Appendix 1 - Plan Schedules

Regional Coastal Environment Plan

Third Schedule - Areas of Significant Conservation Value

SITE NAME:	**MAKETU/WAIHI ESTUARIES AND OKUREI POINT**	
SITE NUMBER:	**ASCV-7**	**MAP SHEET: 15, 16b, 17b**

In the mid part of the Maketu estuary there are extensive intertidal flats and channels which contain large cockle and pipi beds. Significant numbers of juvenile flounder, kahawai (*Arripis trutta*), yellow eye mullet (*Aldrichetta forsteri*), grey mullet and eels are found in the Maketu and Waihi estuaries.

The Kaituna River Mouth, Maketu/Little Waihi estuary complex meet the following Ramsar criteria for an internationally significant wetland.

1(c) It is a particularly good representative example of a common type of wetland.

2(a) It supports an appreciable assemblage of rare, vulnerable or endangered species or subspecies of plant or waterfowl and an appreciable number of individuals of any one or more of these species.

2(c) It is of special value as a habitat of plants or waterfowl at a critical stage of their biological cycle. In the case of international migrants – it is summering over. For other species it is during breeding.

3(c) Percentage of individuals of a population.

(a) Of the variable oystercatcher national population, 5.6%, i.e. 112 birds reside at the wetland.

(b) Of the New Zealand dotterel national population, 1.4%, i.e. 42 birds reside at the wetland.

Maketu and Little Waihi Estuary are important feeding and roosting areas for migratory birds and for waders. Forty-eight species of waders, wetland and shorebirds as well as migrant visitors are found in Maketu and Little Waihi Estuaries and Kaituna wetlands. The waterfowl include nine nationally vulnerable species, including the New Zealand dotterel (*Charadrius obscurus*) which breeds on Maketu Spit, caspian tern (*Hydroprogne caspia*), banded rail (*Rallus philippensis assimilis*) which breeds in the area, wrybill (*Anarhynchus frontalis*), Australasian bittern (*Botaurus stellaris poiciloptilus*), banded dotterel (*Charadrius bicinctus*), reef heron (*Egretta sacra*), white heron (*Egretta alba modesta*), royal spoonbill (*Platalea regia*) of which there are some dozen birds. Nationally rare species found in this area include the variable oystercatcher (*Haematopus unicolor*), Pacific golden plover, far eastern curlew, Asiatic whimbrel, sharp-tailed sand piper, curlew sandpiper, red necked stint, sanderling and eastern little tern and the regionally vulnerable North Island fernbird.

Maketu and Little Waihi Estuaries are important feeding areas for waders such as eastern bar-tailed godwit, pied stilt and variable oyster catcher, ruddy turnstone, red necked stint, whimbrel sp., golden plover, Mongolian dotterel, pectoral sandpiper and sharp-tailed sand piper. These birds arrive in September and depart in February – March. Of interest is the departure to Siberia and other northern latitudes when large numbers of birds arrive from further south to feed before continuing their migration north, and thus Maketu and Little Waihi are important staging posts for migration.

The entrances of Maketu and Little Waihi Estuaries are located on either side of the Okurei Point headland. This geomorphological phenomenon of converging littoral drift is the only example found in New Zealand. In addition, only one example is known from Australia, making the New Zealand example of international significance. DOC Ref: 04-010.

Seventh Schedule - Significant Indigenous Vegetation Areas

SITE NAME:	**KAITUNA SAND DUNES**	**MAP SHEET: 15**
RANKING:	**NATIONAL**	**SITE NO: SSL-32**

This site contains a relatively large population of *Austrofestuca littoralis*, a species classed as rare. This is the best population of *Austrofestuca littoralis* in the Bay of Plenty and is a representative example of sand dune communities in the region. *Desmoschoenus spiralis* (pingao), classed as local, also grows at this site.

SITE NAME:	**KAITUNA RIVER**	**MAP SHEET: 16a**
RANKING:	**DISTRICT**	**SITE NO: SSL-33, SSCMA-33**

This site contains one of the last small remnants of the Kawa swamp, a once large wetland covering much of the Maketu Plains. Some of the vegetation types present here are not well-represented at other sites in the ecological district.

