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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 recent years illustrate the potential for a large spill.

Risk sites

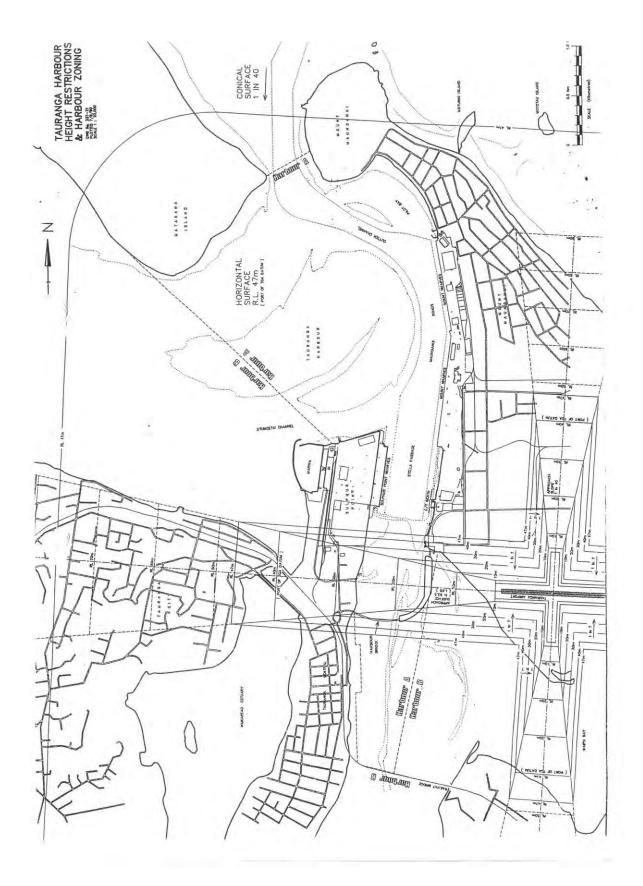
The following oil transfer sites, types of oil, and orders of magnitude are considered to be representative of the risk within the Bay of Plenty region.

Table 1 Tier 1 Transfer Sites in Bay of Plenty

Strike through = Site blocked off

| 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 | |
| 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 Whakatane | Bunkering | Diesel/petrol | 180-200 litres/min | |
| Port Ohope Wharf | Bunkering | Diesel | 180-200 litres/min | |

