

Hawke's Bay Regional Coastal Environment Plan

Operative

8 November 2014





PART H – SCHEDULES

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Schedule A – Sustainable Land Use Capability

1.0 INTRODUCTION

- 1.0.1 One of the more challenging areas arising from the implementation of the RMA is the development and application of methods to monitor and encourage the sustainability of land use. The HBRC has adopted a 'minimum regulation' approach to land use. Such an approach relies upon the provision of information to land users to assist them in making land use decisions which lead toward sustainably managing the land resource.
- 1.0.2 As part of its land use management function the HBRC has undertaken a programme which looks at existing land use cover, identifies sustainable land uses, and then compares the two sets of information to see where they do not match. The areas of mismatch represent areas of the region where land is being used outside its level of sustainability. This Schedule presents this information in the following form:
- a map of existing land uses (as at 1996)
 - a map of sustainable land uses (derived from a Sustainable Land Use Index) and
 - a map identifying areas of mismatch between existing land uses and sustainable land uses.
- 1.0.3 Following this Introduction, this Schedule describes the purpose of the maps, and then sets out the methodology used to derive each of the maps.

2.0 PURPOSE

- 2.0.1 There are two key purposes for the type of information presented in the maps in this Schedule:
- (a) to track changes in sustainable land use that occur over time within the Region and
 - (b) to provide Council with guidance as to the areas that could be targeted for its land management programmes. If a person is using an area of land outside its suite of sustainable land uses, HBRC staff will provide them with advice (and possible assistance) on ways to change land use practices so that they fit with the physical limitations of the land.
- 2.0.2 The HBRC has a number of programmes covering farm plans, one-on-one advice, education programmes and financial grants/incentives that can assist appropriate activities to take place.
- 2.0.3 In using the information contained within this Schedule it is important to note the following:
- (a) that it is not the intention of the HBRC to use this as the basis for regulating what types of use a piece of land should be put to (rather it is targeted at the implementation of non-regulatory methods, as described in Part F of this Plan) and
 - (b) that the information is presented at a region-wide scale, not a scale suitable for farm-by-farm interpretation. A farm-based comparison of existing land uses with sustainable land use could only be achieved by inspecting the farm.

3.0 LAND COVER

- 3.0.1. The HBRC contracted Terralink to prepare a Land Cover Database of Hawke's Bay using SPOT satellite imagery. Eleven SPOT multi spectral scenes were required to cover the region and ranged in acquisition date from 1995 to 1997. There was a ground accuracy of $\pm 25m$ (with a 90% confidence limit).
- 3.0.2 The minimum mapping unit for the classification was 1 hectare. The Land Cover legend, set out below, resulted from discussions between Terralink and the HBRC to ensure that the classification was relevant to Hawke's Bay.

LEGEND : LAND COVER MAP USING SPOT IMAGES	
Primarily Horticulture	Dune Vegetation
Primarily Pastoral	Coastal Wetlands
Forestry planted >5 years	Inland Water
Forestry planted 2-5 years	Inland Wetlands
Clearfelled Forests	Bare Ground
Indigenous Forests	Recreational
Shrubland	Mine
Predominantly Tussock	Urban
Riparian Trees	Unclassified
Conservation Planting	Shelter Belt



4.0 SUSTAINABLE LAND USE INDEX

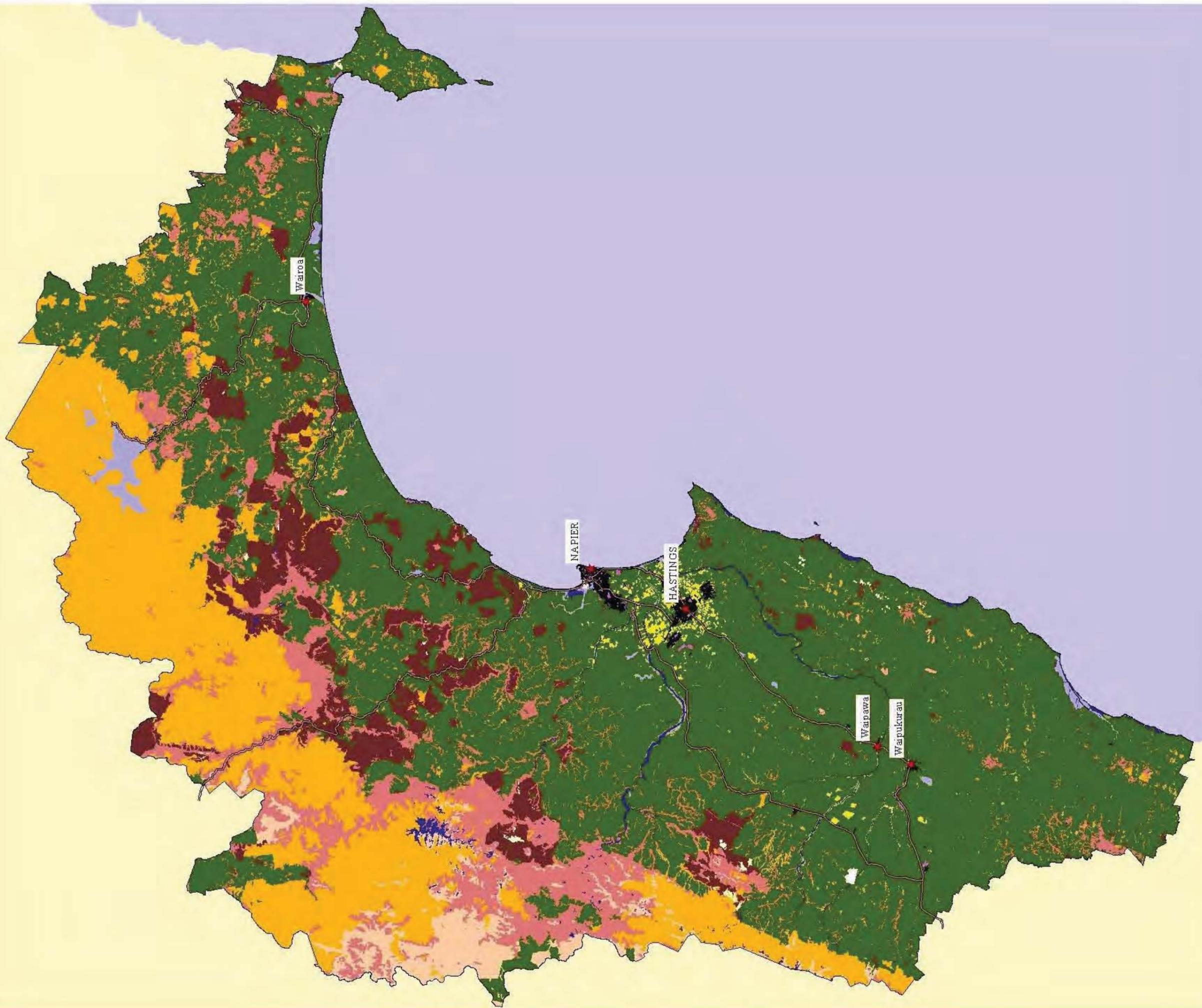
- 4.0.1 The Sustainable Land Use Index was derived by experienced land management staff of the HBRC interpreting the physical capability of the land and identifying a range of uses that each area of land was physically capable of being sustainably used for. The information is presented as a series of maps and forms part of this Schedule.
- 4.0.2 The interpretation was based on Land Resource Inventory Sheets, a national land resource survey carried out in the 1970s and 1980s which classified land according to its physical capabilities and limitations. A total of 117 different types of land (ie: 'Land Use Capability' units) were identified within the Hawke's Bay Region. These were grouped together into areas of land with similar physical limitations, which have the same potential uses and which require the same soil conservation measures. A range of seven physically sustainable land use groups was derived and are described in the table below:

RANGE OF PHYSICALLY SUSTAINABLE LAND USES						
HORTICULTURE	Cropping	Dairying	Pasture	Pasture & Trees	Forestry	Protection
	CROPPING	Dairying	Pasture	Pasture & Trees	Forestry	Protection
		DAIRYING	Pasture	Pasture & Trees	Forestry	Protection
			PASTURE	Pasture & Trees	Forestry	Protection
				PASTORAL FARMING WITH TREES	Forestry	Protection
					FORESTRY	Protection
						PROTECTION

- 4.03 The index is based on seven broad land uses which are representative of those relevant to Hawke's Bay. These are arranged in order of increasing versatility so that land assessed as having its highest level of sustainable use as protection planting had no other options, whereas horticultural land could also be used for cropping, dairying, pastoral farming, pastoral farming with trees or forestry uses. Each of the 117 Land Use Capability units was assigned to one of the seven sustainable land uses by the HBRC's Land Management team. Their assessment was based on the collective experience of the team members and followed discussion as to past experiences of different uses on that Land Use Capability unit.

5.0 IDENTIFICATION OF AREAS OF 'UNSUSTAINABLE' LAND USE

- 5.0.1 Using a GIS overlay analysis of the two sets of maps, areas where the current land use (interpreted from the land cover) is not within the sustainable land use level were identified and plotted. Each map was prepared at a scale of 1:300,000, which enabled a consistent regional presentation but did not encourage enlargement to farm scale.



LEGEND

-  Placenames
-  Railway
-  Main Highways
-  Primarily Horticulture
-  Primarily Pastoral
-  Planted Forests
-  Planted Forests
-  Clearfelled Forests
-  Indigenous Forests
-  Shrubland
-  Predominately Tussock
-  Riparian Trees
-  Conservation Planting
-  Dune Vegetation
-  Coastal Wetlands
-  Inland Water
-  Inland Wetlands
-  Bare Ground
-  Recreational
-  Mine
-  Urban
-  Unclassified



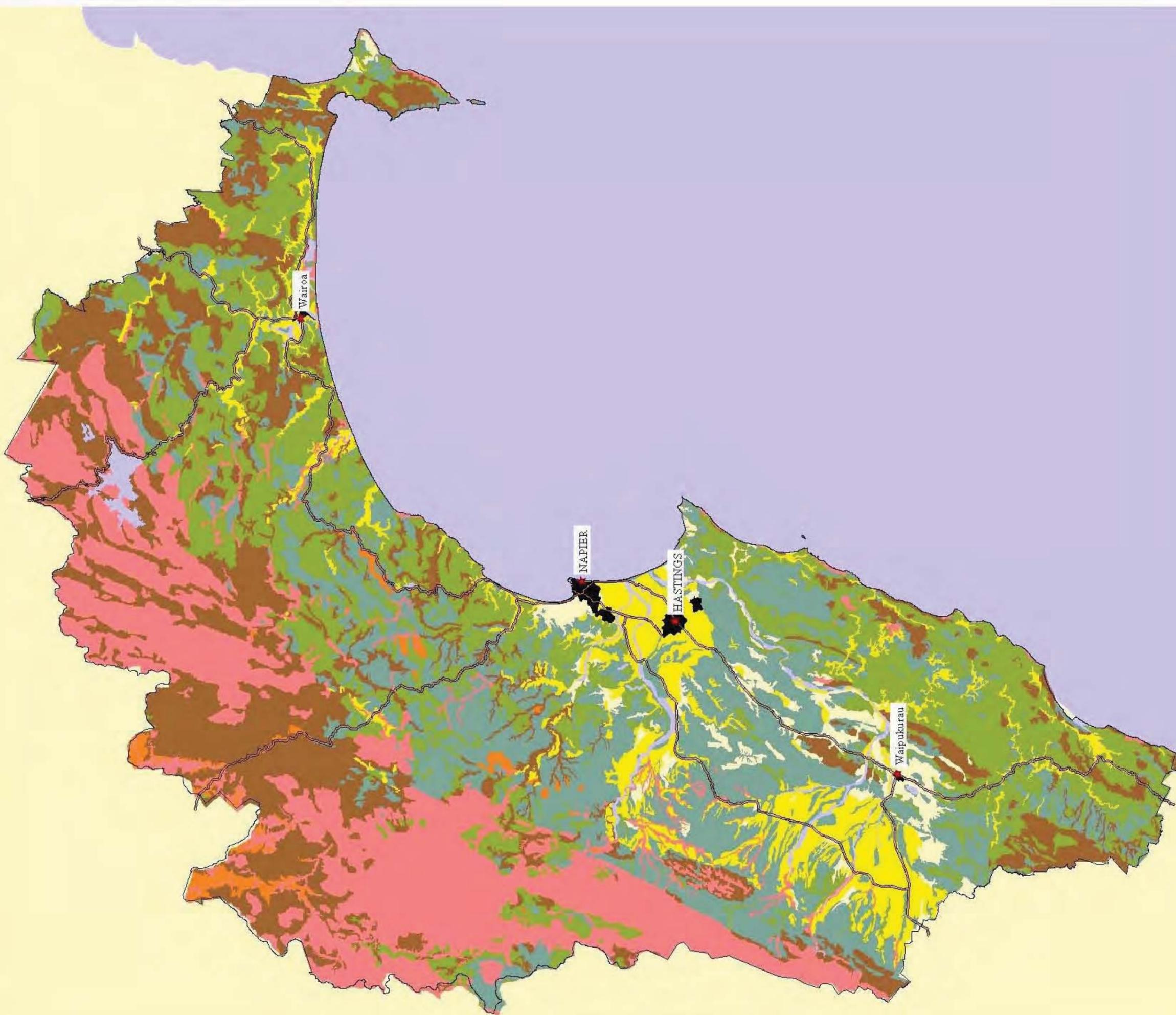
RELIABILITY: Land cover information is derived from mapping at 1:50,000 scale and should not be relied upon for measurements at scales larger than this.

DATA FROM: Land cover information obtained from Terralink New Zealand Ltd.

Cadastral Information and Digital Terrain Information obtained from Land Information New Zealand.
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Schedule A
Land Cover 1995 -1996



LEGEND

- ★ Placenames
- ⚡ Railway
- 🛣️ Main Highways
- 🛤️ Regional Roads
- 🟡 Cropping
- 🟠 Dairying
- 🟤 Forestry
- 🟢 Horticulture
- 🟦 Pastoral Farming
- 🟩 Pastoral Farming with Trees
- 🟪 Protection
- 🟠 Lakes and Rivers
- ⬛ Urban



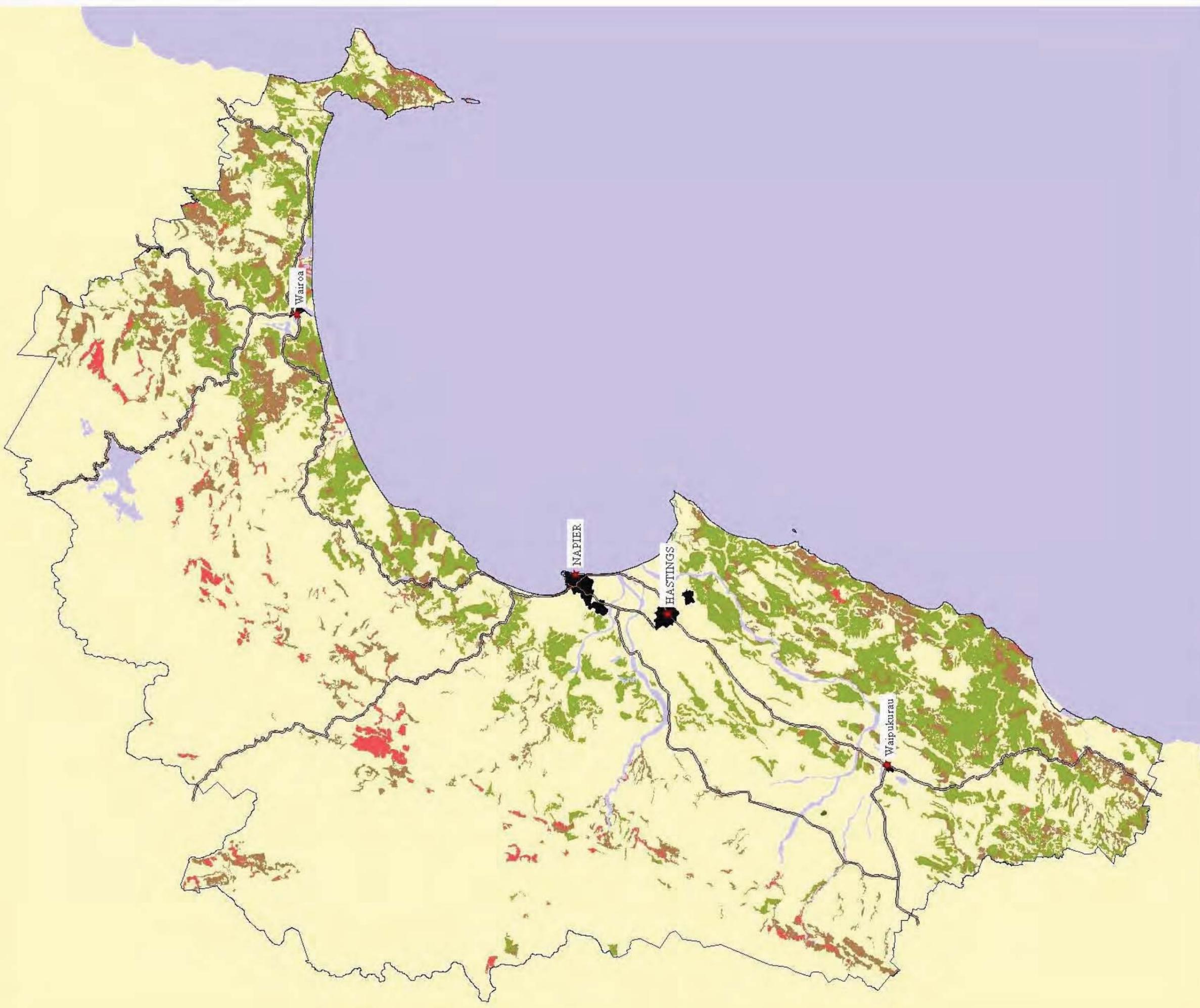
RELIABILITY: Sustainable land use information is derived from mapping at 1:63,360 scale and should not be relied upon for measurements at scales larger than this.

DATA FROM: Land Resource Inventory obtained from Landcare Research New Zealand Ltd, New Zealand Land Resource Inventory Computer Archive. Landcare Research New Zealand Ltd, Private Bag 11052, Palmerston North.

Cadastral Information and Digital Terrain Information obtained from Land Information New Zealand.
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Schedule A
Sustainable Land Use Capability



- LEGEND**
- ★ Placenames
 - ⚡ Railway
 - 🛣️ Main Highways
 - 🛤️ Regional Roads
 - 🌲 Forestry
 - 🌿 Pastoral Farming
 - 🌳 Pastoral Farming with Trees
 - 🛡️ Protection
 - 🌊 Lakes and Rivers
 - 🏙️ Urban



RELIABILITY: Sustainable land use information is derived from mapping at 1:63,360 scale and should not be relied upon for measurements at scales larger than this.

DATA FROM: Land Resource Inventory obtained from Landcare Research New Zealand Ltd, New Zealand Land Resource Inventory Computer Archive. Landcare Research New Zealand Ltd, Private Bag 11052, Palmerston North.

Cadastral Information and Digital Terrain Information obtained from Land Information New Zealand.
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Schedule A
Extent of Areas of
Unsustainable Land Use

Statutory Acknowledgements

These Statutory Acknowledgements do not form part of the Hawke's Bay Regional Policy Statement or regional plans. The Statutory Acknowledgements are appended to plans as directed by legislation.

PART 1

1 INTRODUCTION

- 1.1 Statutory acknowledgements have arisen from a number of Treaty of Waitangi Settlements around the country as part of cultural redress for Maori.
- 1.2 Statutory acknowledgements relate to specific areas of importance (known as statutory areas) to a claimant group¹ and affects processes under the Resource Management Act, including applications for resource consents and local authority responsibilities.
- 1.3 Part 2 of this document contains the statutory acknowledgements that wholly or in part cover statutory areas within Hawke's Bay.

2 WHAT ARE STATUTORY ACKNOWLEDGEMENTS?

- 2.1 A statutory acknowledgement is a formal recognition made by the Crown of a claimant groups particular cultural, spiritual, historical and traditional association with a specific area (statutory area) owned by the Crown.
- 2.2 Statutory acknowledgements may apply to land, rivers, lakes, wetlands, landscape features or a particular part of the coastal marine area. Where the statutory acknowledgment relates to a river, lake, wetland or coastal area, the acknowledgement only applies to that part of the bed in Crown ownership.

3 WHAT IS THE PURPOSE OF STATUTORY ACKNOWLEDGEMENTS?

- 3.1 The purpose of statutory acknowledgements is to ensure:
 - that a particular claimant group's association with a certain significant area(s) in Hawke's Bay is identified, and that the relevant claimant group is informed when a proposal may affect one of these areas.
 - consent authorities have regard to statutory acknowledgements when identifying affected parties in relation to resource consent applications.

4 WHAT ARE HBRC'S OBLIGATIONS FROM STATUTORY ACKNOWLEDGEMENTS?

- 4.1 The main obligations arising for the Hawke's Bay Regional Council from statutory acknowledgements are summarised below:
- 4.2 **Having regard to statutory acknowledgements**
- 4.3 When assessing resource consent applications for an activity that is located within, adjacent to, or impacting directly on a statutory area, the consent authority must:
 - have regard to² the statutory acknowledgement when forming an opinion as to whether relevant iwi is adversely affected by a resource consent application.
- 4.4 Decision making in relation to statutory acknowledgements is still subject to the provision of Part 2 of the RMA (i.e. the RMA's purpose and principles).
- 4.5 **Providing resource consent applications to relevant iwi**
- 4.6 A consent authority must forward summaries of resource consent applications, to relevant iwi, where activities will affect the area to which the statutory acknowledgement applies.
- 4.7 The summary of the application must be provided as soon as reasonably practicable after the application has been received, and before the consent authority decides whether or not to notify the application.
- 4.8 **Recording statutory acknowledgement in statutory plans**
- 4.9 Information recording statutory acknowledgements must be attached to the Hawke's Bay Regional Resource Management Plan and the Regional Coastal Environment Plan.
- 4.10 The attachment of information to plans is for information purposes only. The statutory acknowledgements in Part 2 of this document have not been formally adopted by the Regional Council, and does not form part of the Hawke's Bay Regional Policy Statement or regional plans.

5 USE OF STATUTORY ACKNOWLEDGEMENTS IN SUBMISSIONS

- 5.1 Claimant groups will be able to cite statutory acknowledgements in submissions to a consent authority, as evidence of their particular association with statutory areas. In this context, the statutory acknowledgement does not of itself provide the association for the purpose of consent proceedings but may be taken into account by decision makers.

¹ Claimant groups are usually iwi or large hapu (tribes and sub-tribes) that have a longstanding historical and cultural association with a particular area. Some very specific claims may result in agreements with smaller groups.

² The phrase 'have regard to' does not guarantee that iwi will be considered an affected party in terms of the relevant sections of the RMA. Consent authorities retain discretion to make their own decision, after having regard to the statutory acknowledgement.

PART 2

1 STATUTORY ACKNOWLEDGEMENTS WITHIN THE HAWKE'S BAY REGION

1.2 As at June 2014, Treaty of Waitangi settlement legislation, containing statutory acknowledgments, has been enacted for the following iwi within the Hawke's Bay region.

- Ngati Pahauwera
- Maungaharuru-Tangitu

1.3 The following table sets out the statutory acknowledgments for each iwi.

Iwi	Settlement date	Statutory Acknowledgments
Ngati Pahauwera	June 2012	1
Maungaharuru-Tangitu	May 2014	30

1.4 Information on each statutory acknowledgment, including maps showing the locations of the statutory acknowledgments for each iwi group are presented below.

Statutory Acknowledgement for Ngāti Pahauwera

1 Statutory Acknowledgement

1.1 In accordance with Section 72 of the Ngāti Pāhauwera Treaty Claim Settlement Act 2012, information regarding statutory acknowledgements is hereby attached to the Hawke's Bay Regional Resource Management Plan and Hawke's Bay Regional Coastal Environment Plan. This information includes the relevant provisions from the schedules to the Ngāti Pāhauwera Treaty Claim Settlement Act 2012 in full, the description of the Statutory Areas and the statement of association as recorded in the statutory acknowledgements.

2 Statutory Area

2.1 The area to which this statutory acknowledgement applies is part of the area known Earthquake Slip Marginal Strip, which is located in northern Hawke's Bay, as shown on the maps contained in Paragraph 8 below.

3 Preamble

3.1 Under Section 67 of the Ngāti Pāhauwera Treaty Claim Settlement Act 2012, the Crown acknowledges Ngāti Pāhauwera's statement of cultural, spiritual, historical and cultural association with the relevant part of the Earthquake Slip Marginal Strip.

4 Statement of Association

4.1 Tiwhanui (Earthquake Slip) is an important area as a mahinga kai (food gathering area) for whānau or community events such as hakari at the marae, which enables Ngāti Pāhauwera to continue their cultural practices related to mahinga kai.

4.2 Tiwhanui is part of the region along this coast which is known as Taihinu (Bountiful tide), and has long been recognised as an important mahinga kai area. A whakataūāki by tīpuna Tūkapuarangi expresses the bountiful nature of this area:

Whānatu! Hoki mai ki te Waikari

Ki te riu ki te tai

Pātoto i te ata Pātoto i te po

Go! But return to the valley to the sound of fish coming in both day and night

4.3 Tiwhanui has been a recognisable feature of this region at least since the time that commercial whaling began in the Hawke's Bay, as whalers including Ngāti Pāhauwera, camped in this area during whaling expeditions. Matangi moemoea, the high point behind the slip, was used by whalers as a lookout point.

4.4 Ngāti Pāhauwera have always gathered kai in this area including pāua, kina, kōura (crayfish), karengo, pipi, mussels and, up the Waikari River, flounder, mullet, whitebait, herrings, smelts and kēwai freshwater crayfish. The particular mahinga kai sites are to the south of Tiwhanui, where there are bays for diving, and sites which are obviously suited to camping with available freshwater sources. Ngāti Pāhauwera ancestors traversed the whole of Tiwhanui to reach these sites, utilising caves along the stretch of coast, and there are pa sites to the south of Tiwhanui. They walked along the coast from the mouth of the Mohaka River, fording the Waikari River at high tide to reach the mahinga kai. With the arrival of horses, they would take a number of horses and send the horses back home alone with kai for whānau at home to prepare and dry as appropriate.

4.5 Tiwhanui was also a shelter from the tide, as the rest of the coast in this area is cliffs, and the slip provided the only place of safety at high tide. The distance from home and the tide meant that most expeditions were for a few nights, and Ngāti Pāhauwera ancestors could camp on the slip area as there was also freshwater sources here.

4.6 Ngāti Pāhauwera continue to use Tiwhanui as their ancestors did, using motorbikes instead of horses in some cases. Ngāti Pāhauwera continue to stay overnight to shelter from the tide, and to make the most of the time spent travelling from home. As it is not possible to launch a boat from the mouth of the Mohaka River, Tiwhanui is the only place where Ngāti Pāhauwera can gather some of the kai which is important to them.

5 Purposes of Statutory Acknowledgement

5.1 Pursuant to Section 68 of the Ngāti Pāhauwera Treaty Claim Settlement Act 2012, and without limiting the rest of this schedule, the only purposes of this statutory acknowledgement are:

- (a) to require the relevant consent authorities, the Environment Court and the Historic Places Trust to have regard to the statutory acknowledgement, as provided for in Sections 69 to 71;
- (b) to require the relevant consent authorities to forward summaries of resource consent applications, or copies of notices of resource consent applications, to the trustees of the Ngāti Pāhauwera Development Trust, as provided for in Section 73;
- (c) to enable the trustees of the Ngāti Pāhauwera Development Trust and any member of Ngāti Pāhauwera to cite the statutory acknowledgement as evidence of the association of Ngāti Pāhauwera with the relevant part of the Earthquake Slip Marginal Strip, as provided for in Section 74.

6 Limitations of Effects of Statutory Acknowledgement

6.1 Except as expressly provided in Subpart 6 of Part 2

- (a) this statutory acknowledgement does not affect, and may not be taken into account by, a person exercising a power or performing a function or duty under legislation or a bylaw; and
- (b) no person, in considering a matter or making a decision or recommendation under legislation or a bylaw, may give greater or lesser weight to the association of Ngāti Pāhauwera with the relevant part of the Earthquake Slip Marginal Strip (as described in the statement of association) than that person would give under the relevant legislation or bylaw if no statutory acknowledgement existed in respect of the relevant part of the Earthquake Slip Marginal Strip.

6.2 Except as expressly provided in Subpart 6 of Part 2, the statutory acknowledgement does not affect the lawful rights or interests of any person who is not a party to the deed of settlement.

6.3 Except as expressly provided in Subpart 6 of Part 2, the statutory acknowledgement does not have the effect of granting, creating, or providing evidence of an estate or interest in, or rights relating to, the relevant part of the Earthquake Slip Marginal Strip.

7. Relevant sections of the Ngāti Pāhauwera Treaty Claim Settlement Act 2012

67 Statutory acknowledgement by the Crown

The Crown acknowledges the statement of association.

68 Purposes of statutory acknowledgement

(1) *The only purposes of the statutory acknowledgement are to—*

- (a) *require relevant consent authorities, the Environment Court, and the Historic Places Trust to have regard to the statutory acknowledgement, as provided for in sections 69 to 71; and*
- (b) *require relevant consent authorities to forward summaries of resource consent applications, or copies of notices of resource consent applications, to the trustees of the Ngāti Pāhauwera Development Trust, as provided for in section 73; and*
- (c) *enable the trustees of the Ngāti Pāhauwera Development Trust and any member of Ngāti Pāhauwera to cite the statutory acknowledgement as evidence of the association of Ngāti Pāhauwera with the relevant part of the Earthquake Slip Marginal Strip, as provided for in section 74.*

(2) *This section does not limit sections 76 to 78.*

69 Relevant consent authorities to have regard to statutory acknowledgement

(1) *On and from the effective date, a relevant consent authority must have regard to the statutory acknowledgement in deciding, under section 95E of the Resource Management Act 1991, whether the trustees of the Ngāti Pāhauwera Development Trust are affected persons in relation to an activity within, adjacent to, or directly affecting the relevant part of the Earthquake Slip Marginal Strip and for which an application for a resource consent has been made.*

(2) *Subsection (1) does not limit the obligations of a relevant consent authority under the Resource Management Act 1991.*

70 Environment Court to have regard to statutory acknowledgement

(1) *On and from the effective date, the Environment Court must have regard to the statutory acknowledgement for the relevant part of the Earthquake Slip Marginal Strip in deciding, under section 274 of the Resource Management Act 1991, whether the trustees of the Ngāti Pāhauwera Development Trust are persons who have an interest in proceedings that is greater than the interest that the general public has in respect of an application for a resource consent for activities within, adjacent to, or directly affecting the relevant part of the Earthquake Slip Marginal Strip.*

(2) *Subsection (1) does not limit the obligations of the Environment Court under the Resource Management Act 1991.*

71 Historic Places Trust and Environment Court to have regard to statutory acknowledgement

(1) *This section applies if, on and after the effective date, an application is made under section 11 or 12 of the Historic Places Act 1993 for an authority to destroy, damage, or modify an archaeological site within the relevant part of the Earthquake Slip Marginal Strip.*

(2) *The Historic Places Trust must have regard to the statutory acknowledgement in exercising its powers under section 14 of the Historic Places Act 1993 in relation to the application made under subsection (1), including in determining whether the trustees of the Ngāti Pāhauwera Development Trust are persons directly affected by an extension of time.*

(3) *The Environment Court must have regard to the statutory acknowledgement in determining under section 20 of the Historic Places Act 1993 any appeal from a decision of the Historic Places Trust in relation to the application made under subsection (1), including in determining whether the trustees of the Ngāti Pāhauwera Development Trust are persons directly affected by the decision.*

(4) *In this section, archaeological site has the same meaning as in section 2 of the Historic Places Act 1993.*

8. Statutory Area: Relevant Part of the Earthquake Strip Marginal Strip



Statutory Acknowledgement for Maungaharuru-Tangitū

1. Statutory Acknowledgement

- 1.1 In accordance with Section 43 of the Maungaharuru-Tangitū Hapū Claims Settlement Act 2014 information regarding statutory acknowledgements is hereby attached to the Hawke's Bay Regional Resource Management Plan and Hawke's Bay Regional Coastal Environment Plan. This information includes the relevant provisions from the schedules to the Maungaharuru-Tangitū Hapū Claims Settlement Act 2014 in full, the description of the Statutory Areas and the statement of association as recorded in the statutory acknowledgements.

2. Statutory Areas

- 2.1. The areas to which this statutory acknowledgement applies are (alphabetically):

ID	Area/Feature	Deed of Settlement Map Reference	RRMP Map Reference
20, 29	Anaura Stream and its tributaries	As shown on OTS-201-32	Map E
24, 24	Aropaoanui River and its tributaries	As shown on OTS-201-33	Map E
7	Balance of the Opouahi Scenic Reserve	As shown on OTS-201-31	Map A
18	Balance of the Tutira Domain Recreation Reserve	As shown on OTS-201-30	Map B
8	Bellbird Bush Scenic Reserve	As shown on OTS-201-47	Map A
9	Boundary Stream Scenic Reserve	As shown on OTS-201-46	Map A
11, 16	Earthquake Slip Marginal Strip	As shown on OTS-201-20	Map D
5	Esk Kiwi Sanctuary Area	As shown on OTS-201-22	Map B
20, 21	Esk River and its tributaries	As shown on OTS-201-34	Map E
10	Hapū Coastal Marine Area	As shown on OTS-201-40	Map C
20, 26	Mahiaruhe Stream and its tributaries	As shown on OTS-201-35	Map E
14	Mangapukahu Scenic Reserve	As shown on OTS-201-25	Map B
11, 15	Moeangiāngi Marginal Strip	As shown on OTS-201-21	Map D
20, 27	Moeangiāngi River and its tributaries	As shown on OTS-201-39	Map E
20, 22	Pākuratahi Stream and its tributaries	As shown on OTS-201-45	Map E
4	Peaks of Maungaharuru Range	As shown on OTS-201-29	Map A
10	Rocks and Reefs	As shown on OTS-201-41	Map C
20, 25	Sandy Creek and its tributaries	As shown on OTS-201-43	Map E
19	Tangoio Falls Scenic Reserve	As shown on OTS-201-23	Map B
11	Tangoio Marginal Strip	As shown on OTS-201-49	Map B
17	Te Kuta Recreation Reserve	As shown on OTS-201-26	Map D
20, 23	Te Ngarue Stream and its tributaries	As shown on OTS-201-36	Map E
20, 28	Waikari River and its tributaries	As shown on OTS-201-37	Map E
6	Waikoau Conservation Area	As shown on OTS-201-28	Map A
20, 24	Waikoau River and its tributaries	As shown on OTS-201-38	Map E
11	Waipatiki Beach Marginal Strip	As shown on OTS-201-50	Map D
13	Waipatiki Scenic Reserve	As shown on OTS-201-27	Map D
20, 30	Waitaha Stream and its tributaries	As shown on OTS-201-44	Map E
11, 12	Whakaari Landing Place Reserve	As shown on OTS-201-48	Map B
19	White Pine Bush Scenic Reserve	As shown on OTS-201-24	Map B

3. Preamble

- 3.1. Under Section 38 of the Maungaharuru-Tangitū Hapū Claims Settlement Act 2014, the Crown acknowledges Maungaharuru-Tangitū Hapū's statement of cultural, spiritual, historical and cultural association with the following:

4. Peaks of Maungaharuru Range (as shown on OTS-201-29 & HBRC Map A)

4.1. For the Hapū, the peaks of Maungaharuru (the Maungaharuru Range) and environs are integral to the distinct identity and mana of the Hapū. They are some of the most sacred and important physical landmarks within the takiwā (traditional area) of the Hapū.

4.2. *Spiritual importance*

Maungaharuru is the iconic, most sacred and spiritual maunga (mountain) of the Hapū. Maungaharuru has a mauri (life force) of its own. This mauri binds the spiritual world with the physical world. All elements of the natural world have mauri and it is this mauri that connects the Hapū with Maungaharuru. Mauri is therefore the basis of the spiritual relationship of the Hapū with Maungaharuru.

4.3. The Hapū regard all natural resources as being gifts from ngā atua kaitiaki (spiritual guardians), including the ngahere (forest) upon Maungaharuru. Tāne-nui-a-rangi is the spiritual guardian of the ngahere and all that lives within the ngahere. Tāne-nui-a-rangi is the son of Papa-tū-ā-nuku (Earth Mother) and Rangi-nui (Sky Father), from whom all living things descend, including the Hapū. Descendants of Tāne-nui-a-rangi include the manu (birds) and trees (rākau) within the ngahere. Therefore, both the descendants of Tāne-nui-a-rangi and the descendants of the Hapū are connected by whakapapa (genealogy). Tāne-nui-a-rangi was central to the lives of Hapū tīpuna (ancestors) and remains significant to the Hapū whānau (families) living today.

4.4. Hapū kaumātua (elders) and kaikōrero (speakers) acknowledge the “tīhi tapu o Maungaharuru” -“the sacred peaks of the maunga”. The paramount status of Maungaharuru is recognised by the Hapū in their mihi (greetings), whaikōrero (formal speeches), whakairo (carvings), kōwhaiwhai (painted panels) and tukutuku (woven panels) on their marae, whakatauaāki (tribal proverbs), kōrero tuku iho (Hapū history) and waiata (songs).

4.5. *Cultural importance - Whakatauaāki*

Ka tuwhera a Maungaharuru, ka kati a Tangitū,
Ka tuwhera a Tangitū, ka kati a Maungaharuru.
When the season of Maungaharuru opens, the season of Tangitū closes,
When the season of Tangitū opens, the season of Maungaharuru closes.

4.6. According to kōrero tuku iho, this whakatauaāki:

- describes the takiwā of the Hapū – from Maungaharuru in the west, to Tangitū (the sea) in the east; and
- it proclaims ahi-kā-roa (long occupation) of the Hapū and the inherited right as tāngata whenua to exercise mana whenua and mana moana.

4.7. The relationship the Hapū have with Maungaharuru is culturally significant and provides whānau with a strong sense of place and belonging to the takiwā. It is still customary practice for Hapū members to recite this whakatauaāki to identify where they come from and the relationship that connects them to the natural world.

4.8. Hapū kaumātua also emphasise the connectedness of Maungaharuru with Tangitū. The waters flowing from the maunga feed the rivers, lakes, wetlands and sea - the realm of Tangaroa-i-te-Rupetu (the spiritual guardian of the sea and other water bodies and all that lives within them).

4.9. The whakatauaāki also describes the mahinga kai (places for gathering food) of the Hapū. The ngahere on Maungaharuru was the source of food for the Hapū in the winter. Tangitū was, and remains, the source of food in the summer. While the Hapū collected food on a seasonal basis, they were blessed in that they did not need to leave their takiwā in search of food. Hence another Hapū whakatauaāki “ko tō rātau pā kai ngā rekereke”, “their fortified villages were in their heels”.

4.10. In the past, Maungaharuru was bountiful. From the domain of Tāne-nui-a-rangi, the Hapū sourced their kai (food). They gathered aruhe (fern root), pikopiko (young fern shoots), the raurau (leaves) of the tī kōuka (cabbage tree), berries and huhu (edible grubs) and caught manu. Rongoā (medicinal plants), bark, fern fronds and timber for building materials, flowers for pigments, leaves and seeds for oils, paru (special mud) for dyes and other resources were also gathered.

