

Schedule 1: Cultural Heritage Sites for Preservation

Site No.	Site Type	Name	Location
9	Hulks	S.S. ROTOMAHANA; Steam Tug KARORI; Schooner CLIO; Scow ROVER	McCallum Bay, Pakihi Island, Hauraki Gulf
15	Hulk	Barque REWA	Moturekareka Island, Hauraki Gulf
20	Hulks	Herald Island Hulks	Christmas Beach, Herald Island, Upper Waitemata Harbour
28	Wharf Site	Whatipu Wharf Site	Whatipu, Paratutai, Manukau Heads
30	Wharf Site/ Tramway Site	Kakamatua Wharf & Tramway Site	Kakamatua Inlet, Manukau Harbour
54	Sawmill Site	Manukau Timber Company Mill Site	Hinge Bay, Manukau Harbour
56	Tramway	Karekare-Whatipu Tramway	Karekare-Whatipu, Waitakere Ranges
66	Shipyards Site	David McKay Darroch's Shipyards Site	Whangateau Harbour
70	Water Supply Site	Hellyers Creek Water Supply Site	Hellyers Creek, North Shore, Waitemata Harbour
76	Stone Working Area	Administration Bay Stone Working Area	Between Administration Bay & Pig Bay, Motutapu Island
94	Sawing Station Site	Gordon Browne's Sawing Station	South of Brownes Bay, Mahurangi Harbour
103	Landing Place	Te Haruhi Landing,	Te Haruhi Bay, Shakespear Regional Park, Whangaparaoa Peninsula
104	Shipwreck	Barque ROYAL TAR	Shearer Rock (east of Tiritiri Matangi Island)
14 107-111	Hulks	Wreck Bay, Boulder Bay Hulks	Wreck Bay, Boulder Bay Rangitoto Island
114	Fish Traps	Tahuna Torea Fish Traps	Tahuna Torea, Nature Reserve, Tamaki River
117	Fish Traps	Puhinui Fish Traps	Puhinui Stream, Manukau Harbour
134	Stone Working Area/ Midden	Sunde Site	West Point, Motutapu Island
141	Shipyards Site	Nagle Cove Shipyards Site	Nagle Cove, Great Barrier Island
142	Shipwreck	S.S. Wairarapa	Miner's Head, Great Barrier Island
151	Shipwreck	S.S. Wiltshire	North of Rosalie Bay, Great Barrier Island
159	Fish Trap	Motukorea Fish Trap	Motukorea, Browns Island, Hauraki Gulf
167	Shipyards Site	John Darrach's Shipyards Site	Te Kapa River, Mahurangi Heads; Hauraki Gulf
180	Brickworks Site	Pollen's Brickworks Site	Whau River, Upper Waitemata Harbour
181	Brickworks Site/ Wharf Site	Clark's Brickworks Site	Limeburners Bay/Hobsonville, Upper Waitemata Harbour
182	Landing (Portage)	Riverhead Portage	Riverhead/Upper Waitemata Harbour
315	Landing Site	Slippery Creek Landing Site	Slippery Creek, Drury, Manukau Harbour
325	Factory Site (Fish)	Matakana Shark Factory Site	Matakana River, Hauraki Gulf
330	Brickworks Site/ Jetty Site/ Hulks	Carder's Pottery Site	Limeburners Bay, Hobsonville, Upper Waitemata Harbour
345	Brickworks Site	Robert Holland Brickworks Site	Limeburners Bay, Upper Waitemata Harbour

Site No.	Site Type	Name	Location
349	Shipwreck	H.M.S. ORPHEUS	Between Orwell and Outer Banks, Manukau Heads, Manukau Harbour, map location estimated
406	Stone Working Area	Home Bay Stone Working Area	Home Bay, Rakino Island, Hauraki Gulf
426	Stone Working Area/ Midden	Motukorea Stone Working Area/ Midden	Motukorea, Brown's Island, Hauraki Gulf
476	Shipyard Site	Richard Smith's Shipyard Site	Smith's Bay, Great Barrier Island
541	Salt Ponds	John Stubbs Salt Ponds	Saltpan Flat, McKenzies Bay, Rangitoto Island, Hauraki Gulf
554	Wharf Site	Howick Wharf Site	Howick, Hauraki Gulf
636	Limeworks Tramway Site	Pollen Island Limeworks and Tramway Site	Pollen Island, Upper Waitemata Harbour
653	Copper Smelting Site/ Jetty Site	Whitaker's Copper Smelter Site and Jetty Site	Motuketekete Island, Hauraki Gulf
656	Midden	Blue Bell Point Midden	Blue Bell Point, Tawharanui Regional Park, Hauraki Gulf
673	Ford	White Ford	Turanga Creek, Whitford,
701	Shipwreck	Cutter MARWELL	West of Tiritiri Matangi Island, Hauraki Gulf
857	Careening Area	Ngataranga Bay Careening Area	Ngataranga Bay, North Shore, Waitemata Harbour
865	Quarry (Slate)	Te Tereti Slate Quarry	Motairehe, Catherine Bay, Great Barrier Island
869	Stone Working Area	Whangaparapara Stone Working Area	Whangaparapara, Great Barrier Island
915	Midden (Archaic)	Matatuahu, Archaic Midden, University Excavation site	Te Pirau Point, Wattle Bay, South Head, Manukau Harbour
916	Midden (Archaic)	Matatuahu Archaic midden	Te Pirau Point, Wattle Bay, South Head, Manukau Harbour
983	Shipwreck	P.S. PIONEER	Middle Bank, Manukau Heads, Manukau Harbour, map location estimated
1044	Landing Site	Henry Williams Landing Site	Leigh Harbour, Hauraki Gulf

Schedule 2: Cultural Heritage Sites for Protection

Site No.	Site Type	Name	Location
11	Wharf/ Retaining Wall/ Scow Platform	Waitemata Flour Mill, Riverhead Paper Mill	Riverhead, Upper Waitemata Harbour
13	Whaling Station Site	Whangaparapara Whaling Station Site	Whangaparapara Harbour, Great Barrier Island
31	Wharf	Cornwallis Wharf	Cornwallis, Manukau Harbour
71	Compass Dolphin	Mechanics Bay Compass Dolphin	Mechanics Bay, Waitemata Harbour
92	Shipwreck Site	RAINBOW WARRIOR Shipwreck Site The site of the sinking of the Greenpeace vessel Rainbow Warrior by French secret service agents in July 1985. The vessel was a former trawler purchased by the international environmental action organisation Greenpeace in 1977. In 1984 Greenpeace used the vessel to protest against the French nuclear testing programme in the South Pacific, causing international embarrassment for the French government. Just before midnight on 10 July 1985, agents of the French Secret Service of DGSE, detonated two limpet mines against the hull of the ship, sinking the vessel and drowning photographer Fernando Pereira. The Rainbow Warrior was subsequently refloated and in 1987 the hulk was stripped and sunk off the Cavalli Islands, Northland. The bombing of the Rainbow Warrior was an event of political and historical significance as an infringement of New Zealand's sovereignty by a foreign nation. The site of the bombing, alongside Marsden Wharf, has considerable symbolic and commemorative value to both the New Zealand and the international community.	Marsden Wharf, Auckland, Waitemata Harbour
118	Wharf	Cryer's Wharf	Pakuranga Creek, Tamaki River, Hauraki Gulf
126	Wharf/ Quarry Site	McCallum's Wharf & Quarry Site	Pakuranga Creek, Tamaki River, Hauraki Gulf
127	Wharf/quarry Site	Guy's Wharf & Quarry Site	Ti Rakau Drive, Pakuranga Creek, Te Wharau, Tamaki River, Hauraki Gulf
136	Bridge (Abutments & Swivel Section)	Panmure Bridge Abutments and Swivel Section	Panmure, Tamaki River, Hauraki Gulf
177	Seawall	Thomas's Flourmill Seawall	Oakley Creek, Waitemata Harbour
200	Wharf	Big Omaha Wharf,	Big Omaha, Big Omaha Wharf Road, Whangateau Harbour
208	Wharf	Paremoremo Wharf	Paremoremo, Upper Waitemata Harbour

Site No.	Site Type	Name	Location
221	Graving Dock	Calliope Graving Dock	HMNZ Naval Base, Devonport, North Shore, Waitemata Harbour
227	Wharf	Beachhaven Wharf	Beachhaven, North Shore, Waitemata Harbour
241	Causeway & Seawall	Bayswater Wharf, Causeway & Seawall	O'Neills Point, Bayswater North Shore, Waitemata Harbour
252	Seawall	King Edward Parade Commemorative & Queen's Parade Seawall	King Edward Parade, Queen's Parade, Devonport, North Shore, Waitemata Harbour
285	Wharf Remnant	Tiller's Wharf;	King Edward Parade, Devonport, North Shore, Waitemata Harbour
289	Building	Calliope Sea Scouts Hall	King Edward Parade, Devonport, North Shore, Waitemata Harbour
320	Wharf Site	Wilson's Cement Works Wharf Site	Warkworth, Upper Mahurangi River, Mahurangi Harbour
333	Brickworks/Wharf Site	Auckland Brick & Tile Co. Brickworks and Wharf Site	Whau River, Waitemata Harbour
348	Lighthouse	Bean Rock Lighthouse	Bean Rock, Waitemata Harbour

The Marine Department commenced construction of Bean Rock lighthouse in 1870, and the lighthouse began operation on 24 July 1871. The lighthouse is associated with marine engineer James Balfour, an important figure in New Zealand's early maritime history. Balfour drowned before his plans for the Bean Rock lighthouse were complete, and the eventual design was the work of the colonial engineer James Stewart, who incorporated many features of Balfour's design.

The light, which is now powered by solar charged batteries, was originally powered by kerosene and needed constant attention. For this reason the design of the lighthouse incorporated the hexagonal keepers cottage which gives the structure its distinctive appearance.

In 1912 it became the first New Zealand lighthouse to be automated. The lighthouse was extensively renovated in 1985.

Site No.	Site Type	Name	Location
	Bean Rock cont'd	<p>Bean Rock Lighthouse is the sole surviving example of a wooden cottage type lighthouse in New Zealand, and one of only a few remaining worldwide. It is also New Zealand's oldest wooden lighthouse and the only wave washed tower. The Bean Rock lighthouse has cultural significance as an important landmark in the Waitemata Harbour, and is widely regarded as an Auckland icon. It has Category 1 registration under Section 22 of the Historic Places Act 1993.</p> <p>In addition, Bean Rock, or Te Toka a Kapetaua, upon which the lighthouse is located, has special historical and cultural significance to Tangata Whenua being associated with the Waiohau and Ngati Paoa ancestor Kapetaua who was marooned on the rock by his brother in law Taramokomoko. This led to a major campaign of fighting, which extended throughout the Hauraki District.</p>	
351	Wharf Site/ Sawmill Site	Kauri Timber Company, Whangaparapara Sawmill Site.	Whangaparapara, Great Barrier Island
375	Navigation Beacon	Rangitoto Beacon	Rangitoto Island, Hobson Bay
380	Building	Hobson Bay Dinghy Lockers, Ramps and Mooring Piles	Tamaki Drive, Hobson Bay, Waitemata Harbour
404	Building	Hobson Bay Boat Sheds	Whakatakataka Bay, Waitemata Harbour
405	Wharf	Mansion House Wharf	Mansion House Bay, Kawau Island, Hauraki Gulf
415	Copper Mine	Miner's Head Copper Mine	Miner's Head, Great Barrier Island
428	Seawall	Kaiaraara Mill Stone Seawall	Kaiaraara Bay, Great Barrier Island
632	Hulk	Scow RAHIRI	Blackpool Beach, Waiheke Island
640	Landing	Huia Landing	Huia Bay, Manukau Harbour
647	Building	Takapuna Boating Club	Marine Terrace, O'Neills Point, North Shore, Waitemata Harbour
654	Pumphouse/Wharf Site	Kawau Island Coppermine Pumphouse and Wharf Site.	Miner's Point, Kawau Island, Hauraki Gulf
689	Landing	Panmure Ferry Landing	Foot of Bridge Street, Panmure, Tamaki River, Hauraki Gulf

Site No.	Site Type	Name	Location
797	Swimming Pool/ seawall	Rangitoto Swimming Pool	Rangitoto Wharf, Rangitoto Island
820	Bridge	Western Viaduct Liftbridge Abutments and Control Shed	Western Viaduct, Auckland, Waitemata Harbour
920	Oyster Farm	Kennedy's Bay Oyster Farm	Kennedy's Bay, Waiheke Island
1031	Landing (Seaplane)	Mechanics Bay Seaplane Landing Ramp	Mechanics Bay, Auckland, Waitemata Harbour
1045	Ford	Little Huia Ford	Little Huia, Manukau Harbour
1058	Brickworks/Landing	Pukapuka Brickworks & Landing Site	Pukapuka Inlet, Mahurangi Harbour, Hauraki Gulf
2548	Bathhouse	Waiwera Bathhouse Remains	Waiwera Beach, Hauraki Gulf

Schedule 3: Coastal Protection Areas

Introduction

This schedule provides a summary description of the values of the Coastal Protection Areas identified on the Plan Maps in Volume 2. More detailed information on the values of these areas is held by the ARC in its Natural Heritage Data Base. Certain Coastal Protection Areas have also been identified as Areas of Significant Conservation Value (refer Schedule 4).

Subsection 2.9 of this Plan refers to two types of Coastal Protection Areas, CPA1 and CPA2. These classifications refer to the different values, size, and degree of vulnerability assigned to a significant area or site. The left hand column, makes reference to CPA 1 to CPA 134. This reference is an individual identifier for each of the 134 Coastal Protection Areas and allows cross referencing between the right hand column of the schedule, "Values of Coastal Protection Areas" and the Maps associated with this Plan.

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 1 (Sheet 2) (ASCV 102) (within ASCV 20)	Okahukura Peninsula Hyaloclastite Exposures Geological exposure of hyaloclastite and associated vent complex in the Miocene volcanics of Northland. The exposure is both below Mean High Water Springs and in the cliffs above. The site is the best example of its type and is considered to be nationally important. It has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).
CPA 2 a-j (Sheets 2 and 4) (ASCV 84) (within ASCV 20)	Tapora Islands and Estuary Area of sand banks, bars and dunes opposite the mouth of the Kaipara Harbour forming a complex habitat for a variety of animal and plant communities. The intertidal sand banks (2a) are a feeding ground and important mid tide roost for thousands of international migratory and New Zealand endemic wading birds including a number of threatened species. The associated sand bars and islands (2b, 2g, 2j) provide a high tide roost for these birds and a variety of other coastal bird species. In the shelter of the sand islands and inlet mouths grow important areas of mangroves and saltmarsh (2c, 2d, 2e, 2f, 2h, 2i, 2j). The vegetation adjoining the islands grades from the mangroves and saltmarsh into coastal shrublands and dune vegetation above Mean High Water Springs. Similarly, in the inlet mouths, the saline vegetation grades into freshwater vegetation beyond the coastal marine area. The saline vegetation provides high quality habitat for threatened secretive coastal fringe birds particularly where it abuts terrestrial vegetation which provides shelter for the birds and potential nesting sites. The saltmarshes and dune vegetation include a number of threatened plant species. The Department of Conservation has selected this area, with the exception of Gum Store Creek and the intertidal banks to the east of Te Ngaio Point, as an Area of Significant Conservation Value (ASCV) on the basis of its national importance as a wildlife habitat. All these areas make up an integral part of the Kaipara Harbour. This harbour is an internationally significant wetland and estuary and has been selected in its entirety by the Department of Conservation as an Area of Significant Conservation Value.
CPA 3 a-g (Sheets 1, 4, 5) (ASCV 85) (within ASCV 20)	Tauhoa River Extensive area of intertidal banks (3a) fringed with mangroves and supporting excellent saltmarsh and rich intertidal fauna. Some of the banks (3c, 3e, 3f, 3g) have built up to form low islands and the saline vegetation in the intertidal area grades into the terrestrial vegetation growing above Mean High Water Springs. The saline vegetation provides high quality habitat for threatened secretive coastal fringe birds. The areas of adjacent terrestrial vegetation also provide shelter for the birds and potential nesting sites.

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 3 a-g (Sheets 1, 4, 5) (ASCV 85) (within ASCV 20) cont'd	This is one of the two most extensive areas of saline vegetation in the Kaipara Harbour and is relatively unmodified by reclamation. Part of the area, the Tauhoa Scientific Reserve (3b), is one of only two mangrove reserves in the country. The Department of Conservation has selected the Tauhoa Scientific Reserve and areas to the north (3b, 3c, 3d) as an Area of Significant Conservation Value (ASCV).
CPA 4 (Sheets 4 and 5) (ASCV 20)	Moturemu Island Moturemu Island is a regionally important wildlife habitat as it supports a breeding colony of grey-faced petrel which is unusual for the west coast of the region.
CPA 5 (Sheets 4 and 5) (ASCV 20)	Mataia Along the coast in the southern part of this area, developing mangroves below Mean High Water Springs grade into regenerating forest above. This type of connection is now rare in the main body of the Kaipara Harbour due to vegetation clearance and reclamation around the harbour. Most other such gradations between natural saline and terrestrial vegetation in the Kaipara are found in the estuaries or rivers that flow into the harbour
CPA 6 a-d (Sheets 4, 5, 6) (ASCV 82) (within ASCV 20)	Jordan's Farm, Oyster Point and Shelly Beach Island Area of intertidal banks and shellbanks forming a complex habitat for a variety of animal and plant communities. The rich intertidal banks (6a) are a feeding ground for thousands of international migratory and New Zealand endemic wading birds including a number of threatened species. The associated island (6c) and nearby pasture on Jordan's Farm and Oyster Point collectively provide the numerically most important high tide roost on the Kaipara for these birds and a variety of other coastal bird species. Shelly Beach Island is a key area in the Kaipara Harbour for marine bird species. In recent years it has become a major nesting site for Caspian tern, a threatened coastal bird, with around 500 birds nesting on the island. In the shelter of the shellbanks at Shelly Beach Island and Oyster Point (6c, 6d) and in the mouth of the Makurau River (6b) grow important areas of mangroves and saltmarsh. The vegetation grades from the mangroves and saltmarsh into coastal shrublands above Mean High Water Springs at Shelly Beach Island and Oyster Point (6c, 6d) and into mature kanuka forest with emergent tanekaha and kauri at the Makurau River (6b). The saline vegetation provides high quality habitat for threatened secretive coastal fringe birds. The Department of Conservation has selected this area, with the addition of an area of intertidal bank to the north, as an Area of Significant Conservation Value (ASCV).
CPA 7 a-b (Sheet 7) (within ASCV 20)	Kaipara River Mouth Very extensive area of saline vegetation within the coastal marine area (7a) which grades into areas of 'relict' saltmarshes which are probably rarely, if ever, inundated by the sea. These areas, in turn, grade into the terrestrial vegetation growing on the highest ground. The southern part of the saline vegetation on the eastern bank of the Kaipara River (7b) is the largest single block of dense mangrove in the region and is in good condition and spreading. The saline vegetation provides habitat for threatened secretive coastal fringe birds. Areas of adjacent terrestrial vegetation provide shelter for the birds and potential nesting sites.

