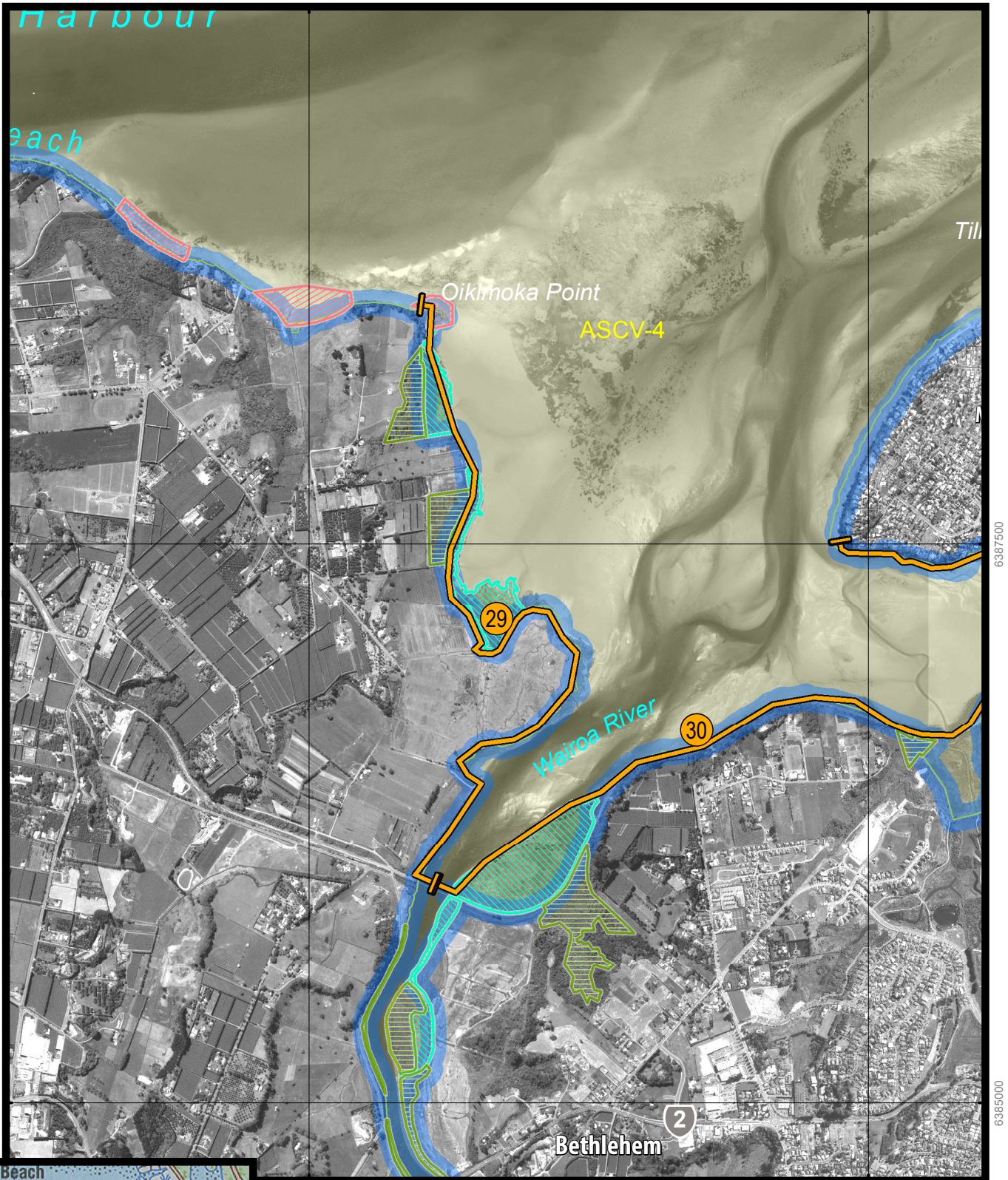


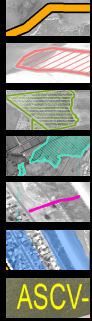
Site 29		Wairoa River	Risk ranking: 1
<b>DESCRIPTION</b> Estuarine wetland, some saltmarsh, eastern side, Wairoa Rivermouth. Some drains and willows.			
<b>Foreshore type/ environmental value</b>	Riverbank, riparian vegetation, saltmarsh All shore segments have “habitat value” All intertidal areas are identified in the Regional Coastal Plan as areas of significant conservation/cultural value		
<b>Map sheets</b>	<b>NEW ZEALAND Topo 50</b> BD36 Lower Kaimai	<b>Chart Number</b> NZ 541	
<b>Segments</b>	<b>TAU – 00340, TAU - 00350</b>		
<b>At Risk Resources</b> <ul style="list-style-type: none"><li>• A range of wetland birds, fernbird (mātātā), bittern (matuku hūrepo), spotless crane (pūweto) and marsh crane (koitareke), banded rail (kataitai), white faced heron (kōtuku), a range of ducks and scarp</li><li>• Whitebait (inanga) spawning habitat</li><li>• Whitebait harvest</li><li>• Cultural values:<ul style="list-style-type: none"><li>▪ Site of significance, Waahi Tapu from Hangarau Marae to Oeanui Pa</li></ul></li></ul>			
<b>Notes</b> Where possible, oil should be prevented from entering the Tauranga Harbour Oil that enters the low energy systems of this habitat will remain for some time			
<b>Actions</b> <ul style="list-style-type: none"><li>• Prevent/minimise oil ingress into this system</li><li>• This estuarine wetland fills from the rear and from small areas of inflow along the river bank. Limit the amount of oil entering and moving through the wetland by placing protective boom/snares across the rear and river bank entrances</li><li>• Service the rear at low tide, service from snares when sufficient water for boat access</li><li>• Block or boom culverts under the railway track</li><li>• Notify wildlife team of potential for oiling</li><li>• Consider pre-emptive capture of wildlife generally</li><li>• Activation of oiled wildlife response collection teams if required</li><li>• This plan requires further reconnaissance to establish:<ul style="list-style-type: none"><li>• Locations and methods for blocking/booming culvert</li><li>• Vehicular access to rear wetland entrance creek</li><li>• Mark river bank creeks for snare booming – requires boat access</li><li>• Amount of snare/boom required</li></ul></li></ul>			
<b>Access</b> Land access is limited. Current access from Bethlehem Road and walk down railway line. <b><u>With implications for safety of responders</u></b> Access by boat – Wairoa Bridge boat ramp.			

**Preferred Response Option Matrix**

	Most preferred	Least preferred	Feasibility