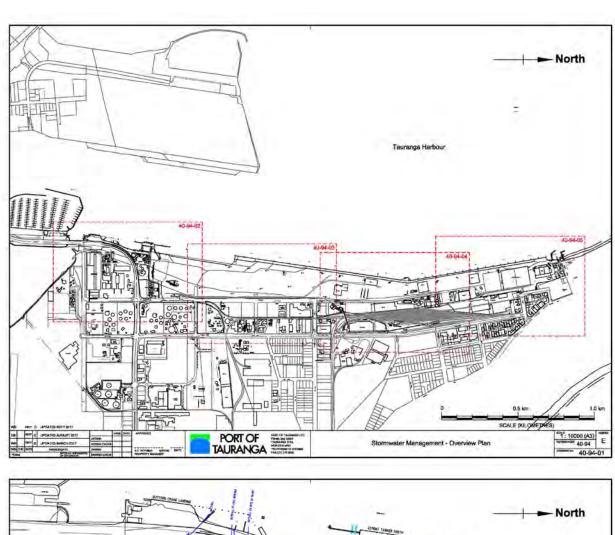
Harbour limits

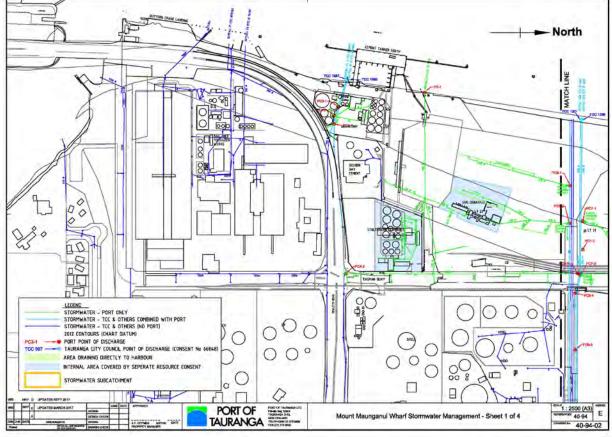


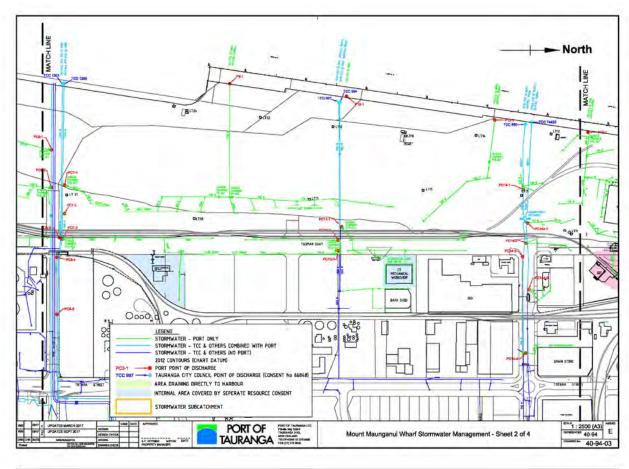
BOPRC OSCP ANNEX 4 SENSITIVE AREAS AND COASTAL INFORMATION

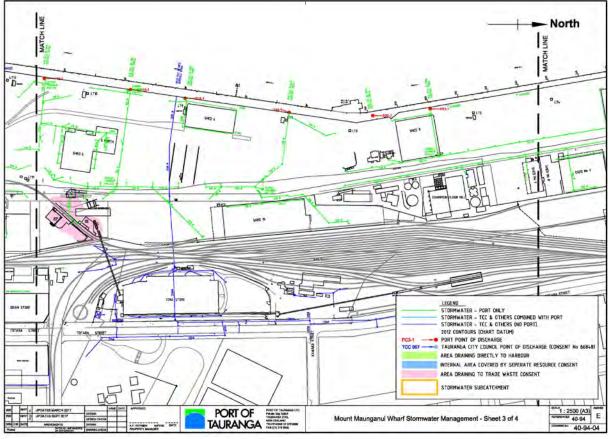
For an up to date Port/Industry Booming Plan see:

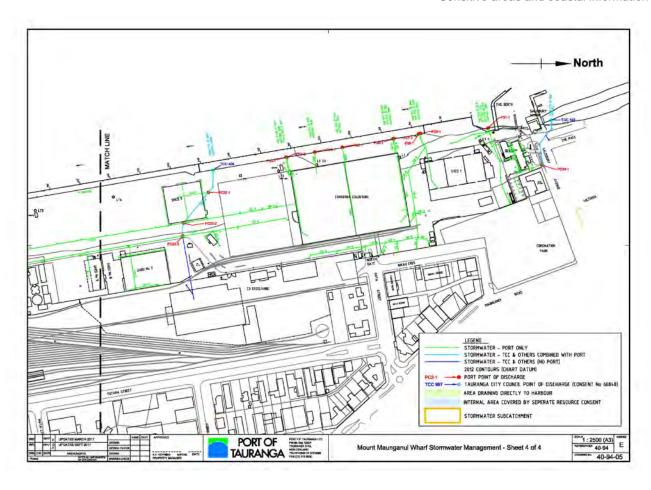
Objective folder ID fA959926 entitled 2017-11-24 Final Approved Industry Plan: (This text is not a link to the document – please open from Objective at the above reference).