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 8 a-d (Sheets 6 and 7) (within ASCV 20)	Puharakeke Extensive area of intertidal banks (8a) fringed with mangroves on the sheltered edges and with shellbanks on the more exposed parts. Supports a range of saltmarsh and mangrove vegetation. Many of the banks (8b, 8c, 8d) have built up to form low islands and the saline vegetation in the intertidal area grades into the terrestrial vegetation growing above Mean High Water Springs. The saline vegetation provides habitat for threatened secretive coastal fringe birds. This is one of the two most extensive saline vegetation in the Kaipara Harbour and has been relatively unmodified by reclamation in the last 20 years.
CPA 9 a-b (Sheets 3, 4, 5) (within ASCV 20)	Omokoiti Large and diverse area of saltmarsh and mangrove vegetation (9b), comprised mainly of a sizeable area of mud and glasswort to landward of a broad band of mangroves. This glasswort flat provides a high tide roosting site for thousands of international migratory and New Zealand endemic wading birds and a variety of other coastal bird species, including a number of threatened species. Most importantly, four or five black stilts, or about 10% of the entire population of this endangered species, spend the winter at this site. The adjacent intertidal banks (9a) are a feeding ground for the thousands of waders that roost at Omokoiti. The saline vegetation is a habitat for threatened secretive coastal fringe birds.
CPA 10 a-d (Sheet 3) (ASCV 14) (within ASCV 20)	South Kaipara Head A large area of mobile dune fields (10d) and a 3 kilometre long active sandspit (10c) almost enclosing a lagoon (10a, 10b). The dune field and spit complex are considered to be nationally important landforms and also comprise an important and complex habitat for a variety of animal and plant communities. The sand area and associated lagoon are considered to be at least nationally important wildlife habitats. A variety of birds, including a number of threatened species, breed in the mobile sand areas and feed in the surrounding waters and intertidal areas (10a, 10c, 10d). This is a nesting area for white-fronted terns in New Zealand. Papakanui Spit (10c) is also used as a high tide roost by thousands of international migratory and New Zealand endemic wading birds including a number of threatened species. The intertidal areas within Waionui Inlet (10a) are an important feeding ground for these wading birds. In the southernmost parts of the inlet (10b) there are sizeable areas of mangroves and saltmarshes which form notable ecotones with the surrounding terrestrial vegetation. On the eastern side these grade into mature manuka – kanuka forest, while on the western side they are bordered by duneland and seasonal wetland, both of which provide a habitat for a variety of threatened plants. Secretive and threatened coastal fringe birds use the margins of the lagoon habitat, particularly where terrestrial vegetation offers shelter for roosting and breeding. The area has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).
CPA 11 (Sheet 8)	Oaia Island Oaia Island is one of four sites near Muriwai that support breeding colonies of the Australasian gannet. It is also used regularly as a haulout site by New Zealand fur seals.

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 12 (Sheet 3, 6 and 8)	<p>Muriwai</p> <p>Representative stretch of exposed sandy beach supporting a typical range of bivalves which live burrowed deeply into the sand around extreme low water springs. Muriwai and Rangitira Beaches is the only location in the Region where toheroa are found.</p>
CPA 13 a-m (Sheets 8 and 9) (ASCV 104)	<p>West Coast (Muriwai to Karekare)</p> <p>The cliffs and intertidal platforms of the rocky coastline from Muriwai to Karekare are made up of rocks that were formed by undersea volcanoes around 19 million years ago. A variety of regionally, nationally and internationally important geological features are to be found along this coast. These include contemporary erosional features, such as blowholes, stacks, and arches (13k, 13l), as well as exposures of volcanic (13a, 13c-f, 13h, 13j, 13m), sedimentary (13a-f, 13j-k) and fossil (13b, 13g) features within the rocks that make up the coast. Most notable are the pillow lavas in the cliffs and intertidal platforms near Muriwai (13c-f) which are considered to be the best preserved pillow lava formations in the world. On the basis of its geological value, this coast was selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).</p> <p>The rocky shores support a diverse range of marine algae and invertebrates and, under the influence of cool currents, shows affinities with marine ecosystems to the south. From Te Henga to Piha is the only part of the region in which bull kelp, a marine alga of cooler waters, is found in significant quantities. The least accessible, and therefore least modified stretch of coast is from Muriwai to Te Henga. The rocky coast also provides a variety of habitats for animals and plants, including an important array of threatened cliff-dwelling plants. In most places, the marine ecosystem grades into areas of natural coastal vegetation, some of which is considered to be amongst the best in the Waitakere ecological district (13a, 13c, 13h, 13i, 13k, 13m). A variety of coastal and sea birds breed on the cliffs and islands and feed in the surrounding waters (13c, 13i).</p> <p>In several places, large sandy beaches have accumulated and, in combination with the rocky shores, these provide a variety of habitats for animals and plants, including pingao, a threatened plant of mobile sand areas.</p>
CPA 14 (Sheet 9)	<p>Whatipu</p> <p>A large area of mobile dunes which is the best example of recent (mostly 1900 to 1930) coastal progradation in New Zealand, leaving many sea caves stranded in the hills behind. It is considered to be a nationally important landform and is also an important and complex habitat for a variety of animal and plant communities. Relatively high numbers of threatened and bird species roost in the mobile sand areas and feed in the surrounding waters and intertidal areas. Some species breed in the area; this is an important nesting area for white-fronted terns. In most places, the marine ecosystem grades into areas of natural coastal vegetation, including natural pingao and spinifex communities in the more mobile, freshwater wetland vegetation in the damp depressions and around the lakes, flaxlands at the base of the cliffs and forests on the cliffs themselves. Much of this vegetation is considered to be amongst the best in the Waitakere ecological district and much of it is habitat for a range of threatened plants. Secretive and threatened coastal fringe birds use the freshwater habitats, as do a variety of coastal bird species.</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 15 a-b (Sheets 9 and 17) (ASCV 7)	<p>Omanawanui</p> <p>Because of the combination of strong, cool lateral currents and erosion-resistant rocks, this stretch of coast (15a) supports a diverse and rich marine fauna which shows open coast, harbour, and southern affinities. The encrusting fauna – sponges, bryozoans, ascidians, and hydroids – is uncommon elsewhere on the west coast of the North Island and, in fact, some species have not been found anywhere else in New Zealand. In most places, the marine ecosystem grades into areas of natural coastal vegetation, some of which is considered to be amongst the best in the Waitakere ecological district. Steep vegetated hillslopes rise approximately 200 metres above the harbour and show a gradient from coastal fringe to slope to ridgetop vegetation. This area is an integral part of the Manukau Harbour, which is an internationally important wetland selected in its entirety by the Department of Conservation as an Area of Significant Conservation Value (ASCV). The Paratutae Wave Cut Notch (15b) is the best example of a wave cut notch on the west coast of the Region.</p>
CPA 16 a-e (Sheets 9, 10, 17) (within ASCV 7)	<p>Huia to Cornwallis</p> <p>A combination of marine habitats is found in this area. The western area (16a, 16b) is comparable to the Omanawanui area having rich and diverse fauna which reflects the similarly strong, cool lateral currents and erosion-resistant rocks. At the eastern end (16c, 16d) the direction and strength of the current changes and boulder beaches become important. Close to Huia (16a), the marine ecosystem grades into an area of natural coastal forest on the cliffs and gumland vegetation higher up. Both of these are considered to be the best in the Waitakere ecological district.</p> <p>The cliffs and intertidal rocks on the Cornwallis Peninsula (16c) are considered to be geologically important because of the exposure of a sequence of volcanic-rich flysch beds that accumulated close to the contemporaneous late Miocene Waitakere volcanoes. The intertidal area of Hui Bay (16e) is an important bird feeding area.</p>
CPA 17 a-b (Sheet 10) (within ASCV 7)	<p>Big Muddy Creek</p> <p>Within and surrounding this small estuarine inlet there are a variety of habitats with notable gradients and links between them. The lower intertidal flats (17a) support dense populations of soft shore fauna and <i>Zostera</i> beds. These grade into dense algal beds in the mid-tidal zone, which in turn grade into extensive mangrove areas in the upper intertidal area. There are also important links between the marine and terrestrial environments. Coastal forest adjoins the mangroves in the more sheltered areas (17b) and shoreline rock shelves and shelly beaches in the more exposed areas. The direct connections between terrestrial and saline vegetation benefit the threatened secretive coastal fringe bird species which are found in this inlet which feed in the intertidal areas and nest and roost under the continuous cover on the land.</p>
CPA 18 (Sheet 10) (within ASCV 7)	<p>Little Muddy Creek</p> <p>Similar to Big Muddy Creek, this small estuarine inlet contains a variety of intertidal habitats ranging from mudflats to rocky reefs. There is an uninterrupted sequence from algal beds in the mid-tidal area, to an extensive mangrove marsh in the upper tidal areas into good stands of coastal forest.</p>
CPA 19 (Sheet 11) (within ASCV 7)	<p>Cape Horn</p> <p>Important coastal forest remnants adjoin the coastal marine area along this stretch of coast. Firm papa reefs below the cliff grade quickly into a muddy intertidal flat near the channel edge. The bays also support a diversity of fauna. Waders and coastal birds feed throughout the area.</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 20 (Sheets 11 and 12) (within ASCV 7)	White Bluff Geological exposure of complexly deformed Waitemata Group rocks showing faults and folds both below Mean High Water Springs and in the cliffs above. The site is one of the best examples of its type in the region and is considered to be regionally important.
CPA 21 (Sheets 12 and 24) (within ASCV 7)	Ann's Creek Mangroves in the intertidal area form part of a unique gradient with the only significant remaining piece of native shrublands on lava flows in the Tamaki ecological district. The shrubland is the first ever collection site of the shrub, <i>Coprosma crassifolia</i> .
CPA 22 a-b (Sheets 12 and 24) (within ASCV 7)	South East Mangere Inlet Small upper intertidal area supporting a high diversity of native saline vegetation. In the south-east corner (22b) is a 0.25 ha meadow of bachelor's button, <i>Cotula coronopifolia</i> . To seawards is a diverse maritime marsh and small raised banks (22a) of clean sand supporting several species of plants characteristic of such areas. In the intertidal areas below the vegetated areas are extensive upper intertidal mudflats with dense populations of characteristic species.
CPA 23 a-c (Sheets 11 and 12) (ASCV 59) (within ASCV 7)	Ambury This modified shoreline (23b) is used as a high tide roost by thousands of international migratory and New Zealand endemic wading birds including a number of threatened species. It is the most important winter roost on the Manukau Harbour for South Island Pied Oystercatchers. The associated intertidal banks (23a, 23c) are a feeding ground for these birds and a variety of other coastal bird species. The rocky area (23b) contains the best example of pahoehoe lava flows in New Zealand. These are located on the northern side of Kiwi Esplanade. For these reasons, this site has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).
CPA 24 (Sheet 11) (within ASCV 7)	Te Tau Bank East This intertidal sandbank contains large numbers of shellfish, including edible species and species uncommon elsewhere in the Manukau Harbour. It is an important feeding area for wading birds.
CPA 25 (Sheets 11 and 12) (within ASCV 7)	Puketutu Island A regionally important, isolated compound volcanic centre, with tuff ring remnants, scoria cones, and lava fields which enter the marine environment around the coast of the island. The island is used as a high tide roost by a variety of wading birds including several threatened species.
CPA 26 a-b (Sheets 11 and 12) (ASCV 58) (within ASCV 7)	Ihumatao The Karore intertidal sandbank (26a) is a particularly rich area which provides a variety of sand flat habitats between high tide and low spring tide marks. On it grows the most extensive area of eelgrass (<i>Zostera</i>) remaining in the Manukau Harbour. Large numbers of fish and wading birds feed on the Karore Bank, with particularly high densities of some common waders feeding in and around the remaining eelgrass beds. Waterfowl, such as black swans and ducks, feed on the eelgrass itself. There is also an artificial bird roost within this area. On the southernmost part of the coast in this area is a fossil forest (26b), buried in excess of 50,000 years ago by tuff from Maungataketake volcano and subsequently exhumed by coastal erosion. The fossil forest lies both below Mean High Water Springs and on land within the coastal environment. The site is an excellent example of its type and is considered to be nationally important. The Department of Conservation has selected the fossil forest as an Area of Significant Conservation Value (ASCV).

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 27 a-c (Sheets 12, 13, 14) (ASCV 120) (within ASCV 7)	<p data-bbox="459 459 547 486">Puhinui</p> <p data-bbox="459 495 1481 1106">Area of intertidal banks and shellbanks forming a complex habitat for a variety of animal and plant communities. The extensive gently-graded sand flats (27a) support dense populations of intertidal sand flat organisms and are an excellent feeding ground for thousands of international migratory and New Zealand endemic wading birds including a number of threatened species. The associated shellbanks at Puhinui (27c) are used as a high tide roost by many of these waders as well as a variety of coastal birds. An artificial roost has been constructed at Wiroa Island (27b) and this is widely used by coastal birds. Waders also use this roost, which is the major roost on the Manukau Harbour for the threatened wrybill. Impounded behind the shellbanks is one of the biggest, best and least disturbed areas of saltmarsh remaining in the Manukau Harbour. The vegetation grades from the shellbank vegetation, into the saltmarsh, and then into kanuka forest with small native trees including kahikatea and rimu above Mean High Water Springs at Puhinui (27c). The saltmarsh, as well as being a habitat for a number of uncommon or threatened plants, is an important habitat for a variety of threatened secretive coastal fringe birds. Its habitat quality is enhanced by the adjoining terrestrial vegetation which provides shelter for the birds and offers potential nesting sites. In the shelter of the Puhinui, Pukaki, and Waokauri Creeks are significant areas of mangroves. Those in the Puhinui Creek are some of the oldest mangroves in the harbour and have batchelor's button meadows on the fringe in places.</p> <p data-bbox="459 1151 1481 1211">The Department of Conservation has selected the roosts and saltmarsh at Puhinui along with closely adjacent intertidal banks as an Area of Significant Conservation Value (ASCV).</p>
CPA 28 (Sheet 14) (ASCV 70) (within ASCV 7)	<p data-bbox="459 1220 659 1247">Takanini Pumicite</p> <p data-bbox="459 1256 1481 1451">Geological exposure of primary tephra from the Taupo Volcanic Zone. The exposure itself is above Mean High Water Springs, but would be affected by activities within the coastal marine area. The site is the purest in the Manukau Harbour and was not extensively modified by estuarine processes during deposition and is therefore considered to be nationally important. It has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).</p>
CPA 29 a-b (Sheets 13 and 14) (within ASCV 7)	<p data-bbox="459 1460 523 1487">Drury</p> <p data-bbox="459 1496 1481 1659">This area is comprised of a variety of intertidal habitats (29a) ranging from sandy mud intertidal flats, to current-exposed rocky reefs and a variety of saline vegetation. Healthy and often expanding areas of mangroves grow in the shelter of the Pahurehure Inlet, Whangamaire Stream, and Drury and Whangapouri Creeks and in the southern half of the Whangapouri Creek are notable eelgrass (<i>Zostera</i>) beds.</p> <p data-bbox="459 1704 1481 1863">Within the upper tidal reaches of Drury Creek (29b) there are a variety of marshes, grading from mangroves through to extensive areas of jointed rush-dominated saltmarsh, to freshwater vegetation in response to salinity changes. This same area (29b) is a migration pathway between marine and freshwater habitats for a number of different species of native freshwater fishes.</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 30 a-b (Sheets 13, 15, 16, 18) (ASCV 112) (within ASCV 7)	Clarks Beach to Karaka Point Area of intertidal banks and shellbanks forming a complex habitat for a variety of animal and plant communities. The extensive gently-graded predominantly fine sand flats (30a) support the greatest diversity and abundance of intertidal sand flat organisms in the Manukau Harbour. They are an excellent feeding ground for many thousands of international migratory and New Zealand endemic wading birds including a number of threatened species. Several shellbanks have developed just offshore at Karaka (30b) since the early to mid 1980's and are now numerically the most important roost on the Manukau Harbour, most notably for waders, but also for a variety of coastal birds. There are a number of other roosts along the shore, most notably near Seagrove, the second most important roosting site on the harbour. These are used during most high tides, but during high spring tides at Seagrove, the birds move onto adjacent pasture. There is a variety of saline vegetation within this area. The intertidal flats between Clarks Beach and Seagrove were the site of very extensive beds of eelgrass. Eelgrass beds declined sharply, but have been reappearing around the region in recent years. Along the shores there are fringes of saltmarsh, which reach their greatest extent and best condition along the northern shore of Seagrove Peninsula. Within the creek itself, at Seagrove, there are areas of healthy mangroves which are expanding rapidly. The Department of Conservation has selected the roosts and closely adjacent intertidal banks as an Area of Significant Conservation Value (ASCV).
CPA 31 (Sheets 15, 16, 18)	Taihiki River This inlet is comprised of a diversity of sheltered harbour habitats ranging from predominantly sandy intertidal flats, to mangroves and to pockets of saltmarsh. It is considered to be an important nursery area for young flounder and grey mullet. This remains one of the least impacted of harbour habitats in the Manukau because of the lack of major inputs of sediment from the catchment and vegetated shoreline.
CPA 32 a-b (Sheets 16 and 18) (ASCV 118) (within ASCV 7)	Waipipi Shell and sand banks at the entrance to Waipipi Creek (32b) which are isolated from the shore at high tide are used as a high tide roost by a variety of coastal birds and several hundred to a few thousand international migratory and New Zealand endemic wading birds including a number of threatened species. Waders congregate on the adjacent intertidal flats (32a) before moving onto the roost. This is one of the smaller of the major high tide wader roosts on the Manukau Harbour. The Department of Conservation has selected the roosts and closely adjacent intertidal banks as an Area of Significant Conservation Value (ASCV).
CPA 33 (Sheets 16 and 18)	Te Toro Quaternary Sands Geological exposure of sands which predates the eruptions of Taranaki and Taupo volcanic centres and the subsequent current transport of black sands northwards along the coast. The exposure is both below Mean High Water Springs and in the cliffs above. The site is considered to be regionally important.

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 34 a-b (Sheets 16, 17, 18) (ASCV 119) (within ASCV 7)	Pollok Spit Sand bank formed into a spit (34b) is a high tide roost used by a variety of coastal birds and thousands of international migratory and New Zealand endemic wading birds including a number of threatened species. Waders congregate on the adjacent intertidal flats (34a) before moving onto the roost. Saltmarsh habitats join the spit with fairly extensive intertidal mangrove areas in Rangiriri Creek. The Department of Conservation has selected the roosts and closely adjacent intertidal banks as an Area of Significant Conservation Value (ASCV).
CPA 35 (Sheets 16 and 17) (within ASCV 7)	Awhitu A range of shoreline habitats in microcosm are found along the shores of Awhitu Regional Park and in the Kauritahi Stream. These support a large range of wading and coastal birds in addition to a number of threatened coastal fringe birds that dwell in the saline vegetation. The area is an integral part of the Manukau Harbour, an internationally important wetland selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).
CPA 36 (Sheets 9, 10, 16, 17) (within ASCV 7)	South Head west of Mako Point This area is subjected to strong, cool lateral currents similar to those at Omanawanui on the opposite side of the harbour mouth. Consequently, this stretch of coast also supports a diverse and rich marine fauna which shows open coast, harbour, and southern affinities. The south head contrasts with the north because of the softer rocks and platform reefs which mean that the biota differs and is less diverse and abundant.
CPA 37 (Sheet 17)	Cochrane's Gap Quaternary Sands Geological exposure of sands which predates the eruptions of Taranaki and Taupo volcanic centres and the subsequent current transport of black sands northwards along the coast. The formation consists of interbedded dune and beach sands are rare peat, overlain by golden brown sands. The formation is poor in the black minerals ilmenite and magnetite. The site is considered to be regionally important
CPA 38 a-b (Sheet 18)	Karioitahi Exposed beach (38a) where the marine ecosystem grades into areas of coastal vegetation, within which a range of threatened plants grow. In the cliffs is a regionally important geological exposure of sands. The Karioitahi Quaternary Sands formation (38b) predates the black sands originating from the Taupo and Taranaki eruptions, and is characterised by a golden grey quartz.
CPA 39 a-b (Sheet 19) (ASCV 37)	Firth of Thames A large system of gravel ridges and furrows (39a) that runs parallel to the coast for five to six kilometres and extends approximately a kilometre inland. The ridge and furrow systems are approximately one metre apart in height and, like the Miranda Chenier Plains to the south, are used as a record of past sealevel oscillations. The landform should be considered to share the international importance of the chenier plains. The coastal gravel ridges and furrows were a complex habitat for a variety of plant communities and the original vegetation was probably kowhai forest on the ridges with marshland in the furrows. Only degraded kowhai forest fragments remain. However, in one place (39b) a fragment of the original vegetation exists with saltmarsh ribbonwood on the most seaward ridge grading into kowhai forest remnants and freshwater wetland growing on the ridge and furrow to landward. This area is the northernmost tip of a large intertidal area that has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV) on the basis of a combination of wildlife and geomorphological values.

