



# HE MAHERE TAIAO

## The Maniapoto Iwi Environmental Management Plan

2007



*A muri kia mau ki te kawau maro, whanake ake, whanake ake'*

*Maniapoto Māori Trust Board*

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## 1. INTRODUCTION

### Ngā Mihi i te iwi o Maniapoto

Tauārai Te Pō! Tauārai Te Ao!  
Tītoko te Ao-mārama.  
Tihei mauri ora!

Ko te wehi ki a ia i te wāhi ngaro; te kaihangā nāna nei ngā mea katoa i hanga.  
Kia uwhia mai tōna manākitanga ki runga ki te Ariki Kīngi Tūheitia tatu iho ki te Whare Ariki.

Tangi tīkapakapa kau ana te tau o taku ate ki ngā mate kua ngaro ki tua o Paerau. Te Ariki-nui Te Atairangikāhu moe mai rā i te rae o tōu tupuna i a Taupiri. Moe mai rā hoki koutou ngā mate o ia marae o ia marae huri noa i te motu, e moe whakaāio ki te pō.

Tihei mauri ora ki a tātou te pito ora tātou katoa e Maniapoto! Tēnei te mihi ki a tātou e tuarāhia nei ngā pīkaunga waihōtanga iho o rātou mā te hunga kua wehe ki te pō. Tēnā koutou kua whai whakāro mai ki tā tātou kaupapa arā ki tō tātou ao. Nā reirā e mihi kau ana ki te ao, arā ki a Papa rāua ko Rangī; o tāua mātua o tuawhakarere. Tenā kōrua, tēnā tātou katoa.

### Acknowledgements

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- ✓ The Maniapoto Māori Trust Board
- ✓ The Maniapoto Regional Management Committees
- ✓ Environment Waikato
- ✓ The Ministry for the Environment
- ✓ The Department of Conservation
- ✓ Waitomo District Council

Tena koutou!

### 1.1 Purpose

The whanau and hapū of Maniapoto has exercised kaitiakitanga over its lands and waterways for many generations. The purpose of the Maniapoto Iwi Environmental Management Plan is to articulate the aspirations, intent and priorities for achieving a safe and healthy environment and to outline how Maniapoto will engage with others to progress its environmental objectives. A key objective of the Maniapoto Iwi Environmental Management Plan is to provide a Maniapoto wide strategy to enhance and sustain the exercise of kaitiakitanga over the natural environment within Maniapoto.

*“ A Maniapoto wide strategy to enhance and sustain the exercise of Kaitiakitanga ”*

The plan will support the leadership of marae, hapū and Regional Management Committees who are at the forefront of exercising kaitiakitanga within the region. The plan will also assist to focus priorities and perspectives for environmental and cultural heritage issues that impact on Maniapoto as a whole. The plan does not in any way supersede the interests of Maniapoto individuals, Marae or Regional Management Committees or their delegated representatives to represent their respective interests on these matters.

The Plan also provides Maniapoto with a tool in the interface with local, regional and central government authorities and other agencies. It will enable Maniapoto to articulate clearly its perspectives on the protection and enhancement of taonga that are of significance to the iwi. It will be a living document that will cover the whole of the Maniapoto region and will be relevant and representative of all of Maniapoto.

The lands and waterways within Maniapoto have changed significantly within the last 50 years. The native animal and bush life, water, land and the air quality that we breathe is struggling with the impact of development, waste management and a growing population. The next 50 years will require good decision making if our children and grandchildren are to inherit a healthy and safe environment.

*“development must not be at the unnecessary detriment of our environment”*

The plan will assist us to educate our communities and our children. It will help to assess the impacts on the environment within the region and propose some strategies to assist us with achieving our environmental aspirations. It is clear that Maniapoto wants development to continue within the region but this development must not be at the unnecessary detriment of our environment.

The Plan is consistent with the key information contained within Te Purongo - Maniapoto State of the Environment report 2002 and the Maniapoto response to the local government LTCCP process in 2006.

The Maniapoto Māori Trust Board wants to engage constructively with the wider community on environmental issues and this plan will assist the Board to do that, it also seeks to ensure that Maniapoto Marae, Hapū and Regional Management Committees are involved from the outset in decisions related to the local environment. The Trust Board's main mission is:

"To preserve and protect the identity, integrity and interests of the Maniapoto Tribe".

The Maniapoto Māori Trust Board, in its drive towards tribal development, has maintained this vision and will work to support Ngāti Maniapoto whanau, hapū, marae and Regional Management Committees to achieve tribal aspirations for the health and well being of the environment.

## 2. IMMEDIATE GOALS & OBJECTIVES

The four principles that underpin the Maniapoto Iwi Environmental Plan are:

Kaitiakitanga: The principle of responsible guardianship to maintain and enhance a safe and healthy environment for the present and for generations to come.

Rangatiratanga: The principle that Maniapoto will facilitate informed and effective decision making on matters within the Maniapoto rohe.

- Kōtahitanga: The principle that Maniapoto will work constructively with others to achieve a safe and healthy environment for future generations.
- Tūmanako: The principle that Maniapoto will strive for a safe and healthy environment and a sustainable environmental future for future generations.

## 2.1 Strategy for 2007-2009

There are three broad priorities for the first three-year period of the Maniapoto Iwi Environmental Plan. These are:

### 1. Participation in decision-making

- ✓ Maniapoto environmental priorities are reflected in the local government planning process,
- ✓ Maniapoto environmental priorities are reviewed and evaluated as part of the local government planning and processes review.

### 2. Communication and Education

- ✓ Maniapoto Iwi Environmental Plan informs local schools' curricular
- ✓ Business and agriculture sector informed of Maniapoto Environment
- ✓ Community informed of Maniapoto Environmental priorities.

### 3. Effective Relationships

- ✓ Strategic relationships with key community groups established,
- ✓ Relationships with local authorities established,
- ✓ Relationships with regional environmental bodies established,
- ✓ Relationship with industry stakeholders.

*“Three key priorities to 2009 are participation, education and relationships.”*

Outlined below are specific goals, targets and indicators based on the broad immediate objectives for the next three year period. The indicators below are taken from the Maniapoto Long Term Council Community Plan (LTCCP) and are included in the 10 year community plans of some of the local authorities within the Maniapoto rohe.

### Participation in Decision Making

1. Opportunities to participate in community development and decision-making at marae, hapū and iwi levels.

GOALS	TARGETS	INDICATORS
Maniapoto are included in the decision making process of community in a way that	Maniapoto participation is valued and resourced. The capacity of Maniapoto to participate is	Local government goals and budgets associated with recognising, nurturing and realising

recognises their unique status as tangata whenua.	enhanced.  Appropriate partnerships, consultation processes, organisational values and goals, funds, exchanges between iwi and tribal authorities.	Maniapoto aspirations.  Number of forums, conferences, hui in which Maniapoto participate (at each level).
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2. The acknowledgement of, respect for and enabling of the traditional role of iwi, hapū and whanau as kaitiaki.