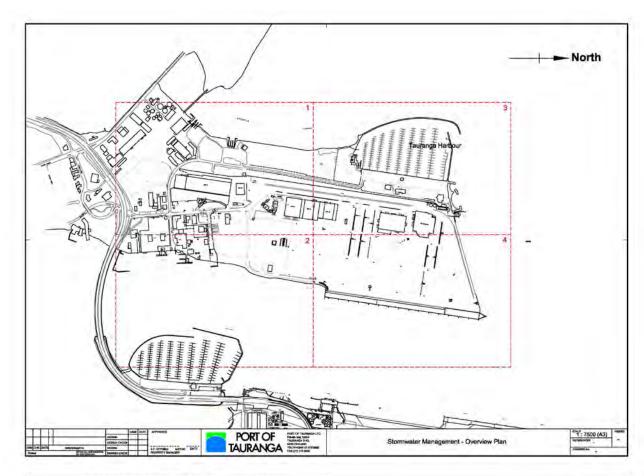


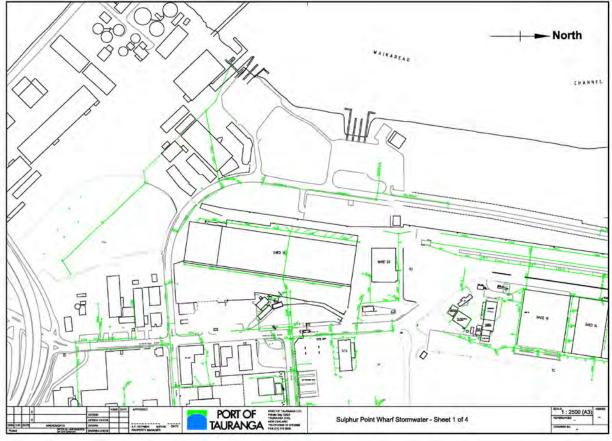


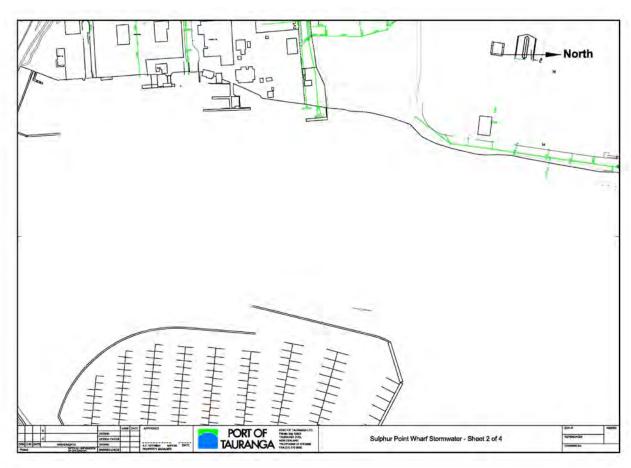


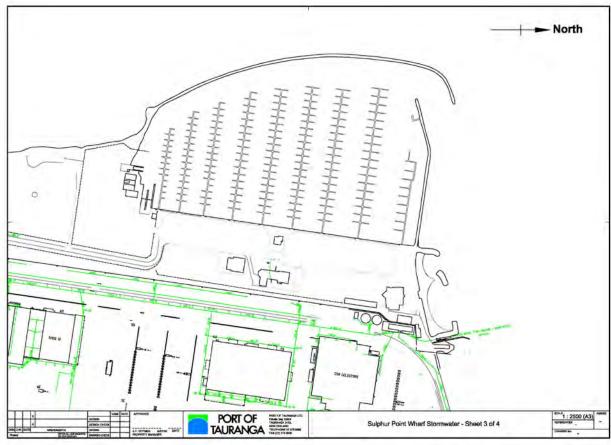


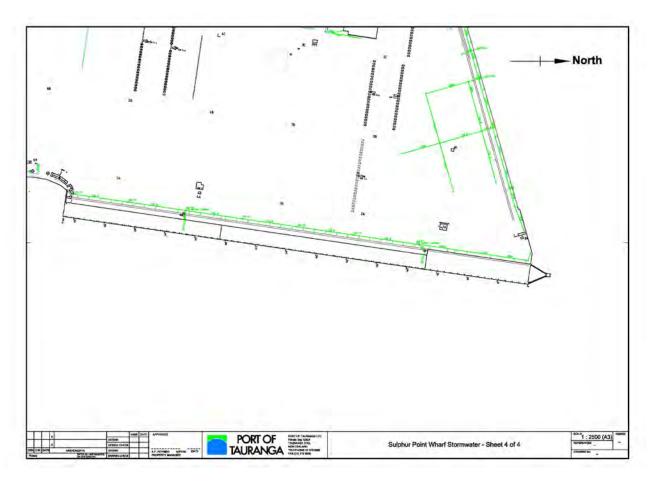










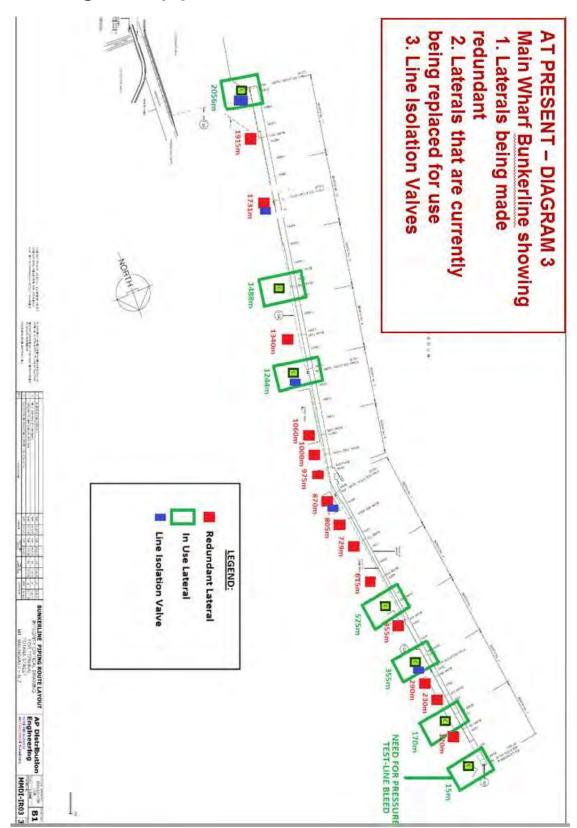


Staff entering the Port of Tauranga must first complete a Port Health and Safety Induction which can be found at:

https://www.port-tauranga.co.nz/health-safety/port-inductions/ (This text is not a link to the document).

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.

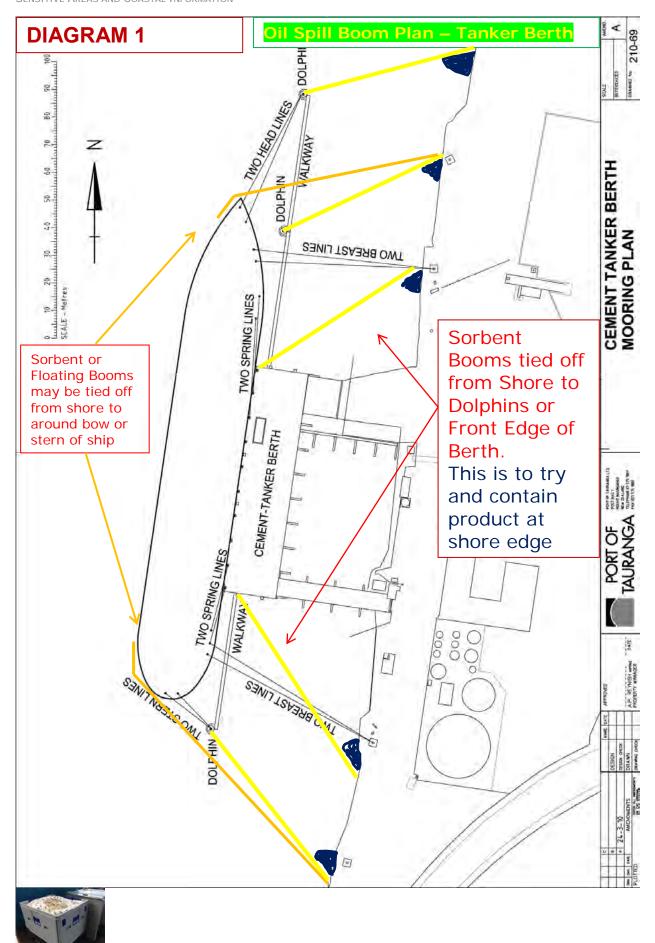
Evaluate tide direction and time of tide change to determine best location to contain oil. Place sorbent boom down current of spill but prepare for tide change and moving location of spill equipment.

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.
- 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.
- Untile 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) until 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 metre 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

Sulphur Point container terminal spill

Bay Marine Works provides a rapid response capability to contain oil for Waste Management under the site's Tier 1 Plan. For the latest version of the plan see:

Objective Link: zA200611

Waste Management FINAL Approved Tier 1 Plan and signoffs

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

Storm water 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 storm water site layout plans as part of Tier 1 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.

Wildlife response information specific to the Bay of Plenty region Bay of Plenty wildlife likely to be threatened by an oil spill