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 40 a-j (Sheets 19 and 20)	<p>Kawakawa to Matingarahi</p> <p>This coast is a complex of rocky outcrops and soft shores. At two places on this coast (40h, 40j) there are regionally important geological exposures within the coastal marine area. These are the Kawakawa Bay Deformed Chert Beds, exposures that are valuable because they give a useful indication of the melange nature of Waipapa Terrane. Moving towards Orere Point, in either direction, the wave exposure increases and the beach sediments (40a, 40c, 40e, 40g, 40i) become correspondingly coarser. The change in conditions is reflected in changes in the type of organism present and an increase in the variety of species. The section of coast from Raukura Point to Orere Point is one of the richest areas in the region for rocky shore and sandy beach flora and fauna. In some places, the marine ecosystem grades into areas of natural coastal vegetation, some of which is considered to be amongst the best in the Hunua ecological district (40b, 40d, 40f, 40h) and at Papanui Point (40h) there are a number of threatened plant species within this vegetation.</p>
CPA 41 a-j (Sheets 20 and 21) (ASCV 92)	<p>Wairoa River and Estuary</p> <p>Largest east coast river in the region with a complex of intertidal flats and shellbanks that have accumulated at the mouth. These provide a varied habitat for a wide range of animal and plant communities. The intertidal banks (41a) are a very rich feeding ground and important midtide roost for a few thousand international migratory and New Zealand endemic wading birds including a number of threatened species. The large shellbanks on the north-west and south-east sides of the estuary (41b, 41h) provide a high tide roost for these birds and a variety of other coastal bird species. The shellbank at Kauri Bay (41b) is also important as a breeding ground for the threatened New Zealand dotterel. In the shelter of the shellbanks and the estuarine stretches of the river grow important areas of mangroves and saltmarsh (41b-j) much of it judged to be the best in the district. There is a gradation from saline vegetation into freshwater vegetation beyond the coastal marine area with decreasing salinity moving upstream from the sea. The saline vegetation provides high quality habitat for threatened secretive coastal fringe birds particularly in saltmarshes where there is terrestrial vegetation which provides roosts for the birds and potential nesting sites. The Department of Conservation has selected this area as an Area of Significant Conservation Value (ASCV).</p>
CPA 42 a-b (Sheet 22)	<p>Omana</p> <p>A variety of shoreline habitats in microcosm are found within the Te Puru Creek and along the shores to the east, ranging from mud flats within the creek to sandy silt flats (42a) surrounding a wide rocky shore platform outside the creek. These provide a habitat for a wide variety of animal and plant communities. Most notable is the saline vegetation growing on the mudflats (42b). Here, in association with mangrove and raupo, is an unusual area of <i>Scirpus</i> sedgeland.</p>
CPA 43 a-h (Sheets 22 and 23) (ASCV 91)	<p>Turanga Creek Estuary</p> <p>Three distinct tidal creeks (Maungamaungaroa, Turanga, and Waikopua) flowing into one large bay, within which a complex of intertidal mud, sand, and shell flats have accumulated. This physical variety provides a similarly varied range of habitats for an assortment of animal and plant communities. The intertidal banks (43a) are a very rich feeding ground and important midtide roost for many hundreds of a variety of international migratory and New Zealand endemic wading birds including a number of threatened species. Large shellbanks at various locations at creek mouths (43c, 43f), behind the beach (43e), or near Motukaraka Island (43b) are used (or have been used in the past) as high tide roosts by these birds and a variety of other coastal bird species.</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 43 a-h (Sheets 22 and 23) (ASCV 91 cont'd)	In the shelter of the shellbanks and the creeks grow areas of mangroves and saltmarsh (43d, 43e, 43g, 43h) some of it judged to be the best in the district. There are two major gradations from saline vegetation into terrestrial vegetation. One (43h) is from mangroves into the best coastal ponga and taraire forests on coastal sediments in the district which in turn grades into kowhai forest. The second (43g) grades from mangroves into saltmarsh into coastal shrublands on islands in the Turanga Creek. The saline vegetation fringing the creeks provides high quality habitat for threatened secretive coastal fringe birds particularly where it abuts terrestrial vegetation which provides roosts for the birds and potential nesting sites. The Department of Conservation has selected this area as an Area of Significant Conservation Value (ASCV).
CPA 44 (Sheet 24)	Waiouru Tuff Mound A Waiouru Tuff Mound, often incorrectly referred to as Pukekiwiriki, is an indistinct, crater-like depression about 300m in diameter. The crater is breached to the SW by tidal creeks and has an eight metre terrace along the Tamaki River. One of the oldest members of Auckland Volcanic Field, this geological landform is considered to be regionally important.
CPA 45 a-b (Sheet 24) (within ASCV 79)	Pakuranga Creek and Roost Pakuranga Creek roost (45a) is one of the roosting sites used by some of the hundreds of wading birds that feed within the Tamaki Estuary. The whole of the Tamaki Estuary is a regionally important wildlife habitat and has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV). This roost is associated with the values of Coastal Protection Areas 47, 48, and 49 and forms an integral part of the wildlife habitat values of the estuary. The mangrove areas of Pakuranga Creek (45b) are regarded as the best example of mangrove habitat in the Tamaki Estuary.
CPA 46 (Sheets 24 and 25) (ASCV 62)	Panmure Basin Explosion Crater An explosion crater and associated tuff ring that is naturally breached to form a tidal lagoon. This landform is still relatively complete and is considered to be regionally important. The Department of Conservation has selected this area as an Area of Significant Conservation Value (ASCV).
CPA 47 (Sheets 24 and 25) (within ASCV 79)	Tamaki River East Roost One of the roosting sites used by some of the hundreds of wading birds that feed within the Tamaki Estuary. This roost is associated with the values of Coastal Protection Areas 45, 48, and 49.
CPA 48 (Sheets 24 and 25) (within ASCV 79)	Tamaki East Bank This intertidal bank is a feeding ground for the hundreds of wading birds that use the Tamaki Estuary. This feeding ground is associated with the values of Coastal Protection Areas 45, 47, and 49. This area also includes part of the Farm Cove ignimbrite, most of which is above MHWS.
CPA 49 a-d (Sheets 24, 25, 40) (ASCV 60) (within ASCV 79)	Tamaki Estuary West Large river estuary where considerable areas of intertidal flats have accumulated and a sand-shell spit has built up near the entrance. The spit has been modified to create a variety of freshwater and estuarine habitats. Hundreds of mainly New Zealand endemic wading birds, including a number of threatened species, use the spit and a stretch of coast nearer the entrance (49d) as high tide roosts. The intertidal banks (49a) contain extensive beds of shellfish and are a feeding ground for these birds.

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 49 a-d (Sheets 24, 25, 40) (ASCV 60) (within ASCV 79) cont'd	<p>The spit and associated northern and southern intertidal banks, together comprise a wildlife habitat of regional importance. This area is associated with the values of Coastal Protection Areas 45, 47, and 48.</p> <p>At Point England (49b) is a small geological exposure of rhyolitic co-ignimbritic accretionary lapilli from the Taupo Volcanic Zone, which is exposed as a thin bed near the base of an eroded low sea cliff. The site is considered to be nationally important and has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).</p>
CPA 50 a-c (Sheets 25 and 40)	<p>Musick Point</p> <p>Area of rocky intertidal marine habitat (50a) which is easily accessible and in reasonably good condition. Two exposures in the cliffs and intertidal platforms are considered to be geologically important. One (50b) is an overthrust fold involving flysch beds and the other (50c) is the best example in the region of an anticline visible in three dimensions. Both of these geological features are considered to be regionally important.</p>
CPA 51 a-d (Sheets 25, 30, 40) (ASCVs 55 and 63)	<p>Hobson Bay – Orakei Basin</p> <p>This area is a breeding area for a variety of shag species. Orakei Basin and Hobson Bay (51a) are feeding areas used by these birds along with a variety of other coastal and wading birds. There are two features of geological significance in the area. Orakei Basin (51b) itself is a large, conspicuous explosion crater and associated tuff ring that has been breached by a stream and invaded by rising sea level. The second site (51d) is a greensand exposure that is historically important as it is the type locality of several Mollusca and of numerous Foraminifera collected by Hochstetter in 1859 and described by Karrer in 1864. Both of these geological features are considered to be nationally important and the Department of Conservation has selected both as Areas of Significant Conservation value (ASCVs).</p> <p>Some of the largest mangroves in the ecological district grow in the Purewa Stream area (51c). The value of these mangroves is enhanced by the gradation from mangrove forest into the coastal forest of Purewa Reserve.</p>
CPA 52 a-b (Sheet 29) (within ASCV 30)	<p>Te Tokoroa Reef</p> <p>Te Tokoroa Reef is the distal end of a lava flow that originated at Three Kings volcano and can be followed to the spring tide low water level. It is the longest lava flow in the Auckland Volcanic Field and is considered to be a regionally important geological feature. The hard surface presented by the lava flow (52a) is unusual within the Waitemata Harbour and the diverse marine biota it supports, particularly sponges and bryozoans, is correspondingly unusual. The value of the reef is enhanced by the saline vegetation it supports. Accumulation of soft sediments in sheltered parts of the reef towards the land (52b) has allowed colonisation by mangrove and saltmarsh plants. The reef is part of the Upper Waitemata Harbour area which is a nationally important wildlife habitat selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).</p>
CPA 53 (Sheets 26 and 29) (ASCV 111) (within ASCV 30)	<p>Pollen Island</p> <p>This is an area of saltmarsh, mangroves, shellbanks, and estuarine and harbour mud flats. It is the best remaining largely unmodified area of its type in the Waitemata Harbour and is considered to be a nationally important landform. It is also a complex habitat for a variety of animal and plant communities. Pollen and Traherne Islands and the surrounding shellbanks are the major high tide roost on the Waitemata Harbour for thousands of international migratory and New Zealand endemic wading birds as well as a variety of coastal birds. This includes a number of threatened species. They are also an important breeding and flocking area for the threatened New Zealand Dotterel on the Waitemata Harbour. The surrounding intertidal banks and waters are a feeding ground for all of these birds.</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 53 (Sheets 26 and 29) (ASCV 111) (within ASCV 30) cont'd	<p>The biggest and least disturbed area of saltmarsh remaining in the Waitemata Harbour grows in the shelter of the Island. Here is found an important intergrading of vegetation from intertidal flats up onto shellbank. Mangroves give way to glasswort herbfields which in turn are replaced by rush and sedge saltmarsh which grades into saltmarsh ribbonwood shrubland on Pollen Island itself. The saline vegetation is an important habitat for a variety of threatened secretive coastal fringe birds. The habitat quality is enhanced by the adjoining thick low saltmarsh ribbonwood vegetation on the Island which provides shelter for the birds and offers potential nesting sites. Here is found a valuable population of the regionally threatened fernbird. The majority of this area was protected as the Motu Manawa (Pollen Island) Marine Reserve in late 1995. The Department of Conservation has selected this area as an Area of Significant Conservation Value (ASCV).</p>
CPA 54 (Sheet 26) (within ASCV 30)	<p>Whau River</p> <p>The Whau River contains substantial quantities of saline vegetation. There are around 40 hectares of mangroves with the taller trees growing in the lower intertidal areas and mangroves of smaller stature growing in the firmer high intertidal regions. These in turn grade into a fringe of saltmarsh lining the coast. The saline vegetation is an important habitat for threatened secretive coastal fringe birds particularly where it abuts terrestrial vegetation which provides roosts for the birds at high tide and potential nesting sites.</p>
CPA 55 a-d (Sheets 26 to 29) (within ASCV 30)	<p>Te Atatu – Henderson Creek</p> <p>This is an area of saltmarsh, mangroves, shellbanks, and estuarine and harbour intertidal banks forming a complex habitat for a variety of animal and plant communities. The intertidal area to the east of the Te Atatu Peninsula (55a) is a major wading bird feeding ground. Nearby extensive clean high-tidal sandflats and a prominent shellbank (55b) offer a high tide roost for some of these wading birds and a variety of coastal birds, as do a series of small shellbanks off the north end of the Te Atatu Peninsula (55c). The latter are considered to be a major roosting area for waders in the Waitemata Harbour and are also a breeding ground used by a range of coastal and wading birds, including a number of threatened species.</p> <p>Large and significant areas of saline vegetation grow in the shelter of these shellbanks. At Te Atatu East (55b) the extensive shell barriers protect high level mangroves with a healthy sedge, rush and glasswort saltmarsh on the shore fringe. At Te Atatu North (55c) there is a large area in which there is either pure mangrove swamp or bare sand flat. Saline vegetation also grows in the shelter of Henderson Creek. Here the edges of the creek are lined with mature mangroves which grow in association with areas of saltmarsh at the mouth of the creek and sedges and eelgrass further up the creek. In one place (55d) there is an important gradation between saline vegetation in the intertidal area and native towai forest on the slopes above.</p> <p>On part of the coast at Te Atatu North (55c) are found remnants of swamp and estuarine vegetation of Pleistocene age now exposed at intertidal levels. The site is considered to be a regionally important geological site.</p>
CPA 56 a-b (Sheet 27) (ASCV 56) (within ASCV 30)	<p>Hobsonville Peninsula</p> <p>At the mouth of Nimrod Inlet and Bomb Bay is a shellbank (56b) that is one of the two major roosts on the Waitemata Harbour for wading birds, including threatened species. These birds feed in the intertidal area to the east of the peninsula (56a). On the southern coast of the Hobsonville Peninsula is a geological exposure of primary tephra from the Taupo Volcanic Zone both above and below Mean High Water Springs. The exposure is one of the few where pumice silts exists at sea level. It was not extensively modified by estuarine processes during deposition and is therefore considered to be nationally important. The Department of Conservation has selected this area as an Area of Significant Conservation Value (ASCV).</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 57 (Sheet 27) (within ASCV 30)	Herald Island to Lucas Creek This area is the best example of the muddy, mangrove-lined inlets of the inner Waitemata Harbour. The diversity and productivity of the flora and fauna is generally large with extensive beds of shellfish and abundances of birds and fish. Gradations between the marine environment and either natural freshwater or natural terrestrial systems are a major characteristic of the ramifying arms of the system. These arms are also important as pathways for migration by native freshwater fish. The saline vegetation is an important habitat for threatened secretive coastal fringe birds, particularly where it abuts terrestrial vegetation, which provides roosts and potential nest sites for birds.
CPA 58 (Sheets 28 and 31) (within ASCV 30)	Hellyers Creek North Hellyers Creek is important because of the extensive natural connections between the marine and terrestrial environments. Almost all of the block of land to the south of View Road on the northern side of Hellyers Creek is covered with trees (kahikatea, kauri, kohekohe, puriri, taraire, kowhai, and kanuka). This natural vegetation adjoins mangroves which occupy large areas of the upper shore.
CPA 59 (Sheets 26, 28, 29) (within ASCV 30)	Soldiers Bay Within this bay a variety of intertidal substrates provide a variety of habitats for a range of plants and animals. There are fine firm sandy sediments on the lower shore, softer sediments and shell barrier at the head of the bay, reefs of sandstone extending from the points and accumulations of boulders beneath the cliffs. The intertidal areas provide a feeding area for a variety of coastal birds which roost on the shell barrier. A complex of mangroves and saltmarsh grow in the shelter of the shellbanks and these grade into a sizeable freshwater raupo wetland out of the coastal marine area.
CPA 60 ag (Sheets 29 and 30) (ASCV 100)	Shoal Bay – Ngataringa Bay Within this area are extensive areas of shellbanks and intertidal sand and mud, which together form a complex habitat for a variety of animal and plant communities. The intertidal area (60a, 60b) is an important wading bird feeding ground. Associated shellbanks (60c, 60d, 60e, 60g) are used as a high tide roost by these wading birds and a variety of coastal birds. Saltmarsh and mangrove communities grow on the margins of this area (60a, 60b), protected by the shellbanks nearer the mouths of the bays. These areas of saline vegetation offer a good habitat to secretive coastal fringe birds. Mangrove and saltmarsh also grow within the shelter of the Tank Farm Explosion Crater (60f). This is a well preserved simple explosion crater and tuff ring about 800 metres in diameter breached to the south-east by the sea and partially filled with intertidal mud. As the last remaining unreclaimed breached tuff ring it is considered to be a landform of regional geological importance and the saline vegetation within it unique. The Department of Conservation has selected this area, with the exception of the Tank Farm Explosion Crater, as an Area of Significant Conservation Value (ASCV).
CPA 61 a-d (Sheet 30)	North Head to Takapuna This stretch of coast (61a) consists of a series of rocky headlands of soft Waitemata series rocks with sandy beaches in between. At the southern end of this area is North Head, a volcano of which the rock at intertidal level is bedded volcanic ash called "tuff". This wide variety of substrates provides a large range of habitats for plant and animal communities. The wave exposure increases from south to north in this area and this is reflected in the composition of the marine communities found along the coast.