4.11. Maungaharuru was also integral to the economy of the Hapū – kai and resources gathered from the maunga were often traded with their neighbours.

4.12. This whakatauaāki also implies that the manuhiri (visitors) of the Hapū will be served kai from Maungaharuru and Tangitū. The ability to offer the range and quality of kai the Hapū had from their takiwā enhanced their mana.

4.13. In addition, the gathering of kai and resources has the reciprocal obligation of the Hapū to act as kaitiaki (guardians). The Hapū had tohu (signs) and tikanga (customs) which dictated the appropriate time and practices for gathering food and resources from Maungaharuru. Mātauranga (knowledge) associated with the collection of resources was central to the lives of the Hapū and remains a significant part of the cultural identity of the Hapū today. Mātauranga and associated tikanga, karakia (prayers) and kawa (rules) are all essential for maintaining customary traditions -the ritual and tapu (sacredness) associated with gathering and utilising resources.

4.14. *Kōrero tuku iho – historical importance.*

Others sometimes refer to different parts of the maunga using different names, namely from south to north: Te Waka, Tītī-a-Okura (this is the name known to the Hapū, Titiokura is the official name), Maungaharuru and Te Heru-a-Tureia. However, when the Hapū speak of Maungaharuru, they are referring to the maunga in its entirety.

4.15. The Hapū have a rich history relating to Maungaharuru. To this day, the North Island of New Zealand is known as Te Ika-a-Māui (Māui's fish). Hapū tradition tells that when Māui-tikitiki-a-Taranga pulled up the fish, the waka (canoe) that Māui and his whānau were on became stranded on top of the mighty fish. At the time, Māui warned his Uncle, Ngārāngikataka, and others not to touch or cut up the fish. But they did not listen. They began to cut up the fish, creating the peaks and valleys that are seen today. Māui was angry, and turned his Uncle and the waka to stone. Others tried to escape to the sea, towards Tangoio, but they too were turned to stone. Today they are in the form of Panepaoa, a small hill located just south of the Pākuratahi (formerly Pakuratahi) Stream and nearby Ngāmoerangi, located on the Tangitū coastline. Te Waka-o-Ngārāngikataka (Ngārāngikataka's canoe) can also be seen, high on the ridgeline of Maungaharuru.

4.16. Oral tradition recounts the migration of the waka Tākitimu southwards, and a tohunga (high priest) of the waka, Tūpai, who cast the staff Papauma high into the air. Papauma took flight and landed on the maunga at the summit of Tītī-a-Okura, at a place called Tauwhare Papauma.

- 4.17. Papauma embodied the mauri of birdlife. The maunga rumbled and roared on receiving this most sacred of taonga (treasures), and the maunga was proliferated with birdlife. Hence the name, Maungaharuru (the mountain that rumbled and roared). It is also said that the mountain roared every morning and evening as the many birds took flight and returned again to the maunga.
- 4.18. Significant pā (fortified villages) are located on Maungaharuru and attest to the occupation of the Hapū over the generations. Towards the southern part of the maunga, pā were occupied by Ngāi Taura and Ngāti Marangatūhetaua (Ngāti Tū), on the central part of the maunga, Ngāti Kurumōkihi, and towards the northern part of the maunga, Ngāi Tahu.
- 4.19. Ngāti Tū occupied Te Pōhue pā at the head of Lake Te Pōhue, and the nearby kāinga (villages) of Kaitahi and Whāngai Takapu.
- 4.20. Several pā relate to Ngāi Taura and its eponymous ancestor, Taura and his wife, Mateawha. Pirinoa pā is situated at the tauihu (prow) of Te Waka-o-Ngārangikataka. Taurua-o-Ngarengare pā is located at the south end of Te Waka part of the Maungaharuru range and is named after one of their sons. Tauwhare Papauma, referred to earlier, became a pā of Taura.
- 4.21. The story of Mateawha also relates to an important wāhi tapu (sacred place) on the maunga. Mateawha was one of the Tūrehu people – she was not human and her people abided by certain rules. One day Taura and Mateawha had visitors, and sadly, Taura forgot himself. He told his wife to carry out work that caused her to violate the rules of her people. The effect was to 'whakanoa te tapu i runga i a ia' - 'to nullify the sacredness of Mateawha'. The implication was that Mateawha was unable to return to her own Tūrehu people and became alienated from them. She was so distraught at the situation, that she took her own life by throwing herself off the cliff face. She hit the side of the rock and fell down into what is known today as Hell's Hole. The stain of her blood was left and since that time, whenever that stain congeals, the Hapū recognise it as an aituā – a bad omen. The site is referred to as Te Pari-o-Mateawha – Mateawha's cliff.
- 4.22. Maungaharuru, and in particular its ridges towards the southern end of the range, are known as "te mauri o te māra o Taura" – "the garden over which the life force of Taura still remains". The maunga was a source of sustenance for Taura and his descendants over many generations.
- 4.23. Tītī-a-Okura is the pass where tītī (muttonbirds) flew over Maungaharuru. Te Mapu and his son Te Okura caught tītī there using a net attached between two poles held high by them in front of a fire. Hence the name, Tītī-a-Okura – the mutton birds of Okura. Another feature is Te Waka-a-Te-O – The canoe of Te O. This rock is located on Tītī-a-Okura and commemorates Te Okura, also known as "Te O".
- 4.24. Several significant wāhi tapu are positioned on Maungaharuru. Ahu-o-te-Atua (formerly named Ahuateatua) - the sacred mound of the Gods, is situated at the north eastern end of Maungaharuru. Oral tradition describes Ahu-o-te-Atua as an altar where tohunga gathered to carry out their spiritual ceremonies. A tarn (mountain lake), one of two located on the eastern side of Te Waka-o-Ngārangikataka, is known to have unusual colouration due to the paitini (toxic) nature of the water.
- 4.25. Tarapōnui-a-Kawhea (as it is known to the Hapū, the official name is Taraponui) – the high peak of Kawhea enveloped with cloud, is the northern most and highest peak on Maungaharuru and is therefore very sacred. The name is ancient and dates from the excursions of Kurupoto and his son Kawhea into the area. Tarapōnui-a-Kawhea was once the regular track for the Hapū from Tūtira to Te Haroto through Waitara.
- 4.26. Oral tradition provides that Tāne-nui-a-rangi and his ngahere provided a korowai (cloak) for Papatū-ā-nuku (his mother). Accordingly, prior to the clearing of native forests and pastoralism, Maungaharuru was home to a wide range of animal and plant species which were, and remain, of great significance to the Hapū. Today, there is a significantly reduced area of native forest.
- 4.27. The remnant and regenerating areas of native forest on Maungaharuru include tawa, tītiki, rewarewa (New Zealand honeysuckle), kāmahī, kānuka (white tea-tree), tawhairaunui (red beech) and tawhairauriki (black beech) and mānuka (tea tree). The nationally significant ngutu-kākā (kakabeak) is also found on Maungaharuru.
- 4.28. The ngahere provided the ideal habitat for a large number of manu including tītī (muttonbird), kiwi, kārearea (native falcon), kākā (native parrot), kererū (native pigeon) and tūī (parson bird). Many of these taonga were harvested for a range of uses, including kai, rongoā, clothing (including feathers for decorating garments and personal adornments), building materials, trade and gifting.
- 4.29. The Hapū have cultural, spiritual, traditional and historic associations with Maungaharuru and its environs, its waters, associated land and flora and fauna. The Hapū have a responsibility as kaitiaki in accordance with their kawa and tikanga to restore, protect and manage all those natural and historic resources and sites. This relationship is as important to present day whānau as it was to their tīpuna. The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with the peaks of Maungaharuru.

5. Esk Kiwi Sanctuary Area (as shown on OTS-201-22 & HBRC Map B)

- 5.1. The Esk Kiwi Sanctuary Area (the Reserve), is located near Te Pōhue at the south eastern end of the Maungaharuru Range (Maungaharuru). The importance of the Reserve is due to its location within the traditional area of Ngāti Marangatūhetaua (Ngāti Tū) and Ngāi Taura and near their pā (fortified villages), kāinga (villages), wāhi tapu (sacred places), mahinga kai (places for gathering food) and other significant sites. The following statement of association is relevant to the Reserve.
- Peaks of Maungaharuru Range.
- 5.2. Te Pōhue was a large pā, located at the head of Te Pōhue Lake and in the shadow of the maunga (mountain). The summit of the pā, formerly encircled by large tōtara fortifications, had commanding views of the surrounding countryside. From there, Ngāti Tū could survey the surrounding lands including the Reserve. Also nearby were the Ngāti Tū kāinga, Kaitahi and Whāngai Takapu. The significance of this area is also demonstrated by the placement of pou(posts) which were named after key tīpuna including Tūkapua, after the eponymous ancestor Tūkapua I for Ngāti Tū and Kaitahi, a key tīpuna for Ngāi Taura.
- 5.3. Te Pōhue area, including the Reserve, has always been part of the arterial route from the coast to the interior, in traditional times with the proliferation of walking tracks, as well as in recent times with the old Taupo Coach Road and today with State Highway 5. In the past, the key walking tracks through this area saw the seasonal passage of the Hapū in the summer to Tangitū and in the winter to Maungaharuru. For this reason, this area has constantly been a significant, strategic location, and the Hapū defended their interests in this land over many generations.
- 5.4. The Reserve is important as it is one of the few areas of remnant and regenerating native forest. It is home to stands of large kānuka (white tea-tree), māhoe (whiteywood), mamaku (black tree fern), and rewarewa (New Zealand honeysuckle), an important rongoā (medicinal plant). Many manu (birds) are found there including kiwi, ruru (morepork), tīwaiwaka (fantail), kererū (native pigeon), mātātā (fernbird), riroriro (grey warbler), kōtare (kingfisher), korimako (bellbird), miromiro (tomtit), pihipihī (silveryeye) and tūī (parson bird). The Hapū caught manu for various reasons, including for kai (food) and preserving for trade or gifting with neighbouring iwi. Their feathers were used by the Hapū for decorating clothing and personal adornment.

5.5. The Hapū have cultural, spiritual, traditional and historic associations with the Reserve and its environs, its waters, associated land and flora and fauna. The Hapū have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all those natural and historic resources and sites. This relationship is as important to present day whānau (families) as it was to their tīpuna (ancestors). The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with Maungaharuru, including the Reserve and associated resources.

6. Waikoau Conservation Area (as shown on OTS-201-28 & HBRC Map A)

6.1. The Waikoau Conservation Area (the Reserve) and environs are integral to the distinct identity and mana of Ngāti Kurumōkihi. The importance of the Reserve derives from its position along the eastern slopes of Maungaharuru (the Maungaharuru Range) within the Ahu-o-te-Atua (formerly named Ahuateatua) and Tarapōnui-a-Kawhea (as it is known to the Hapū, the official name is Taraponui) areas of Maungaharuru, and its proximity to Lake Opouahi. The Waikoau River flows through the Reserve. Accordingly, the following statements of association are relevant to the Reserve.

- Peaks of Maungaharuru Range;
- Balance of the Opouahi Scenic Reserve; and
- Waikoau and Aropoanui Rivers and their tributaries.

6.2. Kōrero tuku iho – historical importance

In addition to Ngāti Kurumōkihi, Waikoau is also associated with Whakairo, the great grandson of Tauria and Mateawha. He appears from time to time at the edges of the bush in the Waikoau area as a fully tattooed warrior. During his lifetime, he occupied Te Onepu pā on the Waikoau River and was known to have traversed a wide area covering Tīfī-a-Okura, Ohurakura, Pūrahoitangihia and Tūtira.

6.3. In Waikoau, plentiful flora and fauna were available for harvesting. These taonga (treasures) were harvested for a range of uses, including kai, rongoā (medicinal plants), clothing (including feathers for decorating garments and personal adornments), building materials, trade and gifting. Today, the Reserve consists of mainly scrub and low forest of mānuka (tea tree) and kānuka (white teatree) with some tītoki and tawa.

6.4. The Hapū have cultural, spiritual, traditional and historic associations with the Reserve and its environs, its waters, associated land and flora and fauna. The Hapū have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all those natural and historic resources and sites. This relationship is as important to present day whānau (families) as it was to their tīpuna (ancestors). The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with Maungaharuru, including the Reserve and associated resources.

7. Balance of the Opouahi Scenic Reserve (as shown on OTS-201-31 & HBRC Map A)

7.1. For Ngāti Kurumōkihi, the balance of the Opouahi Scenic Reserve (the Reserve) and environs are integral to the distinct identity and mana of the Hapū. The importance of the Reserve derives from its position along the eastern slopes of Maungaharuru (the Maungaharuru Range) and the location of Lake Opouahi within the Reserve. Accordingly the following statement of association is relevant to the Reserve.

- Peaks of Maungaharuru Range.

7.2. Spiritual importance

Lake Opouahi is regarded as a particularly spiritual place of Ngāti Kurumōkihi. The tuna (eels) were renowned as being unique to Lake Opouahi. Oral traditions tell of tuna known as the kēhua tuna (ghost eels). The tuna would often challenge whānau (families) in defiance of being harvested. They were famed as the kaitiaki (guardian) of Ngāti Kurumōkihi and the area. Also in this area appeared a tipua (a supernatural being) in a form similar to a white pig. This tipua was revered as a tohu (sign) and would appear at a time of misfortune, either after the event, or as a warning. Patupaiarehe (fairies) are also known to dwell in the area.

7.3. Kōrero tuku iho – historical importance

Nearby the Reserve and at the foot of Maungaharuru are several pā (fortified villages) that are associated with Ngāti Kurumōkihi and are still identifiable today. They are Kokopuru and Matarangi. Kokopuru pā was built on the hill of the same name. Kokopuru pā was heavily fortified and surrounded by extensive cultivations, wāhi tapu (sacred places), midden, ovens and cave shelters. According to a source who visited the pā in 1882, the main defensive structures were, at that time, almost intact, with heavy palisades of upright tōtara poles and boughs stood in a circular formation around the hill.

7.4. Close by is Matarangi pā, on a peak near Lake Opouahi. The pā was formerly surrounded by cultivations where kūmara (sweet potatoes) and taewa (potatoes) were grown and the water supply came from two lakelets – Ngā Ipu-o-Te-Amohia. Another prominent feature was a carved meeting house which was unfortunately destroyed during a skirmish with a warparty. Over the generations, a number of Ngāti Kurumōkihi chiefs, including Waitara, based themselves at Kokopuru and Matarangi.

7.5. In the vicinity of Lake Opouahi are a number of caves that are also known to have been occupied from time to time, and some are the ancestral resting place for tīpuna (ancestors).

7.6. The Reserve is one of the few areas of remnant and regenerating native ngahere (forest) on Maungaharuru. It is located at an altitude of 500 to 700 metres above sea level.

7.7. In this area, plentiful flora and fauna were available for harvesting. In particular, rongoā (medicinal plants) were abundant, including red matipo, māwe, parapara, harakeke (flax), mānuka (tea tree), kāmahī, tawa, rewarewa (New Zealand honeysuckle) and tātarāmoa (bramble / bush lawyer).

7.8. The ngahere provided the ideal habitat for a large number of native birds including kiwi, kārearea (native falcon), kākā (native parrot), kererū (native pigeon) and tūī (parson bird). Many of these birds were harvested for kai (food) and their feathers used for decorating garments and personal adornments.

7.9. Lake Opouahi and its associated waterways were also significant sources of kai for the Hapū. The lake and waterways supplied uniquely tasting tuna, kākahi (freshwater mussels), kōura (freshwater crayfish) and kōkopu (freshwater fish), as well as the daily water supply for the Hapū, as Lake Opouahi is a deep, spring-fed lake.

7.10. The Hapū have cultural, spiritual, traditional and historic associations with the Reserve and its environs, its waters, associated land and flora and fauna. The Hapū have a responsibility as kaitiaki in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all those

natural and historic resources and sites. This relationship is as important to present day whānau (families) as it was to their tīpuna (ancestors). The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with Maungaharuru, including the Reserve and associated resources.

8. Bellbird Bush Scenic Reserve (as shown on OTS-201-47 & HBRC Map A)

8.1. For Ngāti Kurumōkihi, the Bellbird Bush Scenic Reserve (the Reserve) and environs are integral to the distinct identity and mana of the Hapū. The importance of the Reserve derives from its position high along the eastern slopes of Maungaharuru (the Maungaharuru Range) within the Ahu-o-te-Atua (formerly named Ahuateatua) and Tarapōnui-a-Kawhea (as it is known to the Hapū; the official name is Taraponui) areas of Maungaharuru, and its proximity to Lake Opouahi. It is also bisected by the Waikoau River. Accordingly, the following statements of association are relevant to the Reserve:

- Peaks of Maungaharuru Range;
- Balance of the Opouahi Scenic Reserve; and
- Waikoau and Aropaoanui Rivers and their tributaries.

8.2. The Reserve is one of the few areas of remnant and regenerating native ngahere (forest) on Maungaharuru. It is located in moderate to steep terrain at an altitude of 700 metres above sea level. Consequently, it consists of diverse ngahere of tawhairaunui (red beech), kāmahi, mākūka (tea tree) and kākūka (white tea-tree). Other tree species include tawhairauriki (black beech), rewarewa (New Zealand honeysuckle), māhoe (whiteywood), horoeka (lancewood) and maire. The ngahere provided the ideal habitat for a large number of native birds including huia (before it became extinct), kiwi, kārearea (native falcon), kākā (native parrot), kererū (native pigeon), koekoeā (long-tailed cuckoo), korimako (bellbird) and tūtī (parson bird). Many of these taonga (treasures) were harvested for a range of uses, including kai (food), rongoā (medicinal plants), clothing (including feathers for decorating garments and personal adornments), building materials, trade and gifting.

8.3. The Hapū have cultural, spiritual, traditional and historic associations with the Reserve and its environs, its waters, associated land and flora and fauna. The Hapū have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all those natural and historic resources and sites. This relationship is as important to present day whānau (families) as it was to their tīpuna (ancestors). The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with Maungaharuru, including the Reserve and associated resources.

9. Boundary Stream Scenic Reserve (as shown on OTS-201-46 & HBRC Map A)

9.1. For Ngāti Kurumōkihi, the Boundary Stream Scenic Reserve (the Reserve) and environs are integral to the distinct identity and mana of the Hapū. The importance of the Reserve derives from its position high along the eastern slopes of the Maungaharuru Range (Maungaharuru) within the Ahu-o-te-Atua (formerly named Ahuateatua) and Tarapōnui-a-Kawhea (as it is known to the Hapū, the official name is Taraponui) areas of Maungaharuru, and its proximity to Lake Opouahi. The Waikoau River and Boundary Stream flow within the Reserve, and Shine Falls is located in the eastern part of the Reserve. Accordingly, the following statements of association are relevant to the Reserve:

- Peaks of Maungaharuru Range;
- Balance of the Opouahi Scenic Reserve; and
- Waikoau and Aropaoanui Rivers and their tributaries.

9.2. The Reserve is one of the few areas of remnant and regenerating native ngahere (forest) on Maungaharuru. It is located in moderate to steep terrain at varying altitudes of 300 to 980 metres above sea level. Consequently, the ngahere has a range of vegetation. It has a heavy forest cover of tawa, tītōki and rewarewa. Other tree species include tawhairauriki (black beech), kāpuka, pāpāuma, kāmahi, kākūka (white tea-tree), tawhairaunui (red beech), kōwhai, mamaku (black tree fern), ponga (silver tree fern), maire, kahikatea (white pine), rimu (red pine), mataī (black pine) and tōtara. The rare and nationally significant ngutu-kākā (kākā beak) has also been found in the reserve in recent times. The ngahere provided the ideal habitat for a large number of native birds including huia (before it became extinct), kiwi, kārearea (native falcon), kākā (native parrot), kererū (native pigeon), koekoeā (long-tailed cuckoo) and tūtī (parson bird). Many of these taonga (treasures) were harvested for a range of uses, including kai (food), rongoā (medicinal plants), clothing (including feathers for decorating garments and personal adornments), building materials, trade and gifting.

9.3. The Hapū have cultural, spiritual, traditional and historic associations with the Reserve and its environs, its waters, associated land and flora and fauna. The Hapū have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all those natural and historic resources and sites. This relationship is as important to present day whānau (families) as it was to their tīpuna (ancestors). The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with Maungaharuru, including the Reserve and associated resources.

10. Rocks and Reefs and Hapū Coastal Marine Area (as shown on, respectively, OTS-201-41 and OTS-201-40, & HBRC Map C)

10.1. For the Hapū, the rocks and reefs along the coastline (Rocks and Reefs) and the Hapū Coastal Marine Area and environs are integral to the distinct identity and mana of the Hapū and are significant because they are located within Tangitū (the sea).

10.2. Spiritual importance

Tangitū is vital to the Hapū. Tangitū has a mauri (life force) of its own. This mauri binds the spiritual world with the physical world. All elements of the natural world have mauri and it is this mauri that connects the Hapū with Tangitū. Mauri is therefore the basis of the spiritual relationship of the Hapū with Tangitū.

10.3. The Hapū regard all natural resources as being gifts from ngā atua kaitiaki (spiritual guardians), including those within Tangitū. Tangitū is within the domain of Tangaroa-i-te-Rupetu (Tangaroa), the spiritual guardian of the moana (sea) and waterbodies, and all within them. Tangaroa is the son of Papa-tū-ā-nuku (Earth Mother) and Rangi-nui (Sky Father), from whom all living things descend, including the Hapū. Descendants of Tangaroa include the whales, waves, ocean currents and fish life within the moana. Therefore, both the descendants of Tangaroa and the descendants of the Hapū are connected by whakapapa (genealogy). Tangaroa was central to the lives of the Hapū tīpuna (ancestors) and remains significant to the Hapū whānau (families) living today.

10.4. Hapū kaumātua and kaikōrero acknowledge the importance of Tangitū. Tangitū provides cultural, spiritual and physical sustenance, and as such, shapes the identity of the Hapū. The principal status of Tangitū is recognised by the Hapū in their mihi (greetings), whaikōrero (formal speeches),

whakairo (carvings), kōwhaiwhai (painted panels) and tukutuku (woven panels) on their marae, whakatauākī (tribal proverbs), kōrero tuku iho (Hapū history) and waiata (songs).

10.5. *Cultural importance - Whakatauākī*

Ka tuwhera a Maungaharuru, ka kati a Tangitū,

Ka tuwhera a Tangitū, ka kati a Maungaharuru.

When the season of Maungaharuru opens, the season of Tangitū closes,

When the season of Tangitū opens, the season of Maungaharuru closes.

10.6. According to kōrero tuku iho, this whakatauākī:

- describes the takiwā (traditional area) of the Hapū – from Maungaharuru (the Maungaharuru range) in the west, to Tangitū (the sea) in the east; and,
- it proclaims ahi-kā-roa (long occupation) of the Hapū and the inherited right as tāngata whenua to exercise mana whenua and mana moana.

10.7. The relationship the Hapū have with Tangitū is culturally significant and provides whānau with a strong sense of place and belonging to the takiwā. It is still customary practice for Hapū members to recite this whakatauākī to identify where they come from and the relationship that connects them to the natural world.

10.8. Hapū kaumātua also emphasise the connectedness of Maungaharuru with Tangitū. The waters flowing from the maunga (mountain) feed the streams, rivers, aquifers, lakes, wetlands and sea - the realm of Tangaroa.

10.9. The whakatauākī also describes the mahinga kai (places for gathering food) of the Hapū. The ngahere (forest) on Maungaharuru was the source of food for the Hapū in the winter. Tangitū was, and remains, the source of food in the summer. While the Hapū collected food on a seasonal basis, they were blessed in that they did not need to leave their takiwā in search of food. Hence another Hapū whakatauākī:

“ko tō rātau pā kai ngā rekereke”, “their fortified villages were in their heels”.

10.10. The Rocks and Reefs and Hapū Coastal Marine Area were traditionally a vital food source for the Hapū, and in the past, kaimoana (seafoods) were in plentiful supply. From the domain of Tangaroa the Hapū sourced their kai (food). They caught ika (fish), tuna (eels), īnanga and ngaore (forms of whitebait) and kōura (crayfish) and gathered kuku (mussels), kina (sea urchin) and pāua (abalone). Rongoā (medicinal plants) such as kaiō (sea tulip) and sea water were also collected for medicinal purposes. Other resources that were gathered included tāwhaowhao (driftwood), pungapunga (pumice) and rimurimu (bull kelp) for storing tītī (muttonbirds).

10.11. Tangitū was also integral to the economy of the Hapū – kai and resources gathered from Tangitū were often traded with their neighbours.

10.12. This whakatauākī also implies that the manuhiri (visitors) of the Hapū will be served kai from Maungaharuru and Tangitū. The ability to offer the range and quality of kai the Hapū had from their takiwā enhanced their mana.

10.13. In addition, the gathering of kai and resources has the reciprocal obligation of the Hapū to act as kaitiaki (guardians). The Hapū had tohu (signs) and tikanga (customs) which dictated the appropriate time and practices for gathering food and resources from Tangitū. Mātauranga (knowledge) associated with the collection of resources was central to the lives of the Hapū and remains a significant part of the cultural identity of the Hapū today. Mātauranga and associated tikanga, karakia (prayers) and kawa (rules) are all essential for maintaining customary traditions - the ritual and tapu (sacredness) associated with gathering and utilising resources.

10.14. *Kōrero tuku iho – historical importance*

10.15. Tīpuna recounted that Tangitū is named after a strong-willed young woman from the takiwā. Tangitū was an excellent diver and collector of kaimoana who could stay submerged for long periods of time. Against advice, Tangitū went diving into a hole from which she never returned. Tangitū manifested herself as a whale and is an important kaitiaki for the Hapū. According to tradition, if tikanga or kawa were not properly observed when gathering kaimoana or other resources, Tangitū the kaitiaki would appear. The Hapū believe that, as a kaitiaki, Tangitū has the power to protect her people, particularly in the event of natural disasters. She has been known to use her tail to unblock the mouth of Te Ngarue (formerly Te Ngaru) Stream and Pākura-tahi (formerly Pakuratahi) Stream, or lie across the mouth as protection in the event of high seas.

10.16. There are other kaitiaki who live in Tangitū, including Uwha, at Arapawanui, who takes the form of an eel or octopus, and Moremore, the son of Pania (of the reef), who swims the coastline in the form of a mako (shark).

10.17. Also associated with Tangitū is the story of Ruawharo. Ruawharo was a tohunga (high priest) aboard the waka (canoe) Tākitimu on its migration to Aotearoa. He gathered sands from Hawaiki and took them aboard the waka. The sands held the mauri of fishlife. Ruawharo and his wife Hine-Wairakaia had three sons; Matiu, Makaro and Moko-tu-a-raro. To extend the mauri of fishlife, Ruawharo placed his children along the coast at Waikokopu in Te Māhia and between Rangatira and Te Ngaruroro. Significantly for the Hapū, Makaro was placed at Arapawanui to instil the mauri of fishlife along the coastline.

10.18. Along the coast and nearby were significant mahinga kai and places associated with such activities, as follows.

- The mouths of the Waikari, Moeangiāngi, Aropaoanui (known to the Hapū as Arapawanui), Waipātiki (formerly Waipatiki) River, Te Ngarue (formerly Te Ngaru) Stream and Pākura-tahi (formerly Pakuratahi) Stream.
- Tiwhanui is identified by the Hapū as the highest place along the cliffs on the Coast. It was used by the Hapū as a lookout for whales and schools of fish on fishing expeditions.
- Punakērua and Te Areare beaches.
- The Rocks and Reefs that were renowned for kaimoana are:
 - Omoko: located out to sea from the mouth of the Waikari River, which was particularly good for hāpuku (grouper) and well-known as a spawning and nursery area for tāmure (snapper) and other fish.
 - Whakapao, Urukarakā, Te Ngaio-itī, Te Ngaio-Nui and Whakatapatu: lying in an area slightly north of the mouth of the Moeangiāngi River and south to the Waipapa Stream. These were all known as excellent places for catching hāpuku and for

collecting kaiō (sea tulip), a type of sea plant good for medicinal purposes and eating. Whakatapatu was also a good place for catching moki and tarakihi.

- Hinepare and Makaro: located near the mouth of the Arapawanui River.
- Kōtuku and Te Ahiaruhe: located out to sea from the Arapawanui River. The former being known for hāpuku and the latter for tāmure.
- Tarahau: located out to sea opposite the mouth of the Waipātiki Stream. This place was renowned for tāmure, tarakihi and moki.
- Rautoetoe and Te Una: located out to sea opposite the mouth of Te Ngarue River. The former was known for tarakihi and the latter for moki.
- Panepaoa: renowned for moki and a diving hole for crayfish.
- Kiore: a rock shaped like a rat, near Te Areare beach. A good place to collect kaimoana.
- Tamatea: a rock located at Tangoio and used as an indicator of whether it was low tide.

- 10.19. In earlier times, Hapū whānau made seasonal journeys to Tangitū to collect kai, rongoā and other natural materials. Whānau and individuals had different tasks. Some would go fishing, while others would collect shellfish, or collect plant materials from the coastline and associated lowland forests. Natural resources thrived, and as noted above, kōrero tuku iho identify particular rocks and reefs as being renowned for providing bountiful kaimoana from which to gather a variety of fish species. Tangitū teemed with fish including tarakihi, tāmure, herrings, hāpuku (grouper), blue moki, and mangō (sharks), as well as tohorā (whales). The coastal rocks and reefs provided pāua (abalone), kina (sea urchin), kuku (mussels), pūpū (type of mollusc), kaiō and kōura (crayfish). From the mouths of rivers and streams, pātiki (flounder), tuna, īnanga and ngaore (forms of whitebait) and kōkopu (fresh water fish) were harvested. Land based resources were also gathered for various uses. The swamp harakeke (flax) was utilised as a rongoā for its various healing properties including blood cleansing.
- 10.20. Tangitū is a taonga to the Hapū. It is a whole and indivisible entity. The domain of Tangaroa includes the moana, coastal waters, beds, rocks, reefs and beaches, and springs, streams, rivers, swamps, estuaries, wetlands, flood plains, aquifers, aquatic life, vegetation, coastal forests, airspace and substratum as well as its metaphysical elements.
- 10.21. The Hapū have cultural, spiritual, traditional and historic associations with the Rocks and Reefs and Hapū Coastal Marine Area, its waters and associated land and flora and fauna. The Hapū have a responsibility as kaitiaki in accordance with their kawa and tikanga to restore, protect and manage all those natural and historic resources and sites. This relationship is as important to present day whānau as it was to their tīpuna (ancestors). The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with Tangitū including its Rocks and Reefs, the Hapū Coastal Marine Area and associated resources.

11. Coast (as shown on OTS-201-48, OTS-201-49, OTS-201-50, OTS-201-20 and OTS-201-21, HBRC Maps B, C, D & E)

- 11.1. The Coast comprising the Whakaari Landing Place Reserve, Tangoio Marginal Strip, Waipatiki Beach Marginal Strip, Earthquake Slip Marginal Strip and the Moeangiāngi Marginal Strip (together, the Coast) is significant to the Hapū because of its relationship with, and proximity to, Tangitū (the sea) and other lands near the Coast. The Coast is transected by various awa (rivers) that are also important to the Hapū. Accordingly, the following statements of association are relevant to the Coast:
- Rocks and Reefs and the Hapū Coastal Marine Area;
 - Whakaari Landing Place Reserve;
 - Waipatiki Scenic Reserve;
 - Mangapukahu Scenic Reserve;
 - Moeangiāngi Marginal Strip;
 - Earthquake Slip Marginal Strip;
 - Te Kuta Recreation Reserve;
 - Pākuratahi Stream and its tributaries;
 - Te Ngarue Stream and its tributaries;
 - Waikoau and Aropaoanui Rivers and their tributaries;
 - Moeangiāngi River and its tributaries;
 - Waikari River and its tributaries;
 - Anaura Stream and its tributaries; and
 - Waitaha Stream and its tributaries.
- 11.2. The Coast was an area of significant occupation by the Hapū and contains many kāinga (village) and pā (fortified village) sites. Ngāti Whakaari is a section of Ngāti Marangātūhetāua (Ngāti Tū) and occupied the Petane area. Ngāti Tū occupied the coast northwards from Keteketerau (the outlet to Te Whanganui-ā-Orotu (the former Napier Inner Harbour)) to the Otumatai block. In particular, Ngāi Te Aonui and Ngāti Rangitohumare occupied Arapawanui and Ngāi Te Aonui occupied Moeangiāngi. Both Ngāi Te Aonui and Ngāti Rangitohumare intermarried with Ngāti Tū, and later became known as Ngāti Tū. Ngāti Kurumōkihi also occupied Tangoio, Waipātiki, Arapawanui and Moeangiāngi. The coast comprising the Otumatai and Te Kuta blocks northwards to the Waitaha Stream was occupied by Ngāi Tahu. Ngāi Te Ruruku also came to occupy areas of the Coast in particular Tangoio, Waipātiki and Arapawanui.
- 11.3. As Tangitū was a highly prized resource of the Hapū, it was jealously guarded. During the time of Marangātūhetāua and Tataramoa, friction broke out with another hapū, who invaded the fishing grounds at Tangitū and seized the waka (canoes) of Ngāti Tū and Ngāi Tātara (later known as Ngāti Kurumōkihi) and drove the local people away. Marangātūhetāua sought the help of Te Ruruku, a Wairoa chief. Te Ruruku helped Ngāti Tū and Ngāi

Tatara to repel the invaders and in return he was gifted land at Waipātiki. Te Ruruku settled in the area and his descendants through Hemi Puna and Taraipene Tuaitu maintained ahi-kā-roa (long occupation) and are known today as Ngāi Te Ruruku (ki Tangoio).

- 11.4. All along the Coast and nearby are places that the Hapū occupied or are significant to the Hapū –nohoanga (camping sites), kāinga (villages) and pā (fortified villages), urupā (burial grounds) and other wāhi tapu (sacred places), including the following.
- Ngāmoerangi pā near Tangoio beach.
 - Whakaari pā on the Tangoio headland.
 - Te Wharangi pā at Waipātiki.
 - Te Puku-o-te-Wheke pā, camp sites and wāhi tapu at Arapawanui.
 - Kāinga, pā, nohoanga, urupā and other wāhi tapu along the cliffs between Arapawanui, Moeangiangi and Te Kuta.
 - Kāinga and urupā at the Waikari River.

- 11.5. The Hapū have cultural, spiritual, traditional and historic associations with the Coast, associated waters and flora and fauna. Hapū have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all their natural and historic resources and sites. This relationship is as important to present day whānau (families) as it was to their tīpuna (ancestors). The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with the Coast and associated resources.

12. Whakaari Landing Place Reserve (as shown on deed plan OTS-201-48 & HBRC Map B)

- 12.1. For the Hapū, the Whakaari Landing Place Reserve (the Reserve) and environs are integral to the distinct identity and mana of Ngāti Marangatūhetaua (Ngāti Tū), including Ngāti Whakaari and Ngāi Te Ruruku (ki Tangoio). The importance of the Reserve derives from its location on the coast on a prominent headland near Tangoio. Also, Whakaari, an iconic and significant pā (fortified village) of the Hapū, is located within its boundaries. Accordingly, the following statements of association are relevant to the Reserve:

- Rocks and Reefs and the Hapū Coastal Marine Area;
- Pākuratahi Stream and its tributaries; and
- Te Ngarue Stream and its tributaries.

- 12.2. Part of Whakaari is known to locals as “Flat Rock” due to the extension of a large, flat rock from the Whakaari peninsula into the sea.

12.3. *Spiritual importance*

The Reserve is important because of its relationship with, and proximity to, Tangitū (the sea). Tangitū is vital to the Hapū and mauri (life force) is the basis of the spiritual relationship.

12.4. *Kōrero tuku iho – historical importance*

Whakaari is believed to have been named after the tipuna (ancestor) of the same name. Whakaari is a descendant of the Ngāti Tū chief Kohipipi. One day, while out in a waka (canoe), he was concerned about the increasingly stormy weather and decided to return to shore. Others in the waka did not want to return, so he swam ashore. He arrived at the headland, and so it was named after him. Whakaari's descendants are known as 'Ngāti Whakaari' and are a section of Ngāti Tū. Ngāti Whakaari is associated with Petane.

- 12.5. Whakaari was a strategically important pā, especially in the time of the eponymous ancestors, Marangatūhetaua (for Ngāti Tū), Tataramoa (for Ngāti Kurumōkihi formerly known as Ngāi Tatara) and Te Ruruku (for Ngāi Te Ruruku (ki Tangoio)). Whakaari was used as a look out. It overlooked and protected the landing sites for waka on the bays below and stood as a bastion on the northern and eastern flanks. The southern and western flanks were protected from invasion overland by Ngāmoerangi pā. Ngāmoerangi also prevented the waka taua (enemy war canoes) that came across the bay from landing. Situated in the middle and just behind these pā was the formidable pā, Te Rae-o-Tangoio in the Tangoio valley.

- 12.6. Marangatūhetaua sought support from Te Ruruku, a chief from Wairoa, to defend the takiwā (traditional area) from another hapū that had been raiding the fishing grounds of Ngāti Tū and Ngāti Kurumōkihi at Tangoio and Tūtira. Marangatūhetaua needed to offer incentives to Te Ruruku to persuade him to settle among them. It was eventually agreed that Te Ruruku would occupy Ngāmoerangi pā, which was the gateway to the fishing grounds at Tangitū. Marangatūhetaua put his warriors at Te Ruruku's disposal. He also left several of his children at the pā with Te Ruruku as a sign of good faith. Marangatūhetaua and his son Ngapoerau went to live at Te Rae-o-Tangoio, and their descendants have lived there ever since. Te Ruruku, and the warriors, became the guardians of Whakaari and Ngāmoerangi. With the help of Te Ruruku, Marangatūhetaua and Tataramoa were able to repulse the enemy forays into the takiwā and then go on to the offensive.

- 12.7. Whakaari is also mentioned in the stories about Taraia I, the Kahungunu chief, and his migration south. After a battle at Arapawanui, it is said that Taraia I and his party moved on to stay for a while at Whakaari.

- 12.8. Whakaari was also used from time to time as a place of refuge. In the era of the musket, invasion by surrounding iwi caused many Ngāti Kahungunu hapū to flee to Kai Uku and Nukutaurua at Te Māhia. Whakaari provided protection to Ngāti Tū and Ngāti Kurumōkihi who remained in the takiwā during this time.

- 12.9. Around 1840, a whaling station was established at Whakaari. Whaling was an occupation that resulted in a considerable amount of cultural exchange. Some Hapū tīpuna (ancestors) became whalers and others married Pākehā whalers and many whānau are descended from whalers. There were two whaling stations within the takiwā, Whakaari was the most famous and there was another one at Moeangiangi. Whakaari is a significant archaeological and historic site; one of three outstanding whaling station sites in Hawke's Bay in terms of the quality of the archaeological evidence.

- 12.10. From the original tīpuna, the occupation of Whakaari by the Hapū has survived the migration of Kahungunu and also, the later invasion of Kahungunu by surrounding iwi. It is one of only a few pā sites of the Hapū, and their only coastal pā, that is not in private ownership and remains available to the Hapū today.

- 12.11. Whakaari is still significant to the Hapū, not only because it carries the name of a founding tipuna, but also because of its rich history and its spiritual and cultural importance. It is commemorated in a waiata tangi by Kowhio.