| Priority category | Species common name | Regional priority code | NZ threat classification | IUCN category | Status code | Breeds in BOP | Breeding season | Seasonal distribution |
|-------------------|----------------------------------|------------------------|--------------------------|------------------|----------------|---------------|----------------------------|-----------------------|
| 1A | Grey Duck | С | Nationally critical | LC | N | у | Aug-Feb Peaking Oct-Nov | Year round |
| 1A | White Heron | А | Nationally critical | Not listed | N | n | n/a | Sp ,A, W |
| 1A | Black Stilt | А | Nationally critical | CR | E | n | n/a | Year round |
| 1A | NZ Fairy Tern | А | Nationally critical | LC | E | n | n/a | A, W, Sp |
| 1B | Australasian Bittern | В | Nationally endangered | EN | N | у | Jul-Feb | Year round |
| 1B | Black-fronted Tern | С | Nationally endangered | EN | Е | n | n/a | A, W |
| 1B | Black Billed Gull | Е | Nationally endangered | EN | Е | у | Sep-Feb | Year round |
| 1C | Wrybill | С | Nationally vulnerable | VU | Е | n | n/a | Sp, A, W |
| 1C | Northern New Zealand Dotterel | В | Nationally vulnerable | EN | E | у | Aug-Feb | Year round |
| 1C | Banded Dotterel | D | Nationally vulnerable | Not listed | E | у | Jul-Feb | Year round |
| 1C | Reef Heron | В | Nationally vulnerable | LC | N | у | Sep-Feb | Year round |

| Priority category | Species common name | Regional priority code | NZ threat classification | IUCN category | Status code | Breeds in BOP | Breeding season | Seasonal distribution |
|-------------------|----------------------------|------------------------|--------------------------|------------------|----------------|---------------|-----------------|--------------------------|
| 1C | Caspian Tern | В | Nationally vulnerable | LC | N | у | Sep-Feb | Year round |
| 1C | Red Billed Gull | Е | Nationally vulnerable | LC | Е | у | Oct-Feb | Year round |
| 1C | Pied Shag | С | Nationally vulnerable | LC | N | у | Aug/Feb | Year round |
| 1C | NZ Dabchick | В | Nationally vulnerable | VU | E | у | Sep - Mar | Year round |
| 1C | Black Petrel | В | Nationally vulnerable | VU | Е | n | n/a | Year round |
| 2A | NZ Pipit | С | Declining | LC | Е | у | Aug-Feb | Year round |
| 2A | Little Blue Penguin | А | Declining | LC | N | у | Jul -Feb | Year round |
| 2A | NZ Pied Oystercatcher | В | Declining | LC | E | у | Sep - Feb | Year round |
| 2A | Sooty Shearwater | С | Declining | NT | N | y? | Nov-May | Year round |
| 2A | Pied Stilt | В | Declining | LC | N | у | Jul-Jan | Year round |
| 2A | Flesh-footed Shearwater | В | Declining | LC | N | у | Nov-May | Year round |
| 2A | White Fronted Tern | В | Declining | LC | N | у | Aug-Feb | Year round |
| 2B | Variable Oystercatcher | А | Recovering | LC | Е | у | Sep-Feb | Year round |
| 2B | Brown Teal | А | Recovering | EN | E | у | Jun-Feb | Year round |
| 2C | Red Crowned Parakeet | В | Relict | VU | E | у | Aug-Mar | Year round |
| 2C | Fairy Prion | В | Relict | LC | E | n | Nov-Feb | Year round |
| 2C | Broad Billed Prion | В | Relict | LC | Е | у | Aug-Jan | Year round |

| Priority category | Species common name | Regional priority code | NZ threat classification | IUCN category | Status code | Breeds in BOP | Breeding season | Seasonal distribution |
|-------------------|-----------------------|------------------------|--------------------------|------------------|----------------|---------------|-----------------|-----------------------|
| 2C | Common Diving Petrel | В | Relict | LC | N | у | Aug-Dec | Year round |
| 2C | Marsh Crake | Α | Relict | LC | N | у | Sep-Feb | Year round |
| 2C | Spotless Crake | А | Relict | LC | N | у | Sep-Feb | Year round |
| 2C | Cook's Petrel | В | Relict | EN | N | у | Oct-May | Year round |
| 2C | Fluttering Shearwater | В | Relict | LC | E | у | Sep-Feb | Year round |
| 2D | Royal Spoonbill | | Naturally uncommon | LC | N | n | n/a | Year round |
| 2D | Black Shag | | Naturally uncommon | LC | N | у | Apr-Jan | Year round |
| 2D | Little Shag | | Naturally uncommon | LC | Е | у | Aug-Feb | year round |
| 2D | Little Black Shag | | Naturally uncommon | LC | N | n | n/a | Year round |
| 2D | Wandering Albatross | | Naturally uncommon | VU | E | n | n/a | Year round |
| 2D | Royal Albatross | | Naturally uncommon | VU | E | n | n/a | Year round |
| 2D | Banded Rail | | Naturally uncommon | LC | N | у | Sep-Mar | Year round |
| 2D | Giant Petrel | | Naturally uncommon | LC | N | n | n/a | Year round |
| 2D | Buller's Shearwater | | Naturally uncommon | VU | E | n | n/a | Year round |
| 2D | Bullers Mollymawk | | Naturally uncommon | NT | E | n | n/a | Year round |