GOALS	TARGETS	INDICATORS
Sense of physical and spiritual connection to the whenua (land).	The ongoing application of Maniapoto values reflected through environmental quality and Maniapoto access to resources.	Evidence of adoption of a Maniapoto environmental ethic.  Resource consents that are consistent with Maniapoto ethics.  Regeneration of native bush, healthy waterways with abundant wild life.
A regenerated Māori land base.  The growth of the Māori estate that will be available for future generations.	An expanded land base.  A land base that generates economic return.  A land base that is more widely accessible to Māori.	The size and value of Māori resources.  Māori land productivity (leases, herd size/acreage, commercial property income, crop yields).
Our communities learn about the environmental concerns of Maniapoto in respect of the Maniapoto tribal territory.	Increased information on Maniapoto history: Waitangi tribunal and tribal reports; records of whakapapa.  Increased opportunities for communities to interact with Maniapoto.  The provision and support of Maniapoto cultural training courses.	Number of books on tribal history and whakapapa.  Number of opportunities to participate in Maniapoto cultural experiences.  Number of Maniapoto cultural training courses offered.
Enhanced iwi capacity.	Maniapoto has the capacity and resources to produce comprehensive iwi planning documents.  Maniapoto planning documents are given effect to by councils and the various agencies.	Number of comprehensive Maniapoto planning documents.  Number of Maniapoto planning documents recognised by relevant territorial local authorities (TLA's).  Consistency between community organisations, local authorities, regional authorities and central

		government department's policies and Maniapoto planning documents.
Enhanced hapū capacity.	75% of Maniapoto hapū have Hapū Environmental Management Plans which are recognised by the relevant TLA's.	Number of Hapū Environmental Management Plans recognised by relevant TLA's.  Number of Hapū Environmental Management Plans given effect to by community organisations, local authority and central government.
Enhanced marae capacity.	50% of Maniapoto marae have Marae Environmental Policies which are recognised by the relevant TLAs.	Number of Marae Environmental Policies recognised by relevant TLA's.

3. The restoration and preservation of coastal and waterway environments together with the maintenance of access to them.

GOALS	TARGETS	INDICATORS
Regeneration of native bush and healthy waterways with abundant freshwater and marine environments.	Local and regional councils collaborate with Maniapoto to prepare and implement a Cultural Health Index for waterways and streams within the Maniapoto region (similar to that published by the Ministry for the Environment).	The compilation of a Maniapoto Cultural Health Index for waterways and streams.
To provide more consistent access and availability of kaimoana, eels, kaio etc.	Increase in volumes of water based food over seasons. Improvement in the state of health of kaimoana and other water based kai: colour, size, flavour of mussels, pāua, pipi, tuatua, number of eels etc.	Maniapoto inventories of cultural and natural resources.  Customary take of water based kai measured and recorded by marae and kaumātua authorised to approve the take.  Observation by Maniapoto whānau members, marae, hapū and iwi.
Adoption of policies that prevent the disposal or discharge of treated/untreated sewerage or wastewater into coastal and waterway environments.	Local and regional authorities have policies and plans which prevent disposal and discharge into waterway environments.	Number of unacceptable discharges into waterway environments reported to local and regional authorities and the heavy penalties imposed.  Number of days per year and extent over which rāhui is imposed by Maniapoto to address the adverse effects of inappropriate waste disposal.

## Communication and Education

### 4. Improving environmental awareness and ensuring action.

GOALS	TARGETS	INDICATORS
Encouragement of all who live in the region to support environmentally responsible practices.	Local and regional councils encourage environmental leadership and practices, e.g., providing recycle bins or following the Nelson District Councils model of 3 wheelie bins to reduce landfill waste and encourage recycling.	References to the environment in local and regional councils corporate vision statements' and strategic intent.  Acknowledgements of environmental efforts within the region in local and regional council's publications.

### 5. Protecting and respecting the natural features of our environment as taonga.

GOALS	TARGETS	INDICATORS
Access to a clean and healthy environment.	Resource consents are consistent with Maniapoto environmental ethic.  Wāhi tapu sites remain protected.	Analysis of local authority consents using Maniapoto criteria.  Evidence of adoption of a Maniapoto environmental ethic.
Maniapoto maintains knowledge of the natural features of our environment.	Each marae and hapū keeps its own inventories of cultural and natural resources including vegetation, freshwater and marine environments and land-use.	Evidence of cultural inventories within the Maniapoto rohe.

### 6. The improvement of air, soil and water quality together with the enhancement of the natural environment.

GOALS	TARGETS	INDICATORS
Restoration and improvement of the natural environment.	Re-appearance of native wild life and bush fruit.  Increased volume of native flora and fauna.  Sustainability of existing Maniapoto native forests and vegetation.	Maniapoto inventories of natural resources,  i.e.: native trees and plant life that sustain a native bird population, rongoā and native food sources. Observation from Maniapoto land owners about the quality, availability and accessibility of resources.  Days per year and extent over which rāhui is imposed by Maniapoto to address the effects on the environment.

7. Using energy from renewable sources.

GOALS	TARGETS	INDICATORS
Reduction in the use of non-renewable energy sources.	Local and regional authorities work with Maniapoto to reduce reliance on non-renewable energy sources while taking into account the cultural importance of natural resources specific to Maniapoto.	Maniapoto inventories of cultural and natural resources.  Measurement of total energy consumption relative to economic growth.  Measurement of greenhouse gas emissions.

8. Promoting waste reduction, recycling, energy conservation and energy efficiency.

GOALS	TARGETS	INDICATORS
Reduction of inorganic waste and promotion of policies that encourage positive action.  Increase environmental awareness within each whānau household in the Maniapoto region.  Increase environmental awareness within each marae in the Maniapoto region.	Reduction of inorganic waste generated at the marae.  Promotion of positive environmental efforts within the region.  Local government initiatives to promote the reduction of inorganic waste disposal.  Local and regional government assistance with regards to implementing stewardship programmes with manufacturers of inorganic products. An example of this was the Hewlett Packard computer disposal day in Wellington and Auckland.	Marae policies on waste.  Measurement of the amount of waste taken to landfills by marae.  Proportion of waste to recyclable materials (i.e. paper, glass, cans, other).

9. Preserving sites of significance and/or wāhi tapu.

GOALS	TARGETS	INDICATORS
Preservation and protection of sites of significance and/or wāhi tapu within Maniapoto.	Collaborative partnerships between hapū, iwi and local and regional government to register interest, protect, maintain and have ongoing connection with sites of significance and/or wāhi tapu	Historic Places Trust data.  Area size of legally protected sites of significance and/or wāhi tapu within Maniapoto.

	within Maniapoto.	<p>Number of sites of significance and/or wāhi tapu within Maniapoto that are fenced.</p> <p>Maniapoto inventories of cultural and natural resources.</p> <p>Number of cultural and natural resources affected by the granting of resource consents and other developments.</p>
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### Effective Relationships

10. The recognition by local and regional government of iwi, hapū and whanau as a Treaty partner.

GOALS	TARGETS	INDICATORS
Recognition of the rights and status of iwi and hapū as Treaty partners.	<p>Provisions for the Treaty relationship within local and regional government.</p> <p>Local and regional government establish appropriate structures to engage meaningfully with Maniapoto.</p> <p>Local government training on the unique position of tangata whenua as Treaty partners and the implications of this in a modern context.</p>	<p>Engagement of Maniapoto with local and regional government at all levels.</p> <p>Local government goals and budgets associated with recognising, nurturing and realising Maniapoto aspirations.</p> <p>Amount of resourcing to allow for iwi participation in local and regional government decision-making.</p>

11. Improving the community's understanding of the Treaty of Waitangi partnership.

GOALS	TARGETS	INDICATORS
Increased interaction and awareness within the community about the Treaty of Waitangi.	Collaborative partnerships between hapū, iwi and local and regional government to increase opportunities for the community to interact with Te Ao Māori and access information on tribal history.	<p>Number of books on tribal history and whakapapa.</p> <p>Number of opportunities to participate in Maniapoto cultural experiences.</p> <p>Number of Maniapoto cultural training courses offered.</p>

12. Promoting pride in the regions rich and diverse Maniapoto heritage.

GOALS	TARGETS	INDICATORS
<p>Education of our community in relation to the history of the region and the experiences of Maniapoto.</p> <p>Acknowledgment and support for the use of te reo Māori within the region.</p>	<p>Increased information on Maniapoto tribal history:</p> <p>Waitangi tribunal and tribal reports; records of whakapapa; number of books on tribal history and whakapapa; number of manuscripts on tribal history and whakapapa.</p> <p>Increased use and support of te reo, and Maniapoto waiata, karakia, whakairo, rongoā, raranga, whatu, and whakapapa.</p>	<p>Cultural experiences survey particularly measures of visits to marae, wāhi taonga, and viewing exhibitions of taonga, the characteristics of people visiting, frequency of visits, and barriers to access.</p> <p>Number of books on tribal history and whakapapa.</p> <p>Number of opportunities to participate in Maniapoto cultural experiences.</p> <p>Number of Maniapoto cultural training courses offered.</p> <p>Matauranga Māori, – Local government spending on Maniapoto culture and identity.</p> <p>Observation by Maniapoto kaumātua about the use of te reo.</p> <p>Discussion at poukai about the use of te reo.</p>

13. Encouraging iwi and hapū to work together with local and regional government and community organisations in mutually beneficial partnerships.