He rangi tatari tonu, te rangi ākuanei, te ope haereroa e

Mō taku koro e, ka ngaro noa tu rā, ki Whakaari rā ia

Ki te toka kahekahe, nāhau e tamaiti, i whāiti tū māna e..i
Pēnei tonu ai, tā te roimatahanga, he kai maringi kino e..i
Mō te aroha ee, ka ngaro mai kei roto, kei te hinapōuri e..i
Tērā te whetū, taukamo ana mai, nā runga ana mai e..i
O ngā hiwi nui e, ki te whara ngira ia, e tete noa mai ra e
Hohoro mai ko ia, tāhau haramai, he kino te koropuku
Te moe a te kekeno, ki te moana rā ia, ko wai ahau kakaitea rā ..i
Taringa whakarongo, ki te hori ki waho rā,
Kaia mai rō mai rō, koe e..i
Ngahere tonu tana, whakatānguru i taua ngahuru nei e..i
Today is a time to endure, a time to await the Cortege that journeys to bring forth my Koro at the Inlet nestled at the foot of Whakaari,
the Panting Rock;
the Bluff that initiates breathless exertions echoing up from steep and difficult pathways.
There at the Cove below the assembly will gather to await, he, the progeny of our Ancestors.
It is so; a deep and yearning affection, abides in aching memories welling a surging rush to brim and cascade into a deep weep, the
weep of the inconsolable.
Grief so renders me desolate and lost, to drift in that deep chasm of sorrow.
Yonder the Day Star winks and glistens above the great hills and over a solitary sail appearing on the horizon of an undulating sea.
The figurehead of an approaching Prow appears from the distant ocean haze. A doleful ache arises in me.
It is he, borne upon his approaching Bier, distant and solitary, yonder, as a lonely Seal asleep, upon a heaving sighing sea.
I, transfixed to gaze at the Waka Taua consuming the distance, swiftly approaching and gliding in to its moorings and to the awaiting
assembly.
Harken to the sounds emanating from out there!
Listen, to the departing rush of his restless Spirit gone by, drifting to and thro in search of the pathway to the Ancestors.
On towards the moaning, murmuring clamour of a tormented forest agitated by the Southerlies howling gusts and on to the resting
place of peace.

12.12. *Cultural importance*

Whakaari was traditionally an important mahinga kai (place for gathering food) for the Hapū, with numerous significant rocks and reefs nearby. In the past, kaimoana (seafood) was in plentiful supply. At Whakaari the Hapū would gather kaimoana such as pāua (abalone), kina (sea urchin), kuku (mussels), kōura (crayfish) and pūpū (type of mollusc). In the early twentieth century, it was the Hapū women who would go to the beach at Whakaari to gather kaimoana, which they would take home by horseback.

- 12.13. Tikanga (customs) would be maintained throughout this mahi (work). For example, kaimoana would not be eaten on the beach and not till the next day. The whakatauaāki (tribal proverb) below would be adhered to:

"haere ki rō wai, haere ki te moana, karakia" – "when entering the water, or entering the sea, say a prayer".

- 12.14. Whakaari is still a mahinga kai today, although the kai is no longer abundant.
- 12.15. Whakaari is a sheltered haven on a rough coast. It was used as a landing place for waka and in later times, for boats. Nearby (immediately south of some present day cottages), is a site commemorating the place where Marangatūhetaua and Te Ruruku beached their waka.
- 12.16. Whakaari was the starting point for a trail inland, an important place for the Hapū travelling by sea, and it was where they left for their fishing grounds up and down the coast.

13. **Waipātiki Scenic Reserve (as shown on OTS-201-27 & HBRC Map D)**

- 13.1. Waipātiki Scenic Reserve (the Reserve) and environs are of great spiritual, cultural and historical significance to Ngāti Marangatūhetaua (Ngāti Tū), Ngāti Kurumōkihi (formerly known as Ngāi Tatara) and Ngāi Te Ruruku. The importance of the Reserve derives from its location on the Waipātiki (formerly known as Waipātiki) Stream, and proximity to the coast and Tangitū (sea). Accordingly, the following statements of association are relevant to the Reserve.

- Rocks and Reefs and Hapū Coastal Marine Area; and
- Coast.

13.2. *Kōrero tuku iho – historical importance*

The Reserve is located at the head of the Waipātiki valley. The Reserve and its environs was an area of significant occupation by the Hapū and contains nohoanga (camping sites), kāinga (villages) and pā (fortified villages), urupā (burial grounds) and other wāhi tapu (sacred places).

- 13.3. The key pā, located on the coast on the northern side of the river mouth is Te Wharangi. During the time of the Ngāti Marangatūhetaua (Ngāti Tū) chief, Marangatūhetaua and Ngāi Tatara chief, Taramoa, their fishing grounds at Tūtira and Tangoio were being plundered by another hapū. To help protect their fishing grounds, Marangatūhetaua made an alliance with Te Ruruku, a chief from Wairoa. In exchange for helping to repel the invaders, tribal archives record, "ko Waipātiki nā Marangatū i tuku ki a Te Ruruku" – Marangatūhetaua gifted land at Waipātiki to Te Ruruku. Included within this gift was Te Wharangi pā. This was considered a prized gift as the area was renowned as an excellent source of kaimoana (seafood), manu (birds) and other kai (food).

13.4. *Cultural importance*

- 13.5. Today, the Reserve is one of a few areas of native ngahere (forest) remaining in the Waipātiki valley. It comprises mostly kānuka (white tea-tree), hangehange, kawakawa (pepper tree), tītoki, tawa, karaka, rewarewa (New Zealand honeysuckle) and large stands of nikau. Although not as plentiful as earlier times, kererū (native pigeon) and tūī (parson bird) still remain.
- 13.6. The seasonal passage of the Hapū to collect kai is evidenced by the trails from Maungharuru to Tangitū. And within the Reserve is the remnant of an old trail used by the Hapū.
- 13.7. Tarahau, a fishing reef located out to sea opposite the mouth of the awa (river), was renowned for tāmure (snapper), tarakihi and moki, and the coastline from Waipātiki north to Arapawanui was excellent for pāua (abalone). Up until the mid-twentieth century kina (sea urchin), pāua, kuku (mussels) and kōura (crayfish) were still plentiful at Waipātiki and collected regularly by the Hapū.
- 13.8. Kai was also sourced from the awa. The Hapū caught tuna (eels), īnanga and ngaore (forms of whitebait), and as the name suggests, Waipātiki was prolific with pātiki (flounder).
- 13.9. Prior to the 1931 Napier Earthquake, Waipātiki was an estuarine valley. The earthquake uplifted the whole valley so that the previously wide flats and large estuary were replaced by the deeper stream pattern of today. The awa was and continues to be a taonga (treasure) to the Hapū. Traditionally, the awa provided a wealth of resources to sustain the Hapū. The life forms, which are an integral part of the awa, cannot be separated from them. The relationship the Hapū have with this taonga relates to the entire catchment. The health of the awa reflects the health of the Hapū.
- 13.10. Pā harakeke (flax bushes) supplied tīpuna (ancestors) with raw products for rongoā (medicinal plants), weaving materials and trading. Harakeke were located in the wetland areas and associated lowland forests and provided an important habitat for nesting birds and fish species. Although freshwater fish and tuna have been severely depleted, they are still an important resource for whānau (families) today.
- 13.11. Traditionally, kāinga in the river valley were surrounded by an abundant source of timber. The river flats were heavily forested with tōtara, along with lush dense stands of other native timbers. The fruits of the trees were a source of food. A vast range of edible products were harvested from the ngahere. Hapū members knowledgeable in rongoā would gather kawakawa leaves (pepper tree), kōwhai bark, harakeke (flax), frond stems of mamaku (black tree fern), karaka berries, and ngaio. These taonga were used for a variety of ailments, were highly valued by tīpuna and remain culturally significant to the Hapū today. However, the availability of rongoā species has diminished considerably over the past century.
- 13.12. In pre-European times, ngā manu (birds) associated with the awa were plentiful. Kererū (native pigeon), tūī (parson bird), weka (woodhen), kākā (native parrot) and kiwi were found in the ngahere that hugged the river valley; pākura (pūkeke or purple swamp hen) and native ducks were harvested in the wetland areas. Ngā manu were not only important as a source of food, the feathers were also used for cloaks, decorating garments and personal adornment.
- 13.13. In addition to the resources of Tangitū, the awa and ngahere, the alluvial soils near the mouth of the awa were easy for the Hapū to cultivate.
- 13.14. The Hapū have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (custom) to restore, protect and manage all their natural and historic resources and sites. This relationship is as important to present day whānau as it was to their tīpuna. The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with the Reserve and associated resources.

14. **Mangapukahu Scenic Reserve (as shown on OTS-201-25 and HBRC Map B)**

- 14.1. The Mangapukahu Scenic Reserve (the Reserve) and environs are of immense spiritual, historical and cultural significance to the Hapū who maintained ahi-kā-roa (long occupation) in this area. The Hapū are Ngāti Marangatūhetaua (Ngāti Tū), including Ngāti Rangitohumare and Ngāi Te Aonui, Ngāti Kurumōkihi and Ngāi Te Ruruku. Ngāti Rangitohumare and Ngāi Te Aonui intermarried with Ngāti Tū and became known as Ngāti Tū.
- 14.2. The importance of the Reserve is in part due to its location. It lies on the steep, northern side of the Arapawanui Valley and borders the Aropaoanui River (this is the official name; the name known to the Hapū is Arapawanui). Accordingly, the following statements of association are relevant to the Reserve:
- Rocks and Reefs and Hapū Coastal Marine Area;
 - Coast; and
 - Waikoau and Aropaoanui Rivers and their tributaries.

14.3. *Spiritual importance*

Located within the Reserve are urupā (burial grounds). And known to the Hapū are taipō (supernatural beings) that inhabit nearby areas.

14.4. *Kōrero tuku iho – historical importance*

- 14.5. “Arapawanui” has been explained by kaumātua as “ara” meaning pathway, “pawa” to describe the “V” shape of the high canyon walls descending down to the narrow pathway of the awa (river) far below, and “nui” referring to the depth, and sheerness, of the canyon. Hence “Arapawanui” – the way of the big canyon.
- 14.6. The official name of the awa is Aropaoanui. A similar name known to the Hapū is “Arapaoanui” and refers to a site within the Arapawanui valley, and relates to an incident that occurred just prior to the migration of Taraia I. It was there that a chief from another district had committed the corpses of slain enemies to the hāngī (earth oven). The paoa (kidneys) of the enemy began to quiver and twitch. Thinking this was some form of witchcraft, the chief responded by attacking the offending organs with a stick, hence the name for that site of “Arapaoanui” - thoroughly bashedkidneys.
- 14.7. Arapawanui features in many kōrero (stories) of the Hapū including kōrero relating to the voyage of the waka (canoe), Tākitimu. It is said that Ruawharo, a tohunga (high priest) on the waka, placed his son, Makaro, who had been turned to stone near the rivermouth of the Arapawanui River. The toka (stone) held the mauri (life force) of fish life, and where ever it was placed, the area would become prolific and bountiful with fish. Arapawanui has long been renowned as an area that was abundant with kaimoana (seafood).
- 14.8. Arapawanui is also highlighted in the kōrero several generations later, relating to the arrival of the Wairoa chief, Te Ruruku. The Ngāti Tū tīpuna (ancestor) Marangatūhetaua sought the help of Te Ruruku to defend the fishing grounds at Tūtira and Tangoio, which were being plundered by another hapū. On their journey to Tangoio they slept the night at Arapawanui. The next morning they climbed to the summit of Te Karaka, a high hill overlooking the awa. There they were afforded a panoramic view of the surrounding area. Te Ruruku watched in awe as dense clouds of birdlife rose above the forests to black out the horizon of the sea and the rays of the rising sun. Impressed, Te Ruruku asked who had rangatiratanga (authority) over the region. Marangatūhetaua replied that his occupation began from Arapawanui to Maungharuru, then to Te Waka from there to Hukanui and

on to Puketitiri. On hearing this information Te Ruruku's interest in the expedition increased and discussions began about what help he could provide to Marangatūhetau.

- 14.9. Arapawanui has always been one of the principal and largest coastal kāinga (villages) of the Hapū and continued as such well into the nineteenth century. Located within, and in the vicinity of, the Reserve are numerous sites of significance which attest to the occupation of the area by the Hapū. These sites include urupā and other wāhi tapu (sacred places), kāinga (villages), pā (fortified villages) and mahinga kai (food gathering places). The northern ridges in the valley, including the Reserve, formed one of two trails used by the Hapū for their seasonal travel between the coast and inland to Tūtira and Maungaharuru (Maungaharuru Range) (the other main trail being from Tangoio). The trail was high on the ridge to ensure the Hapū could see if the way was safe from any awaiting war party. Along these trails are located sites including Te Hoe, Te Korokoro-o-Marama, Te Karaka and Parepohatu. As noted earlier, Te Karaka was a high point in the area. It is commemorated in a waiata (song) composed by a tipuna (ancestor), Kowhio. The waiata is about a girl named Hariata who was in love with Te-lwi-Whati, and how, when looking down from Te Karaka, she could almost see his dwelling.

Ākuanei au ka piki ki Te Karaka rā ia	I will climb with the dawn to the top of Te Karaka
A marama au te tiro ki Manga-hinahina rā	So that I may get a clear view of Manga-hinahina
Kei raro iho nā ko taku atua e aroha nei au	Just below lies my beloved one.
Taku hinganga iho ki raro rā ko turi te tokorua	Whilst I slept alone, my tucked-up knees only were my bedfellow
Te roa noa hoki o te pō tuarua e lwi	During the long night, twice, lwi, I have dreamed of thee, I awoke, I felt for thee; thou wast gone!
Oho rawa ake nei ki te ao, hopu kau kāhore, ei	

- 14.10. Downstream from the Reserve is the largest terraced pā within the valley, known to the Hapū as Te Puku-o-te-Wheke - literally, the stomach of the octopus (it is also known by others as Arapawanui pā). It is located on the coast on the northern side of the awa. It was an ancient pā occupied by the Hapū, and in later times was associated mostly with Ngāi Te Ruruku, Ngāti Rangitohumare and Ngāi Te Aonui. Te Puku-o-te-Wheke was often visited by allies, being a convenient tauranga waka (anchorage) site. Tamatea (the captain of the waka Tākitimu) and his son Kahungunu, are known to have stopped there for food supplies, and the pā remained a port of call for travellers voyaging up and down the coast. It is recorded that at one time a fleet of up to 50 waka anchored at Arapawanui on their way to a tangihanga (funeral) for a dignitary. Within the valley are other kāinga and pā sites, although many have been destroyed or damaged through land use. The remains of two other pā are visible a little further up the awa on the south side. One of these is known as Rangipō.

14.11. *Cultural importance*

Arapawanui has long been famous as a mahinga kai (a place for gathering food), and in the past was renowned for its kaimoana, fine fern roots and kiore (rats). The awa and its mouth provided an abundant food basket with fish, kina (sea urchin), pāua (abalone) and kuku (mussels). In earlier times, tuna (eels) would also make their journey from Tūtira along the awa and out to sea to spawn. One tipuna recounted of 'te rere o ngā tuna' - 'the migration of the eels', that you could smell them before you could see them, there were so many tuna in the awa. Sadly, due to issues at Lake Tūtira and elsewhere, it appears the migration of the eels is no longer possible and there are far fewer tuna in the awa today.

- 14.12. Arapawanui is also the home of Uwaha, a Hapū kaitiaki (guardian) which reveals itself as a wheke or tuna. Uwaha continues to guard the river and coastline to this day.
- 14.13. Prior to the 1931 Napier Earthquake, the awa was very deep and was used as a means of transport for waka. In later times, the awa was used for commercial purposes to transport bales of wool from the interior to the coastline. The alluvial soils near the river mouth were easy to cultivate, and cultivations covered the valley. In more recent times maize, kūmara (sweet potatoes), taewa (potatoes), watermelon, kamokamo (squash), tomato, sweetcorn and pumpkin were grown in the fertile, black soil.
- 14.14. While hunting manu (birds) was common, Hapū kaumātua speak in later times of also hunting the plentiful ducks, rabbits, hares and pheasants at Arapawanui.
- 14.15. Substantial forest resources were within the valley. Tōtara was collected from areas including the Reserve and used to construct waka, and later, whaling boats.
- 14.16. Today there is little left of the indigenous forest. The Reserve consists of remnant forest and regenerating bush, including mānuka (tea tree), tawa, tītoki, rewarewa (New Zealand honeysuckle), kahikatea (white pine) and mataī (black pine). The forest used to provide the ideal habitat for a large number of native manu. These taonga (treasures) were harvested for a range of uses, including kai (food), rongoā (medicinal plants), clothing (including feathers for decorating garments and personal adornment), building materials and trade and gifting.
- 14.17. Arapawanui continues to be a popular summer camping and fishing destination for many Hapū whānau (families). Some members of the Hapū still maintain landholdings there today. Arapawanui was, and is, considered by the Hapū to be an area of immense spiritual, historical and cultural importance. This is signified by the dense settlement of the Hapū there and their willingness to defend this prized area. The Hapū have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all their natural and historic resources and sites. This relationship is as important to present day whānau as it was to their tīpuna (ancestors). The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with Arapawanui and the Reserve, and their associated resources.

15. **Moeangiāngi Marginal Strip (as shown on OTS-201-21 & HBRC Map D)**

- 15.1. The Moeangiāngi Marginal Strip (the Reserve) and environs are integral to the distinct identity and mana of the Hapū of this area, namely Ngāi Te Aonui, and Ngāti Kurumōkihi. Ngāi Te Aonui intermarried with Ngāti Marangatūhetau (Ngāti Tū), and later became known as Ngāti Tū.
- 15.2. The importance of the Reserve is due to its location on the coast and proximity to Tangitū. In addition, the Reserve straddles Moeangiāngi, which has been one of the principal coastal kāinga (villages) of the Hapū. Accordingly, the following statements of association are relevant to the Reserve.
- Rocks and Reefs and Hapū Coastal Marine Area;
 - Coast; and
 - Moeangiāngi River and its tributaries.

- 15.3. All along the Reserve and nearby are places that the Hapū occupied or are significant to the Hapū – nohoanga (camping sites), kāinga and pā (fortified villages), urupā (burial grounds) and other wāhi tapu (sacred sites). A key area of occupation for the Hapū was Moeangiāngi (together with the surrounding area it is also known in more recent times as Ridgemoat). There are several pā located both to the north and south of the Moeangiāngi River mouth, each with commanding views over the land and sea. It is known that when Tatarāmoa moved to Moeangiāngi from Tangoio, he occupied the pā to the south of the Moeangiāngi River mouth. Tatarāmoa is the eponymous ancestor for Ngāi Tatarā (later known as Ngāi Kurumōkihi).
- 15.4. Hapū kaumātua have commented that there are many urupā in the area of the Reserve, along the ridgetops and near the Moeangiāngi awa (river) and that kōiwi (human bones) were frequently found or uncovered through later land use or erosion.
- 15.5. The Hapū have cultural, spiritual, traditional and historic associations with the Reserve and its environs, its waters, associated land and flora and fauna and have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all those natural and historic resources and sites. This relationship is as important to present day whānau (families) as it was to their tīpuna (ancestors). The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with the Reserve, and associated resources.
- 16. Earthquake Slip Marginal Strip (as shown on OTS-201-20 & HBRC Map D)**
- 16.1. The Earthquake Slip Marginal Strip (the Reserve) and environs are integral to the distinct identity and mana of the Hapū associated with that area.
- 16.2. In the northern part of the Reserve, within the former Te Kuta and Otumatai blocks, the Hapū associated with this area is Ngāi Tahu. In the southern part of the Reserve, within the former Moeangiāngi block, the Hapū associated with this area are Ngāi Te Aonui, and Ngāti Kurumōkihi. Ngāi Te Aonui intermarried with Ngāti Marangatūhetāua (Ngāti Tū), and later became known as Ngāti Tū.
- 16.3. The importance of the Reserve is due to its location on the coast and proximity to Tangitū (the sea). In addition, the Reserve is within the former Te Kuta block, borders the Waikari River and is near Waikare, which has been one of the principal coastal kāinga (villages) of the Hapū. Accordingly, the following statements of association are relevant to the Reserve.
- Rocks and Reefs and Hapū Coastal Marine Area;
 - Coast;
 - Te Kuta Recreation Reserve;
 - Waikari River and its tributaries;
 - Anaura Stream and its tributaries; and
 - Waitaha Stream and its tributaries.
- 16.4. The Reserve and its environs was an area of significant occupation by the Hapū and contains many nohoanga (camping sites), kāinga and pā (fortified villages). The coast south of the Waikari River comprising the former Te Kuta and Otumatai blocks, was occupied by Ngāi Tahu. Ngāti Tū, including Ngāi Te Aonui, and Ngāti Kurumōkihi occupied the remainder of the Reserve, from the coast southwards of the Otumatai block and including the former Moeangiāngi block.
- 16.5. The Reserve forms part of an ancient coastal trail, used by the Hapū to travel between Arapawanui to the Te Kuta River mouth - Te Puta-o-Hinetonga. Tiwhanui is identified by the Hapū as the highest point along the cliffs within the Reserve. It was used by the Hapū as a nohoanga and lookout for schools of fish and whales on fishing expeditions.
- 16.6. The Hapū have cultural, spiritual, traditional and historic associations with the Reserve and its environs, its waters, associated land and flora and fauna and have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all those natural and historic resources. This relationship is as important to present day whānau (families) as it was to their tīpuna (ancestors). The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with the Reserve, and associated resources.
- 17. Te Kuta Recreation Reserve (as shown on OTS-201-26 & HBRC Map D)**
- 17.1. Te Kuta Recreation Reserve (the Reserve) and environs are integral to the distinct identity and mana of Ngāi Tahu. The importance of the Reserve derives from its location on the Waikari River and proximity to Waikare, which has been one of the principal coastal kāinga (villages) of the Hapū, the coast and Tangitū (the sea). Accordingly, the following statements of association apply to the Reserve:
- Rocks and Reefs and Hapū Coastal Marine Area;
 - Coast;
 - Earthquake Slip Marginal Strip; and
 - Waikari River and its tributaries.
- 17.2. The Reserve and its environs was an area of significant occupation by Ngāi Tahu and contains nohoanga (camping sites), kāinga and pā (fortified villages), urupā (burial grounds) and other wāhi tapu (sacred places). Along the Reserve and nearby were also significant mahinga kai (food gathering places) and places associated with such activities, including the mouth of the Waikari River, Te Puta-o-Hinetonga and Tangitū. Tuna (eels) are a taonga species that have been central to the lives of the Hapū for many, many generations. Several pā tuna (eel weirs) are named on the Waikari River including Tutāekaraka.
- 17.3. The Reserve is located on an ancient walking track which later became the Waikare Road. However, it was also the awa (river) which provided the Hapū with a highway to and from the hinterlands to gather resources. Waka (canoes) were used to negotiate the waterways.
- 17.4. The Hapū have cultural, spiritual, traditional and historic associations with the Reserve and its environs, its waters, associated land and flora and fauna and have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all those natural and historic resources. This relationship is as important to present day whānau (families) as it was to their tīpuna (ancestors). The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with the Reserve, and associated resources.

18. Balance of the Tutira Domain Recreation Reserve (as shown on OTS-201-30 & HBRC Map B)

- 18.1. The Balance of the Tutira Domain Recreation Reserve (the Reserve) comprises most of the margins of the Lakes Tūtira, Waikōpiro and Orakai. The Reserve and environs are of great cultural, spiritual and historic significance to Ngāti Marangatūhetaua (Ngāti Tū) and Ngāti Kurumōkihi (formerly known as Ngāi Tatarā). The following statements of association are relevant to the Reserve.
- Sandy Creek and its tributaries; and
 - Mahiaruhe Stream and its tributaries.
 - Sandy Creek is the official name; it is known to the Hapū as Papakiri Stream. Part of the
 - Mahiaruhe Stream is also known to the Hapū as Tūtira Stream.
- 18.2. *Spiritual importance*
- The Tūtira area, including Lakes Tūtira, Waikōpiro and Orakai, is a renowned taonga (treasure) of Ngāti Kurumōkihi. The lakes have a mauri (life force) of their own. This mauri binds the spiritual world with the physical world. All elements of the natural world have mauri and it is this mauri that connects Ngāti Kurumōkihi with the lakes. Mauri is therefore the basis of the spiritual relationship of Ngāi Kurumōkihi with this area.
- 18.3. Lake Tūtira was also regarded by the Hapū as being a particularly spiritual area. The Hapū have a whakatauākī (tribal proverb) about the lake being:
- “ko te waiū o ō tātau tīpuna” – “the milk of our ancestors”.
- 18.4. This whakatauākī is not just a reference to the abundance of kai (food) that could be sourced from the lake. It also referred to the lake providing spiritual sustenance. Accordingly, the physical and spiritual well-being of the Hapū is closely linked to the well-being of Lake Tūtira.
- 18.5. *Cultural importance*
- Orakai and Waikōpiro are regarded as the “eyes of Tūtira”. The Tūtira area, lakes, waterways and adjoining lands formed the central hub of a series of wellknown and used tracks linking the Hapū with Tangitū (the sea in the east) and Maungaharuru (the Maungaharuru Range in the western interior). The Hapū were mobile, and their seasonal gathering gave rise to the Hapū whakatauākī:
- “Ko tō rātau pā kai ngā rekereke” – “their fortified villages were in their heels”.
- 18.6. Various natural resources at Tūtira were celebrated by the Hapū. There was an abundance of bird life. Harakeke (flax) from Tūtira was renowned for its strength and was traded with whalers. It was very good for weaving whāriki (mats) and korowai (cloaks). The lake bed was paved with kākahi (freshwater mussels) and the flavour of the tuna (eels) was unsurpassed.
- 18.7. Tūtira was famous for its tuna. The lakes, the adjoining wetlands and the surrounding awa (rivers) were heaving with tuna. Tuna were speared in the lakes, or caught in where tuna (eel houses) or pā tuna (tuna weirs) built along the edges of the awa. More recent traditions recount how the whānau (families) of Tangoio would travel to Tūtira in February – March after the second big rain to trap and spear tuna. This is the time of ‘te rere o ngā tuna’ - ‘the migration of the eels’. Whānau would prepare the pā tuna along the outlet to Lake Tūtira waiting for the tuna to begin their journey to spawn out at sea. Once caught, the tuna would be prepared and the tuna pāwhara (dried eels) would be shared amongst the wider Tangoio community. Today, the tuna at Tūtira are a small fraction of the numbers that used to populate the lakes, wetlands and awa. They are also known to be an aging population as there are few, if any, juveniles present in the lakes or awa.
- 18.8. Some rongoā (medicinal plants), were only found in or around Lake Tūtira. For example, particular harakeke (flax) was used in pre and post birthing of children, and cleansing the blood. It was, and remains, critical that rongoā is harvested from ‘clean’ areas or water. The site for harvesting must be free of contamination. Rongoā cultural knowledge and treatment are still practised today, however the harvesting of rongoā from Tūtira is now non-existent because the rongoā that was there is nearly depleted and the lakes and their awa are polluted.
- 18.9. The Hapū also carried out ceremonies and rituals at designated places at Tūtira, such as tohi (baptisms). However, such ceremonies have not been performed for several generations, again, due to the state of the lakes and awa.
- 18.10. In the northern edge of Lake Tūtira, lies the log Te Rewa-a-Hinetu. As its name Rewa (the floater) implies, it is endowed with the power of moving from spot to spot. Its approach to Tautenga, a rock, was a particularly bad omen, and would signal a death in the Hapū.
- 18.11. Te Rewa-a-Hinetu is a branch of a rākau (tree) named Mukakai, which has travelled from the South Island up the coast to Otaki; another branch rests in Lake Wairarapa, another at Tikokino, and another at Te Putere. The presence of any portion of this eminent tree is said to be indicative of abundance. With its disappearance the food supply of the Hapū is said to dwindle and diminish.
- 18.12. Where Tūtira was a place of abundance, it is now resource poor. Ngāti Kurumōkihi, as kaitiaki (guardian) has the responsibility to take care of places, natural resources and other taonga within its takiwā (traditional area). Central to these responsibilities is the maintenance of customary practices and the sustainable use of natural resources. This kaitiaki role is an all-encompassing one, providing for the protection of biodiversity, the utilisation and maintenance of resources, for present and future generations and the restoration and enhancement of damaged ecosystems. Decisions about how to look after taonga species and places within the takiwā are based on mātauranga (knowledge). Mātauranga associated with the collection of resources was central to the lives of the Hapū and remains a significant part of the cultural identity of the Hapū today. Mātauranga and associated tikanga (customs), karakia (prayers) and kawa (rules) are all essential for maintaining customary traditions - the ritual and tapu (sacredness) associated with gathering and utilising resources.
- 18.13. *Kōrero tuku iho - historical importance*
- The Tūtira area and the Reserve, are densely populated with sites of significance to Ngāti Kurumōkihi. Major areas of occupation within or nearby the Reserve include the pā of Te Rewa-o- Hinetu, Oporae and Tauranga-kōau which are still identifiable today.
- 18.14. Te Rewa-o-Hinetu pā, is located on the south eastern part of Lake Tūtira and between Lakes Tūtira and Waikōpiro. Te Rewa-o-Hinetu pā was a large and fortified spur which almost completely separated Lakes Tūtira and Waikōpiro. It had natural defences including three sides that were either impenetrable marsh, or water, and its fourth approach being guarded by a maioro (trench and bank). Nearby, remnants of reed-thatched huts, sunken waka, middens, and waka traffic on the adjacent shore remain today. Within the vicinity of Te Rewa-o-Hinetu is a significant wāhi tapu, as Tataramoa, the eponymous ancestor for Ngāi Tatarā (later known as Ngāti Kurumōkihi) is believed to be buried there.
- 18.15. Oporae pā is a small peninsula on the eastern shores of Lake Tūtira. It too benefited from the natural defence of water on three sides and a maioro on its fourth side.

- 18.16. Tauranga-kōau is the island off the east shore of Lake Tūtira and was the site of another pā. Tauranga-kōau featured in a prominent attack upon Ngāi Tataara and its chief of that time, Tiwaewae. Although Tiwaewae was killed by the warparty, Ngāi Tataara boldly held the pā. The siege endured until the tohunga (high priest) of the Hapū went to Te Ahu – the altar of Tunui-a-teika, to invoke their tribal deity. Their deity appeared “like a comet” and travelled southwards towards the tīhi tapu (the sacred peak) of Te Puku (located at the southern end of Waikōpiro), to guide the escape of Ngāi Tataara. There were not enough waka (canoes) so it was decided that the men and boys would escape on the waka, leaving the women and girls in the pā. The men and boys passed through the narrows of Ohinepaka (at that time the opening between Lakes Tūtira and Waikōpiro), and they landed on the east edge of Waikōpiro, where they sank their waka. Tauranga-kōau pā was besieged by the attackers on mōkihi (rafts), and because of this event Ngāi Tataara become known as Ngāti Kurumōkihi (those attacked by rafts). The women and girls were taken ashore as prisoners at a nearby site called Te Papa-o-Waiatara. Following this incident, Ngāti Kurumōkihi mounted numerous attacks to avenge the death of Tiwaewae.
- 18.17. As a prized taonga, many raids were made on Lake Tūtira. However, Ngāti Kurumōkihi have another whakatauākī, “Tūtira upoko pipi” – “Tūtira, the place where heads became soft”, commemorating the success of Ngāti Kurumōkihi in defending Tūtira, their prized taonga. Tribal archives record that, other than the death of Tiwaewae, no other rangatira (chiefs) were ever taken and every raiding party was beaten.
- 18.18. Ngāti Kurumōkihi, and Ngāti Tū before them, have maintained ahi-kā-roa (long occupation) at Tūtira. The continued recognition of the Hapū, their identity, traditions and status as kaitiaki is entwined with the Reserve, and associated resources.
- 19. Tangoio Falls Scenic Reserve and White Pine Bush Scenic Reserve (shown on, respectively, OTS-201-23 & OTS-201-24 & HBRC Map B)**
- 19.1. The Tangoio Falls Scenic Reserve and the White Pine Bush Scenic Reserve (together, the Reserves) are of great spiritual, historical and cultural importance to the Hapū of Ngāti Marangatūhetaua (Ngāti Tū), Ngāti Kurumōkihi and Ngāi Te Ruruku. The importance of the Reserves derives from their location in the Tangoio valley, close to Tangoio, one of the principal settlements of the Hapū. The following statement of association is relevant to the Reserves:
- Te Ngarue Stream and its tributaries.
- 19.2. *Spiritual importance*
- The Reserves and their environs contain many natural resources. All natural resources have a mauri (life force). This mauri binds the spiritual world with the physical world and it is this mauri that connects the Hapū with all natural resources. Mauri is therefore the basis of the spiritual relationship of the Hapū with all natural resources.
- 19.3. The Hapū regard all natural resources as being gifts from ngā atua kaitiaki (spiritual guardians). Tangaroa-i-te-Rupetu (Tangaroa) is the spiritual guardian of the moana (sea) and other water bodies and all that lives within them and Tāne-nui-a-rangi of the ngahere (forest) and all that lives within the ngahere. They are sons of Papa-tū-ā-nuku (Earth Mother) and Rangi-nui (Sky Father), from whom all living things descend, including the Hapū. Therefore, ngā atua kaitiaki and the descendants of the Hapū are connected by whakapapa (genealogy). These guardians were central to the lives of Hapū tīpuna (ancestors) and remain culturally significant to the Hapū whānau (families) living today.
- 19.4. *Kōrero tuku iho – historical importance*
- Tangoio has always been an important area of occupation since the first tīpuna settled in the valley. The earliest pā (fortified village) dates from the time of Toi Kairakau (alias Toi Te Huatahi –Toi the Explorer). Toi was a famous navigator and seafarer who established his southernmost pā at the head of the Tangoio valley, above the confluence of Te Ngarue Stream and Te Kareara Stream, aptly called the Pā-o-Toi. This pā is located across the road from the Tangoio Falls Scenic Reserve. Ngāti Tū are direct descendants of Toi.
- 19.5. Located within the Tangoio Falls Scenic Reserve is a pā referred to as Rauwirikokomuka pā. Another pā within the valley is Pukenui, located high on the Kaiwaka escarpment at the head of Te Ngarue Stream. Pukenui was built by Kohipipi, a Ngāti Tū chief who occupied it for some time, before rebuilding and occupying the Pā-o-Toi.
- 19.6. Te Rae-o-Tangoio – the forehead of Tangoio, is located near the coast on a promontory, that jutted into what was formerly known as the Tangoio Lagoon (before the 1931 Napier earthquake). It is transected by State Highway 2. Te Rae o Tangoio is an ancient pā site originally established by Tangoio, a chief of the early Toi people. The pā was originally named Te Rae-o-Turei – the head of the turtle, but was renamed Te Rae-o-Tangoio by Tangoio as he lay mortally wounded nearby. Te Rae-o-Tangoio was later occupied by Tataramoia, the eponymous ancestor of Ngāi Tataara (later known as Ngāti Kurumōkihi), and his wife Porangi, Kohipipi’s daughter. Marangatūhetaua also occupied Te Rae-o-Tangoio from time to time, and his son Ngapoerau continued in occupation, as do his descendants today.
- 19.7. In addition to the pā named above, there are many other sites of significance in the Tangoio valley which attest to the ahi-kā-roa (long occupation) of the Hapū, including wāhi tapu (sacred places), numerous urupā (burial grounds), both ancient and contemporary, mahinga kai (food gathering places) and ancient trails from the coast to Tūtira.
- 19.8. Tangoio remained a principal settlement of the Hapū up until the 1960’s when many whānau were forced to disperse due to a series of devastating floods. Even so, some whānau continue to live in the valley today.
- 19.9. Over many generations there have been a succession of whareniui (meeting houses) at various locations in the Tangoio valley. The earlier whareniui was also a whare maire (a place of higher learning and excellence). It was a place where members of the Hapū were educated and had a sound understanding of their tribal history and traditions. The current whareniui, Punanga-te-Wao, stands on Tangoio Marae alongside Tangitū, the wharekai (dining room), and Maungaharuru, a utility building.
- 19.10. *Cultural importance*
- The Tangoio valley, including the Reserves, was a pātaka (storehouse) for the Hapū who lived there. The ngahere (forests) in the valley were a source of kai (food). In pre-European times there was an abundance of manu (birds). Kererū (native pigeon) in particular, was reported to have been still plentiful at White Pine Bush in the twentieth century. Kaumātua tell of catching kererū in the winter by building a waka (bird snare) and mixing some sweet water in it. Also harvested were tūi (parson bird), weka (woodhen), kākā (native parrot) and kiwi in the ngahere, and pākura (pūkeko or purple swamp hen) and native ducks, such as the pāpera (grey duck), were harvested in the wetland areas. Ngā manu were not only important as a source of food, their feathers were used for cloaks, decorating garments and personal adornment.
- 19.11. Plants were also gathered for kai. Up to the early twentieth century, White Pine Bush was regarded as particularly good for pikopiko (young fern shoots), poroporo and wild gooseberries, as well as miro (brown pine), kiekie and tuwharo berries. The Hapū also gathered kōrau (a type of vegetable), makomako (wineberry) and tawa berries, and karaka nuts.

- 19.12. In addition to being a source of kai, the ngahere was regarded as the “local pharmacy”. Hapū members knowledgeable in rongoā (medicinal plants) would gather kawakawa leaves (pepper tree), kōwhai bark, harakeke (flax), runa (dock leaves), kopakopa leaves (Chatham Island forgetme-not), koromiko, mānuka (tea-tree), tutu tree, bluegum tree, ongaonga (native stinging nettle), parapara, pipiripi (burr / biddy-bid), frond stems of mamaku (black tree fern), karaka berries and ngaio. These taonga (treasures) were used for a variety of ailments, were highly valued by tipuna and remain culturally significant to the Hapū today. However, the availability of rongoā species has diminished considerably over the past century such that Tātārāmoa (bramble / bush lawyer) no longer grows in the valley and the once prolific kawakawa is difficult to find.
- 19.13. Mātauranga (knowledge) associated with the collection of resources from ngā awa (rivers) and ngahere was central to the lives of the Hapū tipuna and remains a significant part of the cultural identity of the Hapū today. Mātauranga and associated tikanga (customs) and kawa (rules) and karakia (prayers) are all essential for maintaining customary traditions - the ritual and tapu (sacredness) associated with gathering and utilising resources. An example is harvesting of different species according to the seasons or tohu (signs) - according to Hapū kaumātua, the appearance of ripe miro berries was a sign it was time to catch kererū. Another example is the harvesting of rongoā. Extra care was taken with removing leaves and branches to ensure that they would grow back and would remain in plentiful supply.
- 19.14. Today the Tangoio Falls Scenic Reserve comprises regenerating native forest including tītoki, rewarewa (New Zealand honeysuckle), māhoe (whiteywood), putaputawētā (marbleleaf), houhere (lacebark), nīkau (native plam) and kiekie. There are also areas of mānuka (tea tree) and scattered kahikatea (white pine). Manu include the kererū, tūi (parson bird) and korimako (bellbird).
- 19.15. The White Pine Bush Scenic Reserve comprises mature native forest including kahikatea, mataī (black pine), tītoki, rewarewa (New Zealand honeysuckle), tawa and nīkau, along with kawakawa (pepper tree), porokaiwhiri (pigeonwood) and māhoe (whiteywood). Manu include the kererū, tūi, korimako and ruru (morepork).
- 19.16. In earlier times, the awa and ngahere were abundant with taonga resources for the Hapū. All of these taonga were harvested for a range of uses, including kai, rongoā, clothing (including feathers for decorating garments and personal adornments), building materials, trade and gifting. Today, the Reserves are the last bastion of ngahere within the Tangoio valley. And the taonga resources within the ngahere and the awa, are far more scarce than in earlier times (and in the case of Tātārāmoa, non-existent).
- 19.17. The continued recognition of the Hapū, their identity, traditions and status as kaitiaki (guardians) is entwined with the Tangoio Valley, including the Reserves and associated resources. Protecting and revitalising taonga species, and the customary practices relating to those taonga species, particularly rongoā, within the Reserves is paramount for present day whānau, as it was for past generations. Guardianship of the area is integral to the cultural well being of the Hapū as kaitiaki.

