------------------|--------------------------------|--------------------------|
| 1A                   | Grey duck              | С                            | Nationally critical      | LC               | N              | Y                | Aug-Feb<br>Peaking Oct-<br>Nov | Year round               |
| 1A                   | White heron            | A                            | Nationally critical      | Not listed       | N              | N                | n/a                            | Sp ,A, W                 |
| 1A                   | Black stilt            | A                            | Nationally critical      | CR               | E              | N                | n/a                            | Year round               |
| 1A                   | NZ fairy tern          | A                            | Nationally critical      | LC               | E              | N                | n/a                            | A, W, Sp                 |
| 1B                   | Australasian bittern   | В                            | Nationally<br>endangered | EN               | N              | Y                | Jul-Feb                        | Year round               |
| 1B                   | Black-fronted tern     | С                            | Nationally<br>endangered | EN               | E              | N                | n/a                            | A, W                     |
| 1B                   | Black billed gull      | E                            | Nationally<br>endangered | EN               | E              | Y                | Sep-Feb                        | Year round               |
| 1C                   | Wrybill                | С                            | Nationally<br>vulnerable | VU               | E              | N                | n/a                            | Sp, A, W                 |
| 1C                   | Northern NZ dotterel   | В                            | Nationally<br>vulnerable | EN               | E              | Y                | Aug-Feb                        | Year round               |

| Priority<br>category | Species common<br>name    | Regional<br>priority<br>code | NZ threat classification | IUCN<br>category | Status<br>code | Breeds<br>in BOP | Breeding<br>season | Seasonal<br>distribution |
|----------------------|---------------------------|------------------------------|--------------------------|------------------|----------------|------------------|--------------------|--------------------------|
| 1C                   | Banded dotterel           | D                            | Nationally<br>vulnerable | Not listed       | E              | Y                | Jul-Feb            | Year round               |
| 1C                   | Reef heron                | В                            | Nationally<br>endangered | LC               | N              | Y                | Sep-Feb            | Year round               |
| 1C                   | Caspian tern              | В                            | Nationally<br>vulnerable | LC               | N              | Y                | Sep-Feb            | Year round               |
| 1C                   | Red billed gull           | E                            | Declining                | LC               | Е              | Y                | Oct-Feb            | Year round               |
| 1C                   | Pied shag                 | С                            | Recovering               | LC               | N              | Y                | Aug/Feb            | Year round               |
| 1C                   | NZ dabchick               | В                            | Nationally<br>vulnerable | VU               | E              | Y                | Sep - Mar          | Year round               |
| 1C                   | Black petrel              | В                            | Nationally<br>vulnerable | VU               | E              | N                | n/a                | Year round               |
| 2A                   | NZ pipit                  | С                            | Declining                | LC               | Е              | Y                | Aug-Feb            | Year round               |
| 2A                   | Little blue penguin       | А                            | Declining                | LC               | N              | Y                | Jul -Feb           | Year round               |
| 2A                   | NZ pied<br>oystercatcher  | В                            | Declining                | LC               | E              | Y                | Sep - Feb          | Year round               |
| 2A                   | Sooty shearwater          | С                            | Declining                | NT               | N              | Y?               | Nov-May            | Year round               |
| 2A                   | Pied stilt                | В                            | Not threatened           | LC               | N              | Y                | Jul-Jan            | Year round               |
| 2A                   | Flesh-footed shearwater   | В                            | Nationally<br>Vulnerable | LC               | N              | Y                | Nov-May            | Year round               |
| 2A                   | White fronted tern        | В                            | Declining                | LC               | N              | Y                | Aug-Feb            | Year round               |
| 2B                   | Variable<br>oystercatcher | А                            | Recovering               | LC               | E              | Y                | Sep-Feb            | Year round               |
| 2B                   | Brown teal                | А                            | Recovering               | EN               | Е              | Y                | Jun-Feb            | Year round               |