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 61 a-d (Sheet 30) cont'd	<p>There are rich faunal assemblages in the areas of soft sediments near the low tide marks of all of these beaches, but at the sheltered Cheltenham, the principal species is the cockle, whereas at the more exposed Takapuna Beach the tuatua dominates.</p> <p>The flora and fauna of the hard substrata, particularly the sponges, are very rich and diverse.</p> <p>A variety of generally regionally important geological features are to be found along this coast. These include flysch sequences, slump units within them, and folding and faulting of these sedimentary rocks. Several of these geological sites (61b-d) are particularly small and have been identified separately (61b-d). These are a classic example of a structural discordance (61b)(Narrow Neck Structural Discordance), a conspicuous minor reverse fault (61c) (Belmont Cliffs Fault) and the most silica-poor reported sedimentary chabazite, a feature of international significance (61d) (Takapuna Chabazite). With the exception of the chabazite exposure, all of these features are at least partially below Mean High Water Springs and the landward portions of all are vulnerable to activities within the coastal marine area.</p>
CPA 62 a-b (Sheets 30 and 31) (ASCV 57)	<p>Takapuna and Thorne Bay Fossil Forests</p> <p>Two major areas of lava flows (62a) in which there are well preserved lava moulds and casts of trees, many of which appear to have been in growth position at the time of eruption. In the Takapuna Reef Fossil Forest there is evidence of multiple lava flows through a standing forest. At Thorne Bay there are tree moulds up to 2 metres in diameter as well as good examples of gas blisters and segregation vesicle pipes in the lava. Both of these lava areas are considered to be landforms of national geological importance and have therefore been identified by the Department of Conservation, as an Area of Significant Conservation Value (ASCV).</p> <p>The basal reef (62b) extends from Thornes Bay to the southern end of Milford Beach. The area also supports a particularly diverse association of marine flora and fauna.</p>
CPA 63 (Sheet 31)	<p>Torbay Stack</p> <p>'The Tor' at Torbay is a sea stack which is considered to be a landform of regional geological significance. While much of the Tor extends up above Mean High Water Springs, the base is within the coastal marine area.</p>
CPA 64 a-b (Sheets 31 and 34) (ASCV 130)	<p>Long Bay and Okura Estuary</p> <p>Within this area are a considerable variety of intertidal substrates which together form a complex array of habitats which support a variety of animal and plant communities. The communities living on the wave-cut platforms, cliffs, and beaches at Long Bay have been studied over a long period and are in reasonably good condition. This is a known location of pingao, a threatened plant of mobile sand areas. The intertidal areas within the Okura Estuary and outside its entrance range from fine mud to sand and are used as a feeding ground by several hundred wading birds. Many of these birds roost on the sandy area at the entrance to the estuary at high tide. A variety of other coastal birds feed and roost within this area.</p> <p>A limited amount of saltmarsh and mangrove line the estuary. Although the area of saline vegetation is small, it is used by banded rail, a threatened secretive coastal fringe bird, and its habitat quality is enhanced by the adjoining terrestrial vegetation which provides shelter for the birds and offers potential nesting sites.</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 64 a-b (Sheets 31 and 34) (ASCV 130) cont'd	This saline vegetation and other intertidal areas (64b) grade into coastal pohutukawa forest on sheltered cliffs, then into taraire forest on coastal hill country, and finally into kanuka forest on a headland. Both of the latter are considered to be the best examples of their types in the district. At Karepiro Creek, the marine environment grades into significant coastal saltmarsh on stabilised sand above Mean High Water Springs. The Department of Conservation has selected this area as an Area of Significant Conservation Value (ASCV).
CPA 65 a-c (Sheet 34) (ASCV 28)	<p>Weiti Estuary</p> <p>The most notable feature of this small estuary is the series of chenier-type shell spits which have formed within the estuary (65b). These have been used to derive a sea level curve for the last 10,000 years and are considered to be internationally significant landforms. The estuary (65a) is not a significant wading bird feeding ground, but the shell spits are a good high tide roosting site for the wading birds that feed in the adjacent intertidal areas to the south and for the coastal birds that use the estuary itself. The most seaward shellbank is particularly important as it is one of the key breeding grounds in the region for the threatened New Zealand Dotterel.</p> <p>While the saline vegetation of the estuary is not notable, there is one section (65c) of coast where the saline vegetation grades into notable terrestrial vegetation. Here the best manuka-kanuka shrubland on hills in the district abuts the saline vegetation on the coast. The Department of Conservation has selected this area as an Area of Significant Conservation Value (ASCV).</p>
CPA 66 a-b (Sheet 33)	<p>Hobbs Bay</p> <p>The shore platform (66a) at Hobbs Bay is an old one that shows good examples of bioerosion. It is considered to be a landform of regional geological significance. The shore platform and the adjacent intertidal area to the west grades into notable coastal manuka-kanuka forest on headland or peninsula (66b).</p>
CPA 67 a-d (Sheets 32 and 33)	<p>Whangaparaoa Peninsula</p> <p>The cliffs and intertidal platforms (67a) of the rocky coastline at the end of the Whangaparaoa Peninsula are made up of sedimentary Waitemata Group rocks that were deposited during the Miocene. Together the cliffs and shore platform in the northern part of the area are one of four sites on the Whangaparaoa Peninsula that display a regionally important three dimensional exposure of folds and faults in these rocks. The shore platform is extensive and is itself considered to be a landform of regional geological importance. The rocky shores and the intertidal and subtidal sediments on the southern side of the peninsula offer a complex of habitats for a variety of plant and animal communities. The rocky shores support large populations of reef-fish, kina and other invertebrates, and a rich variety of marine algae. On one part of the shore platform (67b) the marine ecosystem grades into a significant area of natural terrestrial vegetation; a small area of complex shrubland on a headland or peninsula. The sediments of the bays (67a) on the south of the peninsula is the habitat of extensive beds of molluscs and in the north-eastern corner of Okoromai Bay grade into a saltmarsh which is a significant migration pathway for native freshwater fishes.</p> <p>Whangaparaoa Head has two significant geological features, a vertically tilted strata (67c) and an area of Parnell Grit with huge blocks of displaced basalt forming the point east of Army Bay (67d).</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 68 (Sheet 34)	<p>Whangaparaoa Peninsula Waitemata Group Deformation I</p> <p>The cliffs and intertidal platforms of the rocky coastline in this area are one of the four sites on the Whangaparaoa Peninsula where there are particularly good examples of a three dimensional exposure of folds and faults in the Miocene Waitemata Group rocks. Each of these four sites is considered to be of regional geological significance.</p>
CPA 69 (Sheet 34)	<p>Whangaparaoa Peninsula Waitemata Group Deformation II</p> <p>The cliffs and intertidal platforms of the rocky coastline in this area are one of the four sites on the Whangaparaoa Peninsula where there are particularly good examples of a three dimensional exposure of folds and faults in the Miocene Waitemata Group rocks. Each of these four sites is considered to be of regional geological significance.</p>
CPA 70 (Sheets 34 and 35)	<p>Red Beach Miocene Flysch</p> <p>Geological exposure of a penecontemporaneous slump within a Waitemata flysch sequence. The exposure is both below Mean High Water Springs and in the cliffs above. It is an excellent exposure and is considered to be regionally important.</p>
CPA 71 (Sheets 34 and 35)	<p>Whangaparaoa Peninsula Waitemata Group Deformation III</p> <p>The cliffs and intertidal platforms of the rocky coastline in this area are one of the four sites on the Whangaparaoa Peninsula where there are particularly good examples of a three dimensional exposure of folds and faults in the Miocene Waitemata Group rocks. Each of these four sites is considered to be of regional geological significance.</p>
CPA 72 (Sheets 34 and 35)	<p>Orewa Estuary</p> <p>Moderate to small sized estuary with a variety of habitats for plant and animal communities in the marine area. Around 85% of the area of the harbour is intertidal banks on which feed migratory wading birds, which use this estuary as a stepping stone in their travels. A range of coastal birds, particularly shags, also feed within the estuary as do a number of species of waterfowl that utilise the estuary and the adjacent oxidation ponds on the southern margin. The mangroves and saltmarsh that occupy the remaining parts of the estuary are a habitat for secretive coastal fringe birds particularly where adjoining terrestrial vegetation provides shelter for the birds at high tide and offers potential nesting sites.</p>
CPA 73 (Sheet 35)	<p>Waiwera Hill Ecotone</p> <p>An area of foreshore and seabed that forms the marine part of an uninterrupted ecotone sequence that extends into important coastal pohutukawa treeland. The area of ecotone outside the coastal marine area is identified in the Plan as "Land Associated with a Coastal Protection Area".</p>
CPA 74 a-b (Sheet 35) (ASCV 69)	<p>Waiwera Parnell Grit</p> <p>An easily accessible educational locality (74a) showing a complex volcanic sediment gravity flow interbedded with flysch. The exposure is both below Mean High Water Springs and in the cliffs above. It is considered to be a geological site of national significance and has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV). The marine area along the length of the exposure and directly to the south (74b) grades into significant coastal complex puriri forest on hills and a headland or peninsula.</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 75 a-i (Sheets 35, 37) (ASCVs 83 and 115)	<p data-bbox="344 459 735 486">Waiwera, Wenderholm, and Puhoi</p> <p data-bbox="344 495 1364 969">Within this area are a considerable variety of intertidal substrates which together form a complex array of habitats which support a variety of animal and plant communities. The communities living on the wave-cut platforms at Wenderholm (75b) have been found to be diverse and in good condition. The mobility of the substrate on the open beach at Wenderholm (75i) means that benthic organisms tend to be confined to subtidal areas. Along the hard shores here (75b) the natural marine area adjoins an important area of coastal taraire forest on a headland or peninsula. The intertidal flats within the Waiwera and Puhoi Estuaries (75a, 75c) are used as a feeding ground by a variety of wading birds, many of which use these estuaries as a stepping stone in their travels. Many of these birds roost on the sandy area at the entrance to the Waiwera Estuary (75a) at high tide. A variety of other coastal birds feed and roost within this area. A limited amount of saltmarsh and mangrove line the Waiwera Estuary, but it is still a good habitat for coastal fringe birds because of the presence of the freshwater Straka's Dam on the boundary. The saline vegetation areas in the Puhoi estuary are more substantial and are some of the best in the district (75d-h).</p> <p data-bbox="344 1010 1342 1144">These too are inhabited by a variety of secretive coastal fringe birds particularly where habitat quality is enhanced by the adjoining terrestrial vegetation which provides shelter for the birds and offers potential nesting sites. The Department of Conservation has selected the two estuaries as Areas of Significant Conservation Value (ASCVs).</p>
CPA 76 a-p (Sheets 35, 36, 37) (ASCV 24)	<p data-bbox="344 1151 571 1178">Mahurangi Harbour</p> <p data-bbox="344 1187 1364 1350">The Mahurangi Harbour (76a) is a classic example of a ria or drowned coastline. Within the harbour there are large areas of intertidal mud and sand. Outside the mouth of the harbour there are a variety of more exposed shores ranging from broad rock platforms to small sandy beaches. This physical variety provides a similarly varied range of habitats for an assortment of animal and plant communities.</p> <p data-bbox="344 1391 1364 1525">In the shelter of the harbour grow extensive areas of mangroves. Some of these areas are judged to be amongst the best in the district (76b-j, 76p). The saline vegetation provides high quality habitat for threatened secretive coastal fringe birds particularly where it abuts terrestrial vegetation which provides roosts for the birds and potential nesting sites.</p> <p data-bbox="344 1565 1364 1830">There is a notable gradation from the mangroves into terrestrial vegetation. At Dyers Creek (76f) a large expanse of mangroves adjoins a highly diverse area of regenerating coastal kauri – tanekaha forest on lowland hills. In this more sheltered part of the harbour is found a small 'old hat' island (76o), Grants Island, so called because the broad intertidal rock platforms that surround the island look like the brim of a hat. This is one of the best examples of an 'old hat' in New Zealand and as such is considered to be a landform of regional geological importance. The Department of Conservation has selected this inner harbour area as an Area of Significant Conservation Value (ASCV).</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
PA 76 a-p (Sheets 35, 36, 37) (ASCV 24) cont'd	The communities in the more exposed habitats in the mouth of the harbour have been found to be in healthy condition and to be good representatives of their types. The marine area around Te Haupa (or Saddle) Island (76m-n) supports a particularly rich and diverse biota. Here too there are gradations between the marine and terrestrial ecosystems. At Big Bay (76l) the representative open rocky Hormosira flats, boulders, and rock pools and the open fine sandy shores grade into a coastal complex forest of pohutukawa, taraire, kohekohe, mahoe, puriri and kowhai on cliffs and hillslopes. This type of forest is now relatively uncommon on the mainland being very susceptible to possum browse. At Cudlip Point on the opposite head of the harbour (76k), the moderately exposed rock platforms grade into an important area of regenerating totara forest on a headland or peninsula.
CPA 77 (Sheets 36 and 37)	Martins Bay Ecotone An area of foreshore and seabed that forms the marine part of an uninterrupted ecotone sequence that extends into an important coastal complex forest. The area of this ecotone outside the coastal marine area is identified in the Plan as "Land Associated with a Coastal Protection Area".
CPA 78 (Sheets 36 and 37)	Mullet Point At Mullet Point the representative rocky and sandy shores grade into a coastal complex forest of pohutukawa, taraire, kohekohe, mahoe, puriri and kowhai on cliffs which is now relatively uncommon on the mainland being very susceptible to possum browse.
CPA 79 (Sheet 37)	Algies Beach Melange Geological exposure of the contact between Northland Allocthon and Miocene Waitemata Group rocks. The site is one of the best of its type and is considered to be regionally important.
CPA 80 (Sheets 36, 37, 38)	Matakana River Mouth On the northern coast of the Matakana River Mouth the marine ecosystem grades into an important area of kanuka coastal forest on cliffs which in turn grades into puriri forest on coastal headlands. This is highly representative of the typical east coast pattern of coastal vegetation which is now much reduced.
CPA 81 (Sheets 36 and 38)	Motutara Point An area of foreshore and seabed that forms that marine part of an uninterrupted ecotone sequence that extends into an area of important coastal pohutukawa forest, at Motutara Point itself. The area of this ecotone outside the coastal marine area is identified in the Plan as "Land Associated with a Coastal Marine Area".
CPA 82 a-c (Sheets 36 and 38) (ASCV 106)	Tawharanui Peninsula The northern side (82b) and the tip (82a) of the peninsula are the best examples of open rocky intertidal and subtidal marine habitats on the coast of the Outer Hauraki Gulf. Here is found a small geological exposure of fossils in Jurassic rocks (82c). This is a very rare occurrence in Northland and consequently the exposure is of national importance and has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV). The open sandy beaches (82b) are also important as the mobile sands are an important New Zealand dotterel breeding area as well as being a threatened plant habitat. The majority of this area (82b) is included within the marine protected area associated with the Tawharanui Regional Park.