GOALS	TARGETS	INDICATORS
<p>Mutually beneficial engagement between local and/or regional government and iwi and/or hapū.</p>	<p>Commitment between local and/or regional government and iwi and/or hapū to have a respectful and honest relationship.</p> <p>Treaty obligations under the Local Government Act.</p>	<p>Local government goals and budgets associated with recognising, nurturing and realising Maniapoto aspirations</p> <p>Maniapoto are represented and involved in decision-making processes affecting all aspects of</p>

		the environment and are adequately resourced for participation.  Number of Māori representatives on local authorities.
Active collaboration between iwi and hapū, other Māori organisations, and community groups to achieve common goals.	Increased number of active Māori organisations within the region.  Increased collaboration between iwi and hapū, other Māori organisations, and community groups.	Number of Māori organisations in a community, e.g. kapa haka, marae, environmental groups, sports clubs, Māori committees, Māori church gatherings, Māori radio stations.  Number of collaborative forums, hui, conferences etc where Māori groups and organisations plan and share resources with community groups.

The relationship between Maniapoto and government is two-dimensional:

- a) Maniapoto enjoy a unique set of rights and privileges as members of hapū; and,
- b) Maniapoto enjoys the same rights and privileges as other non-Māori members of the community.

Māori have a unique culture and an identity protected by a Treaty arrangement, conferring a set of rights that come about as a result of our tribal identities and our identities as Treaty partners. The Treaty preserved the authority of iwi in terms of the environment.

### Local Government

The main barrier to the effective participation of Maniapoto in local government is the lack of recognition of the rights and status of iwi and hapū as Treaty partners, and a lack of knowledge of, and provision for, the Treaty relationship within local government.

The Crown has devolved responsibility for certain matters to local authorities by statute. The provisions of those statutes, and the inherited responsibility not to place the Crown at risk, govern the extent to which local authorities are required to consider the principles of the Treaty.

*“The current systems of local government representation do not recognize and provide for iwi and hapū representatives.”*

Local Government implicitly has a responsibility to have due regard for the articles and principles of the Treaty of Waitangi in the conduct of its business, in particular Article II rights of self-government by tangata whenua and citizenship needs of Māori under Article III.

The current systems of local government representation do not recognise and provide for the representation of the iwi/hapū Treaty partner as of right, nor does it provide for representation that will ensure

that Article II and III Treaty responsibilities will be upheld by local authorities.

Flowing from these inadequate systems are a myriad of problems including:

- ✓ Processes and time frames that do not take account of iwi/hapū consultation processes.
- ✓ Actions by local authorities that impinge on iwi/hapū rights – e.g. lands subject to Treaty claims, developments that desecrate wāhi tapu, loss of access to Māori sites and under resourcing of Māori facilities.
- ✓ Disproportionately high contributions by iwi/hapū to the public good. Maniapoto has contributed thousands of acres of the tribal estate to the public good for roads, reserves, schools etc. We are furthermore levied for use of the water from our own streams, the upgrade of those roads etc. These contributions are far in excess of any non-Māori counterpart.
- ✓ Disproportionately low benefits from local government – despite the excessive contributions made by Maniapoto, we continue to receive less than the non-Māori sector of our community. Local government fund the upkeep and upgrades of non-Māori community facilities such as halls, parks, reserves and cemeteries, but fails to contribute to the upkeep of Māori community facilities such as marae, reserves, wāhi tapu, urupā.
- ✓ A lack of knowledge of Maniapoto issues at all levels of local government.
- ✓ A lack of Māori representation at all levels of local government.
- ✓ A lack of knowledge of tangata whenua resulting in inadequate consultation or consultation with the wrong parties.
- ✓ Urban/rural policies that do not take account of Māori ways of living. Māori living in urban areas are paying urban rates but their facilities – marae facilities – are in rural areas and are not serviced.
- ✓ Maniapoto representatives are discussing the same issues over and over with successive councils and their views are still not being taken account of.
- ✓ Offensive pollution practices have been and continue to be approved by local authorities with little or no regard to tangata whenua concerns.

We consider that tangata whenua should have representation as of right on local and regional authorities. Article II of the Treaty of Waitangi intends that tangata whenua have full authority over their territories. In practical terms today, given our historical developments, this would at the very least require a co-management approach by local and iwi authorities. A practical way of giving effect to co-management is to have tangata whenua representation within local government.

Such representation should reflect a comprehensive coverage of hapū interests. For example in the Maniapoto territory this would involve the six regional management committees of Maniapoto being represented on Council. In addition to the elected members of the seven wards of the Waitomo District Council, there would be a further six seats on council for the elected members of the six regions on Maniapoto. This would be an appropriate reflection of the co-management approach and a fair representation of the hapū of Maniapoto.

Chief Executive Officer competencies in particular, but also staff position descriptions at all levels, should require a knowledge of Māori cultural values, an understanding of the contemporary application of the Treaty of Waitangi and a knowledge of the tangata whenua.

We also consider that local authorities should resource iwi participation as was intended with the development of the Resource Management Act. The Runanga ā Iwi Act, which was drafted and approved at the same time as the Resource Management Act, but was later repealed, intended that tangata whenua would be resourced for the overwhelming level of participation in local government activities that the Acts and the Treaty require. Local authorities should also support tertiary training for Māori into local government related fields. In terms of guidelines for consultation – local authorities must consult the right people on the right issues. They have a responsibility to ensure that they are dealing with mandated representatives of hapū.

*“Local authorities must consult the right people on the right issues.”*

### 3. CURRENT ENVIRONMENTAL OUTLOOK - The Maniapoto Perspective

The Maniapoto region once supported many unique plants, birds, wildlife and insects.<sup>1</sup> It contains environmental features that are of national and international significance including the following:

- ✓ Limestone formations, namely the Waitomo Caves area which is an important Karst landscape with features such as caves numbering over 300, a natural tunnel, a natural bridge, and underground rivers. The most notable of these is the world famous, Waitomo Glowworm Caves, which is famous for its Glowworms (*arachnacampa luminosa*).
- ✓ Ecotourism ventures such as the Ruakuri Cave, Absolute Adventure, Otorohanga Kiwi House and Spellbound, which operate within the natural environment and are dependent on the health of these environments.
- ✓ The Pureora forest which has rare plants such as Purareinga (*Dactylanthus taylorii*), Native Daphne (*Pimelea tomentosa*), Blue Duck (*Hymenolaimus malacorhynchus*) and Ōwhata (*Cordyceps robertsii* – Vegetable Caterpillar). The Pureora Forest has many species of native trees, ferns and plants, introduced trees and plants, fungus and birdlife.
- ✓ The Mahoenui Giant Weta which is not found elsewhere in New Zealand.
- ✓ Eel and whitebait fisheries.
- ✓ The most southern sites of Kumarahou.
- ✓ Fur seals – Maniapoto has one of the largest and most northern sites of New Zealand fur seals off the west coast of the North Island.
- ✓ Fossils – Nationally significant fossil sites including Moa bone, a rare giant penguin bones and egg sites.
- ✓ Limestone outcrops containing rare species of Koromiko.
- ✓ The Waipa and Mokau Rivers.