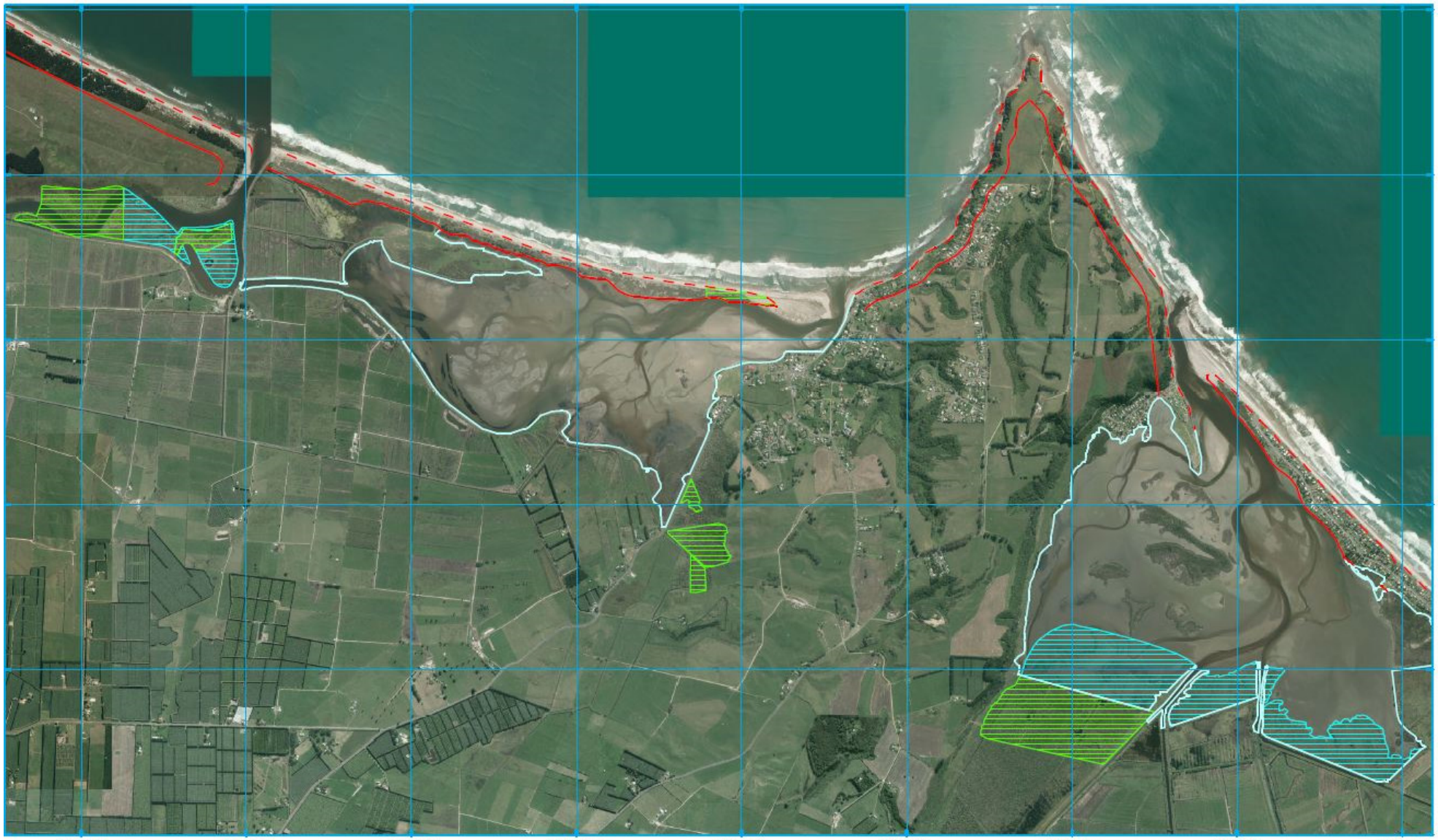
SITE NAME:	**MAKETU SPIT**	**MAP SHEET: 16a**
RANKING:	**DISTRICT**	**SITE NO: SSL-34**

This site contains a small population (five plants) of *Austrofestuca littoralis*, a species classed as rare.

Fourteenth Schedule - Areas of Significant Cultural Values

SITE NAME:	**MAKETU/WAIHI ESTUARIES AND OKUREI POINT**	
SITE NUMBER:	**ASCV-7**	**MAP SHEET: 15, 16b, 17b**

The Maketu Estuary is a regionally important tauranga waka (Arawa canoe final landing) and mahinga kai. The Maketu Estuary is of immense cultural and historical importance to Te Arawa ("mai Maketu ki Tongariro" – from Maketu to Tongariro). Numerous pa and 67 middens have been located on the land adjacent to the estuary. Okurei is also of very high spiritual significance to local Te Arawa.