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 82 a-c (Sheets 36 and 38) (ASCV 106) cont'd	<p>The stream that runs into Anchor Bay on the north (82b) is a high quality freshwater fish habitat and the mouth of this stream needs to be considered as a migration pathway.</p> <p>The southern side of the peninsula (82a) is representative of more sheltered rocky shores and stony beaches. In contrast to the Whangaparaoa Peninsula to the south, the Tawharanui Peninsula still has some extensive areas of natural terrestrial vegetation. The marine ecosystem on the south of the peninsula in particular (82a), grades into manuka forest and one of two areas of notable pohutukawa forest on coastal cliffs.</p>
CPA 83 a-d (Sheets 36, 37, 38) (ASCV 116)	<p>Whangateau Harbour</p> <p>An important east coast harbour characterised by a sequence of depositional sands including a large unconsolidated Holocene barrier sandspit which provide a number of different habitats for a variety of animal and plant communities. The intertidal sand banks (83a) are a rich feeding ground for many international migratory and New Zealand endemic wading birds including a number of threatened species. Many of the migratory birds use the estuary as a stepping stone in their journeys. The waters of the harbour (83a) are a feeding ground for a variety of coastal birds. The tip of the large barrier sandspit (83b) has a number of important natural values. It is a high tide roost for the wading and coastal birds, a key breeding ground for the threatened New Zealand Dotterel, and a threatened plant habitat. In the lee of the sandspit grow areas of saline vegetation including eelgrass, which appears to be spreading. South of the causeway there are important areas of mangroves and saltmarsh (83c) much of it judged to be amongst the best in the district. There is an important gradation from this significant saline vegetation (83c) into a large and rare area of coastal kahikatea swamp forest beyond the coastal marine area. The saline vegetation both here (83c) and in other parts of the harbour provides high quality habitat for threatened secretive coastal fringe birds particularly in saltmarshes where there is terrestrial vegetation which provides roosts for the birds and potential nesting sites. Ti Point (83d) contains both ecological and geological values. This area is the location of the Ti Point volcanic exposure. The reefs offer habitat for the threatened reef heron, and the coastal pohutukawa forest, which is identified in the Plan as "Land Associated with a Coastal protection Area" are identified in the Rodney District Protected Natural Areas Programme.</p> <p>The Department of Conservation has selected this area as an Area of Significant Conservation Value (ASCV).</p>
CPA 84 a-b (Sheet 38) (ASCV 67)	<p>Mathesons Bay</p> <p>Geological exposure (84a) showing the onlap of early Miocene Waitemata sediments on the much older Waipapa Group rocks. The exposure is both below Mean High Water Springs and in the cliffs above. The site is an easily accessible, well-exposed education stop with an excellent example of thrusting.</p> <p>It is considered to be of national geological importance. In one small part of the area (84b) is an exposure of unusual chaliciform reef corals, and fossilised eagle ray feeding pits. This is the richest locality in New Zealand for such fossils and is therefore considered to be of regional importance. The Department of Conservation has selected this area as an Area of Significant Conservation Value (ASCV).</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 85 (Sheet 38)	<p>Leigh Reef and Maori Island</p> <p>Leigh Reef and Maori Island are important for their representation of the rocky shores and reefs of the region. Leigh Reef is the only large subtidal reef in the region and, due to the strong movements of water across it, contains a unique assemblage of encrusting organisms. It also occasionally contains subtropical species of fish. Maori Island is significant for the rich fauna and flora of its reef slope.</p>
CPA 86 a-b (Sheet 38) (ASCV 114)	<p>Cape Rodney to Okakari Point Marine Reserve</p> <p>The reserve (86a) was gazetted in 1975 as New Zealand's first marine reserve. The area is a complex of soft shore and hard shore habitats with a variety of exposure ratings. It provides habitat for great diversity of species. The area is the location of the University of Auckland's marine laboratory. Around Goat Island, (86b) a significant ecotone grades from marine algae to terrestrial coastal forest.</p>
CPA 87 (Sheets 38 and 39) (ASCV 109)	<p>Pakiri Beach</p> <p>This is the only large ocean beach (87a) on the east coast of the region. It exhibits a gradation in the type of sediment and associated fauna from the shore out to the edge of the sand-body 5 kilometres offshore. The fauna diversity decreases getting closer to the shore because of the decreasing stability of the substrate, but the population densities increase. The sands of the beach are an important habitat for a variety of plants and animals. The areas of natural vegetation are fragmentary, but include important areas of pingao/spinifex, Muehlenbeckia shrubland, manuka scrub, and pohutukawa forest. The mobile sands of the beach are a breeding area for coastal and wading birds including the endangered fairy tern and the threatened New Zealand Dotterel which feed in the adjacent waters and intertidal areas. The mouth of the Pakiri River (87b) is a particularly important part of this habitat. It has been described as one of the regional strongholds of the threatened native sand binding plant, pingao. The Pakiri River itself is a tidal stream with a small estuary and bordering saltmarsh that grades into the adjacent natural sand dune plant community. The Pakiri River supports a range of wading, coastal, and secretive threatened coastal fringe birds. Many of the waders and coastal birds roost on the mobile sands at the river mouth, and some, including a range of threatened species nest there. The secretive coastal fringe birds use the saline vegetation and their habitat is enhanced by the presence of adjacent terrestrial vegetation which provides roosts for the birds and potential nesting sites. The Department of Conservation has selected this area as an Area of Significant Conservation Value (ASCV).</p>
CPA 88 (Sheet 36)	<p>Slater Point Fossil Sea Stack</p> <p>Geological exposure of a fossil sea stack buried by shallow marine conglomerate. The exposure is both below Mean High Water Springs and in the cliffs above. The site is possibly the best example of its type in New Zealand and is considered to be nationally important.</p>
CPA 89 (Sheet 36)	<p>Kawau Island Pillow Lavas</p> <p>Geological three dimensional exposure of pillow lava tubes. The exposure is both below Mean High Water Springs and in the cliffs above. The site is one of the best examples of tubular pillow lavas in New Zealand and is considered to be nationally important.</p>
CPA 90 (Sheet 36)	<p>Dispute Cove Channelled Flysch</p> <p>Geological exposure of a small channel within the basal Waitemata flysch.. The exposure is above Mean High Water Springs, but, being only 3 to 10 metres up the cliff, is vulnerable to activities within the coastal marine area. The exposure is excellent and is considered to be regionally important.</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 91 (Sheet 36)	<p>Beehive Island, Kawau</p> <p>Small 'old hat' island surrounded by large intertidal platform with contrasting white shell sand high tide beach. The term 'old hat' is used because the broad intertidal rock platforms that surround the island look like the brim of a hat and the island itself resembles the hat crown. This island is considered to be a landform of regional geological importance. The shell sand beach is a breeding and roosting area for threatened coastal birds.</p>
CPA 92 a-b (Sheet 36)	<p>Motuketekete Island Waitemata Group Miocene Basal Limestone</p> <p>Geological exposure of shallow water shelly conglomerate and bioclastic limestone of the Kawau Subgroup passing up into deep water Waitemata Group flysch. The exposure is both below Mean High Water Springs and in the cliffs above.</p> <p>This is one of only three known localities in New Zealand where reef corals are preserved in growth position and is the only occurrence of early Miocene limestone between Auckland and Bream Tail. It is also a good exposure of the sequence passing up into flysch. For these reasons the exposure is considered to be regionally important.</p>
CPA 93 (Sheets 36 and 37)	<p>Motuora Island</p> <p>The soft sediments, sandy beaches and rocky shores around these islands contain an interesting fauna which is in a natural condition when compared to that of the adjacent mainland coast.</p>
CPA 94 (Sheet 32)	<p>Tiritiri Matangi Island</p> <p>The shore platforms at Tiritiri Matangi Island are considered to be a landform of regional geological significance. A variety of petrels and shearwaters nest on the island and adjacent rock stacks, a situation that may improve now that the island is completely rat-free. The island itself is also a scientific reserve and is operated by the Department of Conservation as an "open sanctuary".</p>
CPA 95 (Sheets 30 and 40) (ASCV 64)	<p>Rangitoto and Motutapu</p> <p>Rangitoto is the youngest and largest volcano in the Auckland field. It has an uneroded lava surface which extends into the coastal marine area. The substrate is uniform, but the variation in exposure experienced on the northern and southern sides creates a range of habitat for a variety of plant and animal communities. On the northern side, the coast is open and supports significant assemblages of organisms associated with rocky reefs, including ascidians, fishes, and beds of the marine alga <i>Carpophyllum</i>. On the southern side, the coast is sheltered and supports assemblages of organisms typical of such sheltered rocky shores, including beds of the marine alga <i>Hormosira</i>. The rocky shores are a breeding ground for large numbers of black-backed gulls, many of which feed in the surrounding waters along with a variety of other coastal birds. The natural marine ecosystem grades into a natural terrestrial system of forest and scrub dominated by a hybrid swarm of pohutukawas crossed with northern rata. Within the coastal environment above Mean High Water Springs, there is a considerable variety of threatened plant species.</p>
	<p>The parts of the area adjacent to Motutapu are important chiefly because of their generally nationally important geological values. The features of this locality have been used for showing the sedimentary relationship of the early Miocene Waitemata Group to the underlying basement, and the character of the early Miocene coastline. One point in this area is the type locality for a giant barnacle species, with fossil plates found at the base of the fossil sea stack on which the barnacles once grew. At another point there is a regionally important exposure of tightly folded chert beds. The area adjacent to Motutapu has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 96 (Sheets 25 and 40) (ASCV 121)	<p>Motukorea (Brown's Island)</p> <p>Motukorea has a main well-cratered scoria cone surrounded by several smaller scoria mounds within a tuff ring remnant. Lava fields extend about 2 kilometres to the north-west, south-west, and south and have been partly submerged by the rising post-glacial sea level so that the lava flows therefore extend a considerable distance below Mean High Water Springs. The southern beach is the type locality for the mineral motukoreaite which forms a cement in tuff and beach rock. Because Motukorea is a whole volcanic system in miniature, the least damaged of Auckland's volcanoes, and the type locality for the mineral motukoreaite, it is considered to be of international geological importance.</p> <p>The lava flows and the accumulated soft shores are also a habitat for a variety of important plants and animals. Although the natural vegetation of the island has been virtually cleared for a long period of time, the shores of the island are the habitat of a threatened plant.</p> <p>They also support a range of threatened wading birds including a breeding population and large post-breeding flock of the threatened New Zealand Dotterel. For this reason, the island has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).</p>
CPA 97 a-b (Sheet 40)	<p>Motuihe Island</p> <p>97a is a geological exposure of shallow water, sandy bioclastic limestone, and conglomerate overlain by deep water Waitemata flysch, all resting on greywacke basement. Forms a small area (50 by 30 metres) of coastal karst. The exposure is both below Mean High Water Springs in the shore platform and in the cliffs above. The exposures are good examples of their type and the karst, although small, is well developed and for these reasons the site is considered to be regionally important. The sandy beaches (97b) on the north-eastern side of the island are a breeding and roosting area for threatened coastal birds.</p>
CPA 98 (Sheet 41)	<p>Crusoe Island (Papakohatu Island)</p> <p>A number of small offshore islands around Waiheke are known to be irregularly used breeding sites for the threatened reef herons. Crusoe Island (Papakohatu Island) is one of these.</p>
CPA 99 (Sheet 41)	<p>Motukaha Island and Fossil Bay</p> <p>A number of small offshore islands around Waiheke are known to be irregularly used breeding sites for the threatened reef herons. Motukaha is one of these. On the mainland of Waiheke, adjacent to the island is a geological exposure of shallow water fossiliferous sediments overlying bored and eroded basement rocks. The fossiliferous sediments contain a rich shallow macrofauna including reef corals in-situ, and is the type locality of many unusual species. Because of this and the overall quality of the exposure the site is considered to be regionally geologically important.</p>
CPA 100 (Sheet 41)	<p>Blackpool Spilite</p> <p>The Blackpool spilite is a 3 metre dark green spilitic pillow lava with calcite interstices bearing pyrite. It is of Triassic age and, as an example of basement volcanics in the region, is considered to be of regional geological importance.</p>
CPA 101	<p>Okahiti Bay</p> <p>A sheltered inlet, whilst enclosed by road, this area is one of the few places on Waiheke Island where an ecotone from mangrove forest through freshwater wetlands to terrestrial forest exist.</p>
CPA 102 (Sheet 41)	<p>Koi Island</p> <p>A number of small offshore islands around Waiheke are known to be irregularly used breeding sites for the threatened reef herons. Koi Island is one of these.</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 103 (Sheet 41)	<p>Whakanewha</p> <p>The sheltered beach, shellbank, and associated saltmarsh of Whakanewha provide a variety of habitats for a range of plants and animals. The sheltered beach includes an extent of intertidal flats that support a variety of invertebrates. Secretive and threatened coastal fringe birds use the saltmarshes and associated wetlands, particularly as regenerating terrestrial vegetation abuts these areas, providing roosts for the birds at high tide and potential nesting sites. The Whakanewha Stream system and catchment is almost entirely clothed in native vegetation in contrast to the other three major stream systems in this part of Waiheke Island. This means it is likely to be an important freshwater fish habitat and the stream mouth and saltmarsh are therefore probably significant migratory pathways and possibly breeding areas.</p>
CPA 104 a-e (Sheets 20, 40, 42)	<p>Awaawaroa Bay</p> <p>Awaawaroa Bay is an estuarine area on the sheltered southern side of Waiheke. Here there are extensive intertidal areas (104a) which are a feeding ground for a relatively large number of a variety of wading bird species. These birds roost on the associated shellbanks (104b-d) at high tide, along with a range of coastal birds which feed in the waters of the area. The area is also an important habitat for a number of secretive threatened coastal birds. In the shelter of the upper reaches of the estuary (104e) there are substantial areas of mangroves and saltmarsh. The saline vegetation grades into the best freshwater raupo wetland on the island.</p>
CPA 105 a-c (Sheets 20 and 42) (ASCV 113)	<p>Te Matuku Bay</p> <p>Te Matuku Bay is an estuarine area on the sheltered southern side of Waiheke. The extensive intertidal flats, shell banks, and low-lying islands offer a variety of habitats for a range of plant and animal communities. The extensive intertidal areas (105a) are a rich feeding ground for large numbers of international migratory and New Zealand endemic wading birds, including substantial numbers of a considerable variety of threatened species. These birds roost on the shell spit in the outer reaches of the bay (105b) at high tide, along with a variety of other coastal birds which feed in the waters of the bay. In the shelter of the upper reaches of the estuary (105c) there are extensive areas of mangroves and saltmarsh growing in association with terrestrial vegetation on the low-lying islands. The saline vegetation grades into the freshwater raupo wetland and kauri-tanekaha forest in the best such sequence on the island. The saline vegetation (105c) and associated freshwater vegetation provide high quality habitat for threatened swamp birds and secretive coastal fringe birds particularly where the wetlands abut terrestrial vegetation which provides roosts for the birds and potential nesting sites. The Department of Conservation has selected this area as an Area of Significant Conservation Value (ASCV).</p>
CPA 106 (Sheets 20 and 42)	<p>Motukahakaha ('Unnamed Islet')</p> <p>A number of small offshore islands around Waiheke are known to be irregularly used breeding sites for the threatened reef herons. Motukahakaha ('Unnamed Islet') is one of these and is likely to be a successful breeding site in the future because of the relatively recent eradication of rats.</p>
CPA 107 (Sheet 42)	<p>Frenchmans Cap</p> <p>A number of small offshore islands around Waiheke are known to be irregularly used breeding sites for the threatened reef herons. Frenchmans Cap is one of these and is likely to be a successful breeding site because it is rat-free.</p>
CPA 108 (Sheet 42) (ASCV 93)	<p>Tarahiki Island</p> <p>Tarahiki is the biggest and most important breeding place in the Hauraki Gulf (perhaps in the country) for the endemic spotted shag. Other birds, such as blue penguin, grey-faced petrel, and reef heron also breed on this island. This is part of a nationally important wildlife habitat selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 109 (Sheet 42) (ASCV 80)	Horuhoru Island This relatively inaccessible island, 1.5 kilometres to the north of Waiheke, is also known as Gannet Rock as it is an important breeding site for this species. The colony has been studied for over 50 years and in 1981 was found to be made up of 5,300 birds. This island has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).
CPA 110 (Sheets 41 and 42)	Onetangi to Hooks Bay This area is one of the best examples of exposed rocky reef habitat in the Inner Hauraki Gulf.
CPA 111 a-b (Sheets 41 and 42)	Woodlands Bay The natural marine ecosystem just to the west of the Onetangi to Hooks Bay area (CPA 110) here grades into the best area of coastal forest on Waiheke Island. This forest is a small area of coastal pohutukawa forest grading into taraire-puriri forest.
CPA 112 (Sheets 41 and 42)	Onetangi Beach This small section of Onetangi Beach is the habitat of pingao, a threatened plant of mobile sand.
CPA 113 (Sheet 41)	Waiheke Island Miocene Macrofauna, Double 'U' Bay Geological exposure of rich shallow water macrofauna in a deepening sequence. The exposure is both below Mean High Water Springs and in the cliffs above. The site is considered to be regionally important.
CPA 114 a-c (Sheet 43) (ASCV 86)	Mokohinau Islands This island group (114 a-c) is a series of small rugged offshore islands of volcanic origin including a number of steep stacks. They contain a large diversity of marine habitats including broken rock, boulder beaches, sandy bottoms, drop-offs and kelp forests. These contain a large diversity of marine species, particularly of encrusting invertebrates and fish. This group is the closest to Auckland to contain a subtropical element in the marine biota. A number of species of coastal birds, and sea birds breed on most of the islands and stacks in the group. The cliff vegetation within the coastal environment is the habitat of several threatened plant species. This island group has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).
CPA 115 (Sheet 43)	Simpson Rock Simpson Rock is an isolated outcrop surrounded by deep water. Although closer to the Mokohinau Islands, the rich encrusting fauna present is more similar to that of the northern tip of Great Barrier Island. A number of new species of sponges and other encrusting taxa have been recorded here.
CPA 116 (Sheet 43) (ASCV 117)	Little Barrier Island The coast of this steep, rugged island of volcanic origin, contains a variety of marine habitats. These include a series of unique boulder beaches on the southern side of the island which stretch from hundreds of metres above Mean High Water Springs into the subtidal area. The boulder area supports a rich subtidal algal flora and in one place is considered to be a site of geological importance. This is the regionally significant Te Titoki Point Cuspate Foreland where two boulder barriers have connected to form a triangular shaped 25 hectare infilled flat. There are two other regionally important geological sites; the large rockfall at Pohutukawa Flat (Hingaia) and the Queens flow banded dacite; both of which are below Mean High Water Springs and in the shore above. The natural marine ecosystem grades into a highly natural terrestrial ecosystem. Some of the best forests in the Region grow here, free from the ravages of possums and the cliffs and stony beaches offer a variety of habitat for a considerable number of threatened plant species.

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 116 (Sheet 43) (ASCV 117) cont'd	Little Barrier Island is also a nature reserve of international significance, being the habitat of several endemic endangered bird species which breed and nest there, the most notable being the Kakapo. The island has been selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV).
CPA 117 a-i (Sheets 44 and 45) (ASCV 42) (within ASCV 87)	<p>Northern Great Barrier Island</p> <p>The northern part of Great Barrier Island is one of the important wilderness areas in the region. Here there are long stretches of rocky shore, a number of inshore and offshore islands, and a highly natural harbour formed by a barrier sandspit. These offer a large range of habitats to a considerable variety of plant and animal communities.</p> <p>It is on the rocky coast that the important geological sites are to be found. Off Ora Point, Rakitu Island, in the intertidal area is a basalt flow within a rhyolitic sequence. This is the only known basalt in the Great Barrier region and as such is considered to be of regional significance. Another regionally significant geological site is the obsidian breccia on the coast of Rakitu Island (117c). This is above Mean High Water Springs, but is likely to be affected by activities within the coastal marine area.</p> <p>The marine biota of the rocky coast is also of high value, with diverse and dense communities of reef organisms. Components of this complex coast are representative of different parts of the north-east coast of New Zealand. Several subtropical species are present, due to the occasional influence of the warm East Auckland current. Rangiwhakaea Bay, in particular, has been found to support one of the highest diversities of fish species in the region, comparable to that of Mokohinau. At the Needles itself is found an area of bull kelp, a marine alga of colder waters. This is an unusual species to find in this somewhat subtropically influenced marine ecosystem. The marine ecosystem grades into a naturally forested terrestrial system along most parts of the north of this coast and many parts of the coast of Rakitu Island (117b). A notable area of vegetation is the unmodified vegetation on Unknown Island, which, because of its separation from the mainland, has remained free of pigs and goats.</p> <p>The cliffs of the coastal environment of the entire area offer a habitat for a variety of threatened plants, as do the small areas of saline herbfield in the mouths of some of the streams entering Rangiwhakaea Bay (117f-i) which is a stronghold for a number of species.</p>
CPA 117 a-i (Sheets 44 and 45) (ASCV 42) (within ASCV 87)	<p>The Whangapoua Harbour (117a, 117d) is an important east coast harbour characterised by a large unconsolidated barrier sandspit. The varying degrees of shelter offered in the harbour and along the shores of the sandspit provide a number of different habitats for a variety of animal and plant communities. The intertidal sand banks within the harbour (117a) are a rich feeding ground for many international migratory and New Zealand endemic wading birds including a number of threatened species for which this is a major overwintering site. The estuary (117a) and the mangrove area (117d) are an important fish breeding and juvenile fish habitat. The large barrier sandspit (117d) has a number of important natural values. It is a high tide roost for the wading birds and a key breeding ground for the threatened New Zealand Dotterel and rare Variable Oystercatcher. It is also an important area of mobile sand vegetation being, in the absence of marram, one of the few places in which the three native sand binding plants; spinifex, pingao and sand tussock, grow together. In the lee of the sandspit grow highly natural areas of mangroves and saltmarsh (117d). There is an important gradation from this significant saline vegetation (117d) into areas of freshwater wetland and native forest beyond the coastal marine area. The saline vegetation and the associated freshwater areas provide</p>

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 117 a-i (Sheets 44 and 45) (ASCV 42) (within ASCV 87) cont'd	high quality habitat for a large proportion of the entire population of brown teal, an endangered waterfowl. The brown teal are particularly numerous in the upper estuary (117d), but are also found at Harataonga Stream (117e) and, in substantial numbers, at Mabey's Farm Stream (117d). The Department of Conservation has selected the area of the proposed marine reserve at Whangapoua and Rakitu Island as an Area of Significant Conservation Value (ASCV).
CPA 118 (Sheet 47) (within ASCV 87)	Awana Stream This is a tidal stream which in conjunction with the freshwater areas, scrub areas, and roosting sites in the coastal environment above Mean High Water Springs, is an internationally significant habitat for brown teal, an endangered waterfowl. The stream provides the best feeding area on Great Barrier Island for the species.
CPA 119 a-c (Sheet 47) (within ASCV 87)	Kaitoke Kaitoke Beach (119a) is an important area of mobile sand vegetation, being one of only two places in the region in which the three native sand binding plants, spinifex, pingao and the sand tussock grow together. The latter two species are considered to be threatened plants. Kaitoke Stream (119b) is a tidal stream which, in conjunction with the associated freshwater swamp, scrub areas, and roosting sites in the coastal environment above Mean High Water Springs, is an internationally significant habitat for brown teal, an endangered waterfowl. Brown teal are also found at Kaitoke Beach South Stream (Blackwells Creek) (119c) which is considered to be in its own right, a nationally important site.
CPAs 120 and 121 (Sheet 47) (within ASCV 87)	Medlands Beach North, Great Barrier (Sugarloaf Creek) Mitchener Road Creek, Great Barrier (Saltwater Creek) These are tidal streams which, in conjunction with the freshwater areas, scrub areas, and roosting sites in the coastal environment above Mean High Water Springs, are internationally significant habitats for brown teal, an endangered waterfowl.
CPA 122 a-b (Sheet 47) (within ASCV 87)	Southern Great Barrier Island The rocky marine habitats (122a) of this section of coast are less exposed than those of the northern and eastern coasts of the island. Here there are banks of boulders as well as kelp forests and rocky barrens. The fish fauna is more similar to that of the mainland coast and includes fewer subtropical species than the more exposed coasts. Near Cape Barrier (122b), the natural marine ecosystem grades into the best coastal forest on Great Barrier arranged in the most intact beach to ridge top forest sequence in the southern part of the island.
CPAs 123, 124 and 125 (Sheet 47) (within ASCV 87)	Shoal Bay Stream Par Beach South Stream Par Beach North Stream These are tidal stream mouths which, in conjunction with the freshwater areas, scrub areas, and roosting sites in the coastal environment above Mean High Water Springs, are habitats of at least regional significance for brown teal, an endangered waterfowl.
CPA 126 (Sheet 47) (within ASCV 87)	Tryphena Stream This is a tidal stream mouth which, in conjunction with the freshwater areas, pastures, scrub areas, and roosting sites in the coastal environment above Mean High Water Springs, is a habitat of national significance for brown teal, an endangered waterfowl.
CPA 127 (Sheet 46) (within ASCV 87)	Whangaparapara Stream This is a tidal stream mouth which, in conjunction with the freshwater area, scrub areas, and roosting sites in the coastal environment above Mean High Water Springs, is a habitat of at least regional significance for brown teal, an endangered waterfowl. The threatened coastal fringe bird, the banded rail, has also been recorded using the wetland area in the Whangaparapara Harbour.

Site & Sheet Numbers	Values of Coastal Protection Areas
CPA 128 (Sheet 46)	Mahuki Gannetry The eastern tip of Mahuki Island in the Broken (Pig) Island group is the site of one of the major breeding colonies of the Australasian gannet in the region.
CPA 129 (Sheet 46)	Unnamed Stack, Broken (Pig) Islands This unnamed stack in the Broken (or Pig) Island Group is the only rat-free island in the Broken Island group. Large numbers of geckoes occupy this island and diving petrels and fluttering shearwaters breed in the scrub. The marine ecosystem grades into important coastal vegetation, most of which is petrel-induced coastal scrub mainly of taupata (<i>Coprosma repens</i>).
CPA 130 a-d (Sheets 44 and 46) (within ASCV 87)	Port Fitzroy In contrast to the barrier estuaries on the eastern side of the island, this deep estuary is formed from a drowned valley. None of the other offshore islands in the region contain estuaries. This is an important fish feeding and shellfish habitat. Forestry HQ Bay Stream (130b) and Wairahi Stream (130c) are tidal stream mouths which, in conjunction with the freshwater areas, scrub areas, and roosting sites in the coastal environment above Mean High Water Springs, are habitats of at least regional significance for brown teal, an endangered waterfowl. This area is also a habitat for secretive coastal fringe birds such as the threatened banded rail. These two areas (130b, 130c) make up part of the area chosen by the Department of Conservation as an Area of Significant Conservation Value (ASCV). Kiwiriki Bay (130d) is an important ecotone grading from marine vegetation through to protected terrestrial forest areas.
CPAs 131 and 132 (Sheet 44) (within ASCV 87)	Karaka Bay Motairehe Bay and Swamp These are tidal stream mouths which, in conjunction with the freshwater area, scrub areas and roosting sites in the coastal environment above Mean High Water Springs, are habitats of at least regional significance for brown teal, an endangered waterfowl.
CPA 133 a-f (Sheet 32)	The Noises Group of small rocky islands which support a diverse and abundant range of coastal and sea birds. The reef heron, a threatened endemic wading bird is also commonly seen on the islands. Maria Island (133a) is one of the few breeding sites in the region of the spotted shag and the white-faced storm petrel.
CPA 134 (Sheet 41)	Mawhitipana Headland and Foredune This area of beach is the habitat of pingao, a threatened plant of mobile sand.