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<sup>1</sup> [www.ew.govt.nz](http://www.ew.govt.nz)

These are only a few of the many sites and relevant environmental features of the area. The environment is of vital importance to the iwi and hapū of Maniapoto. Te Purongo - The Maniapoto State of the Environment Report issued in 2002 stated that, whilst Maniapoto is not opposed to development, the historic costs to the environment due to agriculture, tourism, forestry and industry is unacceptable.

The key environmental concerns identified by Maniapoto are:

- ✓ The rapid decline in water quality and quantity in the region. There is a fast growing demand for access to water for human consumption, irrigation and industrial use. In addition, there is strong demand for access to our waterways for hydro power, agriculture, recreational and other uses.
- ✓ Native flora and fauna within the region is continuing to decline
- ✓ Waste management is creating environmental pressures. There needs to be a reduction in the amount of waste we are creating and more environmentally friendly strategies of dealing with the disposal of rubbish and sewerage.
- ✓ Land development is continuing to create long term impacts including land erosion.
- ✓ Transfer of traditional knowledge – This was highlighted as a key concern as people are moving away from living off the land toward a consumer packaged throw away society. This detachment leaves people with no affiliation to the land, hence less consideration for the environment as the direct impacts of poor environmental management are not seen or experienced on a daily basis.
- ✓ Agricultural practices – The majority of interviewees and respondents link the pollution of waterways with industry and in particular to intensive farming.

*“The rapid decline in water quality and quantity is a key issue for Ngati Maniapoto.”*

The key future environmental aspirations identified by Maniapoto are:

- ✓ A return to having pristine waterways and rivers.
- ✓ To retain and pass on traditional environmental knowledge between generations in order to preserve cultural heritage and a pristine environment
- ✓ Better waste management systems on farms and in the wider community especially with regards to settling ponds, stock disposal and waste.
- ✓ More monitoring of environmental impacts and severe penalties for polluting the environment.
- ✓ An improvement in the consultation process and in decision making with hapū and iwi when it comes to environmental impacts, tribal knowledge, traditional rights and issues.
- ✓ An improvement in farming practices and regular monitoring of these by Environment Waikato and local government.

#### 4. THE MANIAPOTO ROHE

Maniapoto is an iwi of the Tainui confederation. The Tainui canoe, captained by Hoturoa, voyaged from Hawaiki to the land of Te Ika ā Māui bringing the ancestors of the Tainui tribes. After extensive exploration of the new found land the Tainui canoe made landfall at Kāwhia where she was hauled ashore at Maketū, her final resting place.

Maniapoto occupies the southern region of the territory of the Tainui tribes. The extent of the Tainui tribal boundaries is best epitomised by the following whakataukī (proverb)

Ko Mōkau ki runga  
Ko Tāmaki ki raro  
Ko Pare Hauraki, ko Pare Waikato  
Ko Mangatoatoa ki Waenganui

From Mōkau in the south (Mōkau River)  
To Tāmaki in the north (Manukau harbour and Tāmaki)  
With Hauraki to one side, Waikato to the other  
Mangatoatoa in the middle (Waipa valley, west of Te Awamutu)

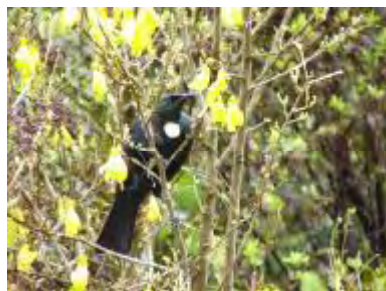
*“Maniapoto holds a unique status as tangata whenua of the Maniapoto district.”*

Maniapoto holds a unique status as tangata whenua of the Maniapoto district. The environment is of vital importance to the iwi and hapū of Maniapoto. There are many activities within the Maniapoto territory that give cause for concern about the welfare of the environment.

The waterways, forest, coastline, air and lands of the region have suffered greatly in favour of agriculture, tourism, forestry, industry and urban settlement.

The Maniapoto rohe is made up of six regional management committees (RMC), with a seventh committee negotiating their boundaries. The following Maniapoto boundary map has been drafted from the boundaries provided by the Maniapoto Māori trust board to show the tribal boundary.

Further on in the report the Regional Management Committee boundaries will be highlighted as well.



## Maniapoto Tribal Boundary



Source: MMTB, © Terralink NZ Ltd

### 5. CURRENT ENVIRONMENTAL OUTLOOK – The regional perspective

This chapter summarises the information held within local authorities and other sources. Where possible, the information is specific to the Maniapoto rohe. In some instances, information from outside the rohe has been included for comparative purposes.

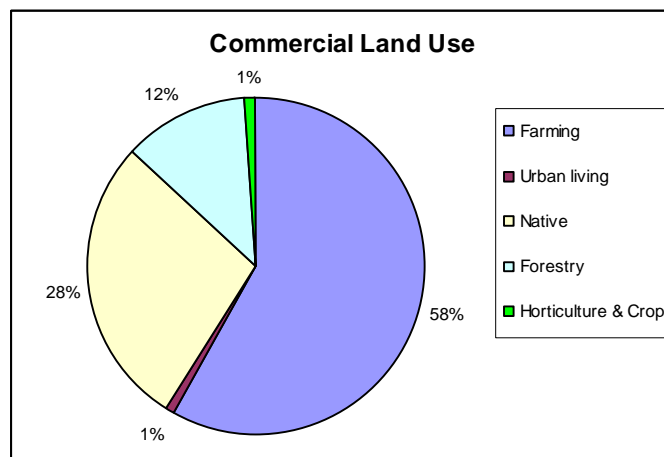
## 5.1 Land

Key environmental impacts include:

- ✓ Land erosion,
- ✓ Fragmentation of rural land,
- ✓ Cultivation of exotic flora and fauna,
- ✓ Pugging and compaction,
- ✓ Excessive drainage,
- ✓ Loss of habitat for native plants and animals.

### Land Use

The major commercial land uses in the region are pastoral farming, followed by indigenous vegetation (including forests, wetlands and grasslands). Plantation forestry makes up twelve percent of land use with the remainder made up of urban areas, horticulture and cropping. The following chart and map highlights current land use. Data was collected from land use surveys conducted during the period 1991-2001.

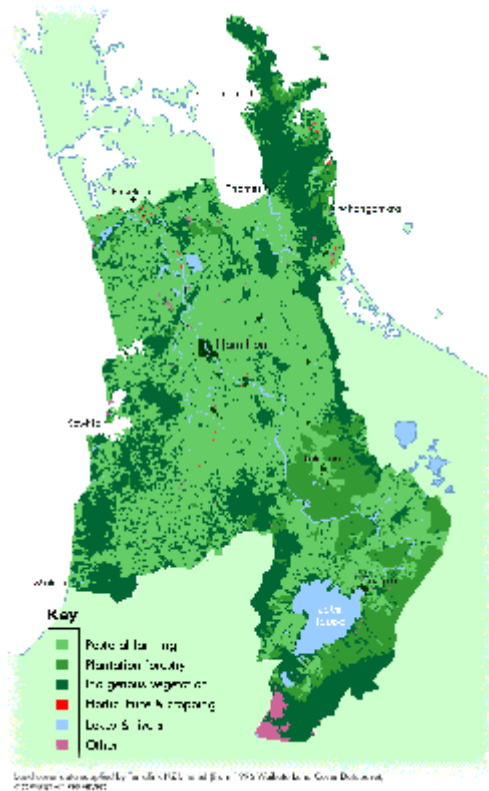


**Chart 1: Current Commercial Land Use.** Source: Environment Waikato

Features of the Western and Central Hill Country include steep, sedimentary hill country, large tracts of native forest and extensive cave and karst systems. Land uses include extensive stock grazing and exotic forestry. Land and soil issues for the area include:

- ✓ Sheet and soil slip erosion of hill country.
- ✓ Soil quality.
- ✓ River bank erosion.
- ✓ Biodiversity – native forest.