20. Rivers and their tributaries (as shown on HBRC Map E)

- 20.1. The following values, resources, cultural and spiritual associations are common to all awa (rivers and streams) with which the Hapū have a customary connection.
- 20.2. *Spiritual importance*
Ngā awa carry the lifeblood of Papa-tū-ā-nuku (Earth Mother) and the tears of Rangi-nui (Sky Father). The wai (water) flowing through these awa symbolises the spiritual link between the past and present. Each awa has a mauri (life force) and wairua (spirit) of its own. This mauri binds the spiritual world with the physical world. All elements of the natural world have mauri and it is this mauri that connects the Hapū with ngā awa. Mauri is therefore the basis of the spiritual relationship of the Hapū with ngā awa.
- 20.3. For the Hapū, ngā awa are a source of wai (water) which is an essential element of life. Wai is considered to transcend life itself, as it sustains the physical and spiritual survival of all things. Therefore the health of an awa reflects the health of the Hapū of the takiwā (traditional area).
- 20.4. Ngā awa support many life forms. They are an integral part of ngā awa and cannot be separated from them.
- 20.5. Ngā awa are taonga (treasures) to the Hapū. Traditionally, ngā awa provided a wealth of resources to sustain the Hapū. The Hapū regard all natural resources as being gifts from ngā atua kaitiaki (spiritual guardians). Tangaroa-i-te-Rupetu (Tangaroa) is the spiritual guardian of the moana (sea) and other water bodies and all that lives within them and Tāne-nui-a-rangi is the spiritual guardian of the ngahere (forest) and all life forms within the ngahere. These guardians were central to the lives of Hapū tipuna (ancestors) and remain culturally significant to the Hapū whānau (families) living in the present day.
- 20.6. The domain of Tangaroa stretches from the source of ngā awa at the tihi tapu (sacred peaks) of Maungaharuru (Maungaharuru Range), to the moana. Each awa is an indivisible and whole entity, from its source to, and including, the moana, or other water body that it flows into. Therefore, the relationship the Hapū have with these taonga relates to the entire catchment. In addition, the Hapū view te Taiao (the environment) and all things within it, including ngā awa, as intrinsically linked. Accordingly, ngā awa, adjoining waterbodies and lands, and the flora and fauna that inhabit such areas, are all intrinsically linked and therefore important when considering the association of the Hapū with ngā awa.
- 20.7. *Ngā ara (pathways)*
Ngā awa provided the Hapū with highways to and from the hinterlands to gather resources. These resources formed the basis for both economic and social relationships. Waka (canoes) were used to negotiate the waterways.
- 20.8. *Tuna (eels)*
Tuna are taonga species that have been central to the lives of the Hapū for many, many generations. The places where tipuna (ancestors) harvested tuna were important tribal areas. Gathering and processing tuna was a customary practice that strengthened cultural wellbeing and whānaungatanga (kinship). Customary management practices followed the lifecycle of the tuna, and harvesting was regulated according to the seasons.
- 20.9. *Rongoā (medicinal plants)*
Rongoā were also harvested from and around ngā awa. Rongoā cultural knowledge and treatment are still practised today, however the harvesting of rongoā from many awa is difficult because the rongoā has become scarce or the awa polluted. It was, and remains, critical that rongoā is harvested from ‘clean’ areas or water, free of contamination.
- 20.10. *Pā harakeke (flax bushes)*
Pā harakeke supplied tipuna with raw products for rongoā, weaving materials and trading. Among other things, harakeke was used extensively by the Hapū to make kete (baskets) for carrying food such as ika (fish) harvested from ngā awa. Harekeke are located on the banks of ngā awa and in

the wetland and estuarine areas fed by ngā awa. They also provided an important habitat and breeding ground for the nesting birds and fish species that lived on and in ngā awa.

20.11. *Ika (fish)*

The Hapū harvested a large number of tuna and other freshwater fish species including kōkopu (cockabully), īnanga and ngaore (forms of whitebait), pātiki (flounder) and kōhitihi (shrimps). Although the numbers of freshwater fish have dwindled, they are still an important resource for whānau today.

20.12. *Ngahere (forest)*

Traditionally, kāinga (villages) in the river valleys were surrounded by an abundant source of timber. The river flats were heavily forested with tōtara, along with lush, dense stands of other native timbers. Tōtara was particularly important to the Hapū, as they used it to build their waka which were used to navigate ngā awa and the moana. The fruits of the trees were a source of food. A vast range of edible products were harvested from the ngahere including frond stems of mamaku (black tree fern), karaka berries, ngaio, and kawakawa (pepper tree).

20.13. *Manu (birds)*

In pre-European times, ngā manu associated with ngā awa were plentiful. Pākura (pūkeko or purple swamp hen) and native ducks including the whio (blue duck) and pārerā (grey duck) were harvested in ngā awa and the wetland areas. Kererū (native pigeon), tūt (parson bird), weka (woodhen), kākā (native parrot) and kiwi were found in the ngahere that hugged ngā awa. Ngā manu were not only important as a source of food, the feathers were used for cloaks, decorating garments and personal adornment.

20.14. *Mātauranga (knowledge)*

Mātauranga associated with the collection of resources from ngā awa was central to the lives of the Hapū tipuna and remains a significant part of the cultural identity of the Hapū today. Mātauranga and associated tikanga (customs), karakia (prayers) and kawa (rules) are all essential for maintaining customary traditions - the ritual and tapu (sacredness) associated with gathering and utilising resources. Examples include the harvesting of different species according to the seasons or tohu (signs). Mātauranga Māori is intertwined with ngā awa and the many resources associated with them.

20.15. *Kaitiakitanga (guardianship)*

The relationship the Hapū have maintained with ngā awa is reflected in their history of resource protection and use. The Hapū as kaitiaki (guardians) have the responsibility to take care of ngā awa within their takiwā. Central to these responsibilities is the maintenance of customary practices and the sustainable use of natural resources. This kaitiaki role is an all-encompassing one, providing for the protection of biodiversity, the utilisation and maintenance of resources, for present and future generations and the restoration and enhancement of damaged ecosystems. Decisions about how to look after taonga species and places within the takiwā are based on mātauranga Māori and implemented through tikanga practised by the Hapū as tāngata whenua for many generations.

20.16. The cultural identity of the Hapū is therefore intertwined with ngā awa and the maintenance of associated customs and traditions is paramount to Hapū wellbeing.

21. **Esk River and its tributaries (as shown on OTS-201-34 & HBRC Map E)**

21.1. The Esk River is the official name of the awa (river). The name known to the Hapū is Te Wai-o-Hingānga. It is an extensive awa with its origins in the vicinity of Taraponui (this is the official name, it is known to the Hapū as Tarapōnuī-a-Kawheā) high on Maungaharuru (the Maungaharuru Range). It flows south-east and exits at the entrance to the Esk valley at Tangitū (the sea). The importance of Te Wai-o-Hingānga to the Hapū lies in its status as one of the southern boundary markers of the takiwā (traditional area) of the Hapū and as a significant mahinga kai (food gathering place). The following statements of association relate to the awa.

- Peaks of Maungaharuru Range; and
- Rocks and Reefs and Hapū Coastal Marine Area.

21.2. Hapū kaumātua (elders) and kaikōrero (speakers) acknowledge the importance of Te Wai-o-Hingānga. The important status of the awa is recognised by the Hapū in their whaikōrero (formal speeches) on their marae and in waiata (songs).

21.3. *Kōrero tuku iho - historical importance*

Prior to the 1931 Napier earthquake, Te Wai-o-Hingānga flowed towards Te Whanganui-ā-Orotu, the large Napier inner harbour. It had two exits. In those days, there was a large lagoon near the present river mouth. Part of the awa flowed into the sea from the lagoon. Another branch, called the Petane Stream, flowed southwards across the present day Petane Domain and into Te Whanganui-ā-Orotu near Te-lho-o-te-Rei (also known as Quarantine Island). Following the earthquake and the uplifting of land, the Petane Stream was reduced to a trickle, and no longer exists today.

21.4. Alongside, and nearby Te Wai-o-Hingānga are kāinga (villages), pā (fortified villages) and wāhi tapu (sacred sites) attesting to the occupation of the Hapū, particularly Ngāi Te Ruruku. Te Wai-o-Hingānga provided a wealth of kai (food) to sustain the Hapū living at the pā at Nukurangi, Kapemaihi and Heipipi.

21.5. Nukurangi pā was located at the current mouth of Te Wai-o-Hingānga on the north side of the lagoon. Nearby is an urupā (burial ground) named Ararata – Mt Ararat, which is associated with Ngāi Te Ruruku.

21.6. Kapemaihi is another kāinga located south of the current river mouth, and was occupied by Ngāi Te Ruruku. It is known to have still been occupied in the 1840's when William Colenso visited and found that one of Te Ruruku's sons, Te Kariwhenua, was living there. In 1849 the pā shifted to Petane on the north side of the awa.

21.7. Further inland from Kapemaihi is the famous Heipipi pā. It is an ancient pā located on the Petane hills and was originally built by Te Koaupari, a Ngāti Marangatūhetāua (Ngāti Tū) ancestor. It was later inhabited by Tunuiarangi, the rangatira (chief) of Ngāti Whatumamoa, tohunga (high priest) and Ngāi Taurā and Ngāti Tū ancestor. Tunui was descended from Tangaroa-i-te-Rupetu, the spiritual guardian of the sea and other water bodies and all that lives within them. As a result, Tunui possessed supernatural powers.

21.8. *Cultural importance*

Prior to the earthquake, the Petane Stream was an excellent mahinga kai. It was a source of kākahi (fresh water mussels) and tuna (eels), with the tidal flats being an excellent place to spear tuna. Īnanga (whitebait) was particularly abundant. Kōura (fresh water crayfish) and kohitihiti (shrimps) were also collected. Kahawai and herrings made their way up the awa and were fished.

21.9. Hapū kaumātua have commented that Te Wai-o-Hingānga, in particular its river mouth, was the source of similar kai as the Petane Stream as well as pātiki (flounder) which were prolific. They also noted the tohu (signs) that were used to harvest kai. For example, the time to net Īnanga or ngaore (forms of whitebait) or kohitihiti, is when you see the whiro (willow) tree leaves appearing. Traditionally, Te Wai-o-Hingānga was an abundant food basket, with diverse ecosystems and species associated with those habitats.

22. **Pākuratahi Stream and its tributaries (as shown on OTS-201-45 & HBRC Map E)**

22.1. The Pākuratahi (formerly Pakuratahi) Stream flows from the hills in the north east along the Pākuratahi valley and exits at the coast at Tangoio Beach. It shares the same mouth as Te Ngarue (formerly Te Ngaru) Stream. Accordingly, the following statements of association are relevant to the awa (stream).

- Te Ngarue Stream and its tributaries; and
- Rocks and Reefs and Hapū Coastal Marine Area.

22.2. The importance of the Pākuratahi Stream to Ngāti Marangatūhetaua (Ngāti Tū) and Ngāi Te Ruruku lies in its proximity to important kāinga (villages), pā (fortified villages), wāhi tapu (sacred places), Tangitū (the sea) including its rocks and reefs, and as a mahinga kai (food gathering place).

22.3. *Kōrero tuku iho - historical significance*

According to Hapū tipuna (elders), the name Pākuratahi derives from “pākura” which is another name for the pūkeko (purple swamp hen). Pākuratahi Stream provided a wealth of kai (food) to sustain the Hapū living at the pā of Te Rae-o-Tangoio (in the Tangoio valley) and Ngāmoerangi, and the kāinga, Te Rua-a-Tunuku.

22.4. On the south side of the mouth of the awa at Tangoio Beach is Ngāmoerangi pā, a coastal pā which has largely been swept away by the sea. In the same location and still visible today is Panepaoa, a small hill. Ngāmoerangi and Panepaoa feature in the story of Māui-tikitiki-a-Taranga fishing up Te Ika a Māui (the North Island of New Zealand). That story is described in the statement of association about the “Peaks of the Maungaharuru Range”.

22.5. Ngāmoerangi is known as a coastal pā, reef and beach. The pā was occupied by Ngāti Tū and is highlighted in the kōrero about the arrival of Te Ruruku to this area. At that time, another hapū had been raiding the fishing grounds of Ngāti Tū and Ngāi Tatarā (which later became known as Ngāi Kurumōkihi) at Tangoio and Tūtira. These issues led Marangatūhetaua, a chief of Ngāti Tū, to seek support from Te Ruruku, a chief from Wairoa. Marangatūhetaua needed to offer incentives to Te Ruruku to persuade him to settle among them. It was eventually agreed that Te Ruruku would occupy Ngāmoerangi pā which was the gateway to the fishing grounds at Tangitū (the coast). Marangatūhetaua put his warriors at Te Ruruku’s disposal. He also left his children Te Kauae and Hopu at the pā with Te Ruruku as a sign of good faith. Marangatūhetaua and his son Ngapoerau went to live at Te Rae-o-Tangoio, and their descendants have lived there ever since. It was from Ngāmoerangi, that Ngāi Te Ruruku, Ngāti Tū and Ngāi Tatarā would prevent waka taua (enemy war canoes) that came across the bay from landing. This pā also afforded protection to their southern and western flanks from invasion overland.

22.6. Another notable pā and kāinga near the awa is Te Rua-a-Tunuku. This is located above the entrance, and on the north side, of the Pākuratahi valley (and present day turnoff from State Highway 2). Te Ruruku and his people built and occupied this pā to keep guard over the surrounding area. An urupā (burial ground) associated with Ngāi Te Ruruku was also located nearby.

22.7. *Cultural importance*

Prior to the 1931 Napier earthquake, the Pākuratahi Stream and valley formed part of the Tangoio Lagoon. It was a very big lagoon and started in the Pākuratahi valley stretching all the way north to Te Rae-o-Tangoio in the Tangoio valley. It was full of tuna (eels), and the Hapū would often catch them by digging channels about 2 feet wide and 1 foot deep so the bigger tuna would be able to swim down them. When there were enough tuna in the channel, it was shut off. They would then wait for the water to seep away leaving the tuna high and dry. Nets were also set to catch ika (fish) in the lagoon.

22.8. Following the 1931 Napier earthquake, the lagoon was reclaimed and later became market gardens. The surrounding coastal flat land which had been swamp, became pastoral land. However the awa and particularly its mouth, were still popular for spearing pātiki (flounder) and catching herrings well into the 1950s and later.

22.9. The awa is also significant in that it flows onto important fishing reefs for the Hapū including, Ngāmoerangi, Rautoetoe and Te Una opposite Tangoio Beach, as well as Panepaoa, a reef of the same name as the hill mentioned earlier, which is said to have become more prominent following the 1931 Napier earthquake.

23. **Te Ngarue Stream and its tributaries (as shown on OTS-201-36 & HBRC Map E)**

23.1. Te Ngarue (formerly known as Te Ngaru) Stream and its tributaries including the Rauwirikomuka and Kareara Streams flow from the steep hills north of Tangoio through the Tangoio valley and exit on the coast at Tangoio Beach. Accordingly, the following statements of association are also relevant to these awa (streams).

- Tangoio Falls Scenic Reserve and White Pine Bush Scenic Reserve;
- Pākuratahi Stream and its tributaries; and
- Rocks and Reefs and Hapū Coastal Marine Area.

23.2. Te Ngarue Stream is of great importance to the Hapū because it flows alongside Tangoio, the principal settlement of the Hapū, and their present day marae.

23.3. Te Ngarue Stream was significant to the Hapū as a key mahinga kai (place for gathering food). Historically, the awa provided a wealth of kai (food) to sustain the Hapū and was particularly abundant with tuna (eels) and Īnanga (whitebait).

- 23.4. Prior to the 1931 Napier earthquake, Te Ngarue Stream and Tangoio valley formed part of the Tangoio Lagoon. It was a very big lagoon and started in the Pākūratahi valley stretching all the way north to Te Rae-o-Tangoio in the Tangoio valley. Following the 1931 Napier earthquake, the lagoon was reclaimed and later became market gardens. The surrounding coastal flat land which had been swamp, became pastoral land.
- 23.5. Oral tradition describes an historical event which illustrates the richness of Te Ngarue as a resource for tuna. Marangatūhetāua, a chief of Ngāti Marangatūhetāua (Ngāi Tū), sought the help of Te Ruruku, a chief from Wairoa, to help defend the fishing grounds at Tūtira and Tangoio, which were being plundered by another hapū. Marangatūhetāua boasted how bountiful the kai was at Tangoio. When Te Ruruku and Marangatūhetāua arrived at Te Rae-o-Tangoio, Marangatūhetāua saw that the mouth of Te Ngarue Stream was blocked. He ordered his sons to open up the channel from the mouth of Te Ngarue Stream to the sea. As the current began to flow swiftly to the sea, the tuna began their run, but up blind channels that had already been prepared. Te Ruruku watched as the people squatted over the channels and with legs astride began pulling out the tuna beneath them, swiftly killing them. The tuna were entering the channels faster than they could be emptied. As Te Ruruku watched this ritual, he saw why Marangatūhetāua had boasted of the bounty of the area. Following this event, Te Ruruku agreed to act as a fighting chief for Ngāti Tū and Ngāti Kurumōkihi and to help them repel the invaders. In exchange, Te Ruruku was gifted land and settled amongst them.
- 23.6. Hapū kaumātua (elders) recall digging channels for tuna in the Tangoio Lagoon in the early twentieth century in much the same way as Marangatūhetāua and his people had done several hundred years before.
- 23.7. In addition to tuna, the Hapū harvested a large number of freshwater fish species including kōkopu (cockabully), īnanga and ngaore (forms of whitebait), pātiki (flounder) and kōura (freshwater crayfish). Although, freshwater fish and tuna have been severely depleted, they are still an important resource for whānau (families) today.
- 23.8. In Te Ngarue Stream lives a kaitiaki (guardian) of the same name, which takes the form of a tuna. It is highly regarded by the Hapū and is carved on the front of Punanga-Te-Wao, the whare tipuna (meeting house) at Tangoio Marae.
- 23.9. One of the tributaries of Te Ngarue Stream is Te Rangiatāhūa Stream. It was used by the women of the Hapū as a place to give birth. This was due to the fact that the waters were always warm. This tributary was named after the mother of Kupa, one of the last known chiefs of Ngāti Kurumōkihi. His pou (post) which was partially burnt is now housed at the Napier museum. Unfortunately, due to pollution of the awa, it is no longer used for birthing.

24. Waikoau and Arapawanui Rivers and their tributaries (as shown on, respectively, OTS-201-38 and OTS-201-33 & HBRC Map E)

- 24.1. The Waikoau River originates at the tihi tapu (sacred peaks) of the central area of Maungaharuru and flows eastwards through the Waikoau Conservation Area. The awa (river) then flows through the Tūtira area and is joined by the Mahiaruhe Stream from Lake Tūtira. It continues east entering into the Arapawanui valley where it is known as the Arapawanui River (by the Hapū; its official name is Arapawanui River). It flows alongside the Mangapukahu Scenic Reserve and then exits into Tangitū (the sea). Accordingly, the following statements of association are relevant to the awa.
- Peaks of Maungaharuru Range;
 - Waikoau Conservation Area;
 - Balance of the Tutira Domain Recreation Reserve;
 - Mangapukahu Scenic Reserve; and
 - Rocks and Reefs and Hapū Coastal Marine Area.
- 24.2. The Waikoau/Arapawanui River is one of the most significant awa in the taikiwā (traditional area of the Hapū). It links two of the most culturally and historically important areas of the Hapū, Tūtira and Arapawanui.
- 24.3. The awa also features in many kōrero (stories) of the Hapū, including a kōrero relating to the defeat of a chief from another district. That chief came to Arapawanui from another district after escaping an attack from Taraia I of Ngāti Kahungunu. Taraia I's party attacked and defeated a group who were thought to be involved in the desecration of the body of his brother, Tupurupuru. Only the chief escaped.
- 24.4. Taraia I's party divided into two groups. The first party was led by Taraia I himself and included his wife Hinepare and her brothers. They travelled south by waka (canoe). In the other party, which travelled overland, were Rakaihikuroa (Taraia I's father) and Tikorua (his first cousin) and his two sons Rangitirohia I and Tangiahi. Their mother, Pania, was the daughter of Tūkapua I of Ngāti Marangatūhetāua.
- 24.5. The chief and his people were at the pā, Te Puku-o-te-Wheke. Taraia I's party paddled to the mouth of the Arapawanui River. When they landed the two groups charged at each other. At one point, Taraia I's party began to flee towards the sea. However Hinepare, who had been standing on a big rock out to sea overlooking the fight, jeered at her brothers for running away. She broke a calabash onto the rock, the sound of which was mistaken by her brothers for a skull crushed by a weapon. When her brothers and Taraia I heard her they rallied their people and returned to the fight. This time, the chief and his people fled in confusion up the awa. Further up the awa, they were set upon by Tangiahi's party which had come down the coast overland. The name of this battle was Wai-kōau, the waters of the shag.
- 24.6. A rock named Hinepare, is located at the mouth of the Arapawanui River.

25. Sandy Creek and its tributaries (as shown on OTS-201-43 & HBRC Map E)

- 25.1. The inlet to Lake Tūtira is Sandy Creek (this is the official name; the name known to the Hapū is Papakiri Stream). This awa (stream) is integral to the distinct identity and mana of Ngāti Marangatūhetāua and Ngāti Kurumōkihi (formerly known as Ngāi Tātara). Its importance is due to its connection with Lake Tūtira and its reputation as an outstanding mahinga kai (place for gathering food). Accordingly, the following statements of association are relevant to this awa.
- Balance of the Tutira Domain Recreation Reserve; and
 - Mahiaruhe Stream and its tributaries.
- 25.2. It is said that in ancient times there was a very large wetland area comprising several hundred acres at the northern end of Lake Tūtira. Also, that the Papakiri Stream never flowed directly into the lake. Instead, its waters worked their way through the wetland, and then into the Mahiaruhe Stream, the outlet flowing from the lake. At the turn of the twentieth century, the wetland remained, although much smaller in size, and comprised acres of harakeke (flax) and raupō (bulrush).

25.3. At Tūtira, the Hapū distinguished at least three types of tuna. Tātārākau – the common kind found in the lake, riko – also from the lake, rarely caught, larger and bronze in colour, and pakarara – the tuna from Tūtira Stream. When the Hapū produced tuna pāwhara (dried eels), the pakarara would keep for four or five days, and the tātārākau and riko several weeks.

26. Mahiaruhe Stream and its tributaries (as shown on OTS-201-35 & HBRC Map E)

26.1. The Mahiaruhe Stream is the outlet from Lake Tūtira. This awa (stream) is integral to the distinct identity and mana of Ngāti Marangatūhetaua and Ngāti Kurumōkihi (formerly known as Ngāi Tataara). Its importance is due to its connection with Lake Tūtira and its reputation as an outstanding mahinga kai (place for gathering food). Accordingly, the following statements of association are relevant to this awa.

- Balance of the Tutira Domain Recreation Reserve; and
- Sandy Creek and its tributaries.

26.2. At the north-western extremity of Lake Tūtira, flowed the outlet, Mahiaruhe Stream. It was described as deep and slow-flowing. The first part of the awa was known by the Hapū as Tūtira Stream. It flowed for approximately a kilometre and reached an ancient ford known as Maheawha (which is more or less where the Napier-Wairoa Road crosses the awa today). From that point the outlet is known as the Maheawha Stream, and flows for a few kilometres to join up with the Waikoau River.

26.3. The Tūtira and Maheawha Streams were regarded as exceptional mahinga kai for tuna (eels). Along the Tūtira Stream alone were 16 named pā tuna (eel weirs). It is believed that there were immense numbers of tuna that never visited the lake, instead communing with the stream by means of holes in the banks of the awa. Tipuna (ancestors) confirmed this belief by the fact that although the pā tuna traversed the entire width of the Tūtira Stream, catches were as heavy in the downstream pā tuna as the upstream pā tuna.

26.4. At Maheawha (the ford), and elsewhere, there were also whare tuna (eel houses). Their sizes varied according to the locality and depth of the awa, but were described as approximately 5 metres long, ½ metre high and just over a metre wide and made of manuka and harakeke. They had several observation holes on the top, large enough to admit a hand and were weighted down with stones. The upstream end of the whare tuna was open to allow the awa to flow inside and it was loosely filled with waterweed. The whare tuna were a permanent trap that required no watching, baiting or lifting.

26.5. At Tūtira, the Hapū distinguished at least three types of tuna. Tātārākau – the common kind found in the lake, riko – also from the lake, rarely caught, larger and bronze in colour, and pakarara – the tuna from Tūtira Stream. When the Hapū produced tuna pāwhara (dried eels), the pakarara would keep for four or five days, and the tātārākau and riko several weeks.

27. Moeangiāngi River and its tributaries (as shown on OTS-201-39 & HBRC Map E)

27.1. The Moeangiāngi River flows south east from the Tūtira area into the Moeangiāngi valley and exits on the coast at Tangitū (the sea). Accordingly, the following statements of association also relate to this awa (river).

- Balance of the Tutira Domain Recreation Reserve;
- Moeangiāngi Marginal Strip; and
- Rocks and Reefs and Hapū Coastal Marine Area.

27.2. The Moeangiāngi River is of great importance to the Hapū because of its proximity to Moeangiāngi, one of the principal settlements of the Hapū. Ngāti Kurumōkihi and Ngāi Te Aonui lived at Moeangiāngi. Ngāi Te Aonui intermarried with Ngāti Marangatūhetaua (Ngāti Tū), and later became known as Ngāti Tū.

27.3. Along the Moeangiāngi River and its tributaries are places the Hapū occupied or are significant to the Hapū - kāinga (villages) and pā (fortified villages), tirohanga (lookouts), urupā (burial grounds) and other wāhi tapu (sacred sites). On the northern side of the awa (river) were two pā, one adjacent to a tributary. A further pā with an excellent lookout was located next to a southern tributary. Another pā was located between a tributary and the coast. A significant pā was located at Moeangiāngi to the south of the river mouth and was occupied at one time by Tataramoa (the eponymous ancestor of Ngāi Tataara which later became known as Ngāti Kurumōkihi) and his people. Tataramoa remained associated with Moeangiāngi and inland areas around Tūtira. Those living at Lake Tūtira also had strong associations with Moeangiāngi.

27.4. The awa was a significant mahinga kai (food gathering area) for the Hapū living in the nearby pā and kāinga and the alluvial soils near the river mouth were easy to cultivate. The awa flowed onto nearby reefs which provided an abundance of kaimoana (seafood) for the Hapū.

27.5. In the mid-19th century, Moeangiāngi remained one of the principal kāinga and at that time there was a whaling station that was later covered by a landslide.

28. Waikari River and its tributaries (as shown on OTS-201-37 & HBRC Map E)

28.1. The Waikari River flows south-east from its origin at Maungaharuru out to Tangitū (the sea). Accordingly, the following statements of association relate to this awa (river).

- Peaks of Maungaharuru Range; and
- Rocks and Reefs and Hapū Coastal Marine Area.

28.2. This awa lies within the takiwā (traditional area) of the Hapū, Ngāi Tahu, which held ahi-kā-roa along this awa and its tributaries. The eponymous ancestor for Ngāi Tahu is Tahumatua II. Tahu's descendant, Te Keu-o-te-Rangi fathered four children: Toenga, Tukapuarangi, Te Whiunga and Hinekaraka.

28.3. The four children were placed by their father on different parts of the Waikari River and its tributaries, both north and south. It is said that Toenga and Tukapuarangi occupied the southern side of the Waikari River, with Toenga occupying the Heru-a-Tureia block stretching south from the Waikari River up onto Maungaharuru. Hinekaraka and Te Whiunga are said to have occupied the northern side of the Waikari River, with Te Whiunga occupying the Anaura valley. Regardless, their territories were not exclusive and each had access to the other's mahinga kai (food gathering areas).

28.4. The descendants of these four children were known as Ngāi Tahu and those who maintained their occupation were the tāngata whenua. Various branches of Ngāi Tahu were later known by other names and represented smaller family groups such as Ngāti Hikapii, Ngāti Hineiro, Ngāti Moe, Ngāti Peke, Ngāti Rangitakuao, Ngāti Tataku and Ngāti Te Maaha.

28.5. Tipuna (ancestors) have identified the kāinga (villages) and pā (fortified villages) of Ngāi Tahu in the lower Waikari River area, and as far north as the Waitaha Stream, including Kumarawainui, Tutaekaraka, Hurihanga, Takapuwahia, Tokatea, Pukepipiri, Puketaiata, Tauwhare and Kaiwaka. They have also identified kāinga and pā in the upper Waikari River and its tributaries including Te Nakunaku, Waipopopo, Tawhitikoko, Patokai and Tiekenui.

28.6. The mouth of the Waikari River is known as Te Puta–o–Hinetonga, after Hinetonga, the mother of Te Keu-o-te-Rangi. The river mouth, the Waikari River and its tributaries have long been recognised as important mahinga kai. They provide the habitat for many taonga (treasured) fish species including īnanga (whitebait), mullet, tuna (eels), pātiki (flounder), kahawai and herring. The Waikari River also flows onto Omoko, a fishing reef located at the mouth of the river, which was a site renown for kaimoana (seafood), in particular hāpuku (grouper). The following Hapū whakatauaī (tribal proverb) refers to the sound of the sea lapping up against the river mouth during the day and night, bringing a bounty of kaimoana with each incoming and outgoing tide. This whakatauaī is still recited today in whaikōrero (formal speeches) on Tangoio Marae.

“Pātōtō ki te ata, pātōtō ki te pō” – “the sound of the tide in the morning and at night”

28.7. The Hapū have cultural, spiritual, traditional and historic associations with ngā awa, their waters, associated land and flora and fauna and have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all those natural and historic resources. This relationship is as important to present day whānau (families) as it was to their tīpuna.

29. Anaura Stream and its tributaries (as shown on OTS-201-32 & HBRC Map E)

29.1. The Anaura Stream flows south-east from its origin at Maungaharuru, into the Waikari River and out to Tangitū (the sea). Accordingly, the following statements of association relate to this awa (stream).

- Peaks of Maungaharuru Range;
- Waikari River and its tributaries; and
- Rocks and Reefs and Hapū Coastal Marine Area.

29.2. This awa lies within the takiwā (traditional area) of the Hapū, Ngāi Tahu, which held ahi-kā-roa along this awa and its tributaries. The eponymous ancestor for Ngāi Tahu is Tahumatua II. Tahu’s descendant, Te Keu-o-te-Rangi fathered four children: Toenga, Tukapuarangi, Te Whiunga and Hinekaraka.

29.3. The four children were placed by their father on different parts of the Anaura Stream, the Waikari River and their tributaries, both north and south. It is said that Toenga and Tukapuarangi occupied the southern side of the Waikari River, with Toenga occupying the Heru-a-Tureia block stretching south from the Waikari River up onto Maungaharuru. Hinekaraka and Te Whiunga are said to have occupied the northern side of the Waikari River, with Te Whiunga occupying the Anaura valley. Regardless, their territories were not exclusive and each had access to the other’s mahinga kai (food gathering areas).

29.4. The descendants of these four children were known as Ngāi Tahu and those who maintained their occupation were the tāngata whenua. Various branches of Ngāi Tahu were later known by other names and represented smaller family groups such as Ngāti Hikapii, Ngāti Hineiro, Ngāti Moe, Ngāti Peke, Ngāti Rangitakua, Ngāti Tataku and Ngāi Te Maaha.

29.5. Tipuna (ancestors) have identified the kāinga (villages) and pā (fortified villages) of Ngāi Tahu in the lower Waikari River area, and as far north as the Waitaha Stream, including Kumarawainui, Tutaekaraka, Hurihanga, Takapuwahia, Tokatea, Pukepipiri, Puketaiata, Tauwhare and Kaiwaka. They have also identified kāinga and pā in the upper Waikari River and its tributaries including Te Nakunaku, Waipopopo, Tawhitikoko, Patokai and Tiekenui.

29.6. The mouth of the Waikari River is known as Te Puta–o–Hinetonga, after Hinetonga, the mother of Te Keu-o-te-Rangi. The river mouth, the Waikari River and its tributaries have long been recognised as important mahinga kai. They provide the habitat for many taonga (treasured) fish species including īnanga (whitebait), mullet, tuna (eels), pātiki (flounder), kahawai and herring. The Waikari River also flows onto Omoko, a fishing reef located at the mouth of the river, which was a site renown for kaimoana (seafood), in particular hāpuku (grouper). The following Hapū whakatauaī (tribal proverb) refers to the sound of the sea lapping up against the river mouth during the day and night, bringing a bounty of kaimoana with each incoming and outgoing tide. This whakatauaī is still recited today in whaikōrero (formal speeches) on Tangoio Marae.

“Pātōtō ki te ata, pātōtō ki te pō” – “the sound of the tide in the morning and at night”

29.7. The Hapū have cultural, spiritual, traditional and historic associations with ngā awa, their waters, associated land and flora and fauna and have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all those natural and historic resources. This relationship is as important to present day whānau (families) as it was to their tīpuna.

30. Waitaha Stream and its tributaries (as shown on OTS-201-44 & HBRC Map E)

30.1. The Waitaha Stream flows south-east from its origin at Maungaharuru out to Tangitū (the sea). Accordingly, the following statements of association relate to this awa (stream).

- Peaks of Maungaharuru Range; and
- Rocks and Reefs and Hapū Coastal Marine Area.

30.2. This awa lies within the takiwā (traditional area) of the Hapū, Ngāi Tahu, which held ahi-kā-roa along this awa and its tributaries. The eponymous ancestor for Ngāi Tahu is Tahumatua II. Tahu’s descendant, Te Keu-o-te-Rangi fathered four children: Toenga, Tukapuarangi, Te Whiunga and Hinekaraka.

30.3. The four children were placed by their father on different parts of the Waikari River and its tributaries, both north and south. It is said that Toenga and Tukapuarangi occupied the southern side of the Waikari River, with Toenga occupying the Heru-a-Tureia block stretching south from the Waikari River up onto Maungaharuru. Hinekaraka and Te Whiunga are said to have occupied the northern side of the Waikari River, with Te Whiunga occupying the Anaura valley. Regardless, their territories were not exclusive and each had access to the other’s mahinga kai (food gathering areas).

30.4. The descendants of these four children were known as Ngāi Tahu and those who maintained their occupation were the tāngata whenua. Various branches of Ngāi Tahu were later known by other names and represented smaller family groups such as Ngāti Hikapii, Ngāti Hineiro, Ngāti Moe, Ngāti Peke, Ngāti Rangitakua, Ngāti Tataku and Ngāi Te Maaha.

- 30.5. Tipuna (ancestors) have identified the kāinga (villages) and pā (fortified villages) of Ngāi Tahu in the lower Waikari River area, and as far north as the Waitaha Stream, including Kumarawainui, Tutaekaraka, Hurihanga, Takapuwahia, Tokatea, Pukepipiri, Puketaiata, Tauwhare and Kaiwaka. They have also identified kāinga and pā in the upper Waikari River and its tributaries including Te Nakunaku, Waipopopo, Tawhitikoko, Patokai and Tiekenui.
- 30.6. The mouth of the Waikari River is known as Te Puta-o-Hinetonga, after Hinetonga, the mother of Te Keu-o-te-Rangi. The river mouth and ngā awa have long been recognised as important mahinga kai. They provide the habitat for many taonga (treasured) fish species including inanga (whitebait), mullet, tuna (eels), pātiki (flounder), kahawai and herring.
- 30.7. The Hapū have cultural, spiritual, traditional and historic associations with the awa, its waters, associated land and flora and fauna and have a responsibility as kaitiaki (guardians) in accordance with their kawa (rules) and tikanga (customs) to restore, protect and manage all those natural and historic resources. This relationship is as important to present day whānau (families) as it was to their tīpuna.

31. Purposes of Statutory Acknowledgement

- 31.1. Pursuant to Section 39 of the Maungaharuru-Tangitū Hapū Claims Settlement Act 2014, and without limiting the rest of this schedule, the only purposes of this statutory acknowledgement are:
- (a) to require the relevant consent authorities, the Environment Court and the Historic Places Trust to have regard to the statutory acknowledgement, as provided for in Sections 38 to 45;
 - (b) to require the relevant consent authorities to forward summaries of resource consent applications, or copies of notices of resource consent applications, to the trustees of the Maungaharuru-Tangitū Trust, as provided for in Section 44;
 - (c) to enable the trustees of the Maungaharuru-Tangitū Trust and any member of Maungaharuru-Tangitū to cite the statutory acknowledgement as evidence of the association of Maungaharuru-Tangitū with the listed Statutory acknowledgements, as provided for in Section 45.

32. Limitations of Effects of Statutory Acknowledgement

- 32.1. Except as expressly provided in Subpart 4 of Part 2
- (a) this statutory acknowledgement does not affect, and may not be taken into account by, a person exercising a power or performing a function or duty under legislation or a bylaw; and
 - (b) no person, in considering a matter or making a decision or recommendation under legislation or a bylaw, may give greater or lesser weight to the association of Maungaharuru-Tangitū with the listed Statutory acknowledgements (as described in the statement of association) than that person would give under the relevant legislation or bylaw if no statutory acknowledgement existed in respect of the listed Statutory acknowledgements.
- 32.2. Except as expressly provided in Subpart 4 of Part 2, the statutory acknowledgement does not affect the lawful rights or interests of any person who is not a party to the deed of settlement.
- 32.3. Except as expressly provided in Subpart 4 of Part 2, the statutory acknowledgement does not have the effect of granting, creating, or providing evidence of an estate or interest in, or rights relating to, the relevant part of the listed Statutory acknowledgements.

33. Relevant sections of the Maungaharuru-Tangitū Hapū Claims Settlement Act 2014

38 Statutory acknowledgement by the Crown

The Crown acknowledges the statements of association for the statutory areas.

39 Purposes of statutory acknowledgement

The only purposes of the statutory acknowledgement are to—

- (a) require relevant consent authorities, the Environment Court, and Heritage New Zealand Pouhere Taonga to have regard to the statutory acknowledgement, in accordance with sections 40 to 42; and
- (b) require relevant consent authorities to record the statutory acknowledgement on statutory plans that relate to the statutory areas and to provide summaries of resource consent applications or copies of notices of applications to the trustees in accordance with sections 43 and 44; and
- (c) enable the trustees and any member of the Maungaharuru-Tangitū Hapū to cite the statutory acknowledgement as evidence of the association of the Maungaharuru-Tangitū Hapū with a statutory area, in accordance with section 45.