Schedule 4: Areas of Significant Conservation Value

In accordance with the provisions of the RMA and the NZ Coastal Policy Statement, the Minister of Conservation has identified the following 62 sites as Areas of Significant Conservation Value (ASCVs). These areas are notated on the Plan Maps in Volume 2 as a triangle with the appropriate DOC Site Record Sheet Number.

The values of the Areas of Significant Conservation Value are discussed in Schedule 3: Coastal Protection Areas. Further detailed information on each Area of Significant Conservation Value is also available from the ARC or the Auckland Conservancy of the Department of Conservation.

Site Record Sheet Number	ASCV Name	Site Record Sheet Number	ASCV Name
007	Manukau Harbour	081	Calliope Dockyard
014	Waionui Inlet-Papakanui Spit, South Kaipara Head	082	Oyster Point, Jordan's Farm and Shelly Beach Island, (Kaipara Harbour)
020	Kaipara Harbour	083	Waiwera Estuary
024	Mahurangi Harbour	084	Tapora Islands and Estuary
028	Weiti River Estuary	085	Tauhoa Scientific Reserve
030	Upper Waitemata Harbour	086	Mokohinau Islands Nature Reserve and Burgess Island
037	Firth of Thames Mudflats	087	Great Barrier Island
042	Whangapoua Estuary and Proposed Marine Reserve, Great Barrier Island	088	Ngataranga Bay Careening Area
055	Ngapipi Road/Hobson Point Greensand Exposure (Orakei Greensands).	090	Tiller's Wharf, Flagstaff Pier, Devonport
056	Hobsonville Peninsula Landslide (formerly Kaiwaneke Point Landslide)	091	Turanga Creek and Estuary Association
057	Takapuna Reef Fossil Forest	092	Wairoa River Estuary and Bay
058	Ihumatao Buried Forest	093	Tarahiki Island (Shag Island)
059	Mangere Mount Foreshore (includes Pahoehoe Lava Flow)	100	Shoal Bay/Takapuna Estuary
060	Point England Accretionary Lapilli	102	Okahukura Peninsula Hyaloclastite Exposures
061	Farm Cove Ignimbrite, Eastern Tamaki River	104	West Coast Lower Miocene Volcanic Deposits
062	Panmure Basin Explosion Crater	106	Tawharanui Peninsula Fossiliferous Jurassic Section
063	Orakei Basin Tuff Ring and Explosion Crater	107	Bean Rock and Lighthouse
064	Motutapu Island Waipapa Series Rock Exposures (Motutapu Basal Waitematas)	108	Kawau Island & Motuketekete Copper Mine & Associated Facilities
067	Mathesons Bay Thrust Cut Unconformity	109	Pakiri Bay Coastal System
069	Waiwera Bay Parnell Grit Formation	111	Marine Reserve Adjacent to Pollen and Traherne Islands
070	Pahurehure Inlet (Takanini) Pumicite Deposits	112	Seagrove/Karaka Foreshore
079	Tamaki River	113	Te Matuku Bay, Waiheke Island
080	Horuhoru Island (Gannet Rock)	114	Okakari Point to Cape Rodney Marine Reserve
		115	Puhoi Estuary
		116	Whangateau Harbour
		117	Foreshore of Little Barrier Island Nature Reserve

Site Record Sheet Number	ASCV Name
118	Foreshore Adjacent to Waipipi Roosts
119	Foreshore Adjacent to Pollok Spit
120	Foreshore Adjacent to Puhinui Roosts
121	Motukorea Island (Browns Island)
122	Wreck of S.S. Wairarapa
124	Sunde Site, Motutapu Island
125	Gordon Browne's Sawing Station, Mahurangi Harbour
126	Western Viaduct Liftbridge
127	Miners Head Copper Mine, Great Barrier Island
128	Whangaparapara Whaling Station, Great Barrier Island
129	Whatipu Wharf
130	Okura River Estuary and Long Bay Beach
131	Kawau Island Wharf

Schedule 5: Mooring Management Areas

Number	Name	Existing No. of Moorings	Maximum No. of Moorings
1.	Rarohara Bay	8	8
2.	Akapoua Bay	12	12
3.	Wairahi Bay	3	7
4.	Nagle Cove	4	6
5.	Whangaparapara Bay	13	24
6.	Whangaparapara Wharf	7	7
7.	Puiriri Bay	36	36
8.	Tryphena Point	11	12
9.	Shoal Bay	38	40
10.	Omaha Cove (Leigh)	28	38
11.	Ti Point	38	45
12.	Omaha	27	50
13.	Matakana River (Sandspit)	85 SM, 74 PM	138 SM, 75 PM
14.	Buckeltons Bay	5	20
15.	Kawau Island	156	200
16.	Dawsons Creek	10	10
17.	Algies Bay	69	100
18.	Anderson Bay	7	10
19.	Scotts Landing	101	101
20.	Te Kapa Inlet	4	10
21.	Jamesons Bay	112	112
22.	Opahi Bay	25	25
23.	Puhoi River	12	34
24.	Stanmore Bay	6	10.
25.	Swann Beach	6	12
26.	Tindalls Bay	9	70
27.	Weiti River	46 SM, 152 PM	92 SM, 152 PM
28.	Okura River	19	19
29.	Torbay	60	60
30.	Devonport East	164	170
31.	Devonport West	54	54
32.	Stanley Bay	50	50
33.	Stanley Point	26	50
34.	Bayswater	15	15
35.	Northcote	368	400
36.	Little Shoal Bay	231	350
37.	Chelsea	23	36
38.	Soldiers Bay	10	50
39.	Charcoal Bay	43	70
40.	Beachhaven	53	60
41.	Hellyers Creek	20	55
42.	Herald Island/Greenhithe	263	300
43.	Paremoremo	23	36
44.	Hobsonville/Catalina Bay	12	20
45.	Te Atatu/Whau River	68 SM, 101 PM	316
46.	Meola/Motions Creek	10	10

Number	Name	Existing No. of Moorings	Maximum No. of Moorings
47.	Cox's Bay	17	17
48.	Herne Bay	100	267
49.	Hobson Bay/Orakei/Okahu Bay	784	670
50.	Whakatakataka Bay East	91	120
51.	Glendowie	195	350
52.	Bucklands Beach	326	330
53.	Pakuranga	242	350
54.	Panmure North	195 SM, 160 PM	420
55.	Panmure South	105 SM	235
56.	Maungamaungaroa Creek	100	100
57.	Turanga Creek	18	38
58.	Maraetai	181	181
59.	Wairoa River	20 SM, 34 PM	54
60.	Kawakawa Bay	25 SM	25
61.	Sandy Bay	10	20
62.	Matiatia Bay	98	98
63.	Sandy (Hekerua) Bay	13	13
64.	Huruhi Bay West (Blackpool)	30	30
65.	Huruhi Bay East (Esslin Bay)	18	18
66.	Huruhi Bay Southside	3	3
67.	Kennedy Point	30	30
68.	Kennedy Bay	6	6
69.	Pataki Bay- Shelly Beach	65	65
70.	Pukiti Bay- Causeway Beach	20	20
71.	Pukiti Bay	16	16
72.	Putaki Bay	46	46
73.	Anzac Bay-Ostend	16 SM, 2 PM	17 SM, 2 PM
74.	Rangihoua Creek	7	7
75.	Kanakarau Bay	11	11
76.	Rocky Bay	60	60
77.	Henderson Creek	19	19
78.	Waiheke East	19	26

Key: All moorings are Swing Moorings (SM) or Pile Moorings (PM) unless indicated otherwise

Schedule 6: Areas Adjacent to the Coastal Marine Area Administered by the Department of Conservation

INTRODUCTION

Policy 4.1.4 of the NZ Coastal Policy Statement states that “regional coastal plans should identify land and areas under the Conservation Act 1987 and other land areas administered by the Department of Conservation so that their status will be taken into account in deciding resource consents.” The Department of Conservation has identified a number of areas of land under its administration adjacent to the coastal marine area of the Auckland Region. These areas are listed below, grouped according to NZMS Map Series 260, and are identified in Map Series 6 of the Plan Maps. Further information on the size and location of each of these areas, and their identified values can be obtained from the Auckland Regional Council or the Department of Conservation.

NB: All numbers refer to Conservation Unit Numbers.

1 NZMS 260 Q09: KAIPARA HARBOUR

Araparera River Marginal Strip (407)
 Bay Road Marginal Strip (387)
 Gum Store Creek Marginal Strip (399)
 Haratahi Creek Marginal Strip (410)
 Hargreaves Basin Marginal Strip (395)
 Kakaraea Islands Stewardship Area (324)
 Kakaraea Road Stewardship Area (406)
 Karaka Point Marginal Strip (401)
 Maeneene Creek Marginal Strip (390)
 Mangrove Flat Marginal Strip (403)
 Manukapua Government Purpose (Wildlife Management) Reserve (330)
 Millets Island Scientific Reserve (278)
 Moturemu Island Scenic Reserve (224)
 Okahukura Stewardship Area (326)
 Omaumau River Marginal Strip (405)
 Omaumau River Scientific Reserve (578)
 Omokoiti Bay Marginal Strip (409)
 Oruawharo River Stewardship Area (313)
 Otekawa Creek East Marginal Strip (397)
 Otekawa Creek West Marginal Strip (396)
 Oturapa-Mullet Creek Marginal Strip (393)
 Papakanui Spit Wildlife Refuge (210)
 Papakanui Stewardship Area (220)
 Parapara Creek Marginal Strip (398)
 Port Albert Stewardship Area (328)
 South Head Stewardship Area (378)
 Takahe Creek Marginal Strip (394)
 Tapora Government Purpose (Wildlife Management) Reserve (330)
 Tauhoa River Marginal Strip (400)
 Tauhoa Stewardship Area (327)
 Tauhoa Scientific Reserve (225)
 Te Hana Creek Marginal Strip (391)

Te Pahi Creek Marginal Strip (402)
 Te Pahi Stewardship Area (226)
 Ti Tree Island Conservation Area (549)
 Ti Tree Island Stewardship Area (389)
 Waioneke Marginal Strip (411)
 Waionui Inlet Marginal Strip (541)
 Whakapirau Creek Marginal Strip (392)

2 NZMS 260 Q10: KAIPARA HARBOUR

Ararimu Marginal Strip (493)
 Araparera River Marginal Strip (407)
 Awakohukohu Creek Stewardship Area (209)
 Kaikiore Creek Marginal Strip (483)
 Kaipara River Stewardship Area (340)
 Kaipara Stewardship Area (341)
 Karukarunui Creek Stewardship Area (207)
 Kaukapakapa Scenic Reserve (257)
 Mairetahi Creek Marginal Strip (479)
 Mairetahi Landing Reserve (343)
 Makarau River Marginal Strip (481)
 Makarau Stewardship Area (256)
 Matawhero Marginal Strip (487)
 Muriwai Beach Marginal Strip (546)
 Omokoiti Flats Marginal Strip (478)
 Otene Marginal Strip (491)
 Paparua Marginal Strip (486)
 Parakai Stewardship Area (258)
 Parekawa Creek Marginal Strip (484)
 Parkhurst Marginal Strip (489)
 Rangitira Beach Marginal Strip (542)
 South Head Road Marginal Strip (574)
 South Head Road Scientific Reserve (577)
 Taumata Creek Marginal Strip (477)
 Taumata Creek Stewardship Area (206)
 Te Hihi Marginal Strip (488)

Te Horo Marginal Strip (496)
 Tikitu Creek Marginal Strip (485)
 Upokonui Creek Marginal Strip (490)
 Waioneke Stewardship Area (255)

3 NZMS 260 Q11, Q12: WEST COAST

Awhitu Stewardship Area (274)
 Hamiltons Gap Marginal Strip (503)
 Irwins Road Stewardship Area (263)
 Muriwai Marginal Strip (448)
 Te Henga Recreation Reserve (272)

4 NZMA 260 R08: MANGAWHAI

Mangawhai Marginal Strip (538)
 Pakiri Marginal Strip (376)
 Rahuikiri Marginal Strip (377)

5 NZMS 260 R09: MAHURANGI HARBOUR

Baddeleys Stewardship Area (334)
 Burton Wells Scenic Reserve (253)
 Casnell Island Scenic Reserve (004)
 Cragieburn Marginal Strip (418)
 Dairy Bay Marginal Strip (426)
 Duck Creek Scenic Reserve (243)
 Goat Island Scientific Reserve (002)
 Goodall Marginal Strip (423)
 Hamatana Marginal Strip (421)
 Hamiltons Landing Scenic Reserve (331)
 Leigh Recreation Reserve (244)
 Leigh Scenic Reserve (237)
 Mahurangi Park Recreation Reserve (301)
 Mahurangi River Historic Reserve (556)
 Mahurangi River Marginal Strip (336)
 Mahurangi Scenic Reserve (254)
 Pukapuka Inlet Marginal Strip (529)
 Puhinui Scenic Reserve (242)
 Rowes Scenic Reserve (236)
 Sandspit Stewardship Area (333)
 Snells Beach Marginal Strip (420)
 Taumata Marginal Strip (412)
 Te Kapa River Marginal Strip (424)
 Ti Point Marginal Strip (416)
 Torkington Bay Marginal Strip (417)
 Whangateau Harbour Marginal Strip (415)
 Youngs Creek Marginal Strip (414)

6 NZMS 260 R10: WHANGAPARAOA TO UPPER WAITEMATA HARBOUR

Clifftop Marginal Strip (435)
 Lucas Creek Marginal Strip (444)
 Lucas Creek Scenic Reserve (551)
 Motutapu Island Recreation Reserve (010)
 Nukumea Stream Marginal Strip (599)
 Okura Beach Marginal Strip (434)
 Okahu Creek Scenic Reserve (262)
 Okura River Marginal Strip (322)
 Okura Estuary Scenic Reserve (266)
 Paremoremo Marginal Strip (443)
 Parish Marginal Strip (429)
 Puhoi River Stewardship Area (342)
 Rarawaru Creek Marginal Strip (442)
 Red Bluff Marginal Strip (438)
 Redvale Marginal Strip (433)
 Schnapper Rock Marginal Strip (446)
 Stanmore Bay Marginal Strip (346)
 Te Koroto Island Marginal Strip (536)
 Te Wharau Creek Marginal Strip (447)
 Tipau Point Marginal Strip (437)
 Weiti River Marginal Strip (432)

7 NZMS 260 R11: WAITEMATA AND MANUKAU HARBOURS

Alanbrooke Crescent Marginal Strip (591)
 Bairds Road Marginal Strip (583)
 Bastion Point Recreation Reserve (372)
 Bayswater Marginal Strip (557)
 Big Bay Marginal Strip (475)
 Browns Island Recreation Reserve (014)
 Clifton Marginal Strip (470)
 Cracroft Marginal Strip (469)
 Curlew Bay Marginal Strip (468)
 Green Bay Marginal Strip (461)
 Harania Creek Marginal Strip (473)
 Henderson Creek Marginal Strip (455)
 Hobson Bay Marginal Strip (552)
 Jolyn Place Marginal Strip (595)
 Kaipatiki Creek Marginal Strip (452)
 Kelston Marginal Strip (458)
 Lincoln Marginal Strip (456)
 Lister Street Marginal Strip (580)
 Mangere Marginal Strip (471)
 Mangere Stewardship Area (281)
 Matietie Historic Reserve (282)
 Meola Creek Quarry Reserve (304)
 Monterey Marginal Strip (467)

Motuihe Island Recreation Reserve (015)
 North Head Historic Reserve (013)
 Onepoto Marginal Strip (453)
 Oruamo Creek Marginal Strip (451)
 Otahuhu Creek Marginal Strip (464)
 Pahurehure Marginal Strip (474)
 Pakuranga Creek Marginal Strip (466)
 Pakuranga Highway Marginal Strip (603)
 Patiki Road Marginal Strip (597)
 Paturua Bay Marginal Strip (462)
 Portage Marginal Strip (459)
 Purewa Creek Stewardship Area (307)
 Rangitoto Island Scenic Reserve (009)
 Rosebank Peninsula Marginal Strip (576)
 Tamaki Historic Reserve (592)
 Tamaki Recreation Reserve (593)
 Tamaki River Marginal Strip (465)
 Turanga Creek Stewardship Area (364)
 Waikopua Creek Stewardship Area (283)
 Weymouth Stewardship Area (362)
 Whau River Marginal Strip (575)
 Whitford Stewardship Area (351)

8 NZMS 260 R12: MANUKAU HARBOUR

Clarks Creek Marginal Strip (511)
 Cochranes Gap Stewardship Area (280)
 Colbeck Road Marginal Strip (532)
 Drury Creek Marginal Strip (514)
 Drury Creek Islands Recreation Reserve (371)
 Drury Stewardship Area (309)
 Kauritutahi Creek Marginal Strip (502)
 Matakawau Creek Marginal Strip (504)
 Mauku Stream Marginal Strip (513)
 Pahurehure Marginal Strip (474)
 Pukewhau Creek Marginal Strip (507)
 Te Totara Creek Marginal Strip (508)
 Taihiki River Marginal Strip (510)
 Waiau Pa Historic Reserve (289)
 Waiuku River Marginal Strip (509)
 Waitara Stream Marginal Strip (505)
 Whatapaka Inlet Marginal Strip (512)

9 NZMS 260 S11: WAIHEKE ISLAND

Pakihi Point Marginal Strip (499)
 Papepape Marginal Strip (501)
 Pasadena Bay Marginal Strip (500)
 Te Matuku Bay Cemetery Reserve (548)
 Te Matuku Bay Stewardship Area (319)

10 NZMS 260 S08, S09, T08, T09: OUTER GULF ISLANDS

Awana Stream Marginal Strip (142)
 Awana Stream Recreation Reserve (129)
 Bushs Beach Recreation Reserve (110)
 Burgess Island Scenic Reserve (028)
 Cape Barrier Marginal Strip (147)
 Claris Recreation Reserve (111)
 Fitzroy Bay Landing Recreation Reserve (128)
 Great Barrier Forest Conservation Area (118)
 Great Barrier Forest Stewardship Area (106)
 Harataonga Bay Marginal Strip (139)
 Harataonga Recreation Reserve (107)
 Kaitoke Beach Marginal Strip (144)
 Kaitoke Creek Marginal Strip (143)
 Komahunga Stewardship Area (134)
 Kotuku Point Scenic Reserve (105)
 Little Barrier Island Nature Reserve (001)
 Mokohinau Islands Nature Reserve (025)
 Omahungaiti Bay Marginal Strip (138)
 Oruawharo Creek Government Purpose Reserve (117)
 Oruawharo Marginal Strip (145)
 Overtons Beach Marginal Strip (140)
 Rakitu Island Scenic Reserve (558)
 Rosalie Bay Marginal Strip (146)
 Ruahine South Stewardship Area (126)
 Sandy Bay Marginal Strip (148)
 Shoal Bay Stewardship Area (130)
 Stony Beach Recreation Reserve (108)
 Sugar Loaf Marginal Strip (590)
 Te Paparahi Stewardship Area (101)
 Whangapoua Stewardship Area (104)
 Whakatutuna Point Marginal Strip (141)
 Windy Hill North Stewardship Area (123)
 Windy Hill South Stewardship Area (124)