The following map also highlights the different land usage within the region.



The following table highlights relevant district council data for the Maniapoto area in terms of commercial land usage.

District Council	Land use type (ha)						Total
	Pastoral farming	Plantation forestry	Indigenous vegetation	Horticulture and cropping	Urban	Other	
Otorohanga	133116	3294	62675	77	341	896	200399
Waipa	131225	299	11908	76	2113	1750	147371
Waitomo*	207375	4227	125607	6	567	746	338528

Source: Environment Waikato

### Rural Subdivision

The rural subdivision indicator is a useful tool that allows the council to identify the amount and type of rural land being subdivided for more intensive uses. From 1991-2001, 3196 hectares of land changed from a low-density rural land use to a more intensive use.

Two-thirds of the land affected by subdivision has a 'high productive capability for pastoral use' The greatest amount of subdivision is occurring on land with high productive capabilities.

In decreasing order, rural subdivision is occurring most rapidly in Thames-Coromandel District, Waikato District, Hamilton City, Taupo District and Waipa District. Lower rates of rural subdivision are also occurring within Waitomo District, Otorohanga District, Rotorua District and South Waikato District.

## Stock Density

Environment Waikato monitors stock density to find out where livestock farming is likely to have the most effect on soil and water quality in the region. Stock density is calculated by converting farm animals to a common stock unit and dividing by the area of land that the stock graze on.

The highest stock densities are in the Hauraki, Lowland Waikato and Waipa River water catchment zones.

The lowest stock densities are in the West Coast and Taupo water catchment zones.

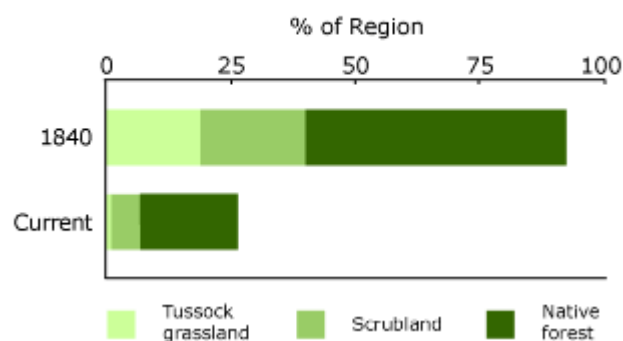
Source: Environment Waikato				
Percentage of farms in each class for each catchment				
Stock Unit Density (Stock Units/ha)	Lower Waikato	Upper Waikato	Waipa	West Coast
<10.5	29	36	27	57
10.5 to 17.5	37	46	40	31
17.5 to 24.5	21	12	22	7
>24.5	13	6	11	5
TOTAL	100	100	100	100

## 5.2 Native Vegetation

Before European settlement the vast majority of the Waikato Region's vegetation was native. About half was forest and the rest was scrub, tussock, wetland or geothermal vegetation. Today about a quarter of the region is in native vegetation, most of it forest.

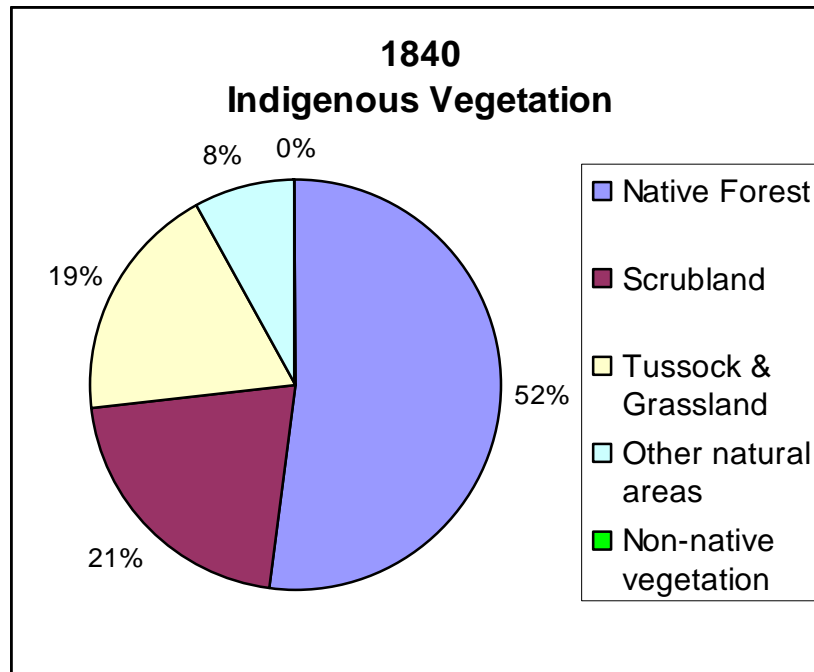
Lowland and coastal areas have seen the most dramatic changes in native vegetation.

**Percent of the Waikato Region covered in native forest, scrub and tussock in 1840 and today**

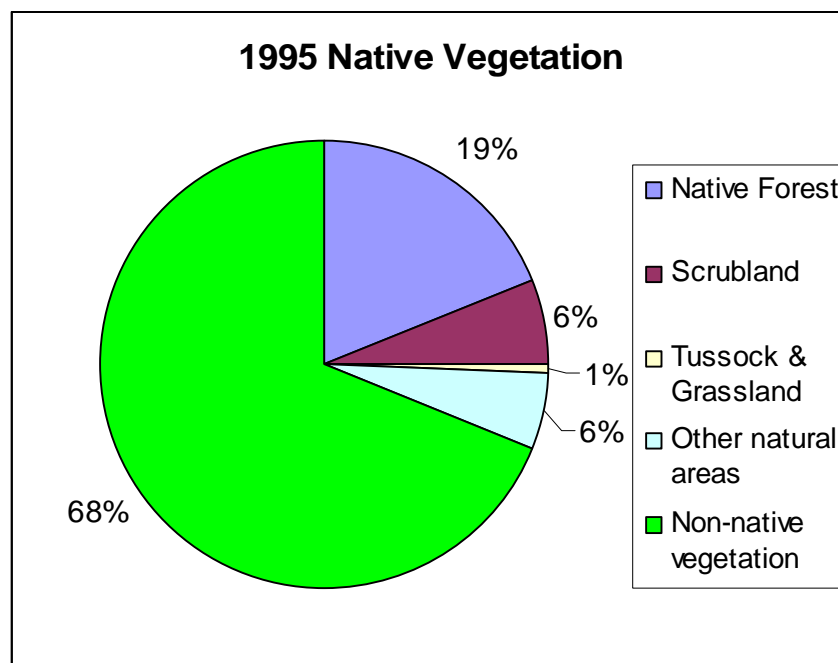


Source: Environment Waikato

The following pie charts compare the regional indigenous vegetation inventory carried out in 1840 and in 1995.