40 Relevant consent authorities to have regard to statutory acknowledgement

- (1) This section applies in relation to an application for a resource consent for an activity within, adjacent to, or directly affecting a statutory area.
- (2) On and from the effective date, a relevant consent authority must have regard to the statutory acknowledgement relating to the statutory area in deciding, under section 95E of the Resource Management Act 1991, whether the trustees are affected persons in relation to the activity.
- (3) Subsection (2) does not limit the obligations of a relevant consent authority under the Resource Management Act 1991.

41 Environment Court to have regard to statutory acknowledgement

- (1) This section applies to proceedings in the Environment Court in relation to an application for a resource consent for an activity within, adjacent to, or directly affecting a statutory area.
- (2) On and from the effective date, the Environment Court must have regard to the statutory acknowledgement relating to the statutory area in deciding, under section 274 of the Resource Management Act 1991, whether the trustees are persons with an interest in the proceedings greater than that of the general public.
- (3) Subsection (2) does not limit the obligations of the Environment Court under the Resource Management Act 1991.

44 Provision of summary or notice to trustees

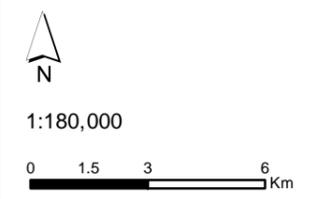
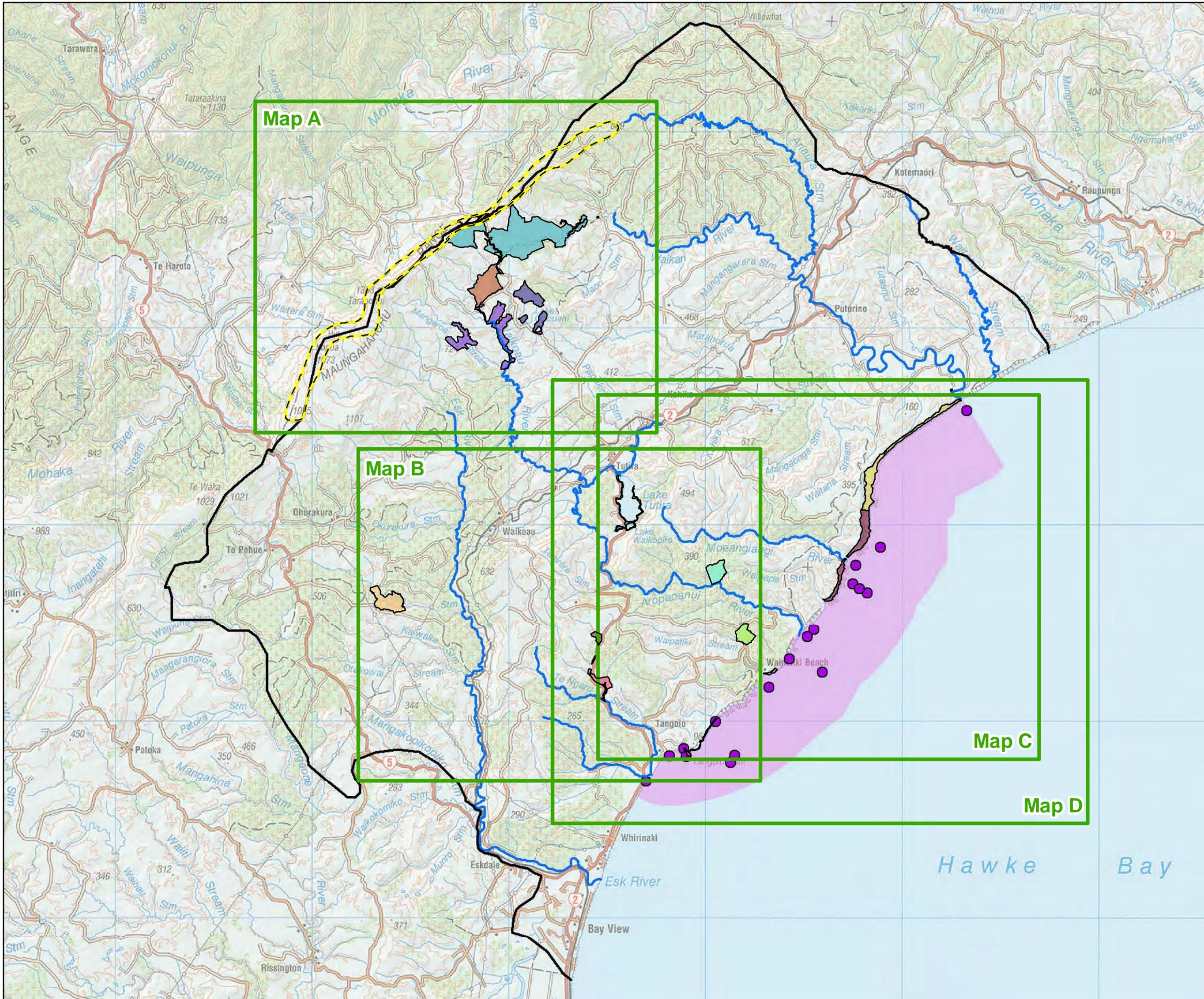
- (1) Each relevant consent authority must, for a period of 20 years on and from the effective date, provide the following to the trustees for each resource consent application for an activity within, adjacent to, or directly affecting a statutory area:
 - (a) if the application is received by the consent authority, a summary of the application; or
 - (b) if notice of the application is served on the consent authority under section 145(10) of the Resource Management Act 1991, a copy of the notice.
- (2) A summary provided under subsection (1)(a) must be the same as would be given to an affected person by limited notification under section 95B of the Resource Management Act 1991 or as may be agreed between the trustees and the relevant consent authority.
- (3) The summary must be provided—
 - (a) as soon as is reasonably practicable after the relevant consent authority receives the application; but
 - (b) before the relevant consent authority decides under section 95 of the Resource Management Act 1991 whether to notify the application.
- (4) A copy of a notice must be provided under subsection (1)(b) not later than 10 working days after the day on which the consent authority receives the notice.
- (5) The trustees may, by written notice to a relevant consent authority,—
 - (a) waive the right to be provided with a summary or copy of a notice under this section; and
 - (b) state the scope of that waiver and the period it applies for.
- (6) This section does not affect the obligation of a relevant consent authority to decide,—
 - (a) under section 95 of the Resource Management Act 1991, whether to notify an application;
 - (b) under section 95E of that Act, whether the trustees are affected persons in relation to an activity.

45 Use of statutory acknowledgement

- (1) The trustees and any member of the Maungaharuru-Tangitū Hapū may, as evidence of the association of the Maungaharuru-Tangitū Hapū with a statutory area, cite the statutory acknowledgement that relates to that area in submissions and proceedings concerning activities within, adjacent to, or directly affecting the statutory area that are made to or before—
 - (a) the relevant consent authorities; or
 - (b) the Environment Court; or
 - (c) Heritage New Zealand Pouhere Taonga; or
 - (d) the Environmental Protection Authority or a board of inquiry under Part 6AA of the Resource Management Act 1991.
- (2) The content of a statement of association is not, by virtue of the statutory acknowledgement, binding as fact on—
 - (a) the bodies referred to in subsection (1); or
 - (b) parties to proceedings before those bodies; or
 - (c) any other person who is entitled to participate in those proceedings.
- (3) However, the bodies and persons specified in subsection (2) may take the statutory acknowledgement into account.
- (4) To avoid doubt,—
 - (a) neither the trustees nor members of the Maungaharuru-Tangitū Hapū are precluded from stating that the Maungaharuru-Tangitū Hapū have an association with a statutory area that is not described in the statutory acknowledgement; and
 - (b) the content and existence of the statutory acknowledgement do not limit any statement made.

Maungaharuru-Tangitu Hapu: Overview Map

- Legend**
- Map
 - Area of Interest
 - Rivers (and associated tributaries) Map E



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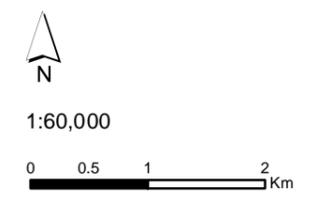
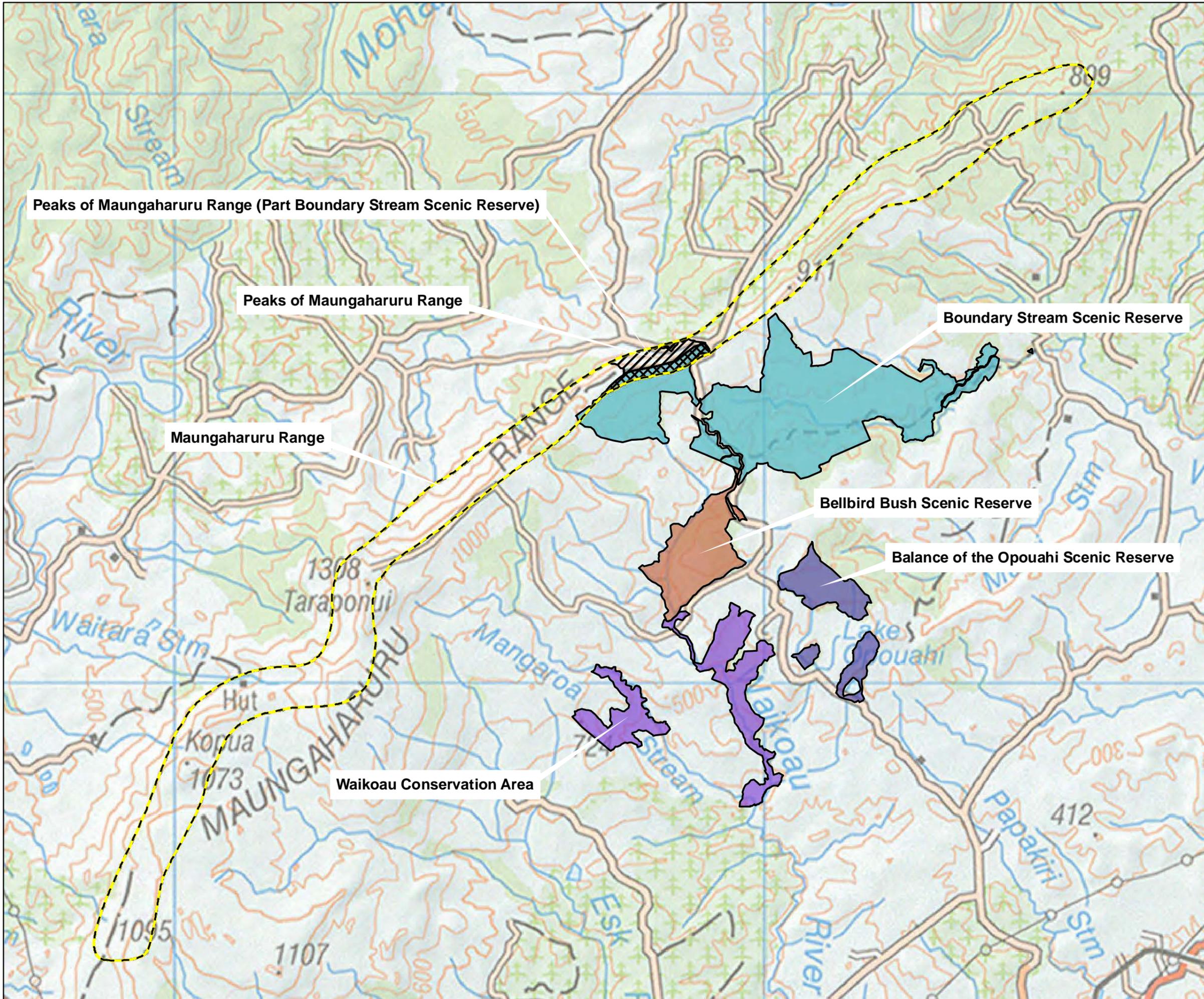
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Maungaharuru-Tangitu Hapu: Map A

- Legend**
- Balance of the Opouahi Scenic Reserve (7)
 - Balance of the Tutira Recreation Reserve (18)
 - Bellbird Bush Scenic Reserve (8)
 - Boundary Stream Scenic Reserve (9)
 - Earthquake Slip Marginal Strip (11, 16)
 - Esk Kiwi Sanctuary Area (5)
 - Mangapukahu Scenic Reserve (14)
 - Moengiaki Marginal Strip (11, 15)
 - Maungaharuru Range (4)
 - Peaks of Maungaharuru Range (4)
 - Peaks of Maungaharuru Range (Part Boundary Stream Scenic Reserve) (4)
 - Tangoio Falls Scenic Reserve (19)
 - Tangoio Marginal strip (11)
 - Te Kuta Recreation Reserve (17)
 - Waikoau Conservation Area (6)
 - Waipatiki Beach Marginal Strip (11)
 - Waipatiki Scenic Reserve (13)
 - Whakaari Landing Place Reserve (11, 12)
 - White Pine Bush Scenic Reserve (19)



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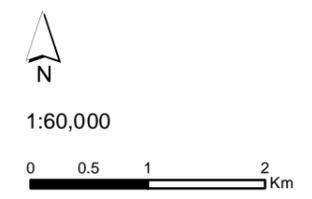
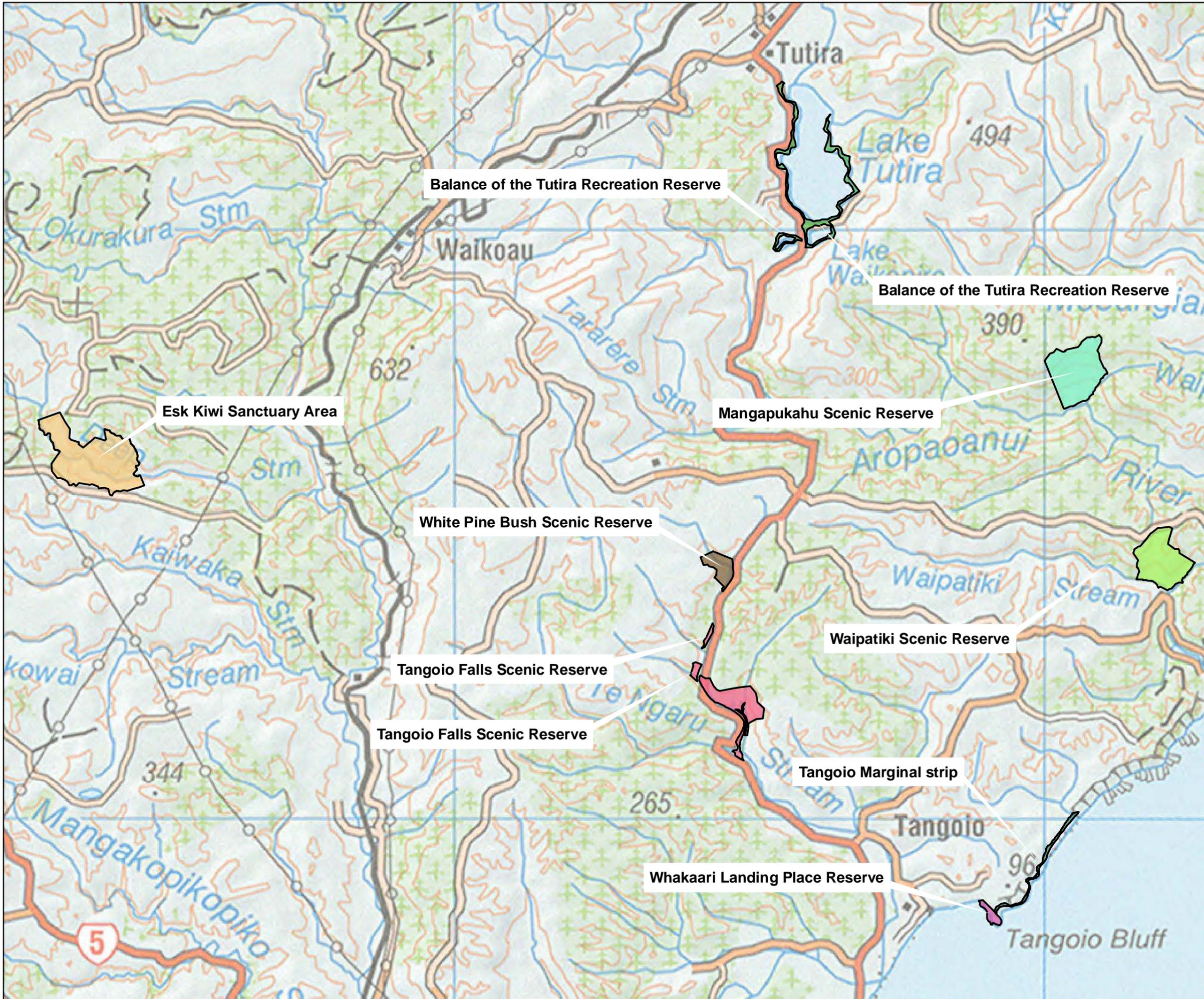
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Maungaharuru-Tangitu Hapu: Map B

- Legend**
- Balance of the Opouhi Scenic Reserve (7)
 - Balance of the Tutira Recreation Reserve (18)
 - Bellbird Bush Scenic Reserve (8)
 - Boundary Stream Scenic Reserve (9)
 - Earthquake Slip Marginal Strip (11, 16)
 - Esk Kiwi Sanctuary Area (5)
 - Mangapukahu Scenic Reserve (14)
 - Moangiangi Marginal Strip (11, 15)
 - Maungaharuru Range (4)
 - Peaks of Maungaharuru Range (4)
 - Tangoio Falls Scenic Reserve (19)
 - Tangoio Marginal strip (11)
 - Te Kuta Recreation Reserve (17)
 - Waikoau Conservation Area (6)
 - Waipatiki Beach Marginal Strip (11)
 - Waipatiki Scenic Reserve (13)
 - Whakaari Landing Place Reserve (11, 12)
 - White Pine Bush Scenic Reserve (19)



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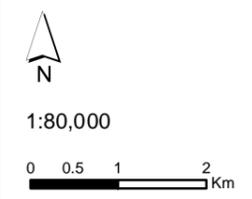
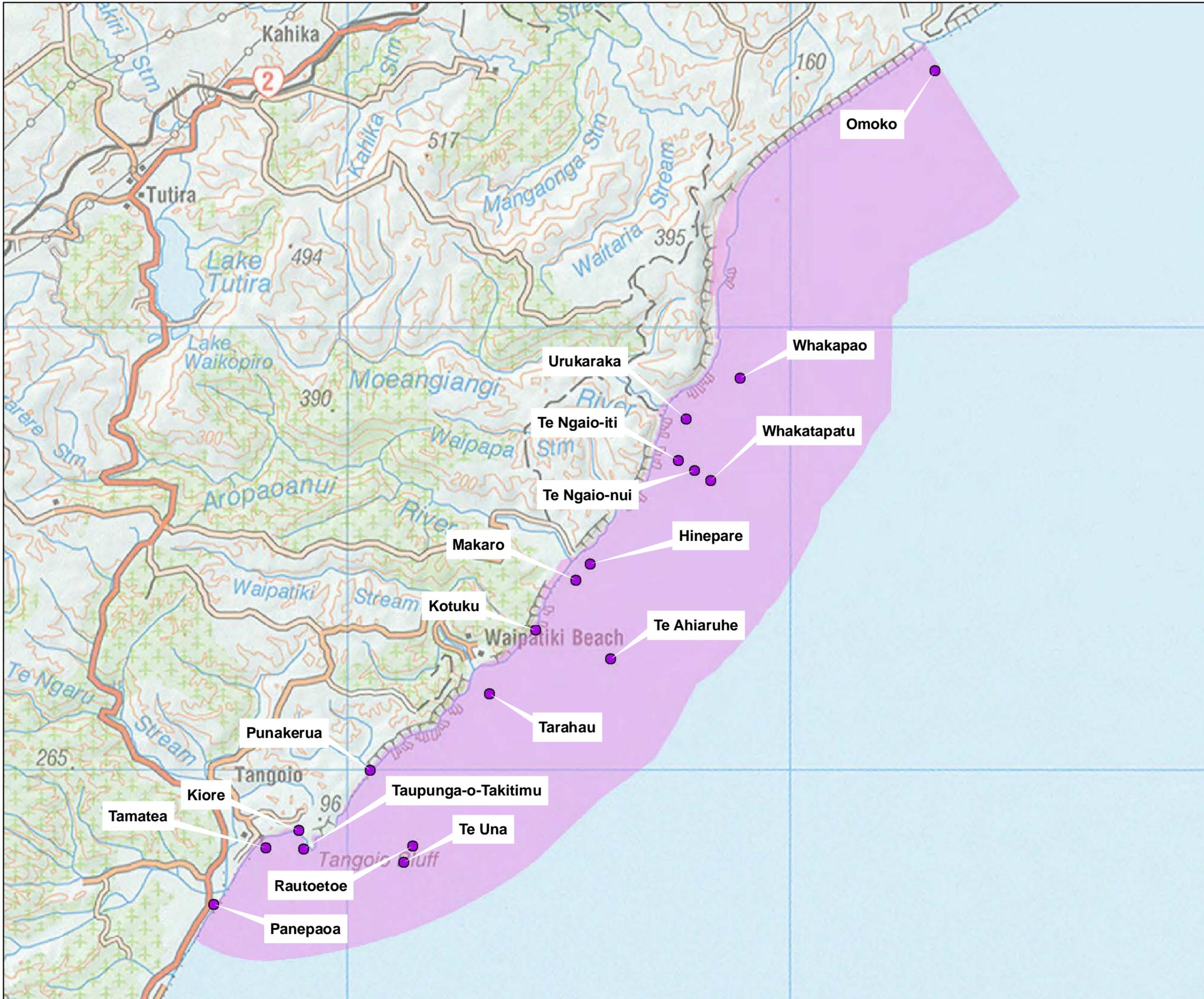
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**Maungaharuru-Tangitu Hapu:
Map C**

- Legend**
- Rocks (10)
 - Reef Area (10)



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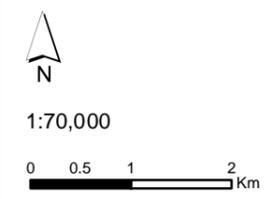
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Maungaharuru-Tangitu Hapu: Map D

- Legend**
- Balance of the Opouahi Scenic Reserve (7)
 - Balance of the Tutira Recreation Reserve (18)
 - Bellbird Bush Scenic Reserve (8)
 - Boundary Stream Scenic Reserve (9)
 - Earthquake Slip Marginal Strip (11, 16)
 - Esk Kiwi Sanctuary Area (5)
 - Mangapukahu Scenic Reserve (14)
 - Moeangiangi Marginal Strip (11, 15)
 - Maungaharuru Range (4)
 - Peaks of Maungaharuru Range (4)
 - Peaks of Maungaharuru Range (Part Boundary Stream Scenic Reserve) (4)
 - Tangoio Falls Scenic Reserve (19)
 - Tangoio Marginal strip (11)
 - Te Kuta Recreation Reserve (17)
 - Waikoau Conservation Area (6)
 - Waipatiki Beach Marginal Strip (11)
 - Waipatiki Scenic Reserve (13)
 - Whakaari Landing Place Reserve (11, 12)
 - White Pine Bush Scenic Reserve (19)



DATA FROM: Information obtained from the Office of Treaty Settlements and the Hawke's Bay Regional Council's Geographic Information Systems Databases.

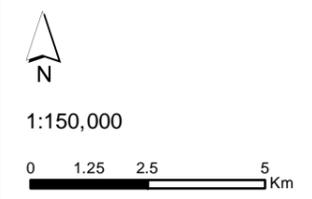
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Maungaharuru-Tangitu Hapu: Map E

Legend
 — Area of Interest
 — Rivers (and associated tributaries)



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Schedule C – Interpretation of terminology for air discharges

1. GENERAL INTERPRETATION OF NOXIOUS, DANGEROUS, OFFENSIVE AND OBJECTIONABLE EFFECTS

- 1.1. Several rules in this Plan use the terms ‘noxious’, ‘dangerous’, ‘offensive’, and ‘objectionable’, particularly rules relating to the discharges of contaminants into air. These terms are also included in s17 of the RMA. Whether an activity is ‘noxious’, ‘dangerous’, ‘offensive’ or ‘objectionable’ depends upon an objective assessment. A Regional Council enforcement officer’s views will not be determinative but may trigger further action and will be one factor considered by the Court if formal enforcement action is taken.
- 1.2. Reference to the terms ‘noxious’, ‘dangerous’, ‘offensive’ and ‘objectionable’ are made in the Glossary to this Plan. The Glossary refers Plan Users to this Schedule. There is no standard definition of these terms because of the need to take account of case law precedent as it develops, i.e. the Plan cannot override interpretations decided by the judiciary. However, the following notes are intended to provide some guidance for interpreting these terms for purposes of assessing compliance with permitted activity conditions, resource consent conditions or sections 17(3)(a), 314(1)(a)(ii), or 322(1)(a)(ii) of the RMA:
- 1.3. (a) **NOXIOUS, DANGEROUS** – The Concise Oxford Dictionary defines ‘noxious’ as ‘harmful, unwholesome’. At the time of writing this Plan, the term ‘noxious’ did not appear to have been defined or considered in case law pertaining to the RMA. Noxious effects may include significant adverse effects on the environment (e.g. on plant and animal life) even though the effects may not be dangerous to humans.
- 1.4. ‘Dangerous’ is defined as “involving or causing exposure to harm”. Dangerous discharges include those that are likely to cause adverse physical health effects, such as discharges containing toxic concentrations of chemicals.
- 1.5. The Workplace Exposure Standards (Occupational Safety and Health Service, 1994) provide guidelines for those involved in occupational health practice, and can be used for interpreting the terms ‘noxious’ and ‘dangerous’. The concentration of any contaminant specified in the Workplace Exposure Standards should not exceed one thirtieth of the time weighted average standard on adjacent properties or public land. Although human health cannot be assured by compliance with this guideline, it can be used as a guide for protection of the general population.
- 1.6. (b) **OFFENSIVE, OBJECTIONABLE** – ‘Offensive’ is defined as “... giving or meant to give offence ... disgusting, foul-smelling, nauseous, repulsive ...”. ‘Objectionable’ is defined as “open to objection, unpleasant, offensive”. Case law has established that what may be offensive or objectionable under the RMA cannot be defined or prescribed except in the most general of terms. Each case will depend upon its own circumstances. Key considerations include:
 - (i) **Location of an activity and sensitivity of the receiving environment** – For example, what may be considered offensive or objectionable in an urban area, may not necessarily be considered offensive or objectionable in a rural area;
 - (ii) **Reasonableness** – Whether or not an activity is offensive or objectionable should be determined by an ordinary person who is representative of the community at large and neither hypersensitive nor insensitive, in deciding whether the activity is disgusting, nauseous, repulsive or otherwise objectionable;
 - (iii) **Existing uses** – It is important to consider what lawfully established activities exist in an area, ie: if a new activity requires a permit, the effect of existing discharges of contaminants into air should be considered.

2. ASSESSMENT OF OFFENSIVE AND OBJECTIONABLE EFFECTS FOR DISCHARGES TO AIR

- 2.1. The criteria that HBRC will apply when assessing whether a discharge of particulate matter or any other contaminant (but not odour) is objectionable to the extent that it is causing an adverse effect; and the standard of evidence required for enforcement action remains the same for both permitted activities and consented activities.:
 - (a) HBRC will make an assessment of the situation. This assessment will take into account:
 - (i) frequency of the discharge¹⁶⁵
 - (ii) intensity of the discharge
 - (iii) nature of the discharge
 - (iv) location of the discharge, having regard to the sensitivity (including reverse sensitivity) of the receiving environment
 - (v) duration of the discharge
 - (vi) any previous validated complaints about the discharge of contaminants relating to the same site.

¹⁶⁵ NOTE: Location is a consideration because whether a discharge is perceived as objectionable to the extent that there is an adverse effect may vary in different environments.



3. ASSESSMENT OF OFFENSIVE AND OBJECTIONABLE ODOUR DISCHARGES

3.1. HBRC has determined that in relation to assessing offensive or objectionable odour, the approach will be as follows:

- (a) An assessment of the situation will be made by a Council Officer who has experience in odour complaints and has had his/her nose calibrated using olfactometry. This assessment will take into account the FIDOL factors - frequency, intensity, duration, offensiveness location; and those matters identified as key considerations in 6(b) (i), (ii), and (iii) above.
- (b) If the discharge is deemed to be offensive or objectionable by the Council Officer, the discharger will be asked to take whatever action is necessary to avoid, remedy or mitigate the effects of the discharge.
- (c) If the discharger disputes the Council Officer's assessment or the problem is ongoing, then a number of approaches may be taken, including one or more of the following:
 - (i) assessments by more Council Officers
 - (ii) asking people living and working in the subject area to keep a diary which notes details of any offensive or objectionable odours
 - (iii) promoting the use of community working groups and other means of consultation between the affected community and the discharger
 - (iv) using the services of an independent consultant to carry out an investigation, and/or community survey
 - (v) using the services of the Council's odour panellists who have all had their noses calibrated by olfactometry and are deemed to have an average sense of smell
 - (vi) undertaking an odour assessment using an olfactometer, or other appropriate technology
 - (vii) leaving the matter to be determined by the Environment Court.
- (d) If the discharge is found to be offensive or objectionable, then enforcement action may be taken. This could be in the form of an abatement notice, infringement notice, enforcement order or prosecution, pursuant to the RMA. In the case of a permitted activity, failure to comply with the conditions would also mean that the activity was no longer permitted, and would thus require a resource consent application to be lodged.



Schedule D – Surface water quality

1.0 INTRODUCTION

1.0.1 The Hawke’s Bay Regional Council undertakes monitoring of the water quality in the regional waterways as part of the State of the Environment (SOE) monitoring. Various determinants are used in which to assess the water quality:

- faecal coliform bacteria
- macroinvertebrates
- total ammonia
- suspended solids
- electrical conductivity
- soluble reactive phosphorous.

1.0.2 Mean concentrations are used to represent the water quality over the preceding years with the exception of the faecal coliform bacteria figure where median values are used. Due to limited macroinvertebrate data the figure is representative of only the last two years. No analysis of trends over time has been provided as the nature of the monitoring programmes has not lent itself towards this. The information does establish the background quality in which the guidelines have been developed and sets levels against which the performance of this plan may be monitored.

2.0 SURFACE WATER QUALITY STANDARDS

Part I – Standards that apply across the entire Coastal Margin

The following standards apply after reasonable mixing and disregarding the effect of any natural perturbations that may affect the water body.

Issue	Guideline
a. Temperature	The temperature of the water shall be suitable for sustaining the aquatic habitat.
b. Dissolved oxygen	The concentration of dissolved oxygen shall exceed 80% of saturation concentration.
c. Ammoniacal nitrogen	The concentration of ammoniacal nitrogen (N-NH4+) shall not exceed 0.1 mg/l.
d. Soluble reactive phosphorus	The concentration of soluble reactive phosphorus shall not exceed 0.015 mg/l.
e. Clarity	In areas used for contact recreation, the horizontal sighting range of a 200mm black disk shall exceed 1.6 m.

Part II - Standards that apply to specific catchments

The following standards represent concentrations of contaminants in the water body that shall not be exceeded after reasonable mixing and disregarding the effect of any natural perturbations that may affect the water body.

Catchment Area	Faecal Coliforms (cfu/100ml)	Suspended Solids (mg/l)
Aropoanui River	200	50
Clive River and tributaries	200	10
Esk River	200	50
Ikanui Stream	200	50
Kopuawhara Stream	200	50
Mangakuri Stream	200	50
Maraetotara River	200	50
Mohaka River	50	10
Ngaruroro River downstream of the Expressway Bridge	150	25
Opoutama Stream	200	50
Porangahau River	200	50
Puhokio Stream	200	50
Tukituki River downstream of Tamumu bridge	100	10



Catchment Area	Faecal Coliforms (cfu/100ml)	Suspended Solids (mg/l)
Tutaekuri River downstream of the Expressway Bridge	150	25
Waingonoro Stream	200	50
Waipatiki Stream	200	50
Waipuka Stream	200	50
Wairoa River at and downstream of Frasertown	200	25

3.0 **FAECAL COLIFORM BACTERIA**

- 3.0.1 Faecal coliform bacteria and macro invertebrates are two determinants that are typically used to assess the quality of the water and to gauge the effects of municipal & industrial discharges, land use practices and activities on or within the water body.
- 3.0.2 Faecal coliform bacteria are derived principally from the gut of mammals (warm blooded vertebrates) and are contained in their faecal material. Faecal coliforms are used to indicate the presence of potentially pathogenic bacteria, protozoans, and viruses. The concentration of faecal coliforms found within the water body is used to assess the risk to human and animal health. No differentiation is currently made as to the derivation of the faecal coliform bacteria (ie: whether the source is human or animal, although techniques are being developed to enable differentiation to be made). Presently the risk is assumed to be similar independent of the origin, as borne out by national research. Current research is being directed towards identifying the appropriateness of indicator species and the relationship between source of faecal material and health risk. Faecal coliform bacteria have been used as an indicator of Hawke’s Bay water quality for some years (dating back to 1971 at some sites). And although directly applicable to recreational water quality under the Water and Soil Conservation Act 1967, it has now been superseded by *e coli* in freshwater, (a species within the faecal coliform bacteria group), and enterococci in marine waters.
- 3.0.3 The three common guideline/standard values (current at the time of writing this Plan) that have been used for assessing the concentration of faecal coliform bacteria and the associated risk to health are:
- for human drinking and consumption purposes, Ministry of Health (2005) Drinking Water Quality Standards for New Zealand.
 - for recreational bathing or contact recreation purposes, Ministry for the Environment and Ministry of Health (2003) Microbiological Water Quality Guidelines for Marine and Freshwater Recreational Areas.
 - for animal drinking (livestock water) purposes, Australia and New Zealand Environment and Conservation Council (2000) Guidelines for Fresh and Marine Water Quality.
- 3.0.4 Bacteria is still being used as a state of the environment indicator for reasons noted above, but where compliance to recreational suitability guidelines is concerned *e.coli* and enterococci are utilised. To monitor changes within the catchment the faecal coliform group of bacteria are useful indicators and will enable a continual assessment of the state of the waters to be made.
- 3.0.5 As well as identifying the risk to health faecal coliform bacteria can help in identifying the presence or potential for other contaminants to be present in the waterway. With increasing bacterial numbers it can be inferred that nutrient concentrations will also increase. An over abundance of nutrients (in excess) can lead to undesirable biological growths manifesting themselves in waterways. This can then lead to reduced clarity, reduced dissolved oxygen, and increased temperatures and pH. The result of this can be a choking of the waterways (eutrophication) reducing the habitat and fishery value and reducing the potential uses of the water (eg: stock water, potable water, irrigation, recreational use, and fishery values).
- 3.0.6 Typically levels of faecal coliform bacteria increase with decreasing distance from the coast, which often corresponds to change in land use practises ie. Increasing agricultural intensification. In other cases direct discharges or poor land management practices can lead to localised degradation, although it need to be borne in mind that other contaminants do not die off or become assimilated readily and can accumulate causing downstream problems (sediments and nutrients).
- 3.0.7 The waters that are ‘cleanest’ are found within the headwaters of each catchment with a degradation as distance from the coast diminishes. Those sampled include:
- Sandy Creek (Aropaonui river catchment)
 - Clive River including Awanui stream, Irongate stream, Kawarewa stream and Poukawa stream
 - Opoutama stream
 - Kopuawhara stream
 - Ikanui stream
 - Mangakuri river



- Waipuka stream
- Waigongoro stream
- Waipataki stream
- Nuhaka river
- Porangahau river including Mangaorapa stream
- Te Ngaru stream
- Whakaki lagoon catchment, specifically Waikatutu stream, Tahuru stream and Whakaki drain

3.0.8 Other areas identified include:

- The Tukituki river around Waipawa, Waipukarau area including tributaries of the Tukituki river specifically; Mangatarat stream, Papanui stream, Porangahou stream;
- Tributaries of the Tutaekuri river, specifically; Awatoto drain and lower Tutaekuri.
- Wairoa river including the lower tributaries, specifically; Ruakituri.

4.0 MACROINVERTEBRATES

4.0.1 Another index that can be used to assess the overall water quality (in relation to the aquatic ecology), is that of the macro invertebrates (MCI index). Unlike bacteriological water quality that gives a result relevant to that point in time, and accordingly requires a number of samples to be taken before trends can be established, the MCI index is more robust and is useful for making an assessment of long term water quality. The MCI index is able to be used to assist in establishing the 'health' of the instream community. Unlike faecal coliform bacteria a large number is indicative of a 'healthy' stream.

4.0.2 In the maps prepared as part of the State of the Environment Annual Update results of the late summer MCI index are plotted. Markers of differing colour intensity are used to depict the relative MCI index. The bars are used to denote the number of taxa found at each site, the longer the bar the greater the number of taxa and therefore the better the water quality. The map illustrates trends similar to that found with faecal coliform bacteria (ie: decreasing water quality with diminishing distance to the coast. The Ruataniwha Plains area is further identified as having reduced water quality with intensive agriculture and pastoral grazing likely to be the main contributors. Factors that would come into this are:

- reduced canopy cover
- grazing of riparian areas
- cultivation close to or into tributaries of the main river systems
- increased temperature (due to direct exposure, see first point)
- reduced riparian vegetation
- increased runoff through irrigation
- fertiliser application close to or into ephemeral stream areas.

5.0 TOTAL AMMONIA

5.0.1 Ammonia is toxic to aquatic life at low concentrations, and has been used to indicate the immediate effect that the water quality may be having on the instream life. Direct discharges to the waterways of faecal contaminants, decaying organic material and deoxygenated areas overlying organically enriched substrates can contribute to the total ammonia concentrations. For the protection of aquatic life low concentrations of this determinant should be present.

5.0.2 In general results show a region of good quality with trends similar to that noted for the other determinants above. Land use changes can have a dramatic effect on the total ammonia. Monitoring the concentrations of total ammonia during the course of the draft plan will enable the assessment of trends over time (representing changes in land use/practices/management), and the identification of problems if they occur in the areas monitored. The effectiveness of the plan (performance) will also be able to be gauged.

6.0 SUSPENDED SOLIDS

6.0.1 Suspended solids can be used to identify the clarity of the waters, potential for other contaminants to be present, landuse practices and management, and potential impact on the instream fishery. In times of floods high suspended solids concentrations arising from runoff and erosion can also indicate nutrient input. Although nutrients are needed to sustain plant growth both instream and out of stream, elevated levels sustained at high levels for periods of time may lead to choking and undesirable growths occurring in the water ways. Suspended solids are also used to assist in the characterisation of the catchment. In general terms the region's waters are of a good quality with the lowland rivers and streams being identified as having elevated levels of suspended solids. Efforts made in protecting the lowland streams and minor tributaries of the major rivers could see improvements in the concentrations noted in this baseline.