Schedule 7: Coastal Marine Area Boundaries

Kaipara Harbour

	River	River Mouth	Coastal Marine Area Boundary
1	Maeneene Creek	Q09 451 500	Seaward side of main trunk railway bridge Q09 452 501
2	Te Hana Creek	Q09 460 489	Q09 460 488
3	Whakapirau Creek, main stem	Q09 442 466	Seaward side Te Hana – Port Albert Rd bridge Q09 448 465
4	Whakapirau Creek, Western Arm	Q09 437 462	Seaward side of Wellsford Valley Road bridge Q09 435 461
5	Kaiwakawaka River	Q09 399 449	Q09 401 451
6	Waireia River	Q09 392 438	Q09 392 438
7	Wharehanu Creek	Q09 382 441	Seaward side Beaver Rd bridge Q09 382 441
8	Takapau Creek	Q09 356 415	Q09 356 415
9	Takahe Creek	Q09 348 409	Seaward end of reclamation Q09 348 409
10	Atiu Creek	Q09 335 408	Q09 335 407
11	Mullet Creek East Arm	Q09 314 402	Q09 314 402
12	Mullet Creek West Arm	Q09 302 403	Q09 302 403
13	Oturapa Creek	Q09 290 403	Q09 290 403
14	Otekawa Creek	Q09 253 411	Seaward side of Journeys End bridge Q09 254 411
15	Gum Store Creek West Arm	Q09 277 374	Q09 276 377
16	Gum Store Creek East Arm	Q09 278 374	Q09 278 374
17	Te Raupa Creek	Q09 334 331	Seaward side of Kakaraea Road bridge Q09 333 331
18	Hiki Creek	Q09 334 347	Seaward side of Burma Road bridge Q09 334 347
19	Kahutaewao Creek	Q09 349 352	Q09 349 352
20	Whanaki Creek Northern Arm	Q09 384 382	Seaward side of Tauhoa – Port Albert Road Q09 387 385
21	Whanaki Creek Southern Arm	Q09 384 380	Seaward side of Tauhoa – Port Albert Road Q09 389 379
22	Te Pahi Stream	Q09 405 349	Q09 405 349
23	Hoteo River	Q09 400 298	South boundary Pt Lot 1 DP 64445 Q09 402 294
24	Omaumau River	Q09 378 272	Q09 378 272
25	Mataia Creek	Q09 382 221	Q09 386 222
26	Araparera Creek	Q09 390 207	Q09 392 208
27	Makarau River	Q10 415 159	Seaward side of Kaipara Coast Highway bridge Q09 417 160
28	Waitangi Stream	Q10 420 154	Q10 421 153
29	Wheraroa Creek	Q10 411 138	Q10 412 137
30	Matawhero Stream	Q10 397 109	Q10 397 108

	River	River Mouth	Coastal Marine Area Boundary
31	Kaipara River	Q10 387 060	Seaward side of confluence of Kaipara River and Kaukapakapa River Q10 394 053
32	Upokonui Creek	Q10 372 047	Seaward side South Head Road Q10 372 047
33	Te Hihi Creek	Q10 348 060	Seaward side of South Head Road Q10 348 059
34	Takapau Horahia Creek	Q10 347 061	Seaward side of South Head Road Q10 346 061
35	Kaituna Creek	Q10 323 069	Seaward side Old South Head Road Q10 323 069
36	Hihi Stream	Q10 317 076	Seaward side South Head Road Q10 317 076
37	Okaro Creek	Q10 314 076	Seaward side South Head Road Q10 314 076
38	Slater Road Creek	Q10 306 085	Seaward side South Head Road Q10 306 085
39	Tikitu Creek	Q10 302 098	Q10 302 098
40	Kaikioro Creek	Q10 297 114	Q10 295 113
41	Mairetahi Creek	Q10 293 141	Q10 293 141
42	Taumata Creek East Arm	Q10 267 182	Q10 267 182
43	Taumata Creek West Arm	Q10 266 182	Q10 266 182
44	Haratahi Creek	Q09 247 221	Q09 247 221

Manukau Harbour

	River	River Mouth	Coastal Marine Area Boundary
45	Huia Stream	Q11 498 659	Seaward side of Huia Road Bridge Q11 498 659
46	Kakamatua Stream	R11 521 656	R11 521 656
47	Big Muddy Creek	R11 543 696	R11 543 696
48	Waiohua Creek	R11 562 706	R11 562 706
49	Little Muddy Creek	R11 570 711	R11 570 711
50	Paturua Stream	R11 581 710	R11 581 710
51	Ann's Creek	R11 736 734	R11 736 734
52	Harania Creek South West Arm	R11 716 705	R11 716 705
53	Tararata Creek	R11 702 706	R11 702 706
54	Tautaurua Creek	R11 698 666	R11 698 666
55	Pukaki Creek	R11 707 673	R11 707 673
56	Waokauri Creek, Northern Arm	R11 723 675	R11 723 675
57	Waokauri Creek, Eastern Arm	R11 735 664	R11 735 664
58	Puhinui Creek	R11 742 632	R11 742 632
59	Puhinui Creek, Eastern Arm	R11 755 633	R11 755 633
60	Waimahia Creek	R11 770 610	R11 770 610

	River	River Mouth	Coastal Marine Area Boundary
61	Papakura Stream (Manukau/Papakura Boundary)	R11 794 601	R11 794 601
62	Hingaia Stream and Slippery Creek	R12 831 545	Western side of SH1 road bridge R12 831 545
63	Ngakoroa Stream	R12 831 535	Southern side of Brimer Rd bridge R12 831 535
64	Oira Stream (Papakura Franklin Boundary)	R12 810 531	R12 810 530
65	Whangapouri Creek	R12 792 523	R12 791 523
66	Whangamaire Stream	R12 772 562	R12 772 562
67		764 551	764 551
68		763 537	763 537
69		766 524	Seaward side of Muir Road bridge 766 523
70		757 541	757 541
71		760 554	760 554
72		764 563	764 563
73	Pahurehure Inlet	R12 759 575	R12 759 575
74		754 581	754 581
75		752 585	752 585
76	Clarks Creek, eastern bank	R12 698 523	R12 698 522
77	Tuhitahi Creek	R12 696 502	Seaward side of Kingseat Rd bridge R12 696 501
78	Karaka Creek	R12 687 504	Seaward side of McKenzie Rd bridge R12 687 503
79	Clarks Creek, western bank	R12 685 524	R12 685 524
80		684 536	684 536
81		682 537	682 537
82	Clarks Beach Inlet Stream	R12 660 523	R12 660 523
83	Taihiki River, northern bank	R12 630 491	R12 630 491
84		638 491	638 491
85		651 491	651 491
86		653 488	653 488
87		660 478	660 478
88		663 478	663 478
89		664 476	664 476
90	Mauku Stream	R12 697 460	Seaward side of Glenbrook-Waiuku Rd R12 697 460
91	Taihiki River, southern bank	R12 680 465	R12 680 465
92		673 466	673 466
93		660 460	660 460
94		659 451	659 451
95		657 656 447	657 446
96		656 447	655 446
97		648 454	648 454
98		Unnamed Stream	R12 636 445

	River	River Mouth	Coastal Marine Area Boundary
99	Stream east side of Race Course Rd	R12 648 388	R12 648 388
100	Waiuku Stream	R12 638 380	Northern side of Waiuku Bypass R12 638 379
101	Rangiwhea Creek	R12 628 386	R12 628 386
102	Awaruaiti Creek	R12 618 392	R12 618 392
103		617 396	617 396
104		617 398	617 398
105	McGowan Road Creek	R12 618 405	R12 618 405
106	Mokorau Creek	R12 615 413	R12 615 413
107	Parakau Creek	R12 607 416	R12 607 416
108	Totara Creek	R12 613 427	R12 613 427
109	Waipipi Creek	R12 601 430	R12 601 430
110		601 432	601 432
111	Te Hakono Creek	R12 601 445	R12 601 445
112		600 446	600 446
113	Pukewhau Creek	R12 598 461	R12 598 461
114	Kohonui Creek	R12 598 469	R12 598 469
115	Ohiku Creek	R12 591 485	R12 591 485
116		586 477	586 477
117	Rangiriri Creek	R12 576 497	R12 576 497
118		576 504	576 504
119		571 506	571 506
120	Matakawau Creek	R12 572 519	R12 572 519
121		562 521	562 521
122	Kauritutahi Stream	R12 559 560	R12 559 560
123	Stream north of Kauritutahi Stream	R12 564 570	R12 563 570

Waitemata Harbour And Hauraki Gulf

	River	River Mouth	Coastal Marine Area Boundary
124	Unnamed stream – Couldrey's Bridge	S11 042 709	Seaward side of Couldrey's bridge S11 042 709
125	Rautawa Stream	S11 037 704	Seaward side of Kawakaw Bay coast road S11 037 704
126	Kawakawa Bay Stream	S11 026 700	Seaward side of Clevedon Kawakawa Road bridge S11 026 700
127	Rotopiro Streams	S11 989 703	S11 990 703
128	Urangahauhau Stream	S11 955 695	Seaward side of Vennon's Bridge S11 956 694
129	Wairoa River	Line adjoining S11 952 697 and S11 951 698	S11 946693
130	Te Puru Creek, Eastern Arm	S11 907 778	Seaward side of Whitford Maraetai Road bridge S11 907 778
131	Te Puru Creek	S11 904 777	Seaward side of Whitford Maraetai Road bridge S11 904 777

	River	River Mouth	Coastal Marine Area Boundary
132	Grangers Stream	R11 860 715	R11 861 716
133	Turanga Creek	R11 858 706	R11 859 706
134	Maungamaungaroa Creek	R11 828 735	R11 828 734
135	Pakuranga Creek, Pakuranga Rd Arm	R11 790 749	R11 790 749
136	Pakuranga Creek, Cascade Road Arm	R11 801 746	Seaward side of Cascade Rd bridge R11 801 746
137	Pakuranga Creek, Golf Course	R11 799 742	R11 799 742
138	Pakuranga Creek, Power Sub Station Arm	R11 801 735	R11 801 735
139	Pakuranga Creek, Cryers Road Arm	R11 789 729	R11 789 729
140	Otara Creek, Kerwyn Rd Arm	R11 778 714	R11 778 714
141	Otara Creek, Opp Andromeda Cres	R11 783 708	R11 783 708
142	Otara Creek, East Tamaki Rd Arm	R11 779 705	R11 779 705
143	Tamaki River, Bairds Rd Arm	R11 757 699	Seaward side of Pipeline in line with Laxon Ave R11 757 699
144	Tamaki River, Middlemore Hospital	R11 747 691	R11 747 691
145	Tamaki River Manukau/ Auckland Boundary	R11 748 700	R11 748 700
146	Otahuhu Creek	R11 747 723	Off end Atkinson Ave R11 747 723
147	Unnamed stream adjacent to Bowden Road	R11 754 746	Outlet structure below Bowden Road R11 754 746
148	Unnamed stream upstream of Donnor Place	R11 753 749	R11 753 749
149	Omaru Creek	R11 772 787	Off end of Taniwha Reserve R11 772 787
150	Purewa Creek	R11 739 802	Off end Kempthorne St R11 739 802
152	Orakei Basin Streams	R11 724 793	R11 724 793
151		729 795	729 795
153	Orakei Road Stream	R11 713 802	R11 713 802
154	Portland Road Stream	R11 706 804	Seaward side of Shore Road R11 706 804
155	Newmarket Stream	R11 698 805	Seaward side of Brighton Road R11 698 805
156	Coxs Creek	R11 642 820	Landward side of Westend Road R11 642 820
157	Motions Creek	R11 634 812	Seaward side of Meola Road R11 635 812
158	Meola Creek	R11 630 809	Seaward side of Meola Road R11 630 809

	River	River Mouth	Coastal Marine Area Boundary
159	Oakley creek	R11 624 795	Seaward side of Great North Road R11 624 795
160	Whau River (Auckland Waitakere Boundary)	R11 612 758	Railway Bridge R11 612 758
161	Rewarewa Creek	R11 601 756	R11 601 756
162	Taroa Stream	R11 599 761	R11 599 761
163	Wairau Creek	R11 582 770	R11 582 770
164	Glenedene Creek	R11 578 783	R11 578 783
165	Henderson Creek	R11 562 800	R11 562 799
166	Paremuka Stream	R11 546 816	Northern end of Woodside Road R11 546 816
167	Huruhuru/Swanson Stream	R11 545 817	Seaward side of footbridge across stm R11 545 817
168	Rarawaru Creek	R11 554 833	R11 554 833
169	Taikata Creek (Kopupaka Stream)	R11 564 843	R11 564 843
170	Lawson's Creek	R11 559 851	R11 559 851
171	Waipareira Stream	R11 568 864	R11 568 864
172	Romeo Stream	R11 568 866	R11 568 866
173	Waiorahia Stream	R11 565 881	R11 565 881
174	Rarawaru Creek	R10 548 901	R10 548 901
175	Totara Creek	R11 534 884	Seaward side of Brigham Creek Road R11 534 884
176	Brigham Creek (Waitakere Rodney Boundary)	R11 524 887	Concrete "V" notch weir R11 524 887
177	Rangitopuni Stream	R10 532 927	Seaward side of Coatesville – Riverhead Highway bridge R10 530 929
178	Paremoremo Creek	R10 565 929	R10 565 930
179	Lucas Creek	R10 616 962	Waterfall upstream of SH1 bridge R10 616 962
180	Oteha Stream	R10 617 956	R10 617 956
181	Te Wharau Creek Northern Arm	R10 604 918	R10 604 918
182	Te Wharau Creek Southern Arm	R10 605 916	R10 605 916
183	Kingfisher Grove Creek	R10 592 909	R10 592 909
184	Hellyers Creek	R10 624 908	R10 624 909
185	Kaipatiki Creek	R11 629 894	R11 629 894
186	Kaipatiki Creek Eskdale Road Arm	R11 627 887	R11 627 887
187	Kaipatiki Creek Beachaven Rd Arm	R11 619 890	R11 619 890
188	Soldiers Bay Stream	R11 621 862	R11 621 862
189	Little Shoal Bay Stream	R11 656 858	Seaward side of Maritime Terrace ford R11 656 858
190	Onepoto Stream	R11 661 867	R11 661 867

	River	River Mouth	Coastal Marine Area Boundary
191	Hillcrest Stream	Seaward side Takapuna Devonport motorway on ramp R11 678 878	Landward side Takapuna Devonport motorway on ramp R11 678 878
192	Wairoko Creek	R11693 872	R11 693 872

Hauraki Gulf Coastline

	River	River Mouth	Coastal Marine Area Boundary
193	Wairau Creek	R10 678 908	Immediately downstream of canal outfall R10 678 907
194	Deep Creek	R10 669 985	Seaward side of Beach Road bridge R10 669 985
195	Awaruku Creek	R10 670 999	Seaward side of road bridge R10 669 999
196	Long Bay North Stream	R10 666 008	R10 666 008
197	Okura Beach Road Stream	R10 646 011	R10 646 011
198	Okura River (North Shore Rodney Boundary)	R10 631 009	R10 631 009
199	Okura River	R10 629 009	R10 629 008
200	Okura River	R10 629 009	R10 628 009
201	Okura River, North Branch	R10 628 022	R10 627 022
202	Doctors Creek	R10 636 059	Opposite Northern boundary Lot 4 DP 26549 R10 636 058
203	Duck Creek	R10 622 062	Seaward side Duck Creek Road bridge R10 622 062
204	Newman Road Stream	R10 613 072	R10 612 071
205	Weiti River	R10 616 078	R10 614 078
206	Orewa River	R10 597 102	R10 595 102
207	Orewa River North Branch	R10 606 107	Opp East extremity Lot 84 DP 107158 R10 604 108
208	Nukumea Stream	R10 618 127	Seaward side of SH1 road bridge R10 618 127
209	Otanerua Stream South Arm	R10 621 139	R10 621 139 200m NE of W corner of reserve
210	Otanerua Stream North Arm	R10 622 141	R10 622 141
211	Waiwera River	R10 613 167	Opp boundary Lots 7 & 8 DP 61445 R10 611 167
212	Okahu Creek	R10 603 178	R10 603 178
213	Puhoi River	R10 608 187	Boundary Pt Allot 9 SO 1804 and Pt Allot 10 SO 1799 R10 606 189
214	Te Muri-O-Tarariki Stream	R10 636 197	R10 635 197
215	Pukapuka River	R09 610 226	Seaward side of Pukapuka Rd bridge R09 610 226

	River	River Mouth	Coastal Marine Area Boundary
216	Dyers Creek Southern Arm	R09 622 245	Boundary Part 1 DP 37582 & Part 82 R09 622 245
217	Dyers Creek Northern Arm	R09 619 249	R09 619 249
218	Cowan Bay Stm West Arm	R09 623 270	R09 623 270
219	Cowan Bay Stm East Arm	R09 628 272	R09 628 272
220	Hepburn Creek	R09 619 284	Seaward side of Hepburn Creek Rd bridge R09 617 283
221	Johnson Creek	R09 613 301	Seaward side of Hepburn Creek Road bridge R09 613 301
222	Mahurangi River	R09 615 310 Off end of Wilson Rd	R09 612 313 Opp Nth end of lake
223	Duck Creek	R09 623 304	R09 623 304
224	Dawson's Creek (Te Whau Creek)	R09 647 300	Seaward side access bridge to Sewage Treatment Plant R09 647 300
225	Goodalls Stream	R09 656 284	R09 656 284
226	Te Kapa River Northern Arm	R09 663 259	R09 663 259
227	Te Kapa River Eastern Arm	R09 674 247	R09 675 248
228	Glen Eden River	R09 641 341	R09 642 342
229	Matakana River	R09 649 369	R09 648 370 Opp Sth boundary Lot 1 DP 100477
230	Baddley's Beach Stream	R09 678 341	R09 678 341
231	Campbells Beach Western Stream	R09 689 341	R09 689 341
232	Campbells Beach Eastern Stream	R09 693 340	R09 693 340
233	Omaha River	R09 668 389	Nth end esplanade reserve adj Lot 1 DP 83584 R09 666 389
234	Tamahunga Stream	R09 668 392	Southern boundary of Lot 1 DP 8755 R09 667 393
235	Birdsall Road Stream	R09 682 419	R09 682 419
236	Young Creek	R09 683 420	Seaward side Ashton (Sadler) Rd bridge R09 684 420
237	Coxhead Creek	R09 703 426	Coxhead Creek Road bridge R09 703 426
238	Kohuroa Stream	R09 719 428	Footbridge R09 719 428
239	Omaha Cove, W arm	R09 727 443	Footbridge R09 727 443
240	Omaha Cove, NE arm	R09 732 445	R09 733 446

Waiheke Island

	River	River Mouth	Coastal Marine Area Boundary
241	Okahuiti Creek	S11 929 877	S11 929 877
242	Tawaipareira Creek	S11 937 873	Seaward side of Ostend Road S11 937 873
243	Rangihoua Creek	S11 950 867	S11 950 867
244		949 866	949 866
245	Awaawaroa Bay Stream	S11 981 851	S11 981 851
246		987 852	987 852
247	Te Matuku Bay Stream	S11 012 840	Orapiu Road bridge S11 012 840

Great Barrier Island

	River	River Mouth	Coastal Marine Area Boundary
248	Oruawharo Stream	T09 357 447	T09 357 445
249	Kaitoke River	T09 318 492	Seaward side Kaitoke Awana Road bridge T09 318 493
250	Awana Stream	T08 336 524	T08 336 525
251	Motairehe Stream	S08 244 620	S08 244 620
252	Whangaparapara Stream	S09 260 487	S09 260 487

Notes:

1. For each river identified in the above schedules the "mouth" is a straight line drawn from bank to bank through or as close as possible to the grid reference relating to that river at right angles to the river flow at that grid reference.
2. For rivers not identified in the above schedules the "mouth" shall be at that point depicted by a straight line representing a continuation of the mean high water springs on each side of the river.