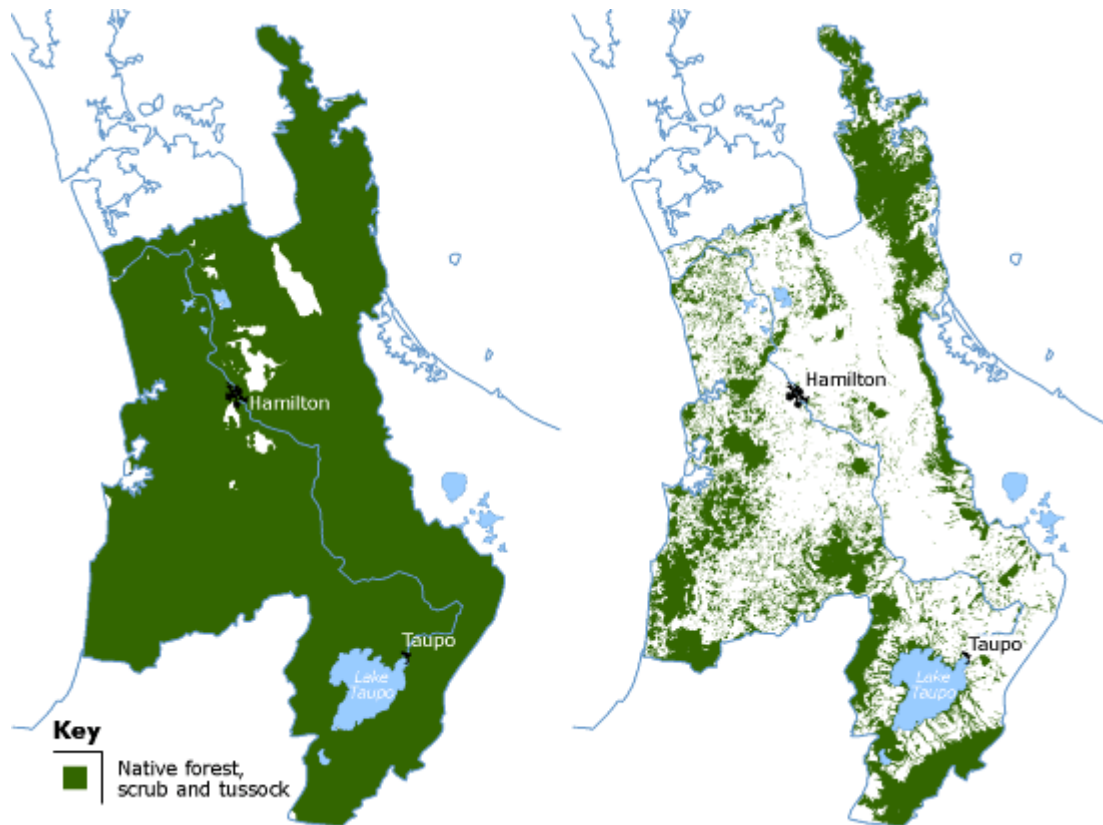


Source: Leathwick, J. Clarkson, B. and Whaley, P. 1995.



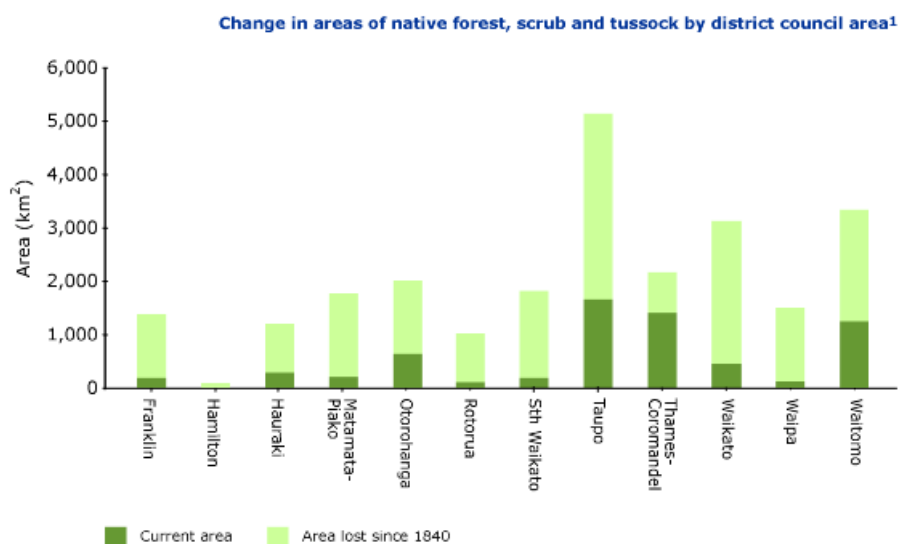
Source: Leathwick, J. Clarkson, B. and Whaley, P. 1995.

Historic (1840) vegetation was reconstructed in 1952 using settler accounts and maps, soil maps and interpretation based on current extent and early aerial photographs. This is outlined in the following maps.



Source: Environment Waikato

The graph below shows the change in the coverage of native forest, scrub and tussock since 1840.

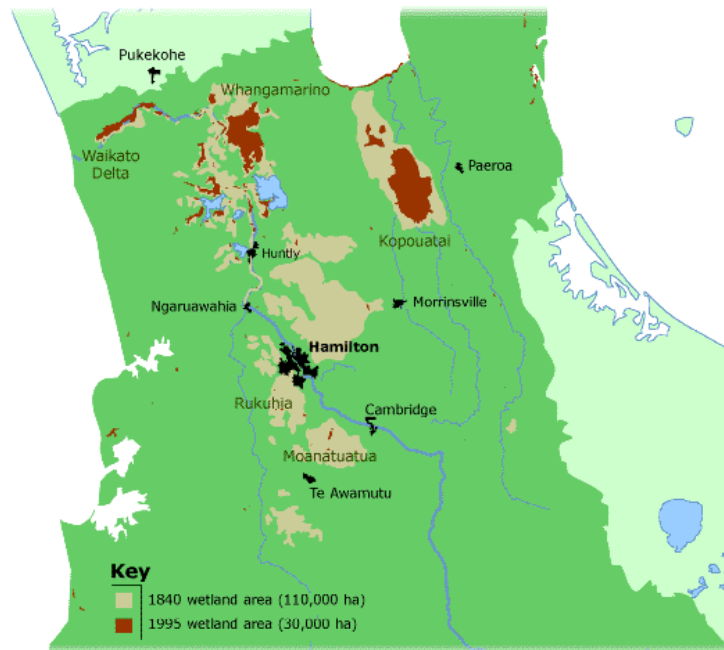


Source: Environment Waikato

Waitomo and Otorohanga still have over 20 percent of their original vegetation. In Waipa less than 10 percent remains. As highlighted by the above charts, graphs and maps, significant tracts of native vegetation have been cleared to make way for pastoral farming and agricultural activities.

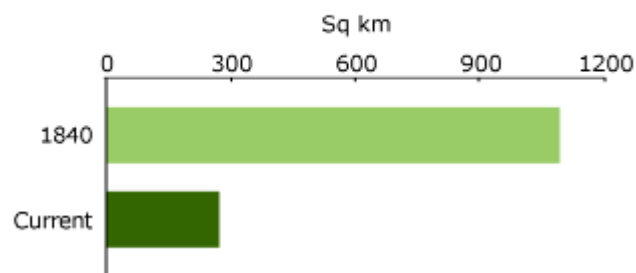
### 5.3 Wetlands

In 1840 there were fewer, larger wetlands in the Waikato Region. After 150 years of drainage, the large wetlands have been lost or split into small fragments. Today, most of the region's wetlands are scattered and smaller than fifty hectares. The once massive 25,840 hectare Gordonton peat bog, for example, now consists of just one 60 hectare remnant.



Source: Environment Waikato

**Area of the Waikato Region covered in freshwater wetland in 1840 and today**



Source: Environment Waikato

The following table highlights the fresh water wetlands in each of the district council catchments for the Maniapoto area per square kilometre.