Containment and Recovery	High		Difficult access and large amounts of boom required
On water Recovery	Low		Very shallow/tidal area
Dispersant Application	Low	Requires escalation to Tier 3 and MNZ approval	Depth won't allow
Shoreline Clean-up	Low		Consider NEBA - marshlands
Natural Recovery	Medium		On-going monitoring



### LEGEND



SCAT Sites

Shorebird Roosts

Site District of Local Significance

Coastal Habitat Preservation Zone

Beach Accessways

Area Sensitive to Coastal Hazards

Area of Significant Conservational Value

## SITE 29 Wairoa River Oil Spill Management Plan




Kilometres

GIS\_462103 - May 2014 © The Bay of Plenty Regional Council  
 © Land Information New Zealand's Digital Cadastral Database (DCDB)  
 CROWN COPYRIGHT RESERVED. Digital Licence No TL/ENV01/01  
 New Zealand Map Grid  
 Aerial Photos flown summer of 2011





Site 30	Matua	Risk ranking: 1
<b>DESCRIPTION</b> Saltmarsh near Matua in the Tauranga Harbour. Drains run through the system.		
<b>Foreshore type/environmental value</b>	Saltmarsh with surrounding mangrove edge All shore segments have “habitat value” All intertidal areas are identified in the Regional Coastal Plan as areas of significant conservation/cultural value	
<b>Map sheets</b>	<b>NZ TOPO 50</b> BD37 Tauranga	<b>Chart Number</b> NZ 541
<b>Segments</b>	<b>TAU-00340</b>	
<b>At Risk Resources</b> <ul style="list-style-type: none"><li>• A range of wetland birds, fernbird (matata), transient bittern (matuku hūrepo), spotless crane (pūweto) and marsh crakes (koitareke), banded rail (kataitai), white faced heron (kōtuku)</li><li>• Estuary habitat</li><li>• Fish – flounder (patiki)</li><li>• Oil that enters the low energy systems of this habitat will remain for some time</li></ul>		
<b>Cultural Resources</b> Mahinga kai, waahi tapu from the Hangarau Marae to Oreanui Pa		
		

**Notes/Response**

- High public use area
- Where possible, oil should be prevented from entering the Tauranga Harbour
- Oil that enters the low energy systems of this habitat will remain for some time

**Actions**

- Prevent/minimise oil ingress into this system
- Clean shoreline according to relevant STM (saltmarsh and reeds clean-up)
- Notify wildlife team of potential for oiling
- Consider pre-emptive capture of wildlife generally
- Activation of oiled wildlife response collection teams if required

Note: The following notes re potential protection of the site made close to the time of the grounding of the Rena. These should be reviewed prior to finalising a response plan for this site.