7.0 ELECTRICAL CONDUCTIVITY

- 7.0.1 Electrical conductivity is seen as a surrogate for contamination in general terms. Geology influences the baseline conductivity to some extent as dissolved minerals (as a result of waterways passing through limestone formations), elevate the concentrations. However this is taken into consideration when analysing conductivity and adjusted for in the interpretation. Conductivity can be useful for characterising the catchment and rivers.
- 7.0.2 State of the Environment monitoring shows that waters which are 'cleanest' are found within the headwaters of each catchment with degradation as distance from the coast diminishes. Improvements made in water quality will be reflected in the conductivities exerted for the waters (ie: lower). Electrical conductivity is a useful indicator for assessing the overall contaminant load present and to track changes over time and distance.

8.0 SOLUBLE REACTIVE PHOSPHORUS

- 8.0.1 Soluble reactive phosphorus is generally deficient in the Hawke's Bay region, which leads to an almost oligotrophic state (low biological diversity and/or abundance) in many headwaters of the region's rivers. This pristine condition, as it is often referred to, does not necessarily mean an ideal situation as some instream plant growth is essential to ensure good biodiversity and thus health.
- 8.0.2 Normal farming practices, substrates and vegetative decay do contribute to increasing concentrations of this determinant in the waterways as distance from the coast diminishes. With this determinant being limited in the upper catchment enables targeting of this determinant if reduction in instream plant growth is required. Prolific growths of algal slimes and larger plants (eg: oxygen weeds), have been experienced in a number of the lower Hawke's Bay rivers (Tukituki, Karamu, Tutaekuri). Improvements in land management techniques and removal of unwanted discharges will see a further reduction in instream soluble reactive phosphorus concentrations.
- 8.0.3 Care needs to be taken in the assessment of concentrations in relation to other biological indicators such as *chlorophylla* and algal biomass to ensure prolific instream plant growth is not masking the effects of soluble reactive phosphorus through luxuriant plant growth.



Schedule E – Coastal water quality

1. INTRODUCTION

- 1.1. Specified areas of coastal waters within the Hawke's Bay region are to be managed in accordance with the following classes:
 - (a) Class AE coastal waters (being water managed for aquatic ecosystem purposes) and
 - (b) Class CR coastal waters (being water managed for contact recreation and aquatic ecosystem purposes).
- 1.2. The minimum standards of water quality applying to each class, and the areas specified as Class AE(HB) and Class CR(HB) are specified below. The Planning Maps identify water quality Class CR(HB) areas. Water quality Class AE(HB) applies to all those areas within Hawke's Bay's coastal marine area that are not otherwise identified in the Planning Maps as Class CR(HB).
- 1.3. The minimum water quality standards applying to the relevant water quality class shall be observed. The standards are expressed in terms of the receiving water quality resulting from the discharge, rather than the quality of the discharge itself.
- 1.4. The minimum standards of water quality referred to in this Schedule shall affect, under s128 and s130 of the RMA, the exercise of existing coastal permits for discharges which either on their own or in conjunction with other discharges, cause the standards to be breached. The effect of more than one discharge may be assessed cumulatively and the standards apply whether or not the point of discharge is in the coastal marine area.
- 1.5. Where a proposed or existing discharge does not comply with or is unlikely to comply with the standards referred to in this Schedule, Policy 16.1 shall apply.
- 1.6. The minimum standards of water quality referred to in this Schedule shall apply in addition to the requirements under s107 of the RMA.
- 1.7. The water quality standards specified for each class apply after reasonable mixing of any contaminant or water with the receiving water and disregard the effect of any natural perturbations that may affect the receiving water body.
- 1.8. Except where provided for by Policy 16.1, the HBRC (or the Minister of Conservation in relation to a Restricted Coastal Activity), when granting a coastal permit to discharge a contaminant, will include conditions requiring that the minimum water quality standards prescribed in this Schedule, shall be met by the consent holder and may, where appropriate, impose more specific and/or stringent standards.

2. CLASS AE(HB)

- 2.1. The water quality Class AE(HB) and associated water quality standards apply to the coastal waters within the coastal marine area that are not otherwise represented on the Planning Maps as 'Class CR(HB)'.

2.2. Water Quality Standards for Class AE(HB) Coastal Water

The discharge of contaminants shall comply with the following standards after reasonable mixing and disregarding the effect of any natural perturbations that may affect the receiving water body:

- a) The natural temperature of the receiving water shall not be changed by more than 3 degrees Celsius.
- b) The following shall not be allowed if they have an adverse effect on aquatic life:
 - i) any pH change
 - ii) any increase in the deposition of matter on the foreshore or seabed
 - iii) any discharge of a contaminant into the water.
- c) The concentration of dissolved oxygen shall exceed 80% of the saturation concentration.
- d) There shall be no undesirable biological growths as a result of any discharge of a contaminant into the water.

3. CLASS CR(HB)

- 3.1. The water quality Class CR(HB) and associated water quality standards apply to the coastal waters within the coastal marine area represented on the Planning Maps as 'Class CR(HB)'.

3.2. Water Quality Standards for Class CR(HB) Coastal Water

The discharge of contaminants shall comply with the following standards after reasonable mixing and disregarding the effect of any natural perturbations that may affect the receiving water body:

- a) The natural temperature of the receiving water shall not be changed by more than 3 degrees Celsius.
- b) The following shall not be allowed if they have an adverse effect on aquatic life:
 - i) any pH change
 - ii) any increase in the deposition of matter on the foreshore or seabed
 - iii) any discharge of a contaminant into the water.



- c) The concentration of dissolved oxygen shall exceed 80% of the saturation concentration.
- d) There shall be no undesirable biological growths as a result of any discharge of a contaminant into the water.
- e) The visual clarity of the receiving water shall not be so low as to be unsuitable for bathing (ie: the horizontal sighting of a 200mm black disc (Secchi disc) should exceed 1.6m¹⁶⁶).
- f) The receiving water shall not be rendered unsuitable for bathing by the presence of contaminants.
- g) The bacterial content of water must not exceed:
 - i) 280 enterococci bacteria per 100ml in marine waters in a single sample or
 - ii) 550 E. coli per 100ml of freshwater in a single sample.

¹⁶⁶ In the active surf zone, it is not possible to use this method.



Schedule F - Resource Management (Marine Pollution) Regulations 1998

1 Title and commencement

- (1) These regulations may be cited as the Resource Management (Marine Pollution) Regulations 1998.
- (2) These regulations come into force on 20 August 1998.

2 Interpretation

- (1) In these regulations, unless the context otherwise requires,—

Act means the Resource Management Act 1991:

[**animal carcass** means the body of any animal that is carried on board as cargo and that dies or is euthanised during the voyage]

[**cargo residue**—

- (a) means the remnants of any cargo that are not covered by any annex to MARPOL other than Annex V and that remain on the deck or in holds following loading or unloading, including loading and unloading excess or spillage, whether in wet or dry conditions or entrained in wash water; but

- (b) does not include cargo dust that remains on the deck after sweeping or dust on the external surfaces of the ship]

carrying in bulk means the carriage of a noxious liquid substance in the cargo spaces of a ship without any form of intermediate containment or packaging:

clean ballast water means ballast water and contaminants carried in a tank used to carry a noxious liquid substance or oil,—

- (a) where the tank has been thoroughly cleaned since last used to carry a noxious liquid substance, and the residue from that cleaning discharged with the tank being emptied; or
- (b) where the tank has been thoroughly cleaned since last used to carry oil and the ballast water and contaminants, when discharged, would not contain oil exceeding 15 parts per million:

[**cooking oil** means any type of edible oil or animal fat used or intended to be used for the preparation or cooking of food, but does not include the food that is prepared using such oil or fat]

[**domestic waste** means any type of waste that is not covered by any annex to MARPOL other than Annex V and that is generated in the accommodation spaces on board the ship, but does not include grey water]

[**en route**, in relation to a ship, means that the ship is underway at sea on a course that, as far as practicable for navigational purposes, will cause any discharge from the ship to be spread over as great an area as is reasonable and practicable]

[**fishing gear** means any physical device or any part of any physical device or combination of items that may be placed on or in the water or on the seabed with the intended purpose of capturing, or controlling for subsequent capture or harvesting, marine or freshwater organisms]

[**food waste** means any spoiled or unspoiled food substance, and includes any fruit, vegetable, dairy product, poultry, meat product, and food scraps generated on board a ship or an offshore installation]

[**garbage**, in relation to a ship or an offshore installation, means—

- (a) all kinds of food waste, domestic waste, operational waste, plastic, cargo residue, incinerator ash, cooking oil, fishing gear, and any animal carcass generated during the normal operation of the ship or offshore installation and liable to be disposed of continuously or periodically; but
- (b) does not include—
 - (i) any substance that is defined or listed in any Annex to MARPOL other than Annex V; or
 - (ii) fresh fish or parts of fresh fish generated as a result of fishing activity undertaken during a voyage, or as a result of aquaculture activity that involves the transport of fish (including shellfish) for placement in an aquaculture facility and the transport of harvested fish (including shellfish) from such facilities to shore for processing]

[**Grade A treated sewage** means sewage discharged from a treatment system included in Schedule 5 or Schedule 6 that is maintained and operated in good working order and in accordance with any instructions of the system's manufacturer]

[**Grade B treated sewage** means sewage discharged from a treatment system included in Schedule 7 that is maintained and operated in good working order and in accordance with any instructions of the system's manufacturer]

[**incinerator ash** means ash and clinkers resulting from a shipboard incinerator used for the incineration of garbage]

[**MARPOL** means the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978]

noxious liquid substance means any substance specified in Schedule 1; and includes any mixtures of those substances:

oil means petroleum in any form, including crude oil, fuel oil, sludge, oil refuse, and refined petroleum products (other than petrochemicals which are noxious liquid substances), and includes the substances specified in Schedule 2:

oil spill has the same meaning as in section 281 of the Maritime Transport Act 1994:

[**operational waste**—

- (a) means any solid waste (including slurry) that is not covered in any annex to MARPOL other than Annex V and that is collected on board during normal maintenance or operations of a ship or an offshore installation or is used for cargo stowage and handling; and
- (b) includes any cleaning agent or additive contained in cargo-hold and external wash water; but
- (c) does not include grey water, bilge water, or other similar discharges essential to the operation of a ship or an offshore installation]



[**plastic** means solid material that contains as an essential ingredient 1 or more high molecular mass polymers and that is formed (shaped) during either manufacture of the polymer or the fabrication into a finished product by heat or pressure, or both, and includes synthetic rope, synthetic fishing net, plastic garbage bags, and incinerator ash from the incineration of plastic]

[**plastics**: *Definition Revoked*]

platform drainage means the drainage water from the machinery space on an offshore installation, and—

- (a) Includes all water and contaminants from generators, fuel tanks, and pumps; but
- (b) Does not include any water or contaminant from processing, production, or displacement associated with exploration, drilling, or production activities which are undertaken by the offshore installation:

segregated ballast water means ballast water and contaminants in a ship's tank where that tank is completely separated from cargo oil and fuel oil systems and is permanently allocated to the carriage of ballast water or cargoes other than oil or noxious liquid substances:

sewage means, in relation to a ship or offshore installation,—

- (a) Drainage and other wastes from any form of toilet, urinal, or toilet scupper:
- (b) Drainage from wash basins, wash tubs, and scuppers located in any dispensary, sick bay, or other medical premises:
- (c) Drainage from spaces containing living animals:
- (d) Waste waters mixed with the drainage and wastes specified in paragraphs (a), (b), or (c):

treated sewage: *Definition Revoked*

PART 1 - DEFINITION PRESCRIBED FOR ACT

3 Definition of "harmful substances"

The following substances are harmful substances for the purposes of the definition of the term "harmful substances" in section 2(1) of the Act:

- (a) petroleum in any form, including crude oil, fuel oil, sludge, oil refuse and refined petroleum products (other than petrochemicals which are noxious liquid substances); and includes the substances specified in Schedule 2:
- (b) any substance specified in Schedule 1 and any mixture of those substances if carried in bulk in a ship:
- (c) drainage and other wastes from any form of toilet, urinal, or toilet scupper on a ship or offshore installation:
- (d) drainage from wash basins, wash tubs, and scuppers located in the dispensary, sick bay, or other medical premises of a ship or offshore installation:
- (e) drainage from spaces on a ship or offshore installation containing living animals:
- (f) waste water from a ship or offshore installation mixed with the drainage and waste specified in paragraphs (c), (d), or (e):
- [(g) all kinds of food waste, domestic waste, operational waste, plastic, cargo residue, incinerator ash, cooking oil, fishing gear, and any animal carcass generated during the normal operation of a ship or an offshore installation and liable to be disposed of continuously or periodically, except—
 - (i) any substance that is defined or listed in any Annex to MARPOL other than Annex V; and
 - (ii) fresh fish or parts of fresh fish generated as a result of fishing activity undertaken during a voyage, or as a result of aquaculture activity that involves the transport of fish (including shellfish) for placement in an aquaculture facility and the transport of harvested fish (including shellfish) from such facilities to shore for processing.]

PART 2 - DUMPING AND INCINERATION

4 Dumping of waste or other matter

- (1) The dumping of waste or other matter, other than the waste or other matter [from any ship, aircraft, or offshore installation] specified in subclauses (2) and (3), in the coastal marine area from any ship, aircraft, or offshore installation is deemed to be a prohibited activity in any regional coastal plan or proposed regional coastal plan.
- (2) In the coastal marine area the dumping of the following waste or other matter [from any ship, aircraft, or offshore installation] is deemed to be a discretionary activity in any regional coastal plan or proposed regional coastal plan:
 - (a) Dredge material:
 - (b) Sewage sludge:
 - (c) Fish processing waste from an onshore facility:
 - (d) Ships and platforms or other man-made structures at sea:
 - (e) Inert, inorganic geological material:
 - (f) Organic materials of natural origin:
 - (g) Bulky items consisting mainly of iron, steel, and concrete.
- (3) This clause does not apply to—
 - (a) The dumping or storage of waste or other matter arising directly from, or related to, the exploration, exploitation, and associated offshore processing of, seabed mineral resources; or
 - (b) A discharge made in accordance with section 15B of the Act or Part 3 of these regulations.

5 Assessment criteria

- (1) Every application under section 88 of the Act for a coastal permit to dump any waste or other matter specified in regulation 4(2) must include the information specified in Part 1 of Schedule 3.
- (2) The consent authority must, when considering an application under section 88 of the Act for a coastal permit for any waste or other matter specified in regulation 4(2), have regard to the matters set out in Parts 1 and 2 of Schedule 3 in addition to any other requirement of sections 104 and 138A of the Act.



6 Incineration of waste in marine incineration facility

- (1) The incineration of waste or other matter in any marine incineration facility in the coastal marine area is deemed to be a prohibited activity in any regional coastal plan or proposed regional coastal plan.
- (2) This clause does not apply to a discharge made in accordance with section 15B or Part 3 of these regulations.

7 Record keeping

- (1) Every holder of a coastal permit to carry out an activity that would otherwise contravene section 15A of the Act must keep records describing—
 - (a) The types and sources of the waste or other matter dumped;
 - (b) The location of dump sites;
 - (c) The method of dumping;
 - (d) The quantity (in cubic metres) of the waste or other matter dumped.
- (2) The records for the preceding calendar year must be provided to the Director of [Maritime New Zealand] before 1 February in each year.

PART 3 - CONTROL OF DISCHARGES

8 Discharge of substances for purpose of avoiding, remedying, or mitigating oil spill

- (1) Any person may, in the coastal marine area, discharge from a ship or offshore installation any substance for the purpose of avoiding, remedying, or mitigating the adverse effects of an oil spill.
- (2) This regulation does not authorise the discharge of any substance in contravention of Part 23 of the Maritime Transport Act 1994 or any marine protection rules made under Part 27 of that Act.

9 Discharge of oil

- (1) Any person may, in the coastal marine area, discharge oil, or mixtures containing oil, from any ship if—
 - (a) The oil is not derived from the cargo of the ship; and
 - (b) The ship is proceeding en route; and
 - (c) The oil content of the discharge before dilution with any other substance does not exceed 15 parts per million.
- (2) Any person may, in the coastal marine area, discharge oil, or mixtures containing oil, from an offshore installation, if—
 - (a) The oil content of the discharge before dilution with any other substance does not exceed 15 parts per million; and
 - (b) The discharge is platform drainage.

10 Discharge of noxious liquid substances

Any person may, in the coastal marine area, discharge from any ship carrying in bulk a noxious liquid substance, any noxious liquid substance if that noxious liquid substance is part of a discharge of clean ballast water or segregated ballast water.

11 Discharge of sewage in coastal marine area

- (1) Before 1 July 2000, any person may discharge sewage in the coastal marine area from a ship or offshore installation, unless that discharge is within 500 metres (0.27 nautical miles) of a marine farm.
- (2) On or after 1 July 2000, no person may discharge sewage in the coastal marine area from a ship or offshore installation unless that discharge occurs—
 - (a) More than 500 metres (0.27 nautical miles) seaward from mean high water springs; and
 - (b) More than 500 metres (0.27 nautical miles) from a marine farm; and
 - (c) In water depths greater than 5 metres; and
 - (d) more than 200 metres (0.108 nautical miles) from a marine reserve, except the marine reserve constituted by the Marine Reserve (Kermadec Islands) Order 1990; and
 - (e) more than 500 metres (0.27 nautical miles) from an area that the Minister of Fisheries has declared by notice in the Gazette to be a mataitai reserve under regulations made under section 186 of the Fisheries Act 1996.
- (3) A rule may only be included in a regional coastal plan or a proposed regional coastal plan relating to the discharges under this regulation if—
 - (a) The rule increases the distances seaward or increases the depth specified in subclause (2) for any harbours, estuaries, embayments, or other parts of a region[, or increases the distances from a marine farm, marine reserve, or mataitai reserve specified in subclause (2),] for all or any part of the year; and
 - (b) The rule takes effect on or after 1 July 2000.

[12 Discharge of Grade A treated sewage in coastal marine area

- (1) Any person may discharge Grade A treated sewage in the coastal marine area from a ship or offshore installation, but must not discharge it within 100 metres of a marine farm.
- (2) Despite subclause (1), a rule may be included in a regional coastal plan or a proposed regional coastal plan if the rule—
 - (a) relates to discharges of Grade A treated sewage in the internal waters of Fiordland (as defined in section 4 of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act 1977); and
 - (b) restricts where those discharges may take place, being a distance of at least 100 metres from a marine farm; and
 - (c) does not relate to vessels operated by the New Zealand Defence Force.
- (3) For the purposes of subclause (2), Fiordland means the coastal marine area between Awarua Point and Sandhill Point.]



[12A Discharge of Grade B treated sewage in coastal marine area

- (1) Any person may discharge Grade B treated sewage in the coastal marine area from a ship or offshore installation, but must not discharge it—
 - (a) within 500 metres (0.27 nautical miles) of a marine farm; or
 - (b) within 500 metres (0.27 nautical miles) of an area that the Minister of Fisheries has declared by notice in the Gazette to be a mataitai reserve under regulations made under section 186 of the Fisheries Act 1996.
- (2) A rule may only be included in a regional coastal plan or a proposed regional coastal plan relating to discharges under this regulation if the rule does either or both of the following:
 - (a) specifies the distances from mean high-water springs or the depth where those discharges may take place for all or any part of the year, being distances of at least 500 metres (0.27 nautical miles) from—
 - (i) a marine farm; or
 - (ii) a mataitai reserve:
 - (b) increases the distance from a marine farm or a mataitai reserve where those discharges may take place for all or any part of the year, being at a distance of more than 500 metres (0.27 nautical miles).]

[13 Discharge of garbage prohibited

Except as provided in regulation 13A, the discharge of garbage in the coastal marine area from any ship or offshore installation is prohibited.]

[13A Exceptions to prohibition on discharge of garbage

- (1) The prohibition in regulation 13 on the discharge of garbage from a ship in the coastal marine area does not apply to a discharge that is —
 - (a) necessary for the purpose of securing the safety of a ship and those on board or saving life at sea; or
 - (b) an accidental loss of garbage resulting from damage to a ship or its equipment, if all reasonable precautions have been taken before and after the occurrence of the damage to prevent or minimise the accidental loss; or
 - (c) an accidental loss of fishing gear from a ship, if all reasonable precautions have been taken to prevent such loss; or
 - (d) a discharge of fishing gear from a ship for the protection of the marine environment or for the safety of that ship or its crew; or
 - (e) food waste, if the discharge occurs—
 - (i) while the ship is en route; and
 - (ii) at least 5 500 metres (3 nautical miles) seaward of the inner limits of the territorial sea; and
 - (iii) at least 500 metres (0.27 nautical miles) from any offshore installation; and
 - (iv) after the food waste has been ground or reduced to a particle size no greater than 25 millimetres; or
 - (f) cleaning agents or additives contained in cargo-hold, deck, and external surfaces wash water, if those substances are not harmful to the marine environment, taking into account guidelines developed by the International Maritime Organization.
- (2) The prohibition in regulation 13 on the discharge of garbage from an offshore installation in the coastal marine area does not apply to a discharge that is—
 - (a) necessary for the purpose of securing the safety of an offshore installation and those on board or saving life at sea; or
 - (b) an accidental loss of garbage resulting from damage to an offshore installation or its equipment, if all reasonable precautions have been taken before and after the occurrence of the damage to prevent or minimise the accidental loss.]

14 Discharge of ballast water

- (1) Any person may discharge in the coastal marine area, from a ship or offshore installation, clean ballast water or segregated ballast water.
- (2) This regulation does not authorise the discharge of clean ballast water or segregated ballast water in contravention of the Biosecurity Act 1993, regulations made under that Act, or import health standards made under section 20 of that Act.

15 Discharges made as part of normal operations of ship or offshore installation

Any person may discharge, in the coastal marine area, a contaminant that is incidental to, or derived from, or generated during, the operations listed in Schedule 4 as the normal operations of a ship or offshore [installation, except a contaminant that is garbage and for which no exception is provided in regulation 13A].

16 Regional rules or resource consents for discharges

No rule may be included in any regional coastal plan, or proposed regional coastal plan, nor any resource consent granted relating to a discharge to which regulations 9, 10, 12, 13, 14, and 15 apply.

SCHEDULES

NOTE: The Resource Management (Marine Pollution) Regulations 1998 contain a number of Schedules. Those Schedules are not reproduced as part of this Plan, but can be found online at www.legislation.govt.nz.



Schedule G – Performance requirements for qualifications to apply agrichemicals

1. The following are the training requirements for conditions set out under rules in Part E of this Plan relating to the widespread application of agrichemicals.
2. **COMMERCIAL USER**
 - 2.1 The minimum training programme for applicators of agrichemicals shall include:
 - 2.1.1 Knowing and being able to describe:
 - (a) the hazard classifications of agrichemicals to be used
 - (b) the adverse effects that could be caused by the agrichemicals to be used
 - (c) his or her obligations and liabilities under Acts of Parliament relative to the agrichemicals to be used and their use
 - (d) which regulations apply in respect of those agrichemicals, and where those regulations can be obtained (including the local regional air quality plan)
 - (e) the content of NZS 8409: 2004 Management of Agrichemicals
 - (f) the precautions required to prevent injury to a person or damage to the environment (including property) by any agrichemicals to be used
 - (g) the procedure to adopt in an emergency involving the agrichemicals to be used.
 - 2.1.2 Knowing and being able to demonstrate:
 - (a) a working knowledge of the operating equipment (including protective equipment and clothing) necessary to manage the agrichemicals being used.
 - 2.2 An example of a qualification that meets these requirements is the GROWSAFE® Introductory Certificate.
3. **CONTRACTOR EMPLOYEE**
 - 3.1 The minimum programme for contract use of agrichemicals (animal and plant health products) where agrichemicals are applied for hire or reward (both ground and aerial application) shall include those matters listed for Commercial Users and these additional matters:
 - (a) first aid, health and safety, and emergency response
 - (b) environmental effects, including spray drift minimization
 - (c) notification requirements, including signage
 - (d) product label interpretation
 - (e) protective equipment selection and use
 - (f) transport, storage and disposal of agrichemicals
 - (g) selection, calibration and operation of application equipment for specific operations.
 - 3.2 An example of a qualification that meets these requirements is the GROWSAFE® Applied Certificate.



Schedule H - Nationally or regionally threatened plant and animal species found in Hawke's Bay

COMMON NAME	TAXONOMIC NAME	National Threat Status or Regionally Significant
Plants:		
Sand tussock, hinarepe	<i>Austrofestuca littoralis</i>	a
Sedge	<i>Carex raoulii</i>	c
Pingao	<i>Desmoschoenus spiralis</i>	b
Matagouri	<i>Discaria toumatou</i>	*
Rush	<i>Juncus caespiticius</i>	*
Creeping musk	<i>Mimulus repens</i>	c
Leafless pohuehue	<i>Muehlenbeckia ephedroides</i>	c
Sand daphne	<i>Pimelea prostrate</i> var. <i>erecta</i> (<i>Pimelea</i> "Mahia")	*
Sand daphne	<i>Pimelea</i> aff. <i>Arenaria</i> (Southern NZ)	b
Coastal shrub	<i>Pimelea tomentosa</i>	b
Coastal ribbonwood	<i>Plagianthus divaricatus</i>	*
Fennel leaved pondweed	<i>Potamogeton pectinatus</i>	b
Wetland buttercup	<i>Ranunculus recens</i> var. <i>recens</i>	b
Fish:		
Brown mudfish	<i>Neochanna apoda</i>	b
Dwarf galaxias	<i>Galaxias divergens</i>	b
Longfin eel	<i>Anguilla dieffenbachii</i>	b
Giant kokopu	<i>Galaxias argenteus</i>	b
Birds:		
Wrybill	<i>Anarhynchus frontalis</i>	a
NZ dotterel	<i>Charadis obscurus</i> "northern"	c
NZ shore plover	<i>Thinornis novaeseelandiae</i>	a
Black-fronted tern	<i>Sterna albobriata</i>	b
Banded dotterel	<i>Charadrius bicinctus</i>	b
NZ dabchick	<i>Poliiocephalus rufopectus</i>	c
White-fronted tern	<i>Sterna striata</i>	b
White heron	<i>Egretta alba</i>	a
Australasian bittern	<i>Botaurus poiciloptilus</i>	a
Reef heron	<i>Egretta sacra</i>	a
Black-billed gull	<i>Larus bulleri</i>	b
Northern little blue penguin	<i>Eudyptula minor</i>	b
Little black shag	<i>Phalacrocorax sulcirostris</i>	c
North Island fernbird	<i>Bowdleria punctata</i>	c
Black shag	<i>Phalacrocorax carbo</i>	c
Pied shag	<i>Phalacrocorax varius</i>	c
Marsh crake	<i>Porzana pasilla</i>	c
Spotless crake	<i>Porzana tabaensis</i>	c
Reptiles:		
Spotted skink	<i>Oiligosoma lineocellatum</i>	b

- 1 Molloy and Davis (October 1994): "Setting priorities for the conservation of New Zealand's threatened plants and animals."
- 2 Dopson, S.R. et al. 1999 : "Conservation Requirements of New Zealand's Nationally Threatened Vascular Plants."
- 3 * Considered endangered within the East Coast – Hawke's Bay Conservancy
- 4 New Zealand Threat Classification System (Hitchman, 2002)
 - a) Acutely threatened
 - b) Chronically threatened
 - c) At risk



Schedule I – Chimney design guide and combustion of fuels

PART A – CHIMNEY HEIGHT REQUIREMENTS

A.1 CHIMNEY HEIGHT REQUIREMENTS - DISCHARGE FROM THE EXTERNAL COMBUSTION OF NATURAL OR LIQUEFIED PETROLEUM GAS ¹⁶⁷

METHODOLOGY

A.1.1 In terrain where the land does not rise to more than half, and buildings do not rise to more than 0.4 times, the indicative height of the chimney within a ground distance of five times the indicative height, and where there are no other significant sources or air-borne contaminants, the height of any chimney discharging the products of combustion from fuel burning equipment will be determined generally in accordance with the following guidelines:

- (a) **For any discharge from the combustion of natural gas or liquefied gas, where the release of nitrogen oxides is less than 0.5 kg/h or the rate of heat release is less than 2 MW** – The minimum chimney height should be the higher of either 8 metres above finished ground level or 3 metres above the highest substantial part of any building located within 40 metres of the chimney or any part of the building to which the chimney may be attached.
- (b) **For any discharge from the combustion of natural gas or liquefied gas, where the release of nitrogen oxides is equal to or exceeds 0.5 kg/h but is less than 20 kg/h and the rate of heat release is less than 50 MW** – The height of the chimney should be calculated in accordance with Table i (with the minimum height being whichever is the greater height of those corresponding to the heat input (MW) and the nitrogen oxides discharge (kg/h)), or be 3.3 metres above the highest substantial part of any building located within 40 metres of the chimney or any part of the building to which the chimney may be attached, whichever is the higher.

Table i: Natural Gas or Liquefied Gas as a Fuel.

Heat Input (MW)	Nitrogen Oxides (kg/h)	Chimney Height Above Ground (m)
2.0	0.5	8.3
2.5	0.6	8.5
3.0	0.8	8.7
4.0	1.1	9.1
5.0	1.4	9.4
6.0	1.7	9.7
7.0	2.0	10.0
8.0	2.4	10.3
9.0	2.7	10.6
10.0	3.0	10.8
11.0	3.4	11.0
12.0	3.7	11.3
13.0	4.1	11.5
14.0	4.5	11.7
15.0	4.8	11.9
16.0	5.2	12.1
17.0	5.6	12.3
18.0	5.9	12.5
19.0	6.3	12.7
20.0	6.7	12.8
25.0	8.6	13.7
30.0	10.6	14.5
35.0	12.7	15.2
40.0	16.9	16.4
45.0	16.9	16.4
50.0	19.0	17.0

¹⁶⁷ These criteria only apply to permitted and controlled activities. This includes large scale fuel burning appliances with combined heat outputs of less than 50 MW for natural gas and liquefied petroleum gas. Discretionary activities require a site specific evaluation which takes into account the impact of the chimney height on ground level concentrations of contaminants as a part of the resource consent application.



A.1.2 In the following circumstances, the height of the chimney should generally be determined so that the discharge will not give rise to sulphur dioxide and nitrogen oxides levels in excess of an indicator level based on 40% of the 'New Zealand Ambient Air Quality Guidelines' (Ministry for the Environment, 2002), using the 99.9% modelled percentile:

- (a) In terrain where the land rises to more than half, or buildings rise to more than 0.4 times, the indicative height of the chimney, within a ground distance of five times the indicative height.

A.2 CHIMNEY HEIGHT REQUIREMENTS - DISCHARGE FROM THE EXTERNAL COMBUSTION OF KEROSENE, DIESEL, COAL, HEAVY FUEL OIL, LIGHT FUEL OIL, UNTREATED WOOD, OR PELLET FUEL ¹⁶⁸

A.2.1 In relation to any large scale fuel burning appliance burning diesel, kerosene, coal, heavy fuel oil, light fuel oil, untreated wood, or pellet fuel, discharges into air from external combustion after the notification date of Variation 2¹⁶⁹, must be via an emission stack where:

- a) the discharge point is at least 12.5 metres above ground level
- b) the discharge point is at least 2.5 metres higher than the apex of any building, tree, slope or other structure within a horizontal radius of 2.5 times the stack height (whichever discharge point (a) or (b) is higher); and
- c) the exhaust gases are directed vertically into air and are not impeded by any obstruction that would lower the velocity of the exhaust gases.

Explanatory Note

A.2.2 To ensure that the plume released from the stack is not affected by building downwash effects, therefore creating high ground level concentrations, the stack must be at least 2.5 metres higher than the tallest building or obstacle within the vicinity of the stack (meaning a circle drawn around the stack with a radius 2.5 times the height of the stack). For example, in a building that has a stack 10m high relative to ground level, there would be a circle with a 25m radius drawn around the stack for potential downwash effects. The discharge point would have to be 2.5m higher than any obstacle within this circle in order to achieve good dispersion of emissions from the stack.

A.3 EXPLANATION

A.3.1 The combustion of any fuel will generate airborne contaminants. The most accepted method of managing discharges of these contaminants is by remaining within desired maximum ground level concentrations. The 'New Zealand Ambient Air Quality Guidelines' (Ministry for the Environment, 2002) set out the desired maximum ground level concentrations for pollutants and the Resource Management (National Environmental Standards for Air Quality¹⁷⁰) set out ambient air quality standards that maximum ground level concentrations must remain within. To give effect to these standards and guidelines, it is necessary to have a chimney of sufficient height to disperse contaminants effectively by diluting the combustion gases to a level where the adverse effects are no more than minor.

A.3.2 In flat terrain and in the absence of high buildings, simple formulae (e.g. Table i) can be used to calculate the height of the chimney required. If these guidelines cannot be met the Council will have the ability to apply more general guidelines when determining adequate heights for chimneys, or if considered necessary require modelling to be carried out.

PART B – EMISSIONS FROM COMBUSTION

B.1 INTRODUCTION

B.1.1 Rules in this Plan regulate the discharge of contaminants into air from combustion processes. For ease of implementation, the rules regulate heat release rates rather than emission rates of contaminants. However, it is important to consider what contaminants are emitted from combustion processes. This Schedule provides guidance on the nature of emissions that can be expected from the combustion processes regulated by the rules in this Plan.

B.1.2 Emission rates can vary enormously, depending on fuel specification/composition, fuel quality, process of combustion, load, equipment age and technical sophistication, maintenance and operating practice, use of control systems and filters, and ambient conditions (temperature and humidity of feed air). It is very difficult to assign a particular emission to a particular activity, and the only way to determine this properly is by measurement. Table iii in this Schedule shows a 'worst' case, a 'typical' case, and a 'best' case.

¹⁶⁸ These criteria only apply to permitted and controlled activities. This includes large scale fuel burning appliances with combined heat outputs of less than 100 kW for coal, heavy fuel oil, light fuel oil and untreated wood, less than 5MW for diesel, less than 2 MW for kerosene, and less than 600 kW for wood pellet fuel being burned in modified pellet boilers, and less than 1.2 MW for wood pellet fuel being burned in custom designed pellet boilers. Discretionary activities require a site specific evaluation which takes into account the impact of the chimney height on ground level concentrations of contaminants as a part of the resource consent application.

¹⁶⁹ 10 December 2008.

¹⁷⁰ Resource Management (National Environmental Standards for Air Quality) Regulations 2004.



B.2 FUEL USE

B.2.1 A first step in estimating emissions is to estimate the fuel used in the various processes (shown in Table ii). Assuming continuous operation of a process for one year, the fuel used can be calculated as follows:

$$\text{Annual fuel consumption (kg/y)} = \frac{\text{Process size (J/s)}}{\text{Fuel calorific value (J/kg)}} \times 3.1536 \times 10^7 \text{ s/y}$$

where:

- fuel calorific value is the energy released per unit fuel:

Natural Gas	36 MJ/m ³
LPG	46 MJ/kg
Oil	41 MJ/kg
Coal	25 MJ/kg
Wood	10 MJ/kg
- 3.1536 x 10⁷ s/y is the factor needed to scale the process to one year.

Table ii: Typical Fuel Use for Combustion Processes.

PROCESS	SIZE	FUEL USE PER YEAR	RATE PER MW
Natural gas	5 MW	4,400,000 m ³	880,000 m ³
	50 MW	44,000,000 m ³	
LPG	5 MW	3,400 tonnes	680 tonnes
	50 MW	34,000 tonnes	
Oil	40 kW	31 tonnes	770 tonnes
	10 MW	7,700 tonnes	
Coal	40 kW	50 tonnes	1,300 tonnes
	10 MW	12,600 tonnes	
Wood	40 kW	130 tonnes	3,200 tonnes
	10 MW	31,500 tonnes	

B.3 | KEY CONTAMINANTS

B.3.1 The key contaminants from combustion processes are as follows:

PM₁₀	The fraction of particulate matter in the air of size less than 10 micrometres. 24 hour standard: 50µg/m ³ Annual guideline: 20µg/m ³
CO	Carbon monoxide. 8 hour standard: 10 mg/m ³ ; 1 hour guideline: 30 mg/m ³ .
NO_x	Oxides of nitrogen, mainly NO, NO ₂ and small amounts of NO ₃ . Standards and Guidelines for NO ₂ only: 24 hour standard: 100 µg/m ³ ; 1 hour guideline: 200 µg/m ³ .
SO_x	Oxides of sulphur, mostly SO ₂ . Standards and Guidelines for SO ₂ only: 24 hour standard: 120 µg/m ³ ; 1 hour standard: 350 µg/m ³ 1 hour standard: 570 µg/m ³ (no exceedences).
O₃	Ozone 1 hour standard: 150 µg/m ³ 8 hour guideline: 100 µg/m ³
VOC	Volatile organic compounds, usually light hydrocarbons, sometimes with small amounts of hazardous contaminants. Guideline levels for these are currently under review.

B.4 CALCULATION DETAILS & EMISSION RATES

B.4.1 Taking the fuel consumption data (from Table ii) and standard emissions factors from the literature (USEPA (AP-42), WHO, IPCC or the Air Pollution Engineering Manual - see "Bibliography") for each of the key contaminants, the annual emissions can then be calculated according to:



Annual emissions = Annual fuel consumption x Standard emission factor

B.4.2 The resultant emissions are reported in Table iii for three cases - worst, typical and best - based on the following assumptions:

- sulphur content of coal = 1.0% by weight (range 0.4 to 2.0)
- ash content of coal = 4.0% by weight (range 3.0 to 5.0)
- density of LPG = 0.5 kg/l
- density of fuel oil = 0.845 kg/l.

B.4.3 The ranges given are subjective estimates. At the extremes, it may be possible to find either very poorly operated equipment, or conversely highly efficient equipment that may lie outside these limits.

Table iii: Typical Emission Rates for Combustion Processes.

PROCESS	SIZE	EMISSION RATE BY CONTAMINANT				
		PM ₁₀ (kg/y)	CO (kg/y)	NO _x (kg/y)	SO _x (kg/y)	VOC (kg/y)
Gas/LPG	5MW worst	870	4,300	10,000	42	790
	5MW typical	370	2,400	5,700	33	440
	5MW best	210	1,400	2,500	24	180
	50MW worst	6,700	81,000	390,000	420	29,000
	50MW typical	2,100	28,000	200,000	330	4,000
	50MW best	700	25,000	37,000	240	1,300
Oil	40kW worst	22	22	260	120	12
	40kW typical	9	20	86	120	6
	40kW best	2	19	22	9	1
	10MW worst	5,400	5,500	65,000	31,000	3,100
	10MW typical	2,200	4,900	21,000	31,000	1,400
	10MW best	540	4,700	5,400	2,300	310
Coal	40kW worst	350	280	930	2,000	53
	40kW typical	250	120	410	880	3
	40kW best	25	15	170	400	3
	10MW worst	88,000	110,000	270,000	490,000	13,000
	10MW typical	63,000	32,000	110,000	220,000	760
	10MW best	6,300	3,200	81,000	81,000	630
Wood	40kW worst	440	1,400	180	13	110
	40kW typical	160	250	42	5	19
	40kW best	10	38	42	1	11
	10MW worst	110,000	760,000	57,000	3,200	27,000
	10MW typical	41,000	410,000	36,000	1,200	4,700
	10MW best	2,500	63,000	950	160	2,800

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Ministry for the Environment (2005) Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004 (NESAQ).

Ministry for the Environment, Ministry of Health (2002) Ambient Air Quality Guidelines 2002 update.