| Priority<br>category | Species common<br>name   | Regional<br>priority<br>code | NZ threat classification | IUCN<br>category | Status<br>code | Breeds<br>in BOP | Breeding<br>season | Seasonal distribution |
|----------------------|--------------------------|------------------------------|--------------------------|------------------|----------------|------------------|--------------------|-----------------------|
| 2C                   | Red crowned parakeet     | В                            | Relict                   | VU               | E              | Y                | Aug-Mar            | Year round            |
| 2C                   | Fairy prion              | В                            | Relict                   | LC               | Е              | N                | Nov-Feb            | Year round            |
| 2C                   | Broad billed prion       | В                            | Relict                   | LC               | Е              | Y                | Aug-Jan            | Year round            |
| 2C                   | Common diving petrel     | В                            | Relict                   | LC               | N              | Y                | Aug-Dec            | Year round            |
| 2C                   | Marsh crake              | А                            | Declining                | LC               | N              | Y                | Sep-Feb            | Year round            |
| 2C                   | Spotless crake           | А                            | Declining                | LC               | N              | Y                | Sep-Feb            | Year round            |
| 2C                   | Cook's petrel            | В                            | Relict                   | EN               | N              | Y                | Oct-May            | Year round            |
| 2C                   | Fluttering<br>shearwater | В                            | Relict                   | LC               | E              | Y                | Sep-Feb            | Year round            |
| 2D                   | Royal spoonbill          |                              | Naturally<br>uncommon    | LC               | N              | N                | n/a                | Year round            |
| 2D                   | Black shag               |                              | Naturally<br>uncommon    | LC               | N              | Y                | Apr-Jan            | Year round            |
| 2D                   | Little shag              |                              | Naturally<br>uncommon    | LC               | E              | Y                | Aug-Feb            | year round            |
| 2D                   | Little black shag        |                              | Naturally<br>uncommon    | LC               | N              | N                | n/a                | Year round            |
| 2D                   | Wandering<br>albatross   |                              | Naturally<br>uncommon    | VU               | E              | N                | n/a                | Year round            |
| 2D                   | Royal albatross          |                              | Naturally<br>uncommon    | VU               | E              | N                | n/a                | Year round            |
| 2D                   | Banded rail              |                              | Naturally<br>uncommon    | LC               | N              | Y                | Sep-Mar            | Year round            |
| 2D                   | Giant petrel             |                              | Naturally<br>uncommon    | LC               | N              | N                | n/a                | Year round            |

| Priority<br>category | Species common<br>name       | Regional<br>priority<br>code | NZ threat classification | IUCN<br>category | Status<br>code | Breeds<br>in BOP | Breeding<br>season | Seasonal distribution |
|----------------------|------------------------------|------------------------------|--------------------------|------------------|----------------|------------------|--------------------|-----------------------|
| 2D                   | Buller's shearwater          |                              | Naturally<br>uncommon    | VU               | E              | N                | n/a                | Year round            |
| 2D                   | Bullers mollymawk            |                              | Naturally<br>uncommon    | NT               | E              | N                | n/a                | Year round            |
| 3                    | NZ Shoveler                  |                              | Not threatened           | LC               | E              | Y                | Oct-Feb            | Year round            |
| 3                    | NZ scaup                     |                              | Not threatened           | LC               | E              | Y                | Oct-Apr            | Year round            |
| 3                    | Grey faced petrel            |                              | Not threatened           | LC               | E              | Y                | Jun-Jan            | Year round            |
| 3                    | Spotted shag                 |                              | Not threatened           | LC               | E              | N                | n/a                | W                     |
| 3                    | Paradise shelduck            |                              | Not threatened           | LC               | E              | Y                | Aug-Jan            | Year round            |
| 4                    | Australasian little<br>grebe |                              | Coloniser                | LC               | N              | Y                | Dec-Apr            | Year round            |
| 4                    | Turnstone                    |                              | Migrant                  | LC               | М              | N                | n/a                | Sp, S, A              |
| 4                    | Cattle egret                 |                              | Migrant                  | LC               | М              | N                | n/a                | Sp                    |
| 4                    | Sharp-tailed<br>sandpiper    |                              | Migrant                  | LC               | Μ              | N                | n/a                | Sp, S, A              |
| 4                    | Lesser knot (red<br>knot)    |                              | Migrant                  | LC               | М              | N                | n/a                | Sp, S, A              |
| 4                    | Red-necked stint             |                              | Migrant                  | LC               | М              | N                | n/a                | Sp, S, A              |
| 4                    | Black fronted<br>dotterel    |                              | Coloniser                | LC               | N              | N                | n/a                | Sp, S, A              |
| 4                    | Mongolian dotterel           | А                            | Vagrant                  | LC               | S              | N                | n/a                | S                     |
| 4                    | Cape pigeon                  |                              | Migrant                  | Not listed       | Е              | N                | n/a                | Year round            |
| 4                    | Australian coot              |                              | Coloniser                | Not listed       | N              | Y                | Aug-Mar            | Year round            |
| 4                    | Eastern bar-tailed<br>godwit |                              | Migrant                  | LC               | М              | N                | n/a                | Year round            |