Schedule 8: Boundaries of Port Management Areas

Port Management Area 1A

All that of the Coastal Marine Area bound by a line commencing at the point of Mean High Water Springs of the Waitemata at map reference 2669929E, 648225IN, then commencing north and north-west in a curved line around the edge of the Marine Rescue Centre eastern breakwater for 164 metres to a point at grid reference 266998IE, 6482395N, thence northerly at 351° for a distance of 553 metres to grid reference 2669896E, 6482941N, thence northerly at 6° for a distance of 158 metres to a point at grid reference 2669913E, 6483098N. Thence west at 278° along and beyond the northern berth of the Fergusson container Terminal for 718 metres to a point at grid reference 2669199E, 6483176N, thence north-west at 290° for 598 metres to grid reference 2668608E, 6483385N, thence south west at 200° for 750 metres to the line of Mean High Water Springs between Marsden and Bledisloe Wharves at grid reference 2668357E, 6482678N. Thence generally north, east and south along the line of Mean High Water Springs to the point of commencement.

Port Management Area 1B

All that part of the Coastal Marine Area bound by a line commencing at the point of Mean High Water Springs of the Manukau Harbour at map reference 2669177E, 6472966N, thence heading in a south-westerly direction at 219° for 57 metres to grid reference 2669142, thence west at 269° for a distance of 155 metres to grid reference 1668986E, 6472922N, thence in a southwards direction at 174° for 203 metres to grid reference 2669009E, 6472720N, thence east at 88° for 472 metres to grid reference 2669481E, 6472715N, thence north at 359° for a distance of 87 metres to the line of Mean High Water Springs at grid reference 2669482E, 6472802N. Thence generally east and north along the line of Mean High Water Springs to the point of commencement.

Port Management Area 1C

All that part of the Coastal Marine Area bound by a line commencing at the point of Mean High Water Springs of the Waitemata Harbour between Marsden and Bledisloe wharves at grid reference 2668357E, 6482678N. Thence north at 19° for a distance of

750 metres to a point at grid reference 2668608E, 6483385N, thence north-west at 290° for 410 metres to grid reference 2668221E, 6483523N, thence south west at 201° for 630 metres to grid reference 2668008E, 6482930N, thence in a curved line under the eastern Ferry Tee for 103 metres to the point of Mean High Water Springs beneath Queen's Wharf and the line of Mean High Water Springs at grid reference 2668019E, 6482784N. Thence generally eastwards along the line of Mean High Water Springs to the point of commencement.

Port Management Area 2

This area is divided into two sections, one being between (a) Queens Wharf and Wynyard Wharf, and the other being (b) the south-western corner of the Western Reclamation.

- a. All that part of the Coastal Marine Area bounded by a line commencing at the point of Mean High Water Springs of the Waitemata Harbour east of the southern limit of Wynyard Wharf at grid reference 2667121E, 6483084N, thence in a north-westerly direction at 44° for a distance of 743 metres to grid reference 2667634E, 6483621N, thence generally in an easterly direction at 89° for 281 metres to grid reference 2667915E, 6483631N, then in a south-eastern direction at 110° for 325 metres to grid reference 2668221E, 6483523N, thence in a south-westerly direction at 201° for 630 metres to grid reference 2668008E, 6482930N, thence in a curved line under the eastern Ferry Tee for 103 metres to the point of Mean High Water Springs beneath Queens Wharf at grid reference 2668019E, 6482784N. Thence in a generally westerly direction along the line of Mean High Water Springs to the point of commencement except for the area described as Port Management Area 3 and set out below.
- b. All that part of the Coastal Marine Area bounded by a line commencing at the point of Mean High Water Springs of the Waitemata Harbour at grid reference 2666624E, 6482736N. Thence in a north-westerly direction at 357° for 275 metres to grid reference 2666603E, 6483010N, thence in a northerly direction at 20° for 238 metres to grid reference 2666682E, 6483235N, thence in

a south-easterly direction at 110° for 146 metres to the point of Mean High Water Springs at grid reference 2666819E, 6483183N. Thence in a generally southerly direction along the line of Mean High Water Springs to the point of commencement.

Port Management Area 3

All that part of the coastal marine area bounded by a line commencing at the point of Mean High Water Springs of the Waitemata Harbour at grid reference 2667731E, 6482875N. Thence in a northerly direction at 19° for 380 metres to grid reference 2667855E, 6483223N, thence in a south-easterly direction at 109° for 91 metres to grid reference 2667937E, 6483189N, thence in a south-westerly direction generally at 198° for 338 metres to grid reference 2667828E, 6482869N. Thence generally easterly along the line of Mean High Water Springs to the point of commencement.

Port Management Area 4A

All that part of the Coastal Marine Area bounded by a line commencing at the point of Mean High Water Springs at grid reference 2666819E, 6483183N, thence in an easterly direction at 291° for 146 metres to grid reference 2666682E, 6483235N, thence in a northerly direction at 20° for 56 metres to grid reference 2666701E, 6483288N, thence in a north-easterly direction at 44° for 436 metres to grid reference 2667006E, 6483599N, thence in a north-easterly direction at 88° for 628 metres to grid reference 2667634E, 6483621N, thence in a southerly direction at 224° for 743 metres to the point of Mean High Water Springs near the eastern side of Wynyard Wharf at grid reference 2667121E, 6483084N. Thence generally west, north and south to the point of commencement.

Port Management Area 4B

All that part of the Coastal Marine Area bounded by a line of commencement at the point of Mean High Water Springs of the Tamaki River at grid reference 2675835E, 6474282N. Thence heading in a north-east direction at 57° for 24 metres to grid reference

2675854E, 6474295N, thence in a south-east direction at 151° for 431 metres to grid reference 2676063E, 6473918N, thence in a south-west direction at 235° for 32 metres to the point of Mean High Water Springs at grid reference 2676035E, 6473900N. Thence in a generally north-west direction along the line of Mean High Water Springs to the Point of commencement.

Port Management Area 4C

All that part of the Coastal Marine Area of the Manukau Harbour bounded by a complete circular line having a radius of 65 metres from a centre point at grid reference 2672502E, 6461072N.

Port Management Area 5

All that part of the Coastal Marine Area bounded by a line commencing at the point of Mean High Water Springs of the Waitemata Harbour at grid reference 2670595E, 6483907N. Thence extending in a southerly direction at 176° for 73 metres to grid reference 2670599E, 6483825N, thence in an westerly direction at 274° for 27 metres to grid reference 2670571E, 6483836N, thence in a southerly direction at 183° for 24 metres to grid reference 2670570E, 6483812N, thence in a westerly direction at 274° for 62 metres to grid reference 2670508E, 6483815N, thence southwards at 176° for 4 metres to grid reference 2670508E, 6483811N. Thence in a south-easterly direction at 126° for 36 metres to grid reference 2670537E, 6483791N. Thence in an easterly direction at 93° for 81 metres to grid reference 2670619E, 6483788N, thence in a northerly direction at 26° for 114 metres to the point of Mean High Water Springs at grid reference 2670667E, 6483890N. Thence generally westerly along the line of Mean High Water Springs to the point of commencement.

Shaded text indicates variations 1 – 6

Schedule 9: Aquaculture Management Area Coordinates

These coordinates relate to the Aquaculture Management Areas defined in Map Series 1 of the Plan Maps. In the table below, AMA Area relates to the Sheet Number within Map Series 1, AMA NUM relates to the specific AMA on that Sheet, and the x coordinates (easting) and y coordinates (northings) relate to the New Zealand Map Grid, and identify each corner of the Aquaculture Management Area boundary.

AMA Name	AMA Area	AMA Num	X Coord	Y Coord
Kaipara Harbour	1	A	2621973.79	6529399.34
Kaipara Harbour	1	A	2622245.51	6529252.13
Kaipara Harbour	1	A	2623265.76	6527490.65
Kaipara Harbour	1	A	2622848.93	6527256.09
Kaipara Harbour	1	A	2621693.06	6529228.08
Kaipara Harbour	1	B	2623920.00	6526745.00
Kaipara Harbour	1	B	2624440.00	6525891.00
Kaipara Harbour	1	B	2624184.00	6525735.00
Kaipara Harbour	1	B	2623664.00	6526589.00
Kaipara Harbour	1	C	2624469.90	6525309.01
Kaipara Harbour	1	C	2624873.02	6525648.99
Kaipara Harbour	1	C	2625956.40	6524815.73
Kaipara Harbour	1	C	2625229.04	6524611.06
Kaipara Harbour	1	D	2630040.00	6528947.00
Kaipara Harbour	1	D	2629758.00	6528534.00
Kaipara Harbour	1	D	2628106.00	6529662.00
Kaipara Harbour	1	D	2628388.00	6530075.00
Kaipara Harbour	1	E	2630109.55	6527901.97
Kaipara Harbour	1	E	2630109.55	6525895.07
Kaipara Harbour	1	E	2629610.60	6525895.07
Kaipara Harbour	1	E	2629610.60	6527901.97
Kaipara Harbour	1	E	2629610.60	6527901.97
Kaipara Harbour	1	F	2634732.47	6542662.95
Kaipara Harbour	1	F	2634722.86	6542543.78
Kaipara Harbour	1	F	2634438.02	6542560.35
Kaipara Harbour	1	F	2634444.44	6542680.05
Kaipara Harbour	1	G	2635622.44	6543475.65
Kaipara Harbour	1	G	2635460.36	6543054.65
Kaipara Harbour	1	G	2635405.31	6543177.99
Kaipara Harbour	1	G	2635129.06	6543287.07
Kaipara Harbour	1	G	2635259.54	6543614.29
Mahurangi Harbour	2	A	2664010.25	6526570.00
Mahurangi Harbour	2	A	2664168.75	6527078.50
Mahurangi Harbour	2	A	2664359.00	6527013.50
Mahurangi Harbour	2	A	2664200.50	6526504.50
Mahurangi Harbour	2	B	2664052.25	6526236.00
Mahurangi Harbour	2	B	2664198.50	6526179.50
Mahurangi Harbour	2	B	2664375.00	6526219.50
Mahurangi Harbour	2	B	2664551.50	6525331.00
Mahurangi Harbour	2	B	2664031.50	6525226.50
Mahurangi Harbour	2	B	2663881.50	6526008.50
Mahurangi Harbour	2	C	2664604.00	6525048.50
Mahurangi Harbour	2	C	2664305.00	6525021.50
Mahurangi Harbour	2	C	2664241.50	6525122.00

AMA Name	AMA Area	AMA Num	X Coord	Y Coord
Mahurangi Harbour	2	C	2664556.25	6525269.00
Mahurangi Harbour	2	D	2665496.63	6526436.33
Mahurangi Harbour	2	D	2665591.88	6526170.42
Mahurangi Harbour	2	D	2665480.76	6525999.77
Mahurangi Harbour	2	D	2665262.48	6525968.02
Mahurangi Harbour	2	D	2665071.97	6526138.67
Mahurangi Harbour	2	D	2664933.07	6526452.21
Mahurangi Harbour	2	D	2665028.32	6526626.83
Mahurangi Harbour	2	D	2665171.19	6526686.36
Mahurangi Harbour	2	D	2665337.88	6526599.05
Mahurangi Harbour	2	E	2664128.50	6524096.50
Mahurangi Harbour	2	E	2664259.50	6524106.50
Mahurangi Harbour	2	E	2664295.75	6524097.50
Mahurangi Harbour	2	E	2664385.00	6523994.50
Mahurangi Harbour	2	E	2664479.96	6523877.13
Mahurangi Harbour	2	E	2664480.28	6523462.97
Mahurangi Harbour	2	E	2664372.25	6523396.00
Mahurangi Harbour	2	E	2664094.25	6523404.00
Mahurangi Harbour	2	E	2664095.75	6523596.00
Mahurangi Harbour	2	E	2664195.75	6523593.50
Mahurangi Harbour	2	E	2664195.75	6523624.50
Mahurangi Harbour	2	E	2664188.25	6523636.50
Mahurangi Harbour	2	E	2663998.75	6523731.00
Mahurangi Harbour	2	E	2664034.75	6523931.00
Mahurangi Harbour	2	E	2664038.25	6523940.50
Mahurangi Harbour	2	F	2663332.00	6523532.00
Mahurangi Harbour	2	F	2663288.20	6523204.61
Mahurangi Harbour	2	F	2663048.55	6523239.05
Mahurangi Harbour	2	F	2663094.25	6523565.50
Mahurangi Harbour	2	G	2663556.50	6522271.50
Mahurangi Harbour	2	G	2663575.75	6522391.00
Mahurangi Harbour	2	G	2663635.25	6522380.50
Mahurangi Harbour	2	G	2663616.00	6522261.00
Mahurangi Harbour	2	H	2663554.00	6522102.00
Mahurangi Harbour	2	H	2663612.00	6522120.00
Mahurangi Harbour	2	H	2663674.00	6521949.50
Mahurangi Harbour	2	H	2663616.25	6521932.00
Mahurangi Harbour	2	I	2666515.50	6523117.00
Mahurangi Harbour	2	I	2666508.14	6523105.57
Mahurangi Harbour	2	I	2666650.50	6523016.50
Mahurangi Harbour	2	I	2666508.25	6522793.00
Mahurangi Harbour	2	I	2666366.00	6522885.00
Mahurangi Harbour	2	I	2666441.35	6523001.94
Mahurangi Harbour	2	I	2666424.17	6523012.38
Mahurangi Harbour	2	I	2666349.25	6522895.50
Mahurangi Harbour	2	I	2666116.59	6523045.64
Mahurangi Harbour	2	I	2666344.75	6523396.00
Mahurangi Harbour	2	I	2666481.75	6523308.00
Mahurangi Harbour	2	I	2666402.66	6523186.55
Mahurangi Harbour	2	J	2666202.75	6522650.00

Shaded text indicates variations 1 – 6

AMA Name	AMA Area	AMA Num	X Coord	Y Coord
Mahurangi Harbour	2	J	2666213.81	6522667.22
Mahurangi Harbour	2	J	2666125.84	6522723.44
Mahurangi Harbour	2	J	2666114.88	6522706.58
Mahurangi Harbour	2	J	2665960.50	6522806.00
Mahurangi Harbour	2	J	2666083.91	6522995.25
Mahurangi Harbour	2	J	2666573.00	6522680.50
Mahurangi Harbour	2	J	2666448.25	6522492.00
Matakana River	3	A	2666440.50	6534366.00
Matakana River	3	A	2666399.00	6534398.50
Matakana River	3	A	2666475.00	6534461.00
Matakana River	3	A	2666529.25	6534375.50
Matakana River	3	A	2666477.25	6534303.50
Kawau Island	4	A	2673512.43	6529920.30
Kawau Island	4	A	2673500.58	6529939.42
Kawau Island	4	A	2673516.04	6529949.83
Kawau Island	4	A	2673527.60	6529931.09
Great Barrier Island	5	A	2721984.05	6560962.54
Great Barrier Island	5	A	2722013.56	6561172.48
Great Barrier Island	5	A	2722247.40	6561118.49
Great Barrier Island	5	A	2722188.67	6560915.31
Great Barrier Island	5	B	2722416.30	6560873.19
Great Barrier Island	5	B	2722265.39	6560894.83
Great Barrier Island	5	B	2722294.48	6561097.62
Great Barrier Island	5	B	2722445.39	6561075.97
Great Barrier Island	5	C	2721947.01	6560712.15
Great Barrier Island	5	C	2721974.84	6560910.20
Great Barrier Island	5	C	2722169.71	6560865.21
Great Barrier Island	5	C	2722098.89	6560647.68
Great Barrier Island	5	D	2721417.47	6556247.76
Great Barrier Island	5	D	2721267.47	6556247.72
Great Barrier Island	5	D	2721267.43	6556447.72
Great Barrier Island	5	D	2721417.43	6556447.76
Great Barrier Island	5	E	2721447.13	6555586.68
Great Barrier Island	5	E	2721297.13	6555586.65
Great Barrier Island	5	E	2721297.09	6555786.65
Great Barrier Island	5	E	2721447.09	6555786.68
Great Barrier Island	5	F	2721454.53	6555295.53
Great Barrier Island	5	F	2721318.53	6555295.53
Great Barrier Island	5	F	2721347.60	6555363.33
Great Barrier Island	5	F	2721303.52	6555532.79
Great Barrier Island	5	F	2721453.52	6555532.79
Great Barrier Island	5	G	2721909.08	6554629.33
Great Barrier Island	5	G	2721909.08	6554779.33
Great Barrier Island	5	G	2722109.08	6554779.33
Great Barrier Island	5	G	2722109.08	6554629.33
Great Barrier Island	5	H	2718609.70	6554164.92
Great Barrier Island	5	H	2718684.70	6554294.83
Great Barrier Island	5	H	2718857.91	6554194.83
Great Barrier Island	5	H	2718782.91	6554064.92
Great Barrier Island	5	I	2718844.08	6554038.18

AMA Name	AMA Area	AMA Num	X Coord	Y Coord
Great Barrier Island	5	I	2718971.24	6554011.15
Great Barrier Island	5	I	2718923.25	6553785.39
Great Barrier Island	5	I	2718796.09	6553812.42
Waiheke Island	6	A	2691811.66	6486837.14
Waiheke Island	6	A	2691889.16	6486722.94
Waiheke Island	6	A	2691792.08	6486660.94
Waiheke Island	6	A	2691726.82	6486771.07
Waiheke Island	6	B	2693041.48	6486353.46
Waiheke Island	6	B	2693001.86	6486280.09
Waiheke Island	6	B	2692834.23	6486320.46
Waiheke Island	6	B	2692886.05	6486399.15
Waiheke Island	6	C	2693447.89	6486455.20
Waiheke Island	6	C	2693408.28	6486381.82
Waiheke Island	6	C	2693240.65	6486422.20
Waiheke Island	6	C	2693292.47	6486500.89
Waiheke Island	6	D	2697572.11	6482562.79
Waiheke Island	6	D	2697591.43	6482356.65
Waiheke Island	6	D	2697529.50	6482356.60
Waiheke Island	6	D	2697489.58	6482356.60
Waiheke Island	6	D	2697469.52	6482562.48
Waiheke Island	6	D	2697512.98	6482562.63
Waiheke Island	6	E	2698724.14	6483480.78
Waiheke Island	6	E	2698538.18	6483305.70
Waiheke Island	6	E	2698250.34	6483582.66
Waiheke Island	6	E	2698144.60	6483582.79
Waiheke Island	6	E	2698144.83	6483756.62
Waiheke Island	6	E	2698405.64	6483743.90
Waiheke Island	6	F	2700035.57	6482243.50
Waiheke Island	6	F	2699959.01	6482155.06
Waiheke Island	6	F	2699774.21	6482462.61
Waiheke Island	6	F	2699936.57	6482605.17
Waiheke Island	6	G	2704144.73	6486941.15
Waiheke Island	6	G	2704144.42	6486662.64
Waiheke Island	6	G	2704138.18	6486107.31
Waiheke Island	6	G	2703857.40	6486116.67
Waiheke Island	6	G	2703848.04	6486578.40
Waiheke Island	6	G	2703838.35	6486941.65
Wairoa Bay	7	A	2698642.47	6471530.00
Wairoa Bay	7	A	2698367.47	6471130.00
Wairoa Bay	7	A	2697487.68	6471303.28
Wairoa Bay	7	A	2697457.69	6471705.20
Wairoa Bay	7	A	2697814.61	6471733.19

NB: The coordinates in this schedule relating to existing marine farm boundaries (existing at the date this Variation was notified) are not completely accurate and should not solely be relied upon for determining the exact location of these existing marine farms. These points have been calculated at the scale of the maps provided in Map Series 1 of the Planning Maps. To obtain exact survey points readers should refer to the survey plan contained within the relevant marine farming lease or licence. Marine farming leases and licences are held by the Ministry of Fisheries.