If booming is impractical here, snares placed in the preferred flowpath on the northern side of the bay, may intercept oil entering and/or leaving the area at low to mid tide when flow is constrained to this channel.

- Evaluation

Matua Estuary has been identified as Protection Priority 1 for areas within the Tauranga Harbour

The ideal response would be to use rope snares laid in front of the mangroves. Rope snares will rise and fall on tide and could be reused if they weren't oiled. The rope would be secured to waratahs at approximately 20 m intervals. Rope snares would need to be brought in and made up - this could take up to a week. Distance required would be approximately 600 m to 700 m supported by 35 waratahs

Alternatively, open channels could be boomed with sorbents. These will not stop oil entering mangroves and saltmarshes on edges of the estuary

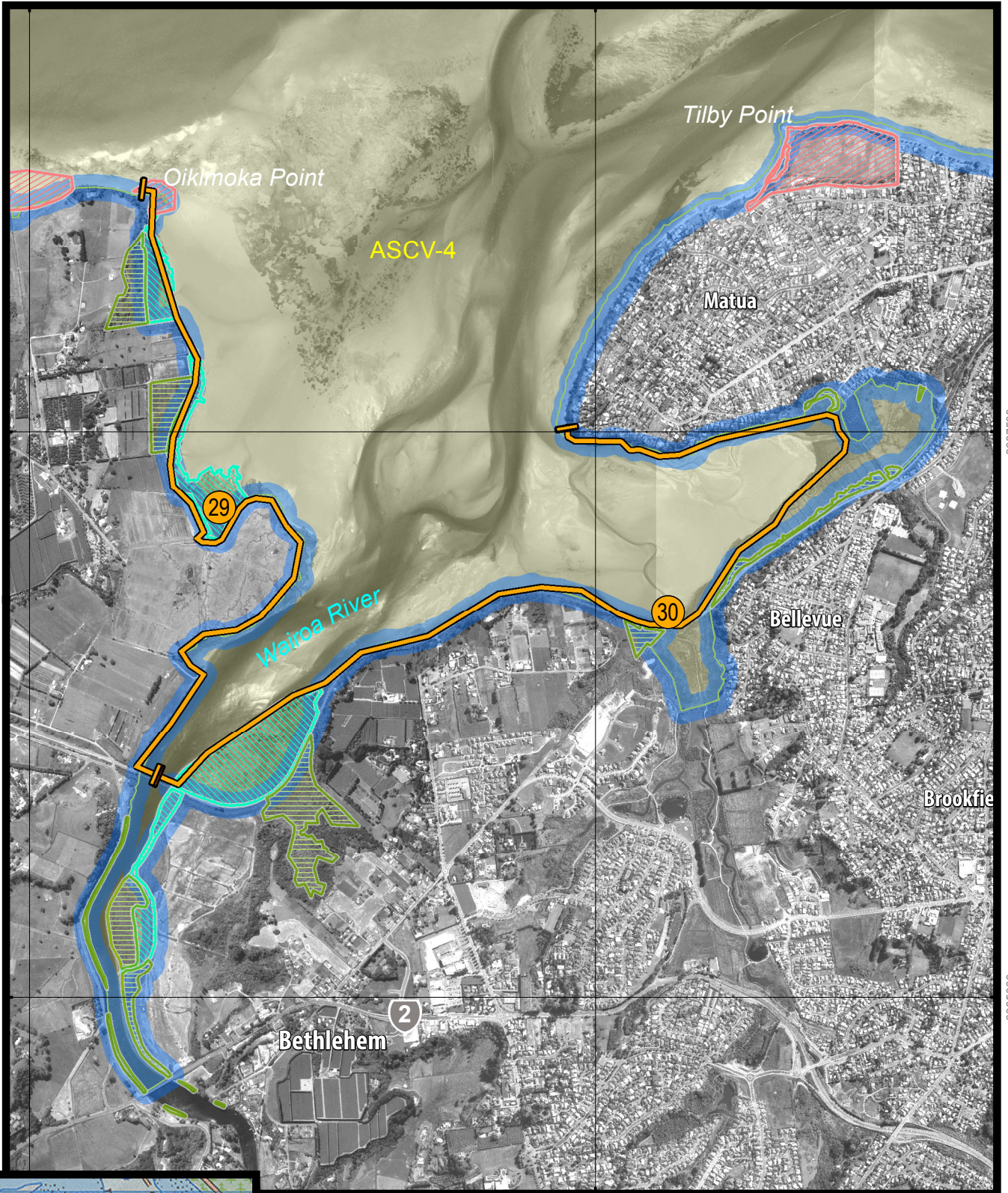
**Access**

- Surrounded by walking tracks, vehicle access to edge via Matua suburb
- Possible by boat at high tide only