| Priority<br>category | Species common<br>name         | Regional<br>priority<br>code | NZ threat classification   | IUCN<br>category | Status<br>code | Breeds<br>in BOP | Breeding<br>season | Seasonal distribution |
|----------------------|--------------------------------|------------------------------|----------------------------|------------------|----------------|------------------|--------------------|-----------------------|
| 4                    | Far eastern curlew             |                              | Migrant                    | LC               | М              | N                | n/a                | Sp, S, A              |
| 4                    | Whimbrel -<br>Asiatic/American |                              | Migrant/Vagrant            | LC               | М              | N                | n/a                | Sp, S, A              |
| 4                    | Pacific golden plover          |                              | Migrant                    | LC               | М              | N                | n/a                | Sp, S, A              |
| 4                    | Skua                           |                              | Migrant                    | LC               | М              | N                | n/a                | S                     |
| 4                    | Eastern little tern            |                              | Migrant                    | LC               | М              | N                | n/a                | S                     |
| 4                    | Black-browed<br>mollymawk      |                              | Coloniser                  | EN               | E              | N                | n/a                | Year round            |
| 4                    | Siberian tattler               | А                            | Vagrant                    | LC               | S              | N                | n/a                | S                     |
| 5                    | NZ kingfisher                  |                              | Not threatened             | Not listed       | N              | Y                | Aug-Feb            | Year round            |
| 5                    | Grey teal                      |                              | Not threatened             | LC               | N              | Y                | Sept-Jan           | Year round            |
| 5                    | White faced heron              |                              | Not threatened             | LC               | Ν              | Y                | Aug-Jan            | Year round            |
| 5                    | Australasian hawk              |                              | Not threatened             | LC               | Ν              | Y                | Sep-Mar            | Year round            |
| 5                    | Black swan                     |                              | Not threatened             | LC               | I              | Y                | Year round         | Year round            |
| 5                    | Southern black-<br>backed gull |                              | Not threatened             | LC               | N              | Y                | Oct-Feb            | Year round            |
| 5                    | Australasian gannet            |                              | Not threatened             | LC               | Ν              | Y                | Jul-Dec            | Year round            |
| 5                    | Pukeko                         |                              | Not threatened             | LC               | N              | Y                | Year round         | Year round            |
| 5                    | Spur winged plover             |                              | Not threatened             | LC               | N              | Y                | June-Jan           | Year round            |
| 6                    | Rock pigeon                    |                              | Introduced and naturalised | LC               | I              | Y                | Sep-Jan            | Year round            |
| 6                    | Mallard                        |                              | Introduced and naturalised | LC               | I              | Y                | Aug-Feb            | Year round            |
| 6                    | Feral goose                    |                              | Introduced and naturalised | LC               | I              | Y                | Sep-Jan            | Year round            |

| Priority<br>category | Species common<br>name | Regional<br>priority<br>code | NZ threat classification   | IUCN<br>category | Status<br>code | Breeds<br>in BOP | Breeding<br>season | Seasonal distribution |
|----------------------|------------------------|------------------------------|----------------------------|------------------|----------------|------------------|--------------------|-----------------------|
| 6                    | Canada goose           |                              | Introduced and naturalised | LC               | I              | Y                | Sep-Jan            | Year round            |
| 6                    | Mute swan              |                              | Introduced and naturalised | LC               | I              | N                | n/a                | Year round            |
| 6                    | Blackbird              |                              | Introduced and naturalised | LC               | I              | Y                | Jul-Mar            | Year round            |
| 6                    | Yellowhammer           |                              | Introduced and naturalised | LC               | I              | Y                | Jul-Mar            | Year round            |
| 6                    | Chaffinch              |                              | Introduced and naturalised | LC               | I              | Y                | Jul-Mar            | Year round            |
| -                    | Muscovy duck           |                              | Not listed                 | LC               | 1              | Y                | Sep-Mar            | Year round            |

#### Key

#### Status Code:

Ε Endemic Ν Native

Breeds only in New Zealand territories

Breeds in New Zealand territories and elsewhere

М Migrant

Straggler/vagrant Introduced S 1

#### **IUCN Classification scheme**

- Critically Endangered CR
- ΕN Endangered
- VU Vulnerable
- NT Near Threatened
- LC Least Concern