HORIZONTAL DATUM: New Zealand Geodetic Datum 2000
For practical purposes, NZGD2000 equates to WGS84
VERTICAL DATUM: Mean Sea Level
PROJECTION: New Zealand Transverse Mercator 2000

© Bay of Plenty Regional Council, 2014
© Sourced from Land Information New Zealand data.
CROWN COPYRIGHT RESERVED

Bay of Plenty REGIONAL COUNCIL

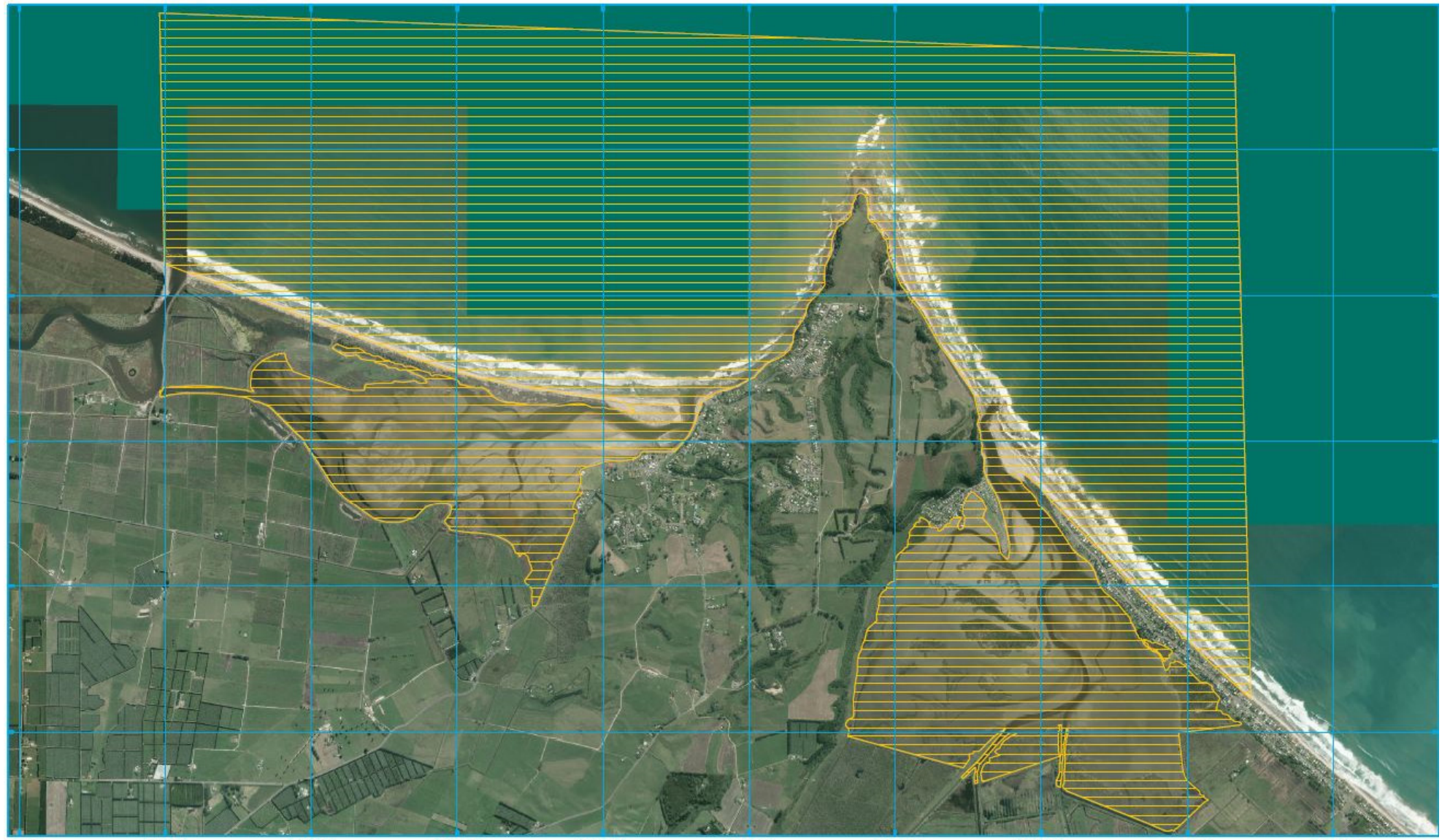
- Areas Sensitive to Coastal Hazards
- Harbour Line
- Toe of Foredune
- Site of Significance (On Land)
- Site of District or Local Significance (Coastal Marine Area)

Kaituna River Mouth with Coastal Plan Layers (Map16a)

0.55 0 0.55 1.1
Kilometres

Scale 1:30000

GIS-477025
Printed 5/05/2014



HORIZONTAL DATUM: New Zealand Geodetic Datum 2000
For practical purposes, NZGD2000 equates to WGS84
VERTICAL DATUM: Mean Sea Level
PROJECTION: New Zealand Transverse Mercator 2000

