

appendix g: coastal protection areas



COASTAL PROTECTION AREAS - from ARC Regional Plan Coastal (proposed)

CPA NUMBER	CPA NAME	DESCRIPTION
CPA 13a: j: k: l	West Coast (Muriwai to Karekare)	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, 13j) and sedimentary (13a, 13j-k) features within the rocks that make up the coast. On the basis of its geological value, this coast was selected by the Department of Conservation as an Area of Significant Conservation Value (ASCV). The rocky shores support a diverse range of marine algae and invertebrates and, under the influence of cool currents, show affinities with marine ecosystems to the south. From Te Henga to Piha is the only part of the region which bull kelp, a marine alga of cooler waters, is found in significant quantities. 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, 13k). 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.
CPA14	Whatipu	A large area of mobile dunes which is the best example of recent (mostly 1900 to 1930) coastal accretion 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 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 dunes, freshwater wetland vegetation in the damp depressions and around the lakes, flatlands at the base of the cliffs and forests on the cliffs themselves. Much of this vegetation is considered to be amongst the best on the Waitakere ecological district and much of it is habitat for a range of threatened plants. Secretive and threatened birds of the coastal fringe use the freshwater habitats, as do a variety of coastal bird species.
CPA 15a-b	Omanawanui	Because of the combination of strong, cool lateral currents and erosion-resistant rocks, this trench of coast 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).
CPA 16a-d	Huia to Cornwallis	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. 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.
CPA 17a-b	Big Muddy Creek	Within and surrounding this small estuarine inlet there are a variety of habitats with notable gradients and links between them. The lower intertidal flats support dense populations of soft shore fauna and Zostera beds. These grade into dense algal beds in the mid-tidal zone, which in turn grade into extensive mangrove areas on 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.
CPA 18	Little Muddy Creek	Similar to Big Muddy Creek, this small estuarine inlet contains a variety of intertidal habitats ranging from mudflats to rock 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.

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CPA 54	Whau River	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.
CPA 55a-d	Te Atatu - Henderson Creek	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 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 one of the two major roosts on the Waitemata Harbour and are also a breeding ground used by a range of coastal and wading birds, including a number of threatened species. 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 there is an important gradation between saline vegetation in the intertidal area and native towai forest on the slopes above. 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.
CPA 56	Hobsonville Peninsula Landslide	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 silt 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).
CPA 57	Herald Island to Lucas Creek	This area is the best example of 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 an abundance 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.