**Preferred Response Option Matrix**

	Most preferred	Least preferred	Feasibility
Containment and Recovery	High		Large amount of boom required, snares a better option
On water Recovery	High		If possible prior to entering area
Dispersant Application	Low	Requires escalation to Tier 3 and MNZ approval	Depth won't allow
Shoreline Clean-up	Low/Medium		Refer NEBA
Natural Recovery	Medium		Ongoing monitoring





### LEGEND

-  SCAT Sites
-  Shorebird Roosts
-  Site District of Local Significance
-  Coastal Habitat Preservation Zone
-  Beach Accessways
-  Area Sensitive to Coastal Hazards
-  ASCV-4 Area of Significant Conservation Value

## SITE 30 Matua

### Oil Spill Management Plan



Kilometres

GIS\_462103 - May 2014 © The Bay of Plenty Regional Council  
 © Land Information New Zealand's Digital Cadastral Database (DCDB)  
 CROWN COPYRIGHT RESERVED. Digital Licence No TL/ENV01/01  
 New Zealand Map Grid  
 Aerial Photos flown summer of 2011





Site 31	Mauao - Mount Maunganui	Risk ranking: 1
<b>DESCRIPTION</b>  This site includes the intertidal zone surrounding a volcanic plug forming the south headland of Tauranga Harbour and the Mount Maunganui main beach. It is particularly important to Iwi for seafood collection and culturally.		
<b>Foreshore type/environmental value</b>	Mauao - Intertidal zone with a bedrock platform terrace and extensive boulders with steep terrestrial sediment banks in the Supratidal zone. Shell beaches at the eastern end  Mount Maunganui main beach – sand beach  Habitat-shoreline, intertidal/food/contact surfaces	
<b>Map sheets</b>	<b>NZ Topo 50</b> BD37 Tauranga	<b>Chart Number</b> NZ5412
<b>Segments</b>	<b>BOP 00010+</b>	
<b>At Risk Resources</b> <ul style="list-style-type: none"><li>• Site of cultural and spiritual significance to Iwi. This site is included in Te Maunga Mauao Mataitai (local kaimoana management) and is of special cultural significance as a food source</li><li>• Significant breeding sites for blue penguin (breeding August–March) and grey-faced petrels (breeding June–January) and feeding and roosting and nesting for, pied shag (breeding September–February), feeding for reef heron</li><li>• Fur seal (kekeno) haul out all around the island</li><li>• Extensive shellfish gathering</li><li>• Fishing takes place off most points where access is available</li><li>• The site is a major tourist attraction with a public walkway all the way around the Mount</li></ul>		
<b>Notes and preferred protection and clean-up options</b> <ul style="list-style-type: none"><li>• Oil may be difficult to remove from the shoreline. Oil in rock crevices may be difficult to remove. High probability contact surfaces in the vicinity of known penguin runways and need to be cleaned to a high standard – removal of all oil. A range of techniques should be tested, note that aggressive techniques such as warm high pressure water may be required. Due to potential impact on other organisms by aggressive techniques should be only be used in well-defined high priority areas</li><li>• Other parts of the Mount should be treated as habitat and oil removed by scraping and wiping (and hand picking on shell beaches) to remove the potential for secondary oiling</li></ul>		
<b>Access</b>  Nearest boat ramp is Pilot Bay, Tauranga Harbour. Walkways around the mount provide easy access and can be used by light vehicles and ATV. Good road access to main beach.		