	1840	Current
District Council	km2	km2
Otorohanga	28	<1
Waipa	167	3
Waitomo*	<1	5

Source: Environment Waikato

Proportion of Region's wetland in each District:

	1840	Current
District Council	%	%
Otorohanga	3	<1
Waipa	15	1
Waitomo*	<1	2

Source: Environment Waikato

### Where are our Wetlands

#### *Waitomo*

The Waitomo area is famous for its caves, karst, glowworms, formations and underground rivers. There is also a system of freshwater dune lakes south of Kawhia Harbour which is fringed with raupo, flax and sedges. The lakes are home to dabchick, fern bird, crakes, bitterns, scaup and many species of native fish. There are also a number of kahikatea forests, particularly along the Mangapu River. The Waitomo district is the only district that has increased its native freshwater wetlands as opposed to clearing it all as seen in the above tables.

#### *Waipa*

The Waipa district contains peat lakes formed at the end of the last ice age (over 15,000 years ago). The district council is restoring Lake Ngaroto and has planted thousands of trees around the Lake. The Moanatuatua Scientific Reserve is one of the few sites in New Zealand where the rare giant cane rush (*Sporadanthus*) occurs. The Waipa wetlands have decreased the most in comparison to the Waitomo and Otorohanga district councils.

#### *Otorohanga*

The Otorohanga district contains the Waipapa Ecological Area where mountain mires were created after the Taupo eruption flattened the forest and deposited a layer of pumice.

Sedges, tangle ferns, sundews and sphagnum moss grow on the peat, with swamp *Coprosma* and bog pine at the margins. The uncommon sedge *Gahnia rigida* grows here. The wetland areas of Otorohanga have also decreased since 1840.

### 5.4 Waikato Catchment

The Waikato River is New Zealand's longest river, and has a total catchment area of about 14,250 square kilometres. The greater Waikato catchment includes the Waikato and Waipa rivers as well as smaller rivers and streams such as the Maramarua, Mangawara and Tongariro rivers.

The Waikato River Catchment Services Project began in 1999 and was known by its shorter name 'Project Watershed'. The Project was set up to address the issues of flood protection, soil conservation and river management in the greater Waikato catchment.

The Waikato Catchment is geographically diverse. It is made up of a range of different soil types and has some unique features, including large wetlands and peat lakes. What happens in one area of the catchment can directly affect what happens in another. For example, soil erosion issues in the Waipa catchment can contribute to sedimentation in the Waikato River and flooding in the Lower Waikato.



The above map highlights the different areas of the Waikato catchment area.

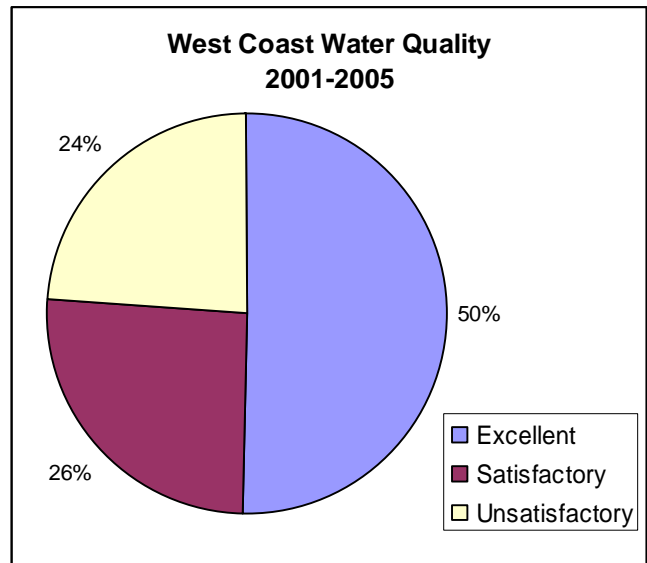
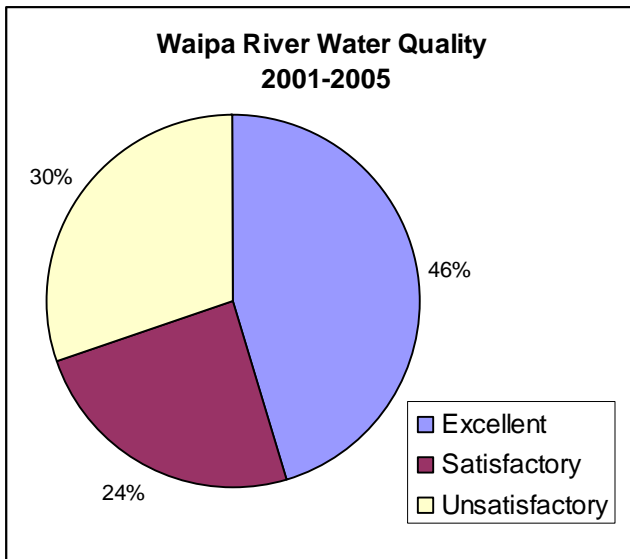
## 5.5 Rivers and Streams Water Quality

### River Water Quality

Environment Waikato regularly assesses indicators of water quality that measure the physical and chemical characteristics of our rivers and streams (such as temperature, acidity and nutrients). This tells us how suitable the rivers and streams are for freshwater plants and animals. Overall, this shows that the water quality in most waterways within Ngāti Maniapoto is getting worse specifically:

- Water quality for ecological health is getting worse
- In areas where land use is more intensive, water quality for ecological health is poorer.

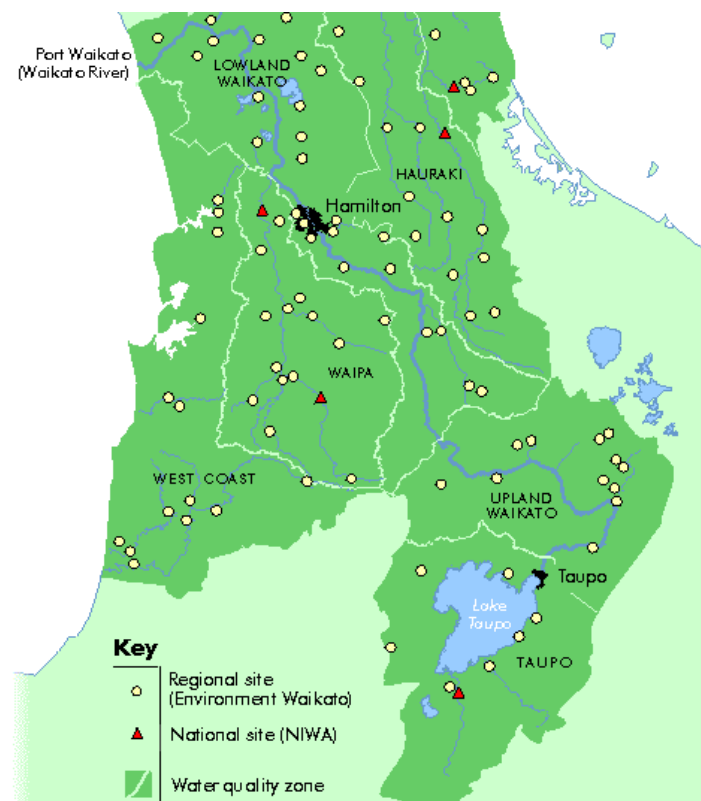
Water quality is measured by either taking measurements on site or taking samples of water back to the laboratory for analysis. The data is based on samples collected during the period 2001-2005. The following charts highlight the health of the Waipa and West Coast river systems.



Source: Graphs created from Environment Waikato data

The above graphs reiterate that a large portion of river water quality is unsatisfactory in both the Waipa and West Coast areas.

The following map illustrates the different river systems within the Environment Waikato catchment area and their monitoring sites as well as National Institute of Water and Atmospheric Research (NIWA) monitoring stations.