Schedule J – Air Quality Guidelines 2002

(includes comparison with 1994 guideline values)

PART A AIR QUALITY GUIDELINE VALUE COMPARISONS

Contaminant	1994 Guideline Values		2002 Guideline Values	
	Value	Averaging Time	Value	Averaging Time
Carbon monoxide (CO)	30 mg/m ³	1 hour	30 mg/m ³	1 hour
	10 mg/m ³	8 hours	10 mg/m ³	8 hours
Particulate matter (PM ₁₀)	120 µg/m ³	24 hours	50 µg/m ³	24 hours
	40 µg/m ³	Annual	20 µg/m ³	Annual
Nitrogen dioxide (NO ₂)	300 µg/m ³	1 hour	200 µg/m ³	1 hour
	100 µg/m ³	24 hours	100 µg/m ³	24 hours
Sulphur dioxide ⁺ (SO ₂)	500 µg/m ³	10 min	-- Withdrawn --	
	350 µg/m ³	1 hour	350 µg/m ³	1 hour
	125 µg/m ³	24 hours	120 µg/m ³	24 hours
	50 µg/m ³	Annual	-- Withdrawn --	
Ozone (O ₃)	150 µg/m ³	1 hour	150 µg/m ³	1 hour
	100 µg/m ³	8 hour	100 µg/m ³	8 hours
Hydrogen sulphide (H ₂ S)	7 µg/m ³	30 min	7 µg/m ³	30 min
Lead ⁺⁺ (Pb)	0.5-1.0 µg/m ³	3 month	0.2 µg/m ³	3 month moving average (calculated monthly)

NOTES:

- + The sulphur dioxide guideline values do not apply to sulphur acid mist.
- ++ The guideline values for metals are for inhalation exposure only. They do not include exposure from other routes. Those other routes should be considered in assessments.

PART B AMBIENT AIR QUALITY STANDARDS 2004

From Resource Management (National Environmental Standards for Air Quality) Regulations 2004

Contaminant	Standard	Time Average	Allowable Exceedences (Per Year)
Carbon monoxide (CO)	10 mg/m ³	8 hours	1
Nitrogen dioxide (NO ₂)	200 µg/m ³	1 hour	9
Ozone (O ₃)	150 µg/m ³	1 hour	0
Particulate matter (PM ₁₀)	50 µg/m ³	24 hours	1
Sulphur dioxide (SO ₂)	350 µg/m ³	1 hour	9
	570 µg/m ³	1 hour	0



Schedule K – Emission requirements: Small scale solid fuel burners

PART A SMALL SCALE SOLID FUEL BURNERS - AIRZONE 1 - HASTINGS AIRSHED

1 SOLID FUEL BURNER REQUIREMENTS (FREE STANDING BURNERS, NEW BURNERS¹⁷¹ (WITH OR WITHOUT A WETBACK) & INSERT BURNERS (WITHOUT A WETBACK))

A.1.1 A small scale solid fuel burner must:

- a) emit no more than 1.0 gram of total suspended particulate matter per kilogram of fuel burned, calculated by averaging the total suspended particulate emissions for high, medium and low burn rates, when tested in accordance with AS/NZS4012:1999 and AS/NZS4013:1999, or AS/NZS4014.6.2007, AS/NZS4886.2007 and AS/NZS5078:2007 when testing pellet burners, or the functional equivalent for other non batch-fed appliances. Where the nominated test fuel is wood then the test shall be carried out using softwood in accordance with the requirements of AS/NZS 4014.2:1999
- b) have a thermal efficiency, for space heating only, as described in AS/NZS4013:1999, of 65% or greater
- c) comply with the definition of 'NESAQ compliant burner' in this Plan
- d) not be modified in any way so as to alter the specifications of the burner from those tested and stated by the manufacturer
- e) be maintained in good operational order and operated in accordance with the manufacturer's instructions and
- f) be capable of being operated on a high, medium and low burn rate.

OR

A.2 SOLID FUEL BURNER REQUIREMENTS (INSERT BURNERS WITH A WETBACK)

A.2.1 A small scale solid fuel burner must:

- a) emit no more than 1.5 grams of total suspended particulate matter per kilogram of fuel burned, calculated by averaging the total suspended particulate emissions for high, medium and low burn rates, when tested in accordance with AS/NZS4012:1999 and AS/NZS4013:1999, or AS/NZS4014.6.2007, AS/NZS4886.2007 and AS/NZS5078:2007 when testing pellet burners, or the functional equivalent for other non batch-fed appliances. Where the nominated test fuel is wood then the test shall be carried out using softwood in accordance with the requirements of AS/NZS 4014.2:1999
- b) have a thermal efficiency, for space heating only, as described in AS/NZS4013:1999, of 65% or greater
- c) comply with the definition of 'NESAQ compliant burner' in this Plan
- d) not be modified in any way so as to alter the specifications of the burner from those tested and stated by the manufacturer
- e) be maintained in good operational order and operated in accordance with the manufacturer's instructions
- f) be capable of being operated on a high, medium and low burn rate, and
- g) be connected to the hot water supply system within a residential dwelling.

PART B SMALL SCALE SOLID FUEL BURNERS - AIRZONES 1 & 2 - NAPIER AIRSHED AND AIRZONE 2 - HASTINGS AIRSHED

B.1 SOLID FUEL BURNER REQUIREMENTS

B.1.1 A small scale solid fuel burner must:

- a) emit no more than 1.5 grams of total suspended particulate matter per kilogram of fuel burned, calculated by averaging the total suspended particulate emissions for high, medium and low burn rates, when tested in accordance with AS/NZS4012:1999 and AS/NZS4013:1999, or AS/NZS4014.6.2007, AS/NZS4886.2007 and AS/NZS5078:2007 when testing pellet burners, or the functional equivalent for other non batch-fed appliances. Where the nominated test fuel is wood then the test shall be carried out using softwood in accordance with the requirements of AS/NZS 4014.2:1999
- b) have a thermal efficiency, for space heating only, as described in AS/NZS4013:1999 of 65% or greater
- c) comply with the definition of 'NESAQ compliant burner' in this Plan

¹⁷¹ A new burner is classed as a burner not replacing an existing burner located within the same building.



- d) not be modified in any way so as to alter the specifications of the burner from those tested and stated by the manufacturer
- e) be maintained in good operational order and operated in accordance with the manufacturer's instructions and
- f) be capable of being operated on a high, medium and low burn rate.

PART C SMALL SCALE SOLID FUEL BURNERS - NAPIER AIRSHED AND HASTINGS AIRSHED

C.1 MODIFIED SOLID FUEL BURNER & INFORMATION REQUIREMENTS

C.1.1 The modified small scale solid fuel burner must:

- a) emit no more than 1.5 grams of total suspended particulate matter per kilogram of fuel burned, calculated by averaging the total suspended particulate emissions for high, medium and low burn rates, when tested in accordance with AS/NZS4012:1999 and AS/NZS4013:1999, or AS/NZS4014.6.2007, AS/NZS4886.2007 and AS/NZS5078:2007 when testing pellet burners, or the functional equivalent for other non batch-fed appliances. Where the nominated test fuel is wood then the test shall be carried out using softwood in accordance with the requirements of AS/NZS 4014.2:1999
- b) have a thermal efficiency, for space heating only, as described in AS/NZS4013:1999 of 65% or greater
- c) comply with the definition of 'modified NESAQ compliant burner' in this Plan
- d) be maintained in good operational order and operated in accordance with the manufacturer's instructions and
- e) be capable of being operated on a high, medium and low burn rate.

C.1.2 All modifications shall be undertaken by an independent suitably qualified person¹⁷² approved by the burner manufacturer and notified to the Hawke's Bay Regional Council.

C.1.3 The following information shall be provided to the Hawke's Bay Regional Council prior to the modification taking place:

- a) name, address and phone number of property owner
- b) description of the type of device, year of manufacture and installation, and tested particulate emission rates for that device at the time of installation (if available)
- c) a description of the modifications that need to take place to make the existing burner NESAQ compliant
- d) confirmation by the burner manufacturer or their agent that the existing burner is in good working order, and complies with the technical specifications of the particular NESAQ compliant burner model, or provision of a list of remedial work necessary to make it NESAQ compliant, and/or to restore the burner to good working order
- e) technical specifications of the old appliance and the equivalent NESAQ authorised appliance, and confirmation by the burner manufacturer that the technical specifications and overall dimensions of both burners, after modification are the same.
- f) a list of measures that can be undertaken to ensure the existing burner cannot be easily tampered with after the modification has occurred.

C.1.4 The following information must be provided to the Hawke's Bay Regional Council after the modification has occurred:

- a) confirmation by the burner manufacturer that the technical specifications of the existing burner and the equivalent NESAQ compliant burner, after modification are the same
- b) confirmation by the burner manufacturer that the list of remedial work identified in condition C.1.3(d) , above (if any), has been undertaken
- c) name and phone number of the approved 'independent suitably qualified person' who carried out the modification.
- d) confirmation that the list of measures referred to in C.1.3(f) above have been carried out.

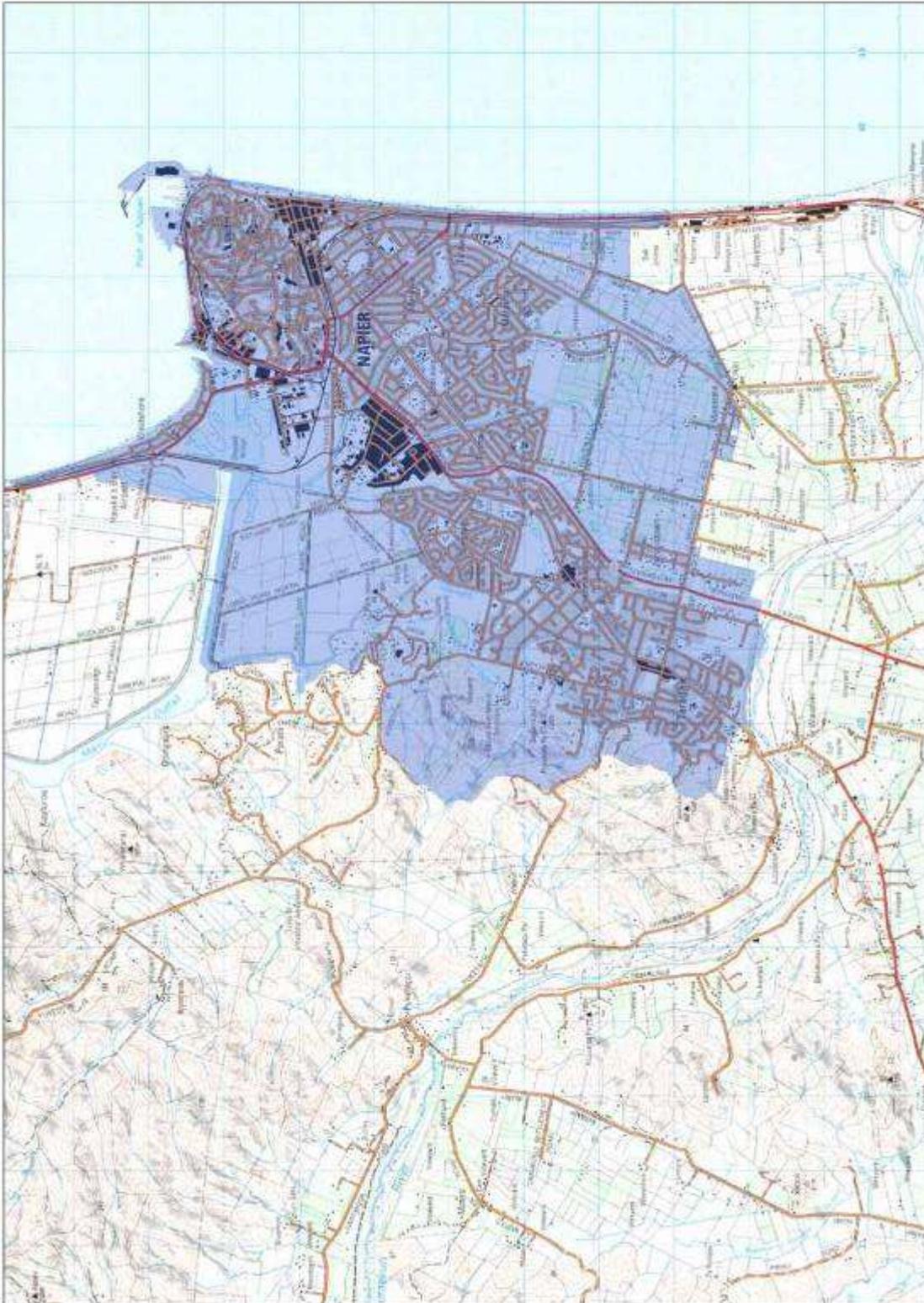
C.1.5 The Hawke's Bay Regional Council may require information provided in accordance with C.1.3 above to be technically peer reviewed.

¹⁷² An independent suitably qualified person is deemed to include the manufacturer of the burner, or a nominated representative of the manufacturer, or staff employed by the manufacturer,



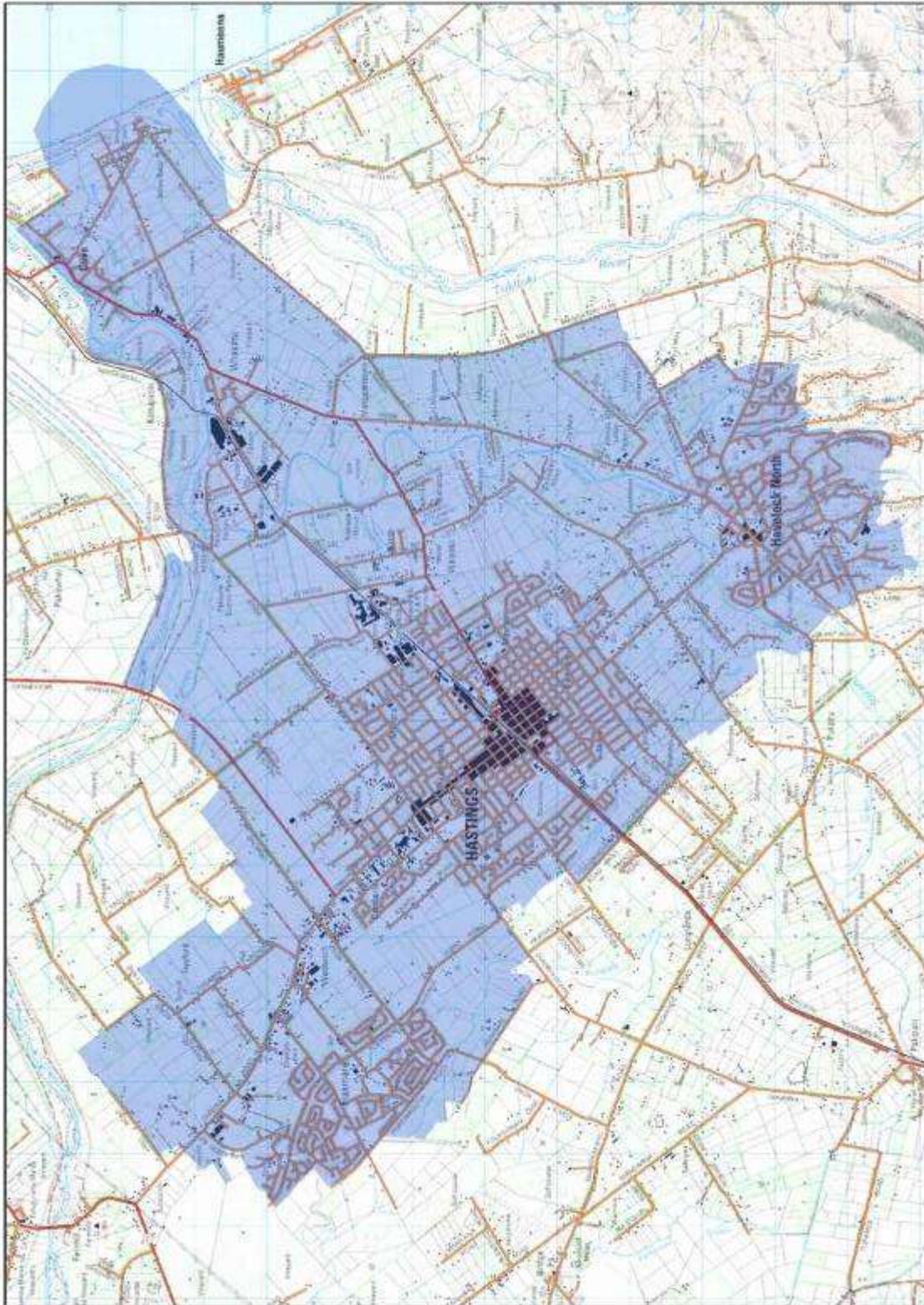
Schedule L – Airshed boundaries and Airzone boundaries

Napier Airshed



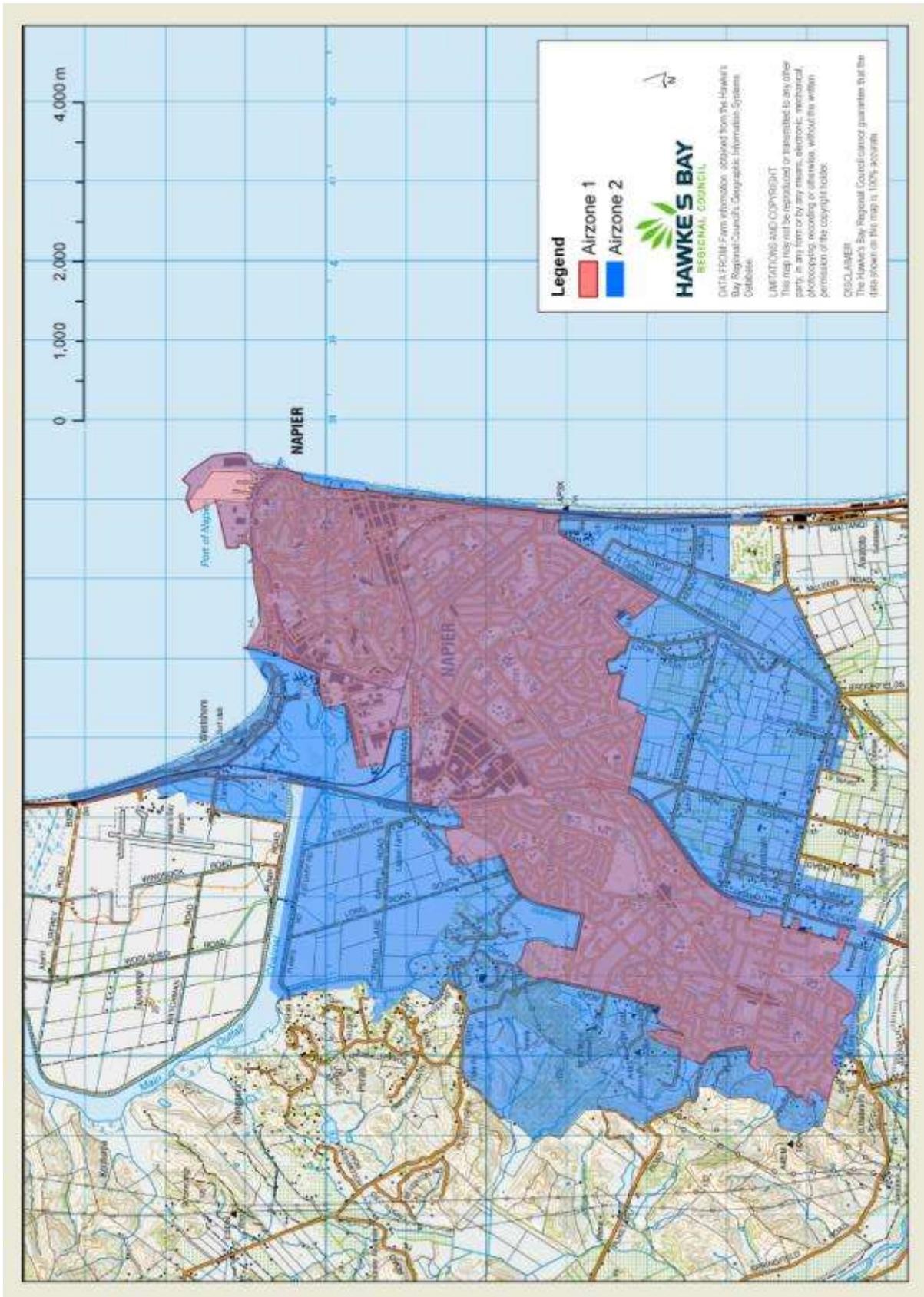


Hastings Airshed



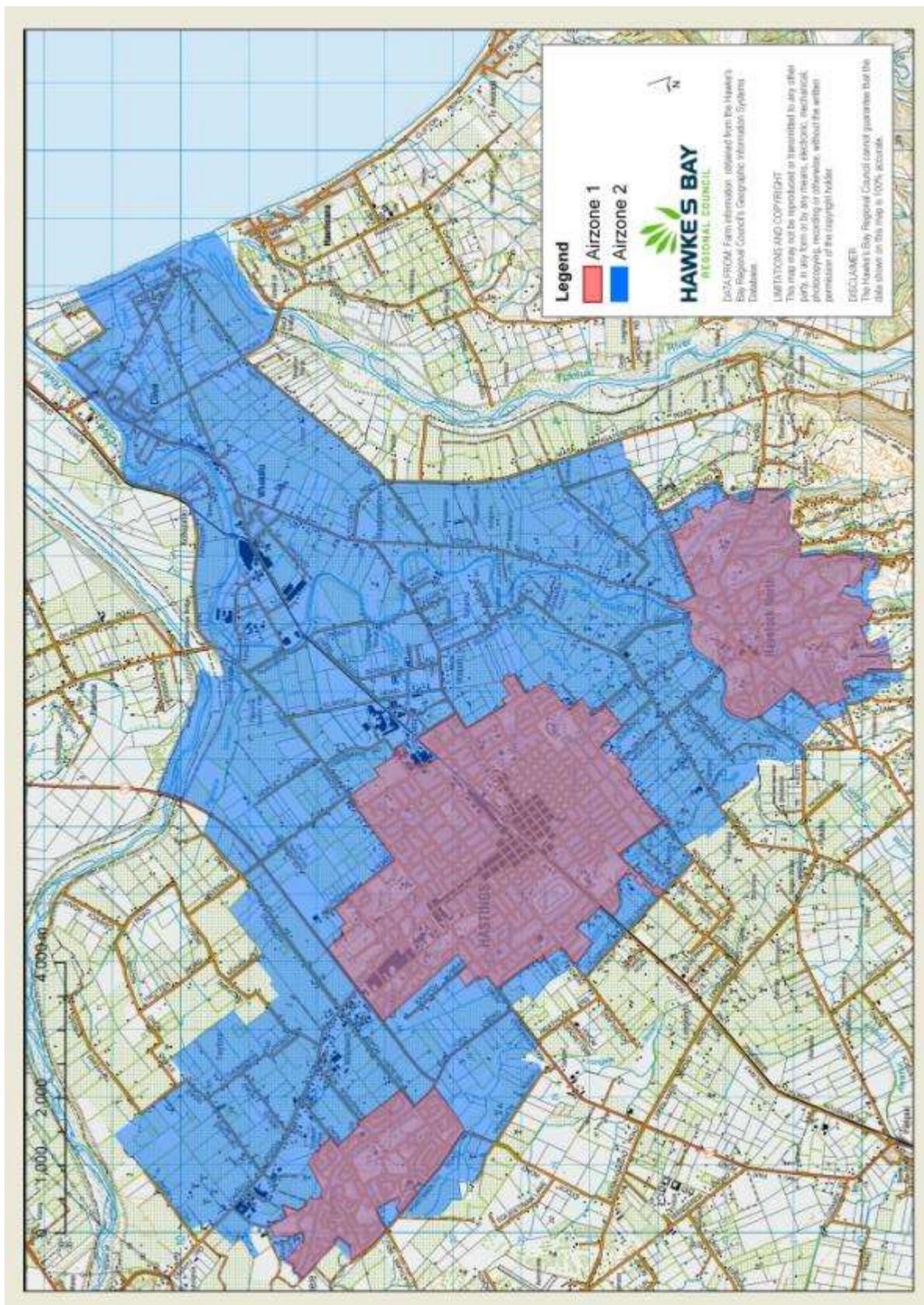


Napier Airshed: Airzone boundaries





Hastings Airshed: Airzone boundaries





Schedule M - Recorded historic heritage features within Hawke's Bay coastal marine area

Reference No.	Description	NZTM~ Northing	NZTM Easting	Source Reference
1	Burial	5670485	2023531	Y19/16*
2	Waka landing site	5662372	2025038	Y19/90*
3	Shipwreck	5644807	1945238	W20/55*
4	Shipwreck	5622880	1935337	V21/208*
5	Ex-freezing works site	5622779	1934937	V21/260*
6	Taikura (within 80m diameter circle centred on coordinates)	5539482	1918370	7675+
7	Takapau Rock	5528969	1911707	7688+
8	Ohinemuhu (Red Rock)	5531594	1911562	7673+

~ NZTM refers to New Zealand Transverse Mercator coordinate system.

* Source is New Zealand Archaeological Association (NZAA). Reference is NZAA file reference.

+ Source is New Zealand Historic Places Register. Reference is register number.



Schedule N – Design specifications for wastewater systems

1. Design flow allowances for wastewater systems

Source	Minimum wastewater flow allowance in L/person/day	
	On-site roof water tank supply	Reticulated community/bore water supply
Households	180	200
Households (blackwater only)	60	60
Households (greywater only)	90	120
Motels/hotels		
- Guests, resident staff	220	220
- Non-resident staff	30	30
- Reception rooms	20-30	20-30
- Bar trade (per customer)	20	20
- Restaurant (per diner)	25-30	25-30
Community halls		
- Banqueting	20	30
- Meetings	10	15
Tea rooms (per customer)		
- without restroom facilities	10	15
- with restroom facilities	15	25
School (pupils plus staff)	15-30	15-30
Rural factories, shopping centres	30	50
Camping grounds		
- fully serviced	100	130
- recreation areas	50	65

NOTE: For the purposes of determining building occupancy, Hawke's Bay Regional Council adopts an occupancy of 2 people per room, excluding bathrooms, kitchens, laundries and any other room that cannot feasibly be used as a bedroom

2. Irrigation systems

2.1 Maximum design irrigation rates for irrigation systems

Soil category	Soil texture	Design irrigation rate (mm/day)
1	Gravels and sands	5
2	Sandy loams	5
3	Loams	4
4	Clay loams	3.5
5	Light clays	3
6	Medium to heavy clays	2

2.2 Design specifications for irrigation systems

- a) Irrigation lines placed on the surface shall be pinned to the surface and covered with at least 100 mm depth of media



- b) Subsurface irrigation lines shall be installed at a maximum depth of 200 mm below ground level and covered with at least 100 mm depth of cover
- c) Maximum spacing of 600 mm in Category 1 and 2 soils and 1000 mm in all other soil categories, as defined in AS/NZS 1547
- d) Secondary treated wastewater shall be applied evenly across the entire land treatment field
- e) On sloping ground the design irrigation rate (DIR) shall be decreased to ensure that effluent migration down slope is taken up adequately within the top soil and plant root system. Required reductions according to slope are as follows:
 - i) Flat slopes and up to 10% - no reduction;
 - ii) 10% to 20% - reduction in DIR value of 20%
 - iii) 20% to 30% - reduction in DIR value of 50%, and
 - iv) >30% - specialist advice required

3. Trenches or beds

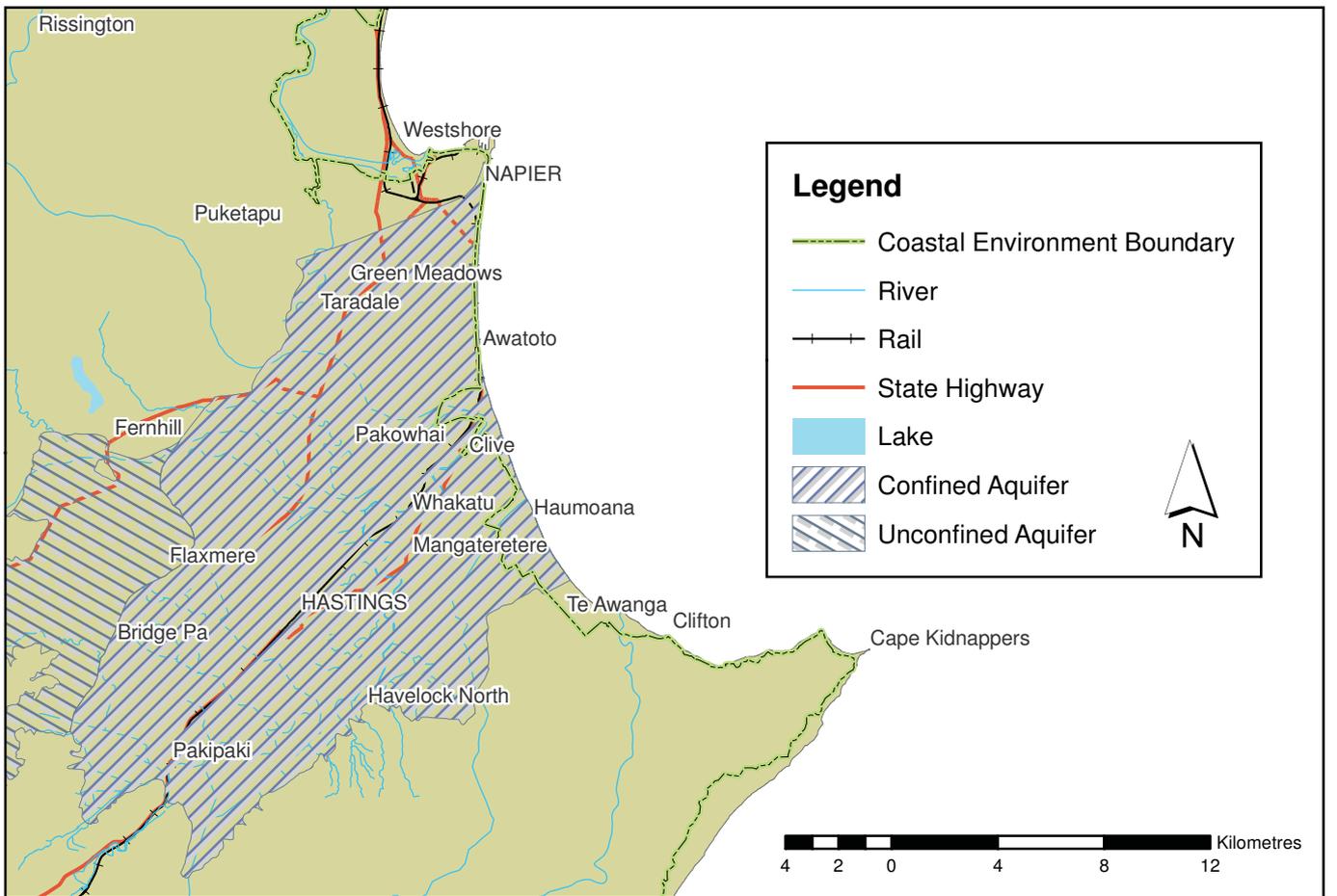
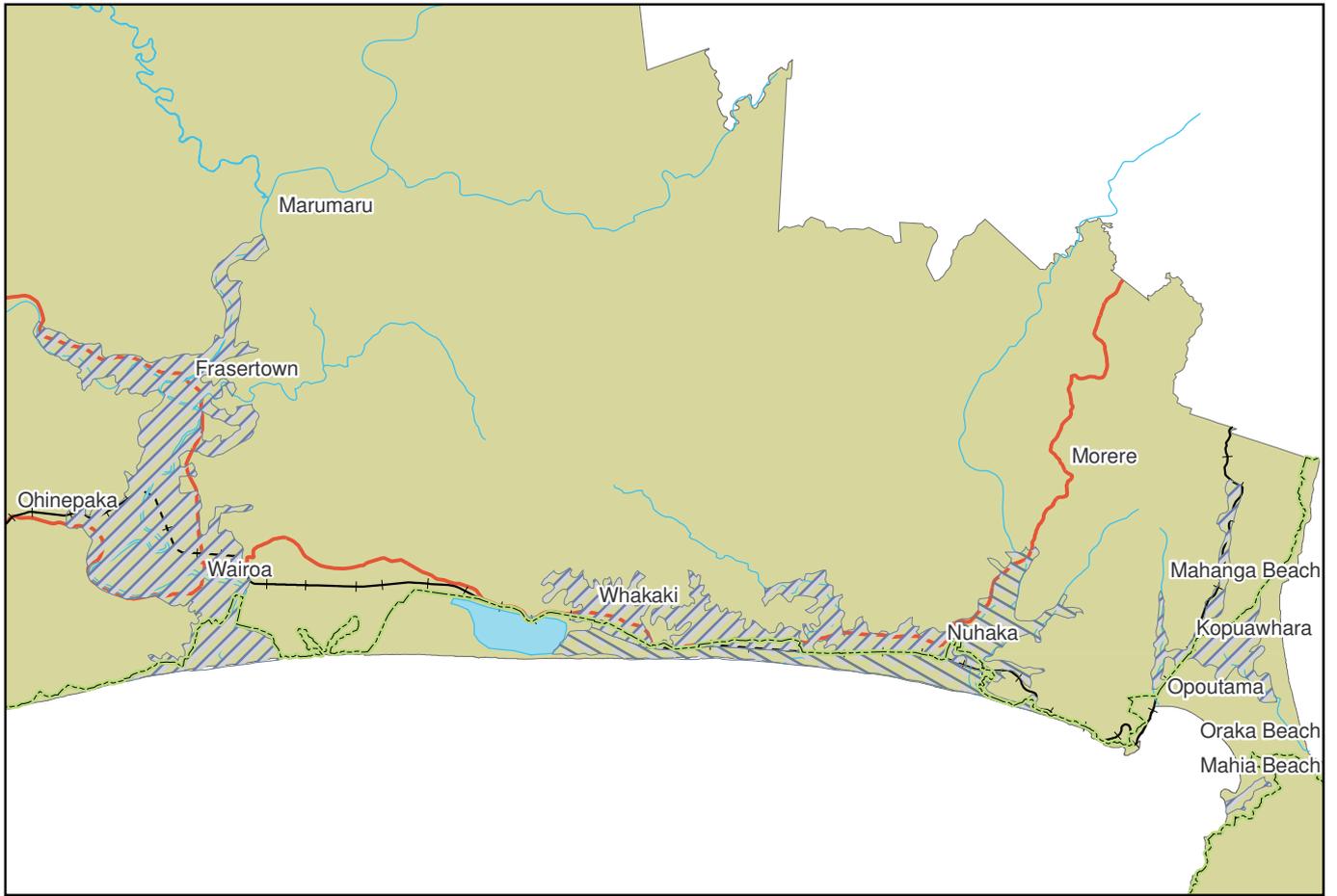
3.1 Maximum design loading rates for trenches and beds

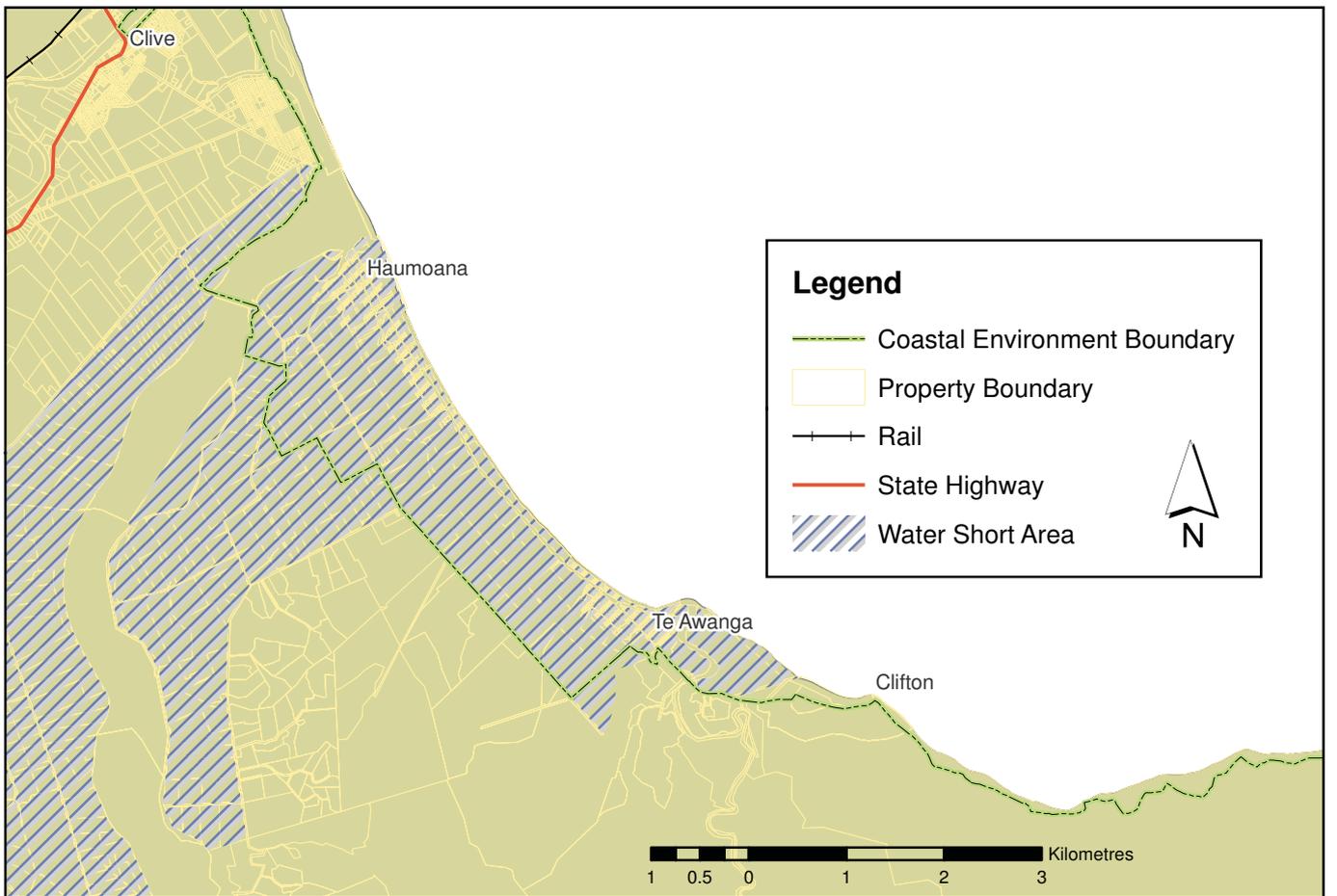
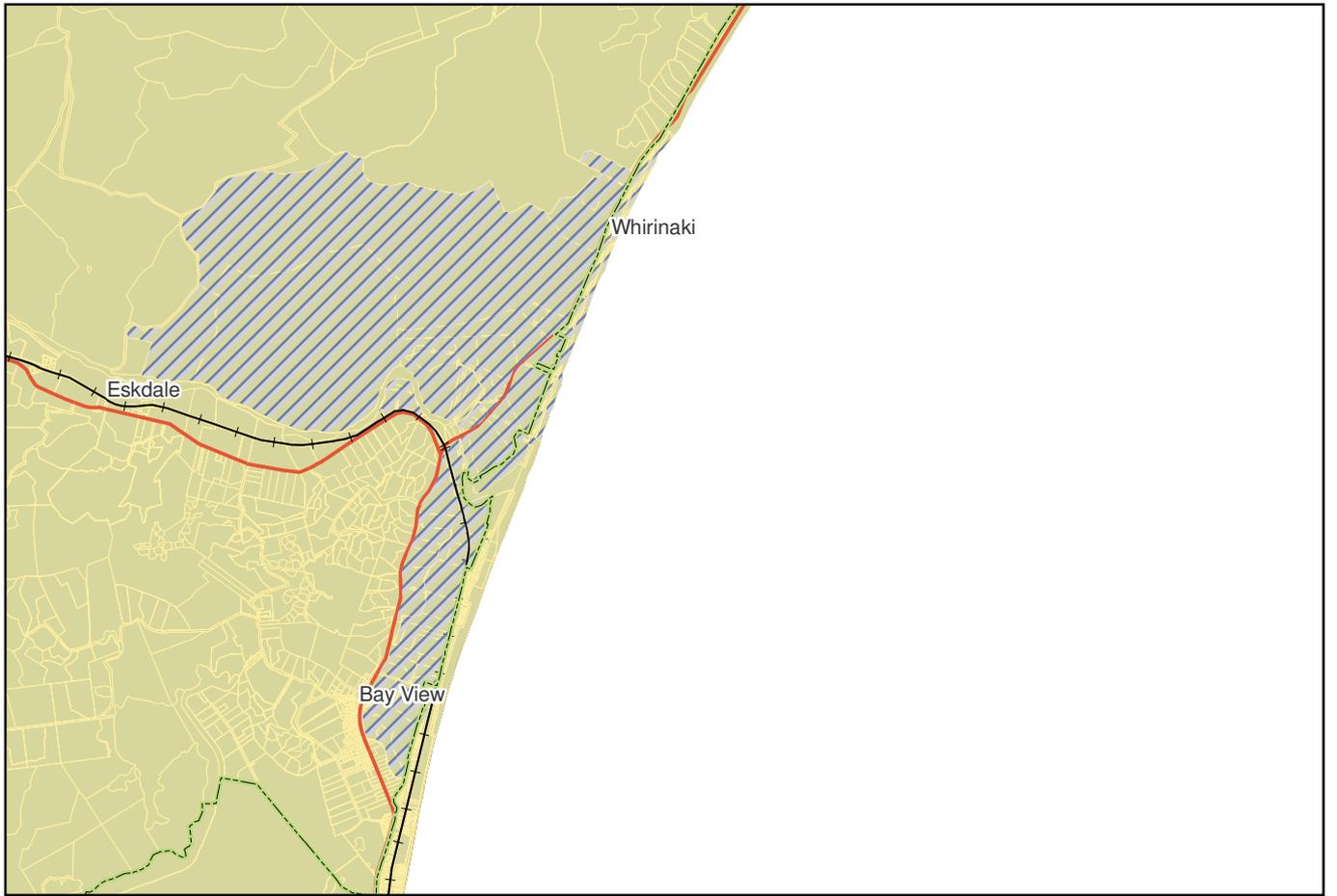
Soil category	Soil texture	Structure	Design loading rate		
			Primary treated effluent		Secondary treated effluent (mm/d)
			Conservative rate (mm/d)	Maximum rate (mm/d)	
1	Gravels and sands	Structureless	20 (see note 1)	35 (see note 1)	50 (see note 1)
2	Sandy loams	Weakly structured	20	35	50
		Massive	15	25	50
3	Loams	High/mod structure	15	25	50
		Weakly structured/massive	10	15	30
4	Clay loams	High/mod structure	10	15	30
		Weakly structured	6	10	20
		Massive	4	5	10
5	Light clays	Strongly structured	Consent required – see Rule 27(o)	Consent required – see Rule 27(o)	Consent required – see Rule 27(o)
		Mod structured / massive			
6	Medium to heavy clays	Strongly structured	Consent required – see Rule 27(o)	Consent required – see Rule 27(o)	Consent required – see Rule 27(o)
		Mod structured / massive			