**Preferred Response Option Matrix**

	Most preferred	Least preferred	Feasibility
Containment and Recovery	High		Not possible in the high flow channel areas
On water Recovery	High		Possible with ORV or similar if conditions suitable
Dispersant Application	Low	Requires escalation to Tier 3 and MNZ approval	Refer Dispersant Guidelines
Shoreline Clean-up	High		Penguin runways and all mobile oil, beaches
Natural Recovery	Low	Penguin runways	Inaccessible areas; non-mobile stain areas only



*Bay of Plenty*

*Tauranga Entrance*

Mauao/Mount Maunganui

ASCV-6  
Moturiki Is

Panepane Point

**MOUNT MAUNGANUI**

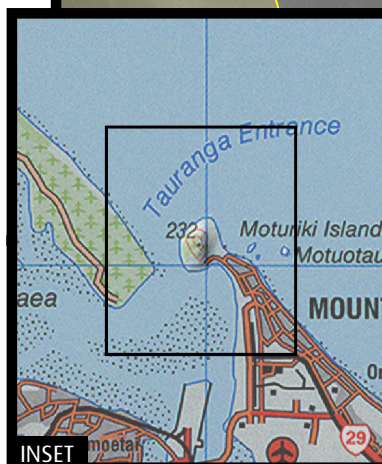
*Matakana Island*

ASCV-4

*Tauranga Harbour*

6392500

6390000



**LEGEND**



SCAT Sites

Shorebird Roosts

Site District of Local Significance

Coastal Habitat Preservation Zone

Beach Accessways

Area Sensitive to Coastal Hazards

Area of Significant Conservation Value

## SITE 31 Mauao - Mount Maunganui

### Oil Spill Management Plan

1 0

Kilometres

GIS\_462103 - May 2014 © The Bay of Plenty Regional Council  
© Land Information New Zealand's Digital Cadastral Database (DCDB)  
CROWN COPYRIGHT RESERVED. Digital Licence No TL/ENV01/01  
New Zealand Map Grid  
Aerial Photos flown summer of 2011

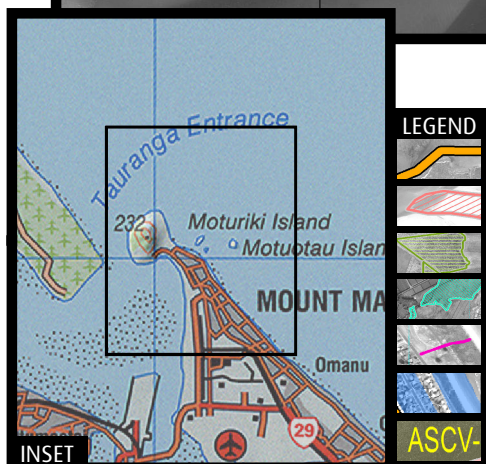
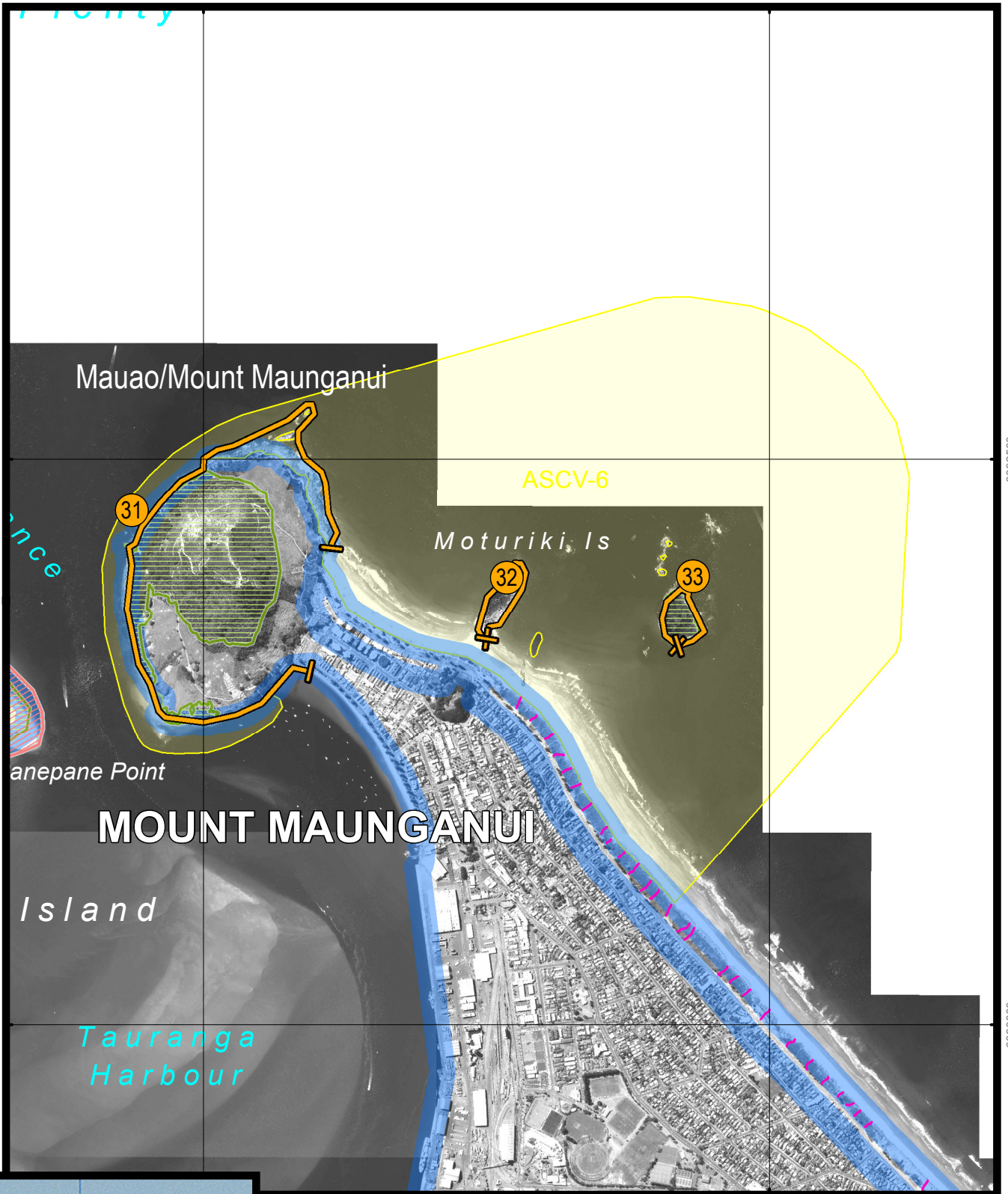