| Priority category | Species common name | Regional priority code | NZ threat classification | IUCN category | Status code | Breeds in BOP | Breeding season | Seasonal distribution |
|-------------------|--------------------------------|------------------------|--------------------------|------------------|----------------|---------------|-----------------|-----------------------|
| 3 | NZ Shoveler | | Not threatened | LC | E | у | Oct-Feb | Year round |
| 3 | NZ Scaup | | Not threatened | LC | Е | у | Oct-Apr | Year round |
| 3 | Grey Faced Petrel | | Not threatened | LC | Е | у | Jun-Jan | Year round |
| 3 | Spotted Shag | | Not threatened | LC | Е | n | n/a | W |
| 3 | Paradise Shelduck | | Not threatened | LC | Е | у | Aug-Jan | Year round |
| 4 | Australasian Little Grebe | | Coloniser | LC | N | у | 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 Sandpiper | | Migrant | LC | М | n | n/a | Sp, S, A |
| 4 | Lesser Knot (red 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 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 | E | n | n/a | Year round |
| 4 | Australian Coot | | Coloniser | Not listed | N | у | Aug-Mar | Year round |
| 4 | Eastern Bar-tailed Godwit | | Migrant | LC | М | n | n/a | Year round |
| 4 | Far Eastern Curlew | | Migrant | LC | М | n | n/a | Sp, S, A |
| 4 | Whimbrel - Asiatic/American | | Migrant/Vagrant | LC | М | n | n/a | Sp, S, A |

| Priority category | Species common name | Regional priority code | NZ threat classification | IUCN category | Status code | Breeds in BOP | Breeding season | Seasonal distribution |
|-------------------|-------------------------------|------------------------|----------------------------|------------------|-------------|---------------|-----------------|--------------------------|
| 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 mollymawk | | Coloniser | EN | E | n | n/a | Year round |
| 4 | Siberian Tattler | Α | Vagrant | LC | S | n | n/a | S |
| 5 | NZ kingfisher | | Not threatened | Not listed | N | у | Aug-Feb | Year round |
| 5 | Grey Teal | | Not threatened | LC | N | у | Sept-Jan | Year round |
| 5 | White Faced Heron | | Not threatened | LC | N | у | Aug-Jan | Year round |
| 5 | Australasian hawk | | Not threatened | LC | N | у | Sep-Mar | Year round |
| 5 | Black Swan | | Not threatened | LC | I | у | Year round | Year round |
| 5 | Southern Black-backed Gull | | Not threatened | LC | N | у | Oct-Feb | Year round |
| 5 | Australasian Gannet | | Not threatened | LC | N | у | Jul-Dec | Year round |
| 5 | Pukeko | | Not threatened | LC | N | у | Year round | Year round |
| 5 | Spur Winged Plover | | Not threatened | LC | N | у | June-Jan | Year round |
| 6 | Rock Pigeon | | Introduced and naturalised | LC | 1 | у | Sep-Jan | Year round |
| 6 | Mallard | | Introduced and naturalised | LC | 1 | у | Aug-Feb | Year round |

| 6 | Feral Goose | Introduced and naturalised | LC | I | у | Sep-Jan | Year round |
|---|--------------|----------------------------|----|---|---|---------|------------|
| 6 | Canada Goose | Introduced and naturalised | LC | 1 | у | Sep-Jan | Year round |
| 6 | Mute swan | Introduced and naturalised | LC | I | n | n/a | Year round |
| 6 | Blackbird | Introduced and naturalised | LC | I | у | Jul-Mar | Year round |
| 6 | Yellowhammer | Introduced and naturalised | LC | I | у | Jul-Mar | Year round |
| 6 | Chaffinch | Introduced and naturalised | LC | I | у | Jul-Mar | Year round |
| - | Muscovy Duck | Not listed | LC | I | у | Sep-Mar | Year round |

Key

Status Code:

E Endemic Breeds only in New Zealand territories

N Native Breeds in New Zealand territories and elsewhere

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

S Straggler/vagrant Not a regular migrant or few migrate to New Zealand territories but do not breed

Introduced Introduced by humans

IUCN Classification scheme (http://www.iucnredlist.org) Seasons

CR Critically Endangered Sp Spring ΕN Endangered Š Summer VU Vulnerable Α Autumn Near Threatened W Winter NT LC Least Concern

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 prioritization 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.