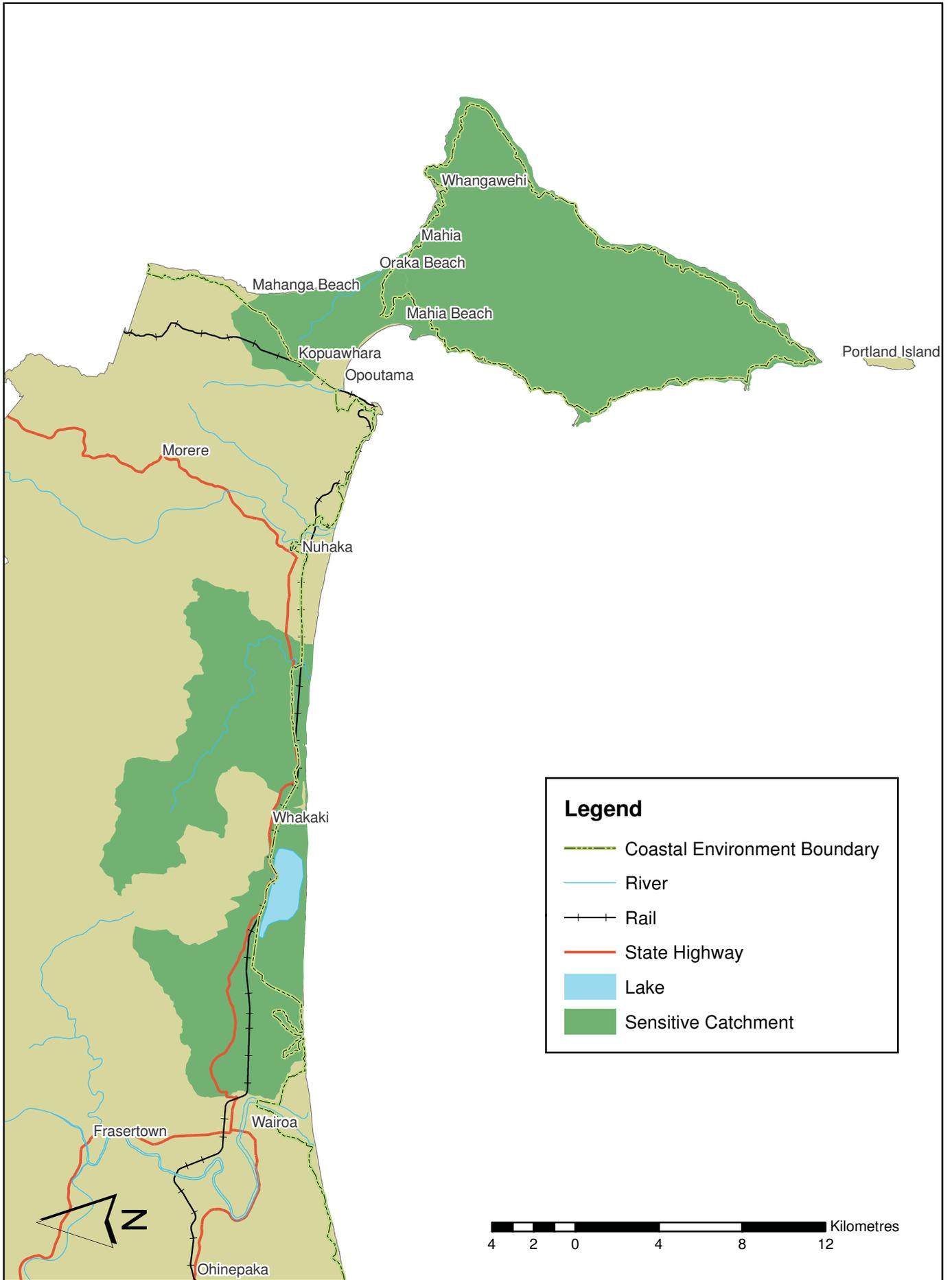
NOTE 1: The treatment capacity of the soil and not the hydraulic capacity of the soil or the growth of the clogging layer govern the effluent loading rate of category 1 soils. Category 1 soils require special design.

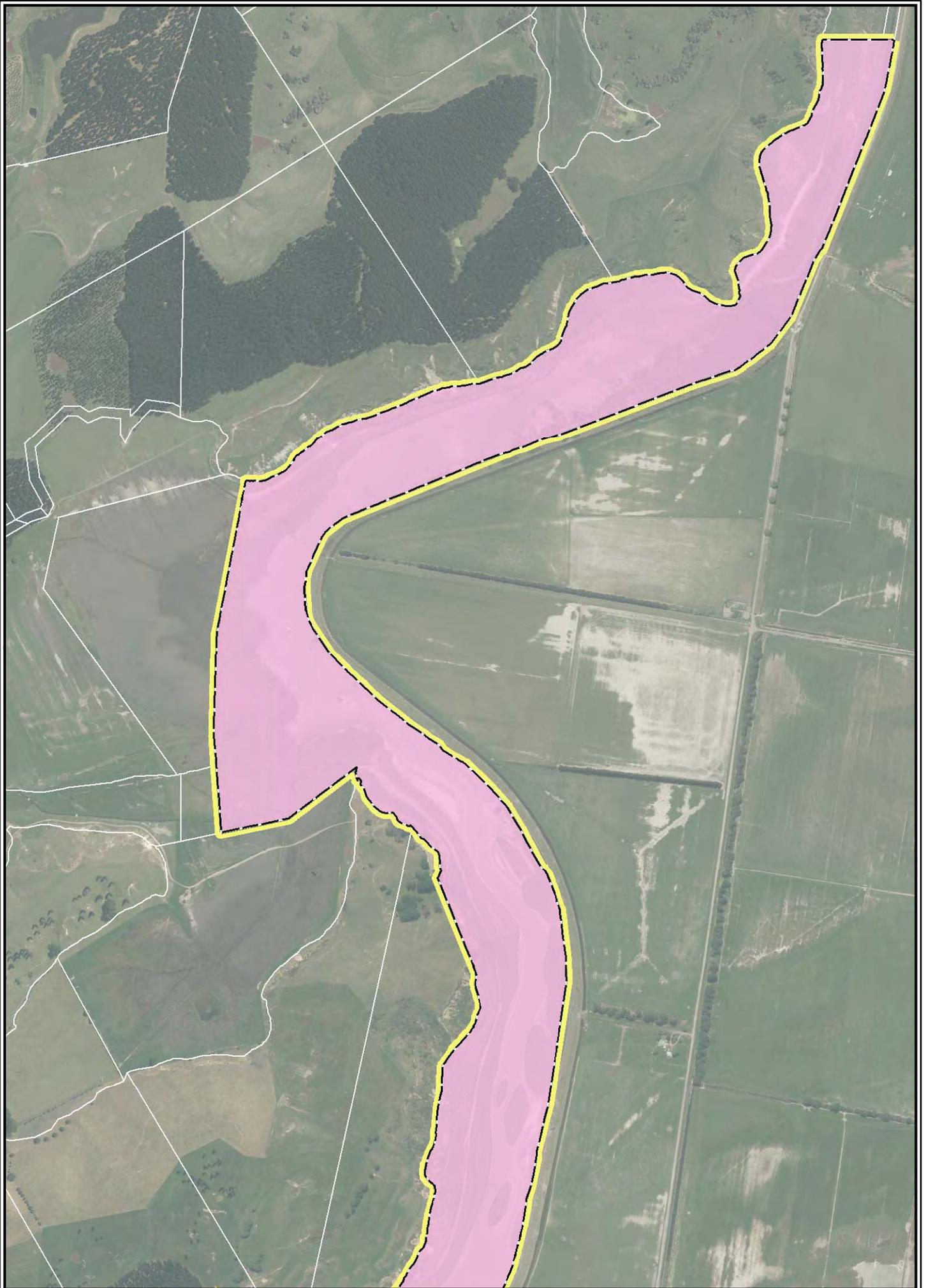
3.2 Design specifications for trenches or beds

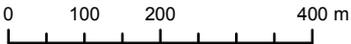
- a) Trenches must be at least 400 mm deep and 300 mm wide and have a depth of aggregate of 200 mm to 400 mm.
- b) They shall be no longer than 25 m long, and there must be a spacing of at least 1000 mm between adjacent trench walls
- c) Beds must be at least 1000 mm wide, with a minimum spacing of 1000 mm between adjacent bed walls
- d) Multiple distribution lines to be included where beds are more than 1.5 metres in width
- e) Both trenches and beds must be backfilled with distribution media and covered with a minimum 150 mm of topsoil
- f) The discharge shall be pumped, or dosed in fixed quantities so that the wastewater is applied evenly across the entire land treatment field
- g) Gravity drainage to trench and beds is not permitted unless a specifically designed siphon system is used to provide dose loading and distribution over the entire trench or bed area at any one time
- h) Trenches or beds shall not be constructed on slopes of greater than 15 degrees (approximately 26 % slope).







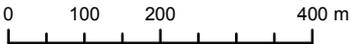


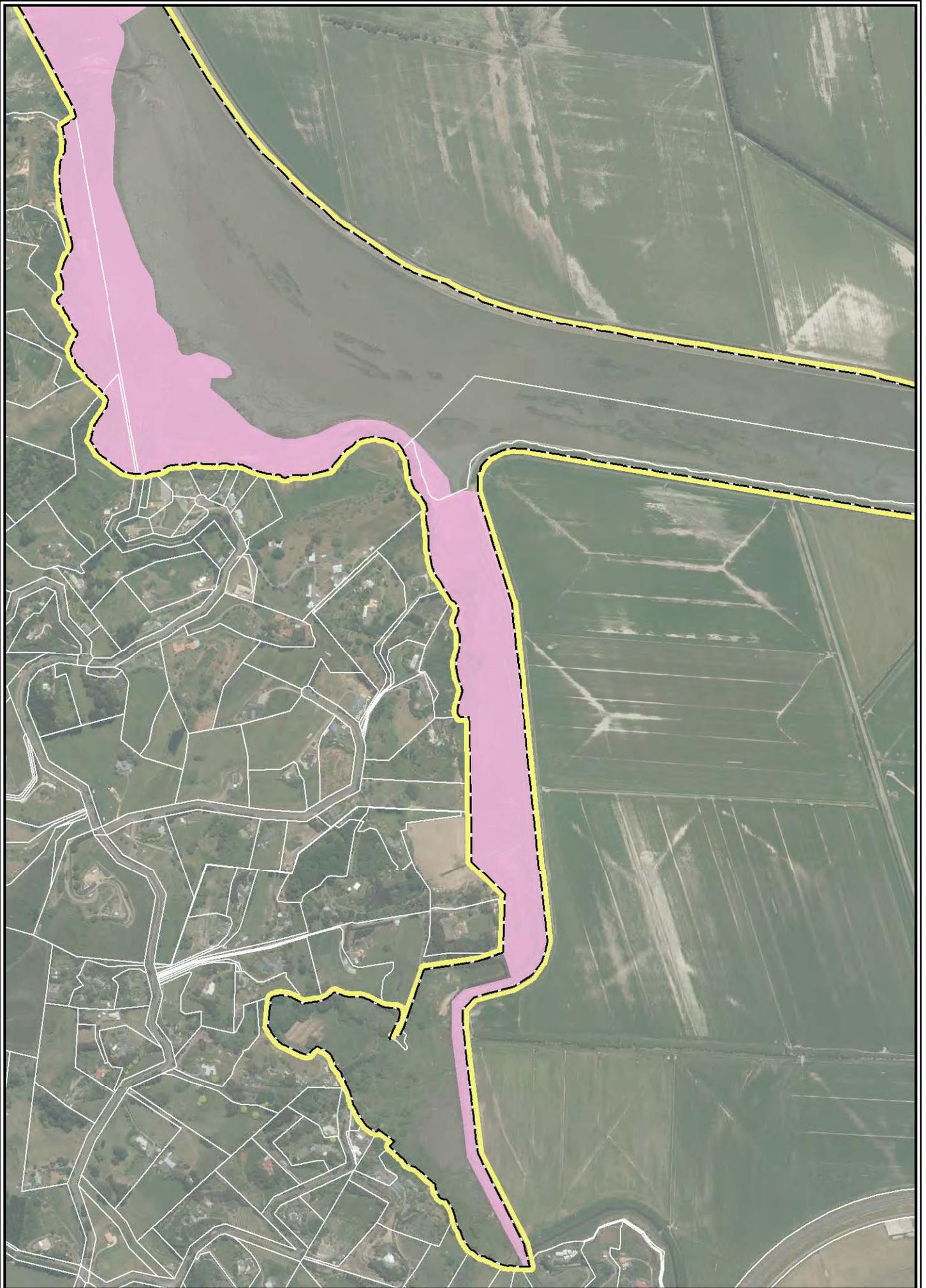
  
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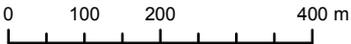
Schedule R - Stock Management Areas
Location: Upper Ahuriri Estuary 1 of 3

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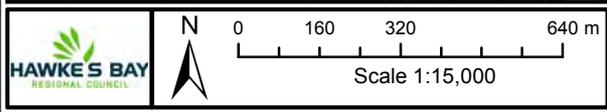
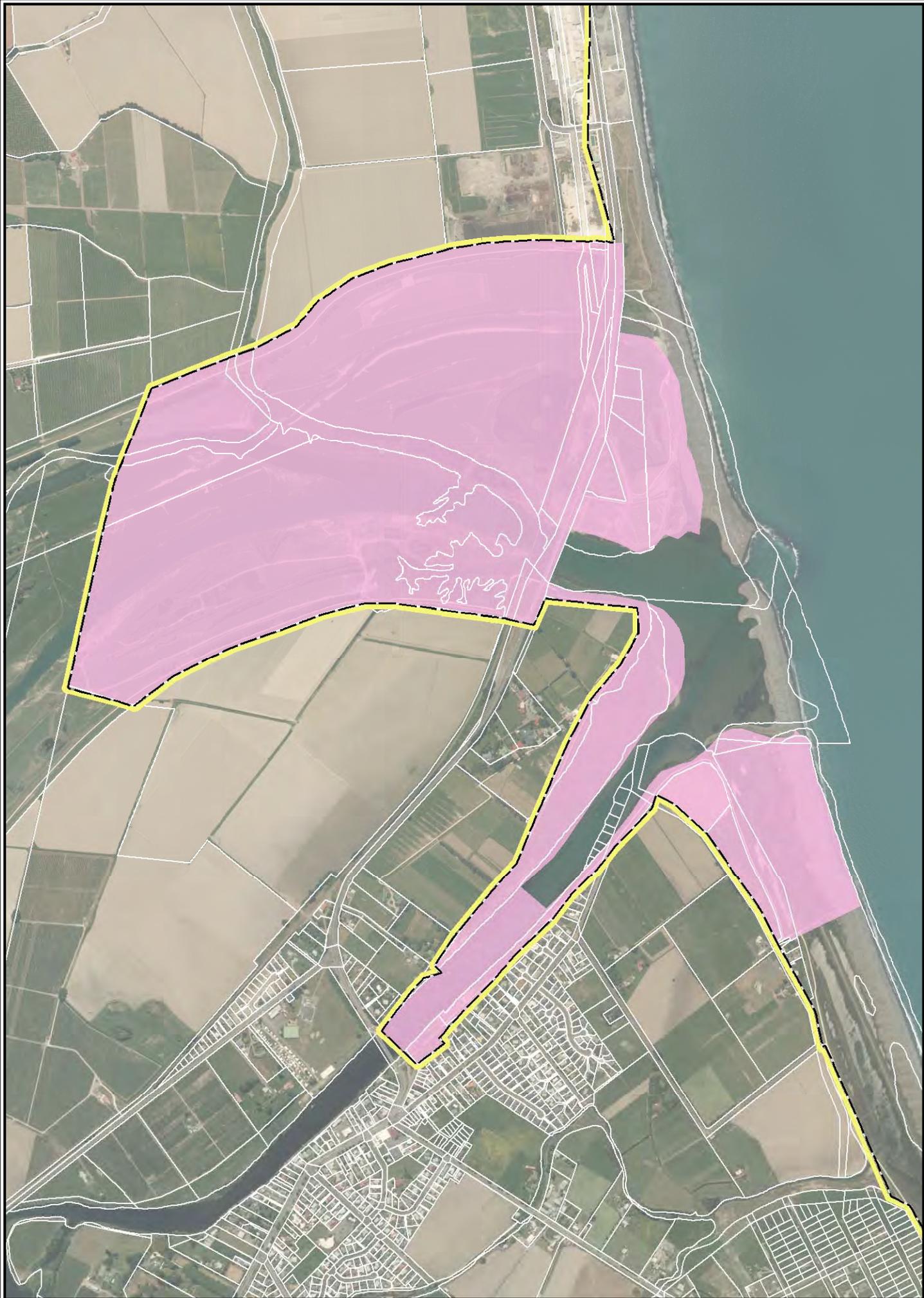
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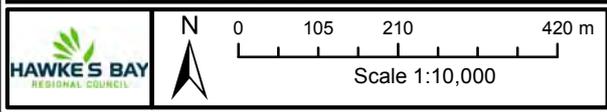
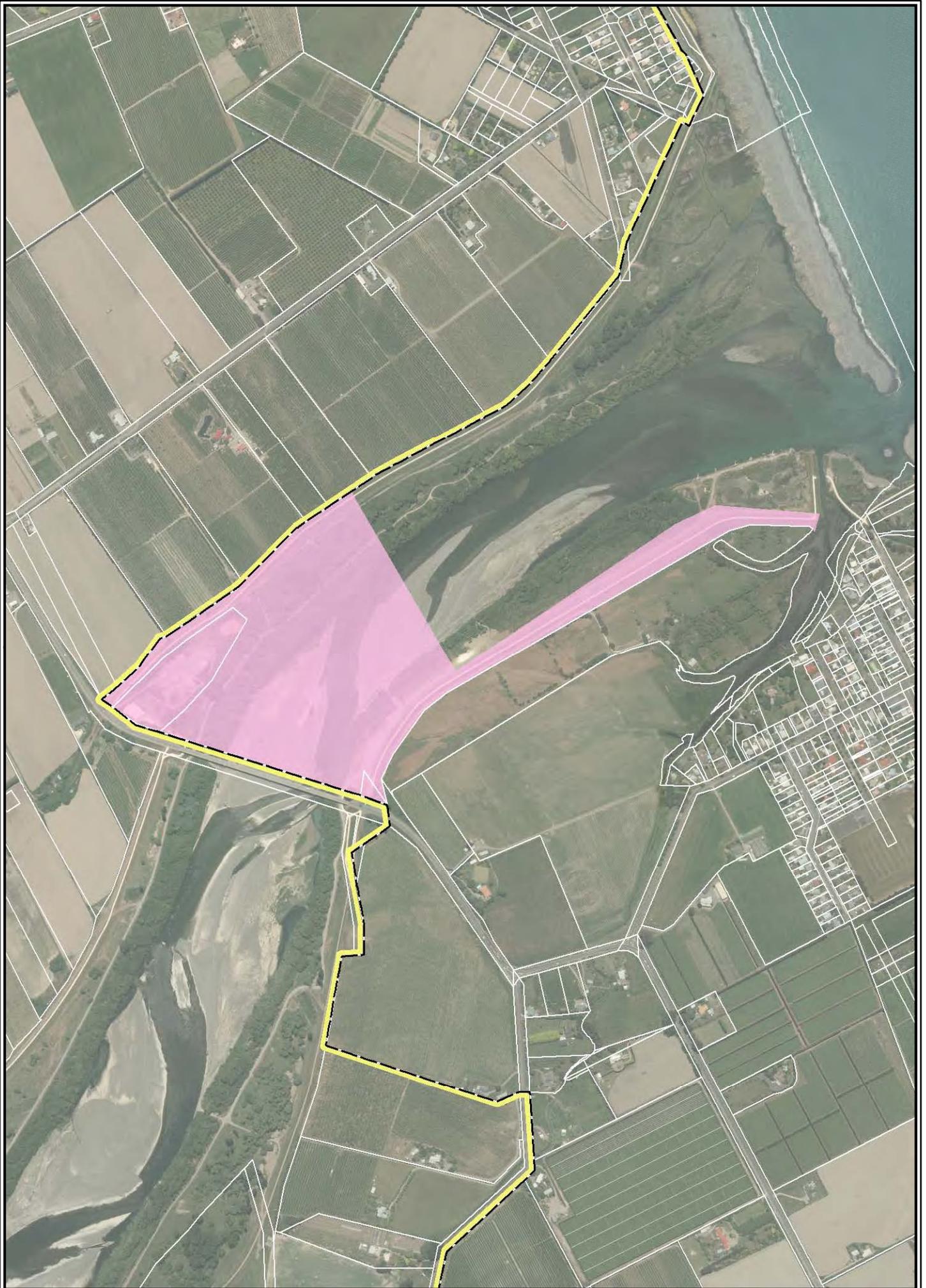
Schedule R - Stock Management Areas
Location: Upper Ahuriri Estuary 3 of 3

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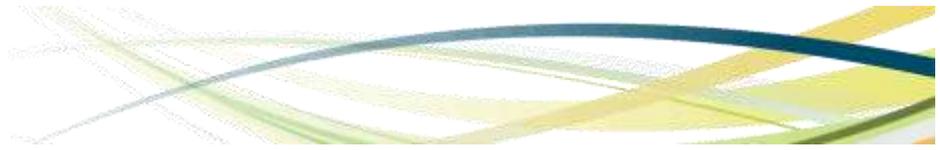
Schedule R - Stock Management Areas
Location: Waitangi Estuary

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Schedule R - Stock Management Areas
Location: Tukituki River mouth





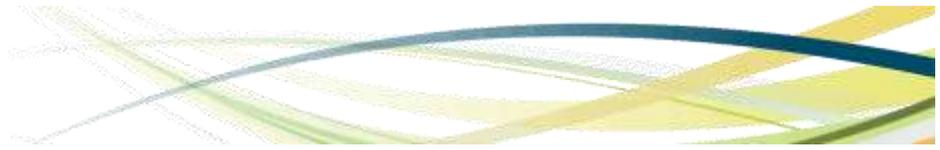
Schedule S – Lawfully established structures within CMA

ID	General description of structure	General location descriptor	NZTM	NZTM
			Easting	Northing
			(rounded to nearest 5) ¹⁷³	
1	Seawall	Happy Jacks, Mahanga	2023430	5670585
2	11 kV power line poles	Maungawhio Lagoon	2022830	5663875
		to	2022930	5665375
3	Seawalls	Oraka	2023800	5663835
		to	2023840	5663770
4	Retaining wall for Mahia East Coast Road	Mahia	2025840	5661970
5	Rip rap rock wall along foreshore adjacent to Newcastle Street	Mahia Beach	2020990	5661775
6	Navigation buoy	Mahia Beach	2021050	5662445
7	Navigation buoy	Mahia Beach	2021150	5663475
8	Two retaining walls for Mahia East Coast Road	Whangawehi	2027440	5661170
9	Boat ramp	Whangawehi	2028145	5660870
10	Mahia East Coast Road bridge	Whangawehi	2028045	5660770
11	Jetties	Whangawehi	2028145	5660870
12	Retaining wall for Mahia East Coast Road	Auroa Point	2028545	5661470
13	Jetty	Portland Island	2028545	5661470
14	Retaining wall	Mahia Beach	2021230	5662170
15	Palmerston North Gisborne Railway bridge	Opoutama	2018325	5665475
16	Palmerston North Gisborne Railway bridge	Waikokopu	2017725	5664270
17	Breakwater wall	Waikokopu	2017825	5664170
18	Breakwater wall	Waikokopu	2018325	5665275
19	Jetties	Waikokopu	2017725	5664270
20	Boat ramp southern end of Freyberg Street	Wairoa River	1982670	5670460
21	AFFCO NZ Ltd effluent pipe; stormwater/defrost outlets; non-potable/ condenser water intake & outlet; stormwater/hotwater overflow outlet	Wairoa River	1983370	5670260
		to	1983275	5660345
22	Old meat loading ramp	Wairoa River	1983670	5670260
23	Pilot Hill boat ramp	Wairoa River	1982170	5667155
24	Sewage pipe	Wairoa River	1982370	5667355
25	Wairoa Yacht Club boat ramp	Wairoa River	1983470	5668960
26	Jetty	Wairoa River	1983270	5670160

¹⁷³ NOTE: Structures are at or about the stated coordinates.



ID	General description of structure	General location descriptor	NZTM	NZTM
			Easting	Northing
			(rounded to nearest 5) ¹⁷³	
27	Whirinaki fuel supply pipeline	Whirinaki	1934130	5631690
28	Pan Pac effluent outfall structure	Whirinaki Beach	1935635	5633690
29	11 stormwater outfall pipes	Westshore	1933290	5625140
		to	1934540	5622705
30	Whirinaki fuel supply pipeline	Napier Inner Harbour	1934935	5622580
		to	1934735	5622580
31	Power line poles	Ahuriri Estuary	1931435	5622480
		to	1931435	5622780
32	Bay View water supply pipeline	Ahuriri Estuary	1932635	5622380
		to	1932535	5622580
33	Low level crossing	Ahuriri Estuary	1931935	5622380
		to	1932035	5622680
34	Footbridge	Ahuriri Estuary	1933635	5622780
35	Footbridge	Ahuriri Estuary	1933735	5622580
36	Footbridge	Ahuriri Estuary	1933735	5622580
37	Retaining wall (concrete tyres and posts)	Ahuriri Estuary	1934535	5622080
		to	1934535	5622380
38	Stormwater discharge pipe in retaining wall	Ahuriri Estuary	1934535	5622080
39	Stormwater discharge pipe	Ahuriri Estuary	1934335	5622080
40	Stormwater discharge pipe south of Pandora Bridge	Ahuriri Estuary	1934535	5622280
41	Stormwater discharge pipe north of Pandora Bridge	Ahuriri Estuary	1934335	5622580
42	Embankment Road and rail bridges	Ahuriri Estuary	1933435	5621880
		to	1933535	5622480
43	LV cable on low level bridge	Ahuriri Estuary	1931835	5622380
		to	1931935	5622680
44	33kv overhead lines	Ahuriri Estuary	1931435	5622480
		to	1931435	5622780
45	11kv cables on bridge	Ahuriri Estuary	1933435	5621880
		to	1933535	5622480
46	11kv cables on bridge	Ahuriri Estuary	1934535	5622280
		to	1934535	5622480
47	33kv overhead lines	Ahuriri Estuary	1935240	5612970
		to	1935240	5613170
48	33kv overhead lines	Ahuriri Estuary	1934540	5611970
		to	1934540	5611670
49	State Highway 2 Road bridge	Pandora	1934535	5622480
50	Westshore Ahuriri water supply pipeline	Pandora	1934535	5622480
51	Telecommunication cables attached to SH2 bridge	Pandora	1934535	5622480



ID	General description of structure	General location descriptor	NZTM	NZTM
			Easting	Northing
			(rounded to nearest 5) ¹⁷³	
52	Historic remnants of old freezing works	Napier Inner Harbour	1934940	5622680
			to 1934935	5622880
53	Meeanee Pier number 1 and Meeanee Pier number 2	Napier Inner Harbour	1934735	5622480
54	Port of Napier slipway	Napier Inner Harbour	1934635	5622480
55	Northey Boatbuilders Ltd slipway	Napier Inner Harbour	1934635	5622480
56	Westshore Seascouts jetty, boatramp and associated breastwork	Napier Inner Harbour	1934635	5622480
57	Hawke's Bay Sport Fishing Club boat launch ramps	Napier Inner Harbour	1934535	5622480
58	Boat launch ramp	Napier Inner Harbour	1934535	5622480
59	3 boat launch ramps, slipways and associated breastwork	Napier Inner Harbour (North Beach)	1934535	5622280
			to 1934735	5622280
60	Napier Sailing Club moorings and marina and associated breastwork	Napier Inner Harbour	1934835	5622280
61	Boat launch ramps and associated breastwork	Napier Inner Harbour (Scapa Flow)	1934835	5622180
62	Pile moorings along West Quay	Napier Inner Harbour	1934835	5622180
			to 1934935	5622480
63	Gabion retaining wall and jetty at West Quay North	Napier Inner Harbour	1934935	5622480
			to 1935035	5622580
64	Bridge Street pier, slipway, pile moorings, jetties	Napier Inner Harbour (Iron Pot)	1935035	5622580
			to 1935235	5622580
65	Stormwater discharge pipe	Iron Pot	1935135	5622580
66	Stormwater discharge pipe	Iron Pot	1935235	5622580
67	Floating jetty/walkway	Napier Inner Harbour	1934635	5622480
68	Hawke's Bay Game Fishing Club boat launch ramp and jetty	Napier Inner Harbour	1935035	5622580
69	Groyne adjacent to East Pier light	East Pier	1935135	5622980
70	Pile marking position of 'Montmorency' wreck	East Pier	1935395	5622980
71	Port company boat launch ramp	Breakwater Road	1936440	5623095
72	Navigation aid (aka 'Yellow Buoy')	Breakwater Road	1937390	5626770
73	Navigation buoy 1 (aka 'Mid Channel Buoy')	Breakwater Road	1937545	5624485
74	Navigation buoy 2 (aka 'SAPHTO Buoy')	Breakwater Road	1937790	5624050
75	Navigation buoy (aka 'North Pania Navigation Buoy')	Breakwater Road	1940795	5627950
76	Navigation buoy (aka 'South Pania Buoy')	Breakwater Road	1938160	5624865
77	Navigation aid (aka 'A Buoy')	Breakwater Road	1936305	5624485
78	Navigation aid (aka 'B Buoy')	Breakwater Road	1936750	5624250
79	Navigation aid (aka 'C Buoy')	Breakwater Road	1936365	5623765
80	Wave TAS0090 Buoy	Breakwater Road	1938540	5625035



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			Easting	Northing
			(rounded to nearest 5) ¹⁷³	
81	Wave TAS0170 Buoy	Breakwater Road	1938655	5625025
82	Seawall around North Breakwater Reclamation	Port of Napier to	1936970 1937240	5623725 5623780
83	Seawall around No 4 Wharf Reclamation	Port of Napier to	1937115 1937195	5623165 5622885
84	Seawall adjacent to Kirk Reclamation	Port of Napier to	1936440 1936965	5623100 5623360
85	Kirkpatrick Wharf Number 5	Port of Napier to	1936940 1936975	5622980 5623375
86	Herrick Wharf Number 4	Port of Napier to	1937075 1937100	5622920 5623165
87	Geddis Wharf Number 3	Port of Napier to	1937205 1937215	5622880 5623105
88	Higgins Wharf Number 2; attached oil transfer pipelines and rail lines	Port of Napier to	1937355 1937370	5622930 5623400
89	Seawall adjacent to breakwater	Port of Napier to	1937230 1937465	5623800 5622935
90	Napier City Council stormwater structure under No 5 Wharf	Port of Napier	1936940	5622980
91	Stormwater discharge pipe from West entrance	Port of Napier	1936455	5623010
92	Stormwater outlet between Herrick and Kirkpatrick wharves	Port of Napier	1936965	5622960
93	Seawall following MHWS from west side of port area to root of breakwater at east side of port area	Port of Napier to	1936095 1937360	5622890 5622905
94	"A" Wharf	Port of Napier to	1937220 1937330	5622895 5622920
95	Overtopping drain protecting North reclamation (including seawall)	Port of Napier to	1936970 1937240	5623725 5623780
96	Pilot boat jetty	Port of Napier	1936965	5622960
97	Cassidy Quay No 1 Wharf	Port of Napier to	1937370 1937155	5623400 5623575
98	All stormwater discharge outfall points identified in Consent CD040033W	Port of Napier to	1936385 1937365	5623230 5622535
99	Workshop groyne, southern boundary of Port area	Port of Napier	1937440	5622580
100	Battery Road groyne, western boundary of Port area	Port of Napier to	1936240 1936205	5622900 5622965
101	Herrick No 4 Wharf extension	Port of Napier	1937100	5623165
102	Wave overtopping drain adjacent to breakwater (including seawall)	Port of Napier to	1937360 1937240	5622905 5623780
103	Bridge 1 over concrete breakwater wave overtopping drain	Port of Napier	1937260	5623755
104	Bridge 2 over concrete breakwater wave overtopping drain	Port of Napier	1937490	5623430



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105	Concrete block breakwater	Port of Napier	1937360	5622905
		to	1937230	5623800
106	Spur Breakwater	Port of Napier	1937230	5623800
		to	1936830	5623665
107	Old Tutaekuri Channel floodgates	Napier	1933335	5621980
108	Wildlife ponds inlet/outlet structure	Napier	1933035	5622480
109	Main outfall channel pump station outlet 1	Napier	1931935	5622680
110	Main outfall channel pump station outlet 2	Napier	1931935	5622380
111	Marineland intake wells	Napier	1937140	5620880
112	Aquarium intake well 1	Napier	1937040	5620180
113	Aquarium intake well 2	Napier	1937040	5620280
114	Cross Country Drain stormwater outfall	Napier	1936860	5617005
115	Napier City sewer outfall	Awatoto	1936940	5615775
116	Navigation buoy	Awatoto	1938355	5615660
117	Navigation buoy	Awatoto	1938555	5615660
118	Hastings City Short and Long sewer outfalls	East Clive	1938345	5610670
119	Groyne 1	East Clive	1937745	5611760
120	Groyne 2	East Clive	1937865	5611430
121	Groyne 3	East Clive	1938035	5611060
122	HBRC Groyne number 1	East Clive	1937745	5612370
123	Six navigation buoys identified in Consent CL050429C	Clive	1940600	5612435
		to	1941225	5610570
124	Groyne	Haumoana	1938940	5609240
125	Seawall	Waimarama	1942110	5584375
		to	1942305	5583670
126	Navigation mark	Waimarama	1942310	5584485
127	Seawall	Kairakau	1935855	5571375
		to	1935630	5570830
128	Pontoon jetty	Kairakau	1935550	5570830
129	Underwater Marine Reserve information panels	Kairakau	1927245	5547510
130	Navigation buoy 1 marking Te Angi Angi Marine Reserve boundaries	Kairakau	1927715	5546305
131	Navigation buoy 2 marking Te Angi Angi Marine Reserve boundaries	Kairakau	1928385	5547925
132	Navigation buoy 3 marking Te Angi Angi Marine Reserve boundaries	Kairakau	1928600	5547085



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133	Navigation buoy 4 marking Te Angi Angi Marine Reserve boundaries	Kairakau	1929435	5548845
134	Navigation buoy 5 marking Te Angi Angi Marine Reserve boundaries	Kairakau	1929510	5548370
135	Rock rip rap structure using concrete blocks	Pourerere to	1929950 1929960	5554070 5554005
136	Wooden piles and two floating pontoons	Napier Inner Harbour	1934790	5622525
137	Limestone and boulder rock rip rap	Napier Inner Harbour	1935015	5622535
138	Redevelopment of Jull Wharf	Napier Inner Harbour	1935060	5622540
139	River bank protection groyne 1 in Lower Tukituki River	Lower Tukituki River	1938395	5609220
140	River bank protection groyne 2 in Lower Tukituki River	Lower Tukituki River	1938480	5609250
141	River bank protection groyne 3 in Lower Tukituki River	Lower Tukituki River	1938555	5609275
142	River bank protection groyne 4 in Lower Tukituki River	Lower Tukituki River	1938620	5609305
143	Water quality monitoring buoy	Whirinaki	1939575	5632740
144	Surface and subsurface aquaculture structures identified in Consent CL000499C	Waipatiki to	1949045 1958255	5641805 5638375