Site 32	Moturiki (Leisure) Island	Risk ranking: 3
<b>DESCRIPTION</b>  Moturiki (Leisure) Island is a 3.1 ha rocky outcrop connected to the east of Mount Maunganui Beach by a short sand spit. It is situated about 500 m from Motuotau (Rabbit) Island. The Island extends seaward with steep large boulder sides, becoming gradually steeper towards the northern end.  The prevailing northerly winds expose the seaward end of the island. Reflection of waves from the Mount Maunganui beach on the west side of the island creates more turbulence.		
<b>Foreshore type</b>	Boulders, rock pools, exposed bedrock and cliffs All shore segments have “habitat value”	
<b>Map sheets</b>	<b>NZ Topo 50</b> BD37 Tauranga	<b>Chart Number</b> NZ541; NZ5411
<b>Segments</b>	<b>BOP-00025</b>	
<b>At Risk Resources</b> <ul style="list-style-type: none"><li>• Little blue penguins (kororā), accessing on rocks</li><li>• Red-billed gulls (akiaki) - nationally vulnerable</li><li>• Common diving petrel and storm petrel breeding</li><li>• Black-backed gull (karoro) - nationally vulnerable</li><li>• Cultural sites/resources:<ul style="list-style-type: none"><li>▪ Waahi Tapu site covers the island</li></ul></li></ul>		
<b>Actions</b> <ul style="list-style-type: none"><li>• Any bulk oil should be removed as a priority to prevent remobilisation to cleaner areas</li><li>• Notify wildlife team of potential for oiling</li><li>• Consider pre-emptive capture of wildlife generally</li><li>• Activation of oiled wildlife response collection teams if required</li></ul>		
<b>Access</b> Via sand spit on foot or boat.		

#### Preferred Response Option Matrix

	Most preferred	Least preferred	Feasibility
Containment and Recovery	High		Deflection booms if weather allows
On water Recovery	High		ORV or similar vessels
Dispersant Application	Low	Requires escalation to Tier 3 and MNZ approval	Off-shore option
Shoreline Clean-up	High		Reasonable access to foreshore, especially penguin areas
Natural Recovery	Medium		Weather may lead to this as an end option





## SITE 32 Moturiki (Leisure) Island

### Oil Spill Management Plan



Kilometres

GIS\_462103 - May 2014 © The Bay of Plenty Regional Council  
 © Land Information New Zealand's Digital Cadastral Database (DCDB)  
 CROWN COPYRIGHT RESERVED. Digital Licence No TL/ENV01/01  
 New Zealand Map Grid  
 Aerial Photos flown summer of 2011