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 km². The name 'Tauranga' means 'landing place.'

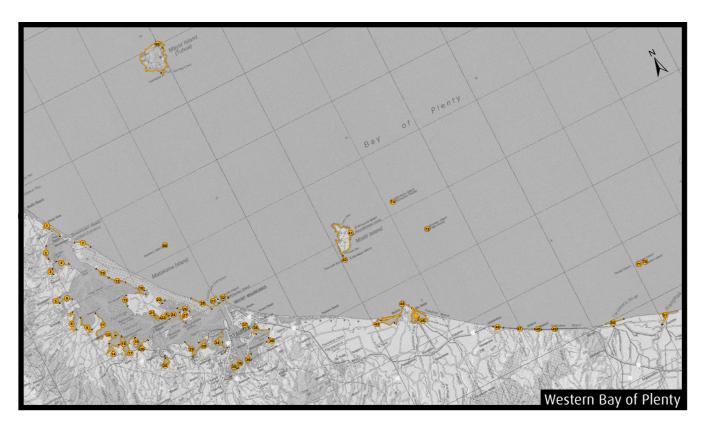
The surrounding land from which water runs into the harbour is used extensively for urban, horticultural and agricultural purposes. At the eastern end of the harbour are the landmark Mauao or Mount Maunganui and the city of Tauranga. This entrance is deeper and allows for a large amount of cargo ships 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.

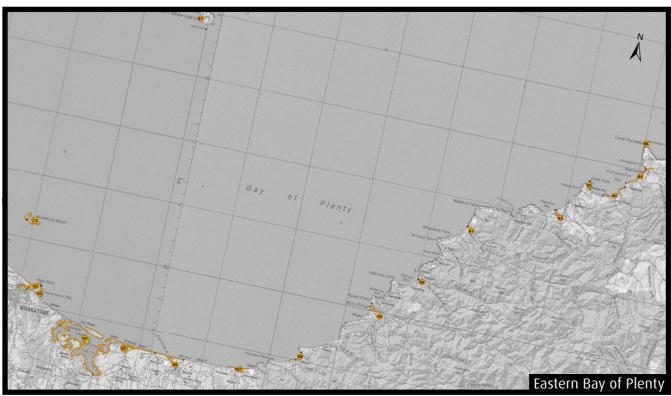
Largely covered by pine plantations, Matakana Island forms a natural barrier between the harbour and the Pacific Ocean. Matakana Island is also home to a number of people who live in the island's settlement. The island is largely covered in plantation pines for forestry. Many beaches are littered with 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.





Map Index
Oil Spill Management Plan

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Site Maps

Index

Site Maps available in Objective - Folder ID fA342204

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| | Port of Tauranga – Mt Maunganui |
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| 02 | North Tanners Point |
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| 04 | Tuapiro Estuary Spit |
| 05 | Uretara Upper |
| 06 | Uretara East |
| 07 | Waikoura Point |
| 08 | Rereatukahia |
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| 73 | Motuhora (Whale) Island |
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| | |

DESCRIPTION

The Port of Tauranga has two separate wharves divided by the Tauranga Harbour. The Sulphur Point wharf is 750 m long and is used to offload and store shipping containers.

This site also includes Tauranga Marina located on the northern end of Sulphur Point.

| Foreshore type | Port – wharf with piles and rip rap wall. Marina – rip rap wall and piers. | | |
|----------------|---|--------|--|
| Map sheets | NZMS 260 Series Chart number | | |
| | | NZ5412 | |

At Risk resources

- Commercial port
- Tauranga Marina (561 berths)
- Little blue penguins, and pied shags under wharves in Marina.
- Reef heron on marina breakwater rocks.