A reasonable number migrate to New Zealand territories but do not breed

Not a regular migrant or few migrate to New Zealand territories but do not breed

Introduced by humans (http://www.iucnredlist.org)

#### Seasons Sp S Spring Summer

Α Autumn

W Winter

#### **Priority Category**

#### Category 1: First priority for deterrence, rescue and/or rehabilitation

Species with a New Zealand Threat Classification of 'Threatened' and/or IUCN Red-list classification (<u>www.iucnredlist.org</u>) of critically endangered (CR), endangered (EN) or vulnerable (VU). These are ranked from 1A to 1c for further prioritization using the New Zealand Threat Classification system.

- 1A Nationally critical
- 1B Nationally endangered
- 1C Nationally vulnerable

#### Category 2: Second priority for deterrence, rescue and rehabilitation

Species with a New Zealand Threat Classification of 'At Risk' and/or IUCN Red-list classification (<u>www.iucnredlist.org</u>) of critically endangered (CR), endangered (EN) or vulnerable (VU). These are ranked from 2A to 2D for further prioritisation using the New Zealand Threat Classification system.

- 2A Declining
- 2B Recovering
- 2C Relict
- 2D Naturally uncommon

#### Category 3: Third priority for deterrence, rescue and rehabilitation

Species which are endemic to New Zealand and are considered to be 'Not Threatened' under the NZ Threat Classification System, and with an IUCN Red-list classification of lower risk (LR) or not listed.

#### Category 4: Fourth priority for deterrence, rescue and rehabilitation

Species considered as migrants, vagrants or colonizers under the NZ Threat Classification System, and with an IUCN Red-list classification of lower risk (LR) or not listed.

#### Category 5: Fifth priority for deterrence, rescue and rehabilitation

Species which are native to New Zealand and are considered to be 'Not Threatened' under the NZ Threat Classification System, and with an IUCN Red-list classification of lower risk (LR) or not listed.

#### Category 6: Sixth priority for deterrence, rescue and rehabilitation

Species considered to be 'Introduced and Naturalised' under the NZ Threat Classification System, and with an IUCN Red-list classification of lower risk (LR) or not listed.

For more information about all birds and their threat status go to:

#### http://www.nzbirdsonline.org.nz/

## **Priority areas for protection**

This section contains site sheets and maps that show the priority areas for protection inside the Tauranga Harbour and within the remainder of the Coastal Marine Area. Also included is a description of the areas, information on access, possible response options and restrictions on options.

## **Tauranga Harbour**

Tauranga Harbour is a large tidal estuary covering an area of 218 km<sup>2</sup>. The name 'Tauranga' means 'landing place.'

The surrounding land from which water runs into the harbour is used extensively for urban, horticultural and agricultural purposes. At the eastern end of the harbour are the landmark Mauao or Mount Maunganui and the city of Tauranga. This entrance is deeper and allows for a large amount of cargo ships to enter and leave the Port of Tauranga. At the western end is the small coastal settlement of Otawhiwhi or Bowentown. This entrance is shallower but is often used by recreational boaties.

Largely covered by pine plantations, Matakana Island forms a natural barrier between the harbour and the Pacific Ocean. Matakana Island is also home to a number of people who live in the island's settlement. The island is largely covered in plantation pines for forestry. Many beaches are littered with fallen logs and debris which could become oiled in event of a spill landing on the shoreline. Consider beach pre-cleans to reduce secondary contamination of shoreline debris. The sheltered side of the island has inlets and lagoons and the ocean side of the island is popular with local surfers.

The harbour waters are mostly shallow. At low tide more than 60% of the harbour bed is exposed. The estuaries of Tauranga Harbour are home to many kinds of wildlife. Young fish spawn in the shallow waters and many birds nest on the harbour margins. A large volume of water enters and leaves the harbour with each tide.

The harbour has long been an important resource for the people of the Bay of Plenty. For Maori, the harbour has strong spiritual significance and is a traditional source of food. Flounder, kahawai, mussels and cockles are some of the kaimoana (seafood) that can be collected from the harbour. There are often limits as to how much can be collected and where they can be collected from.

Economic activity revolves around the Port of Tauranga, which operates several kilometres of wharves on land which has been reclaimed from the harbour at Sulphur Point and at Mount Maunganui. Established in 1873, the port handles more export cargo than any other port in the country. The port also transfers large volumes of a wide variety of oils including persistent oils and waste oil slops.