© Bay of Plenty Regional Council, 2014
© Sourced from Land Information New Zealand data.
CROWN COPYRIGHT RESERVED

Bay of Plenty REGIONAL COUNCIL

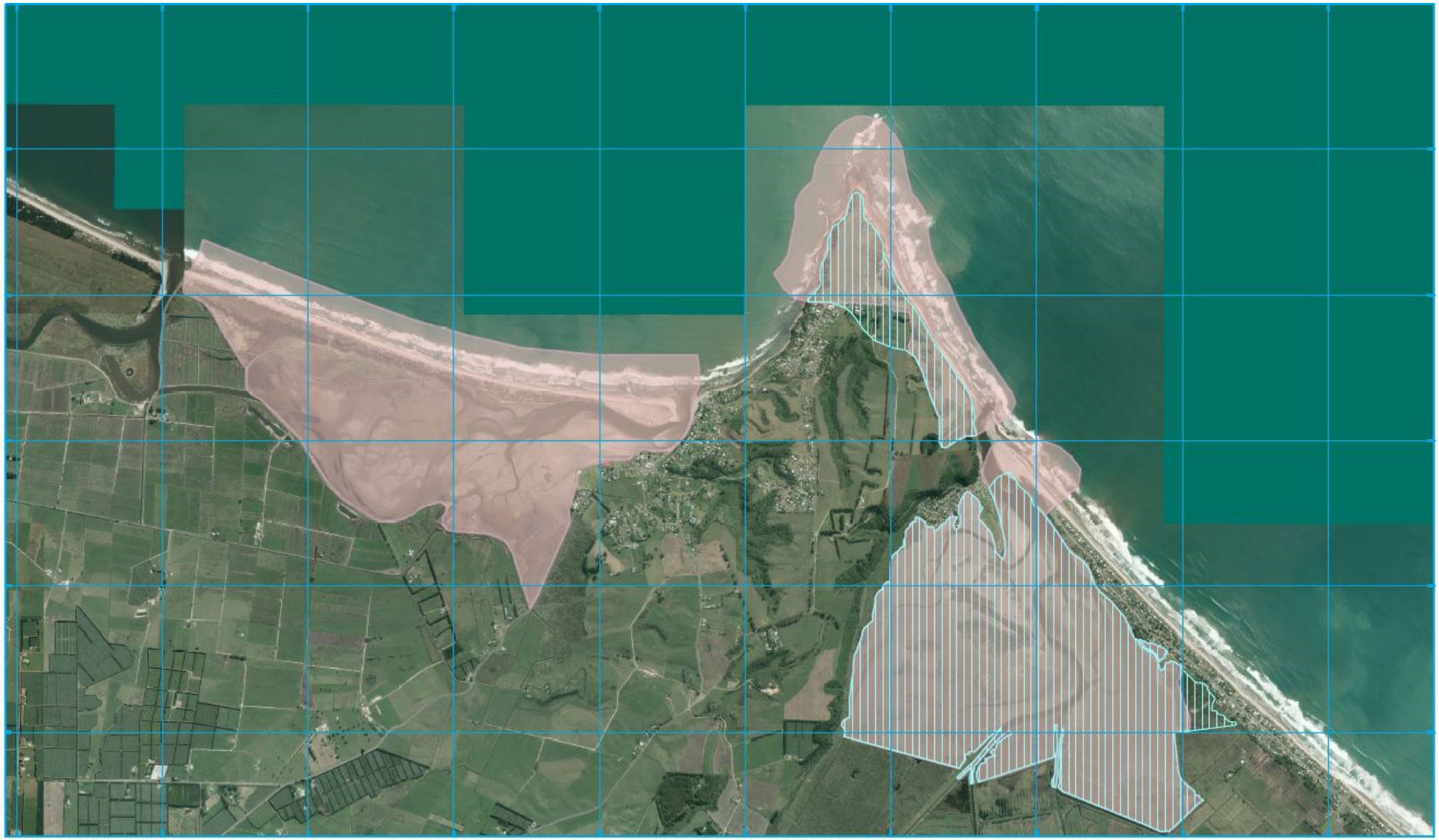
Area of Significant Conservation or Cultural Value (Coastal Marine Area)

0.6 0 0.6 1.2
Kilometres

Scale 1:34000

Kaituna River Mouth with Coastal Plan Layers (Map16b)