Notes

When oil is expected to move to the south, its movement should be directed as follows:

- If originating from Sulphur Point Wharf, it should be directed to the southern area of the wharf (sandy beach area) by use of booms. Oil may be recovered at these sites by the use of suitable recovery equipment
- In the event of oil spillage in the marina, an oil boom may be deployed in order to close the entrance and try to contain the oil. However, the floating nature and finger jointed construction of marina piers typically make them poor containment structures. Indeed, oils may be trapped within the structure of the piers and may require extensive cleaning using techniques such as prop washing, divers and water blasting. Note that the marinas may provide a diverse habitat for marine life including rare sponges. Typically, spillage occurring in the marina will be of a non-persistent type and should be left to evaporate. Fire and vapour risk should be assessed at regular intervals. Agitation may help the rate of evaporation, particularly when skinning has occurred. Where there is a risk of fire or explosion, New Zealand Fire and Emergency is the lead agency.
- Tauranga Marina Society Phone (07) 578 8747
- Port of Tauranga Emergency Enquiries Phone (07) 572 8888

Access

Access to the port is restricted and authorised personnel only are allowed on the wharves. Road access is through the Sulphur Point gate on Mirrilees Road.

Road access to the Tauranga Marina is via Keith Allen Drive. Boat ramps located at marina.

Preferred Response Option Matrix

| | Most preferred | Least preferred | Feasibility |
|--------------------------|----------------|---|--|
| Containment and recovery | Medium | | Strong currents but possible to direct oil to collection areas |
| On water recovery | High | | Possible with Awanui and the Lamor Oil Skimmer and pump system - see above |
| Dispersant application | Low | Requires escalation to Tier 3 and MNZ approval | Best on strong tides |
| Shoreline clean-up | Medium | | Good for sandy shoreline areas, harder for rocky areas |
| Natural recovery | Medium | | Rocky shoreline will be difficult to clean |

| Site | Port of Tauranga – Mt Maunganui | Risk ranking: (1=High) 1 2 3 |
|-------------|------------------------------------|------------------------------|
| DESCRIPTION | | |
| T D ((T | | |

The Port of Tauranga has two separate wharves divided by the Tauranga Harbour. The Mount Maunganui wharf is 2.5 km long and includes the tanker berth at the southern end.

This site also includes Tauranga Bridge Marina to the south of the Port.

| Foreshore type | Port – wharves with piles and rip rap walls | | |
|----------------|---|--------------|--|
| | Marina – floating breakwater and piers | | |
| Map sheets | NZMS 260 Series | Chart number | |
| | | NZ5412 | |

At Risk Resources

- Commercial Port
- Tauranga Bridge Marina (500 berths)
- Little blue penguins, and pied shags under wharves in marina.
- Reef heron on marina breakwater rocks.

Notes

- Consider activating the Port/Industry Booming Plan. Note, if the spill is not from a transfer site, the cost of activating the plan may initially rest with the regional council until a spiller is identified.
- The BOPRC equipment store is located within the Mount Maunganui Port next to Shed 8
 When oil is expected to move to the south, its movement may be directed as follows:
- If originating from the Mount Maunganui Wharf, it may be directed to the Butters Wharf area by the use of an oil boom or booms and recovered
 - When oil is expected to move to the north, its movement may be directed as follows:
- When oil is moving north from the main wharves, then the Pilot Bay area may be protected by rigging a boom from the northernmost corner of No.1 Berth, to act as a containment system allowing for recovery of oil by a recovery system mounted on a floating plant
- In the event of oil spillage in the marina, an oil boom may be deployed in order to close the entrance and try to contain the oil. However, the floating nature and finger jointed construction of marina piers typically make them poor containment structures. Indeed, oils may be trapped within the structure of the piers and may require extensive cleaning using techniques such as prop washing, divers water-blasting. Note that the marinas may provide a diverse habitat for marine life including rare sponges. Typically, spillage occurring in the marina will be of a non-persistent type and should be left to evaporate. Fire and vapour risk should be assessed at regular intervals. Agitation may help the rate of evaporation, particularly when skinning has occurred. Where there is a risk of fire or explosion, New Zealand Fire and Emergency is the lead agency.
- Port of Tauranga Customer Services Centre Phone (07) 572 8888
- Tauranga Bridge Marina Phone (07) 575 8264

Access

Marina - Te Awanui Drive

Boat ramp located of Totara Street

Port - Access to the port is restricted and authorised personnel only are allowed on the wharves. Road access is through the Hull Road and Rata Street gates.

Preferred Response Option Matrix

| | Most preferred | Least preferred | Feasibility |
|--------------------------|----------------|---|--|
| Containment and recovery | Medium | | Strong currents but possible to direct oil to collection areas |
| On water recovery | High | | Possible with ORV or similar system, see above |
| Dispersant application | Low | Requires escalation to Tier 3 and MNZ approval | Best on strong tides |
| Shoreline clean-up | High | | Numerous sandy beaches, good access |
| Natural Recovery | Low | | High public access to beach areas |