GIS-477025
Printed 5/05/2014



810000 2811000 2812000 2813000 2814000 2815000 2816000 2817000 2818000 2819000

HORIZONTAL DATUM: New Zealand Geodetic Datum 2000
For practical purposes, NZGD2000 equates to WGS84
VERTICAL DATUM: Mean Sea Level
PROJECTION: New Zealand Transverse Mercator 2000

© Bay of Plenty Regional Council, 2014
© Sourced from Land Information New Zealand data.
CROWN COPYRIGHT RESERVED

Bay of Plenty REGIONAL COUNCIL

Regionally Significant Feature and Landscape (1993)

Outstanding Landscape (Coastal) (2006)

Kaituna River Mouth with Coastal Plan Layers (Map16c)

0.6 0 0.6 1.2
Kilometres

Scale 1:34000

GIS-477025
Printed 6/05/2014

Western Bay of Plenty District Plan

Appendix 1: Schedule of Identified Significant Ecological Features

Site No	District Plan Map Ref	Name	Habitat
V14/1	H12; H13	Maketu Sandspit 1	Duneland Vegetation
V14/2	H12; H13; U152	Maketu Estuary	Saltmarsh and Wetlands
V14/3	H13	Arawa Wetlands	Willow forest and Freshwater wetland
V14/10	H13; U152	Maketu Sandspit 2	Spinifex sand field
SBS 5	H12	Ford Road	Bird Nesting and Roosting Site

Appendix 2: Schedule of Identified Outstanding Landscape Features

Natural Features and Landscapes

S19 - Maketu Estuary Landward Edge Protection Yard C.P.1

Includes the water body of the estuary up to MHWS and its landward edge 40m inland on land zoned Rural.

S24 - Open Coastal Landscape Landward Edge Protection Yard

The area identified contains all land adjoining the open coastline, zoned Rural and within 100m of MHWS.

Appendix 4: Schedule of Proposed Esplanade Reserves and Strips

1. An esplanade strip of 10m in width or 20m in width where topography dictates a wider strip is necessary to provide public access shall be set aside along the rivers and streams identified in the District Plan namely:

(xxxvi) the true right bank of the Kaituna River downstream from Maungarangi Road to the Kaituna River mouth;

				Main attributes (includes those that enhance and diminish natural character)				
Name	Amount of natural character	General description of area	Attributes that enhance natural character	Water	Land cover and land use	Terrestrial biotic	Abiotic systems and landform	Perceptual
Kaituna River (KR) Map 23	High	The Kaituna River mouth originally exited at the Maketu Harbour mouth and seawalls and retaining are present to manage erosion and water flow into the estuary, at the river cut. The Kaituna wetland is a remnant feature of the wider wetland that once extended immediately behind the dune environment in this area.	1. Kaituna wetlands vegetation cover and water body. 2. Flood plains and intertidal zone within the river corridor comprising remnant wetlands and spawning areas for native fish.	1. The water body of the Kaituna River has been managed within stop banks to manage the flood risk. Lower flood plains within the stop banks form part of the intertidal and flood plain environment.	1. The Kaituna River comprises a distinctive rear coastal wetland.	1. The Kaituna River wetlands have moderate diversity, are modified by weed infestations, and provide habitat for a range of indigenous wetland fish and bird species. 2. The flood plains and wetlands alongside the river provide spawning habitats for native fish species.	1. The Kaituna River and Maketu Estuary have been significantly modified and channelled.	1. Parts of the Kaituna River display highly natural processes and patterns, including intertidal zones and the Kaituna wetlands. 2. The natural floodplains remains visible and reflects the dynamic nature of the river system.
Maketu Estuary (ME) Map 23	High	The Maketu Estuary and dune sand spit are an example of an historic wetland and river system set behind a sandy coastal edge. Modification to the natural patterns and processes has occurred from the creation of a new river mouth for the Kaituna River, stopping the major flows of water into the Maketu Estuary.	1. Native saltmarsh and intertidal vegetation cover within the estuary. 2. Dune planting and natural processes occurring on the dune feature. 3. Extensive intertidal zone within the estuary within minimal modification.	1. Water outlet into the Estuary is highly modified, however, the vegetation patterns within the estuary are largely unmodified.	1. The dune system remains unmodified 2. Some maemae are located within the estuary.	1. The Maketu Estuary, spit, dunelands and saltmarshes have moderate to high diversity with regional significance, are modified by weed infestations, and provide habitat for a very high diversity of indigenous fauna species, notably wading birds.	1. The natural coastal processes are dominant for the coastal dune system. 2. The estuary has undergone modification to the intertidal zone from the Kaituna River cut modification.	1. Despite the modification to the water body the estuary and dune feature appear largely unmodified and highly natural. 2. The community support the restoration and management of this natural feature.