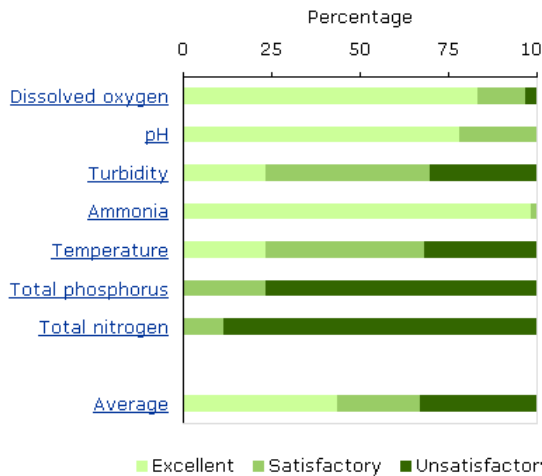


Water Monitoring Systems. Source: Environment Waikato

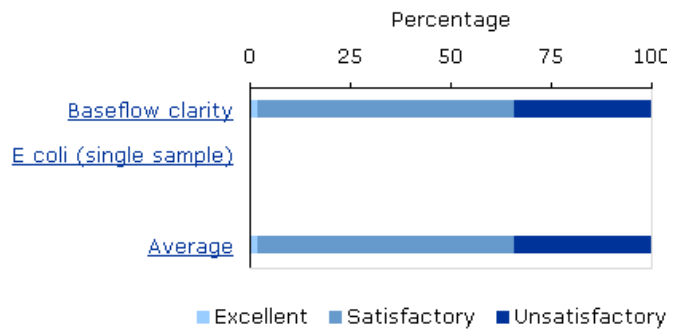
Puniu River at Bartons Corner Road

The graphs show how well the water here passed the standards for ecology (ecological uses, the plants and animals that live in the water) and swimming.

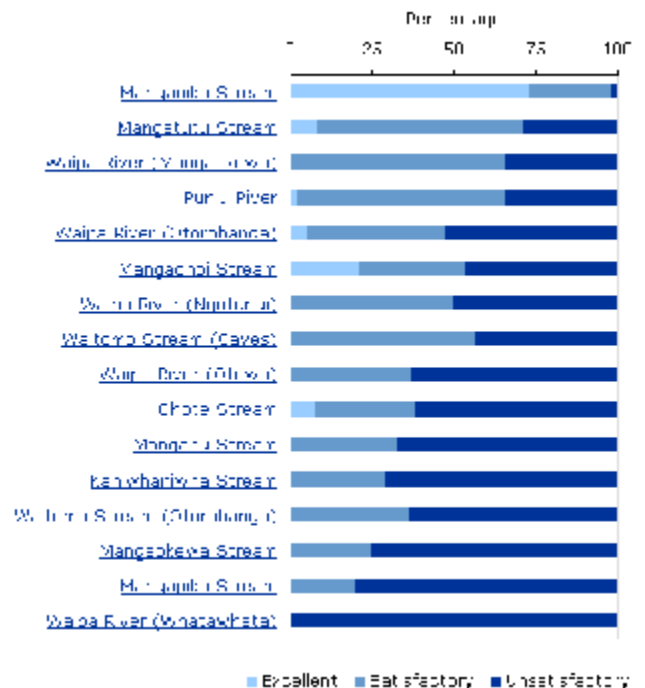
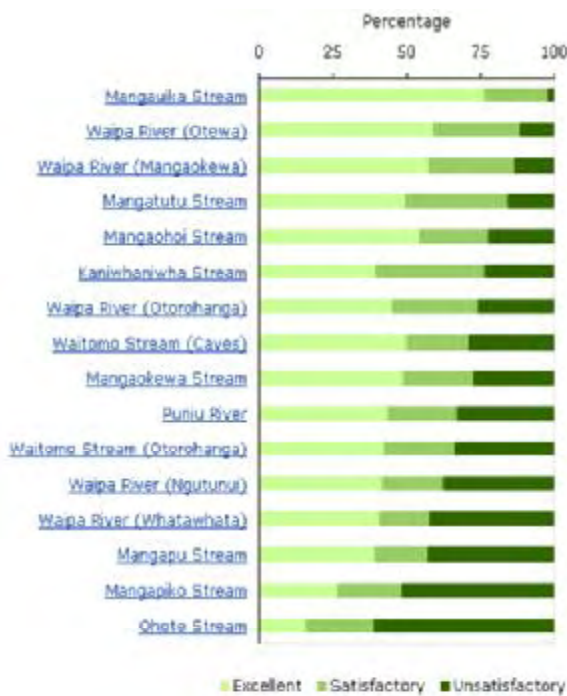
Ecology:



Swimming:



Source: Environment Waikato



Source: Environment Waikato

Marokopa River at Te Anga

The graphs below show an assessment of the Marokopa river taken at Te Anga for levels of water quality. The river water quality for swimming is almost at the point where it is unsatisfactory.



Zone	Excellent	Satisfactory	Unsatisfactory
Waipa River	9.1	43.8	47.1
West Coast	4.5	42.8	52.7

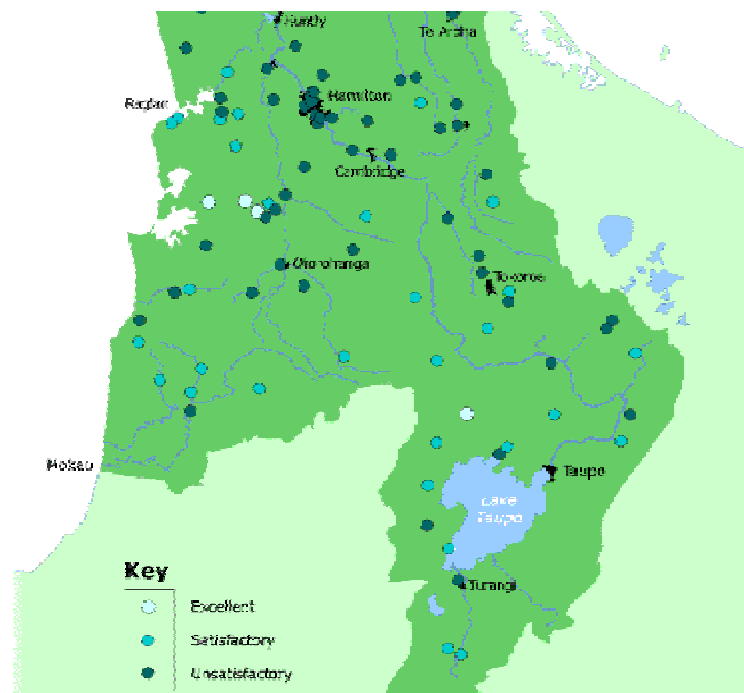
Source: Environment Waikato

## 5.6 River Biology

This indicator measures the presence and numbers of freshwater invertebrates (such as insects, crustaceans and worms) in rivers across the region. Different types of invertebrates have different tolerances to pollution and are also affected by the quality of their habitat. This means that Environment Waikato can tell how good the water and habitat quality is by the types and numbers of invertebrates living in the river.

The following map shows the different sites of river monitoring carried out by Environment Waikato and the quality of habitat at these monitoring stations. This map highlights that while there are a few excellent and satisfactory sites in the Maniapoto area, there are also a number of unsatisfactory sites.

*River Biology Monitoring Map*



Source: [www.ew.govt.nz](http://www.ew.govt.nz)

### Ecological health of streams and rivers in the Waikato region

The ecological health of undeveloped catchments and developed catchments were measured and the overall percentages for the West Coast and Waipa areas showed that the West coast has an unsatisfactory level of 14.5% and the Waipa catchments have an unsatisfactory level of 25%.

Habitat quality in streams and rivers in the Waikato region

	Percentage of samples			
	Well above average	Above average	Below average	Well below average
West coast	7.017544	38.0117	52.04678	2.923977
Waipa	16.15385	30	48.46154	5.384615

Source: Environment Waikato

This table highlights that more than half of the West Coast and Waipa river systems have a habitat quality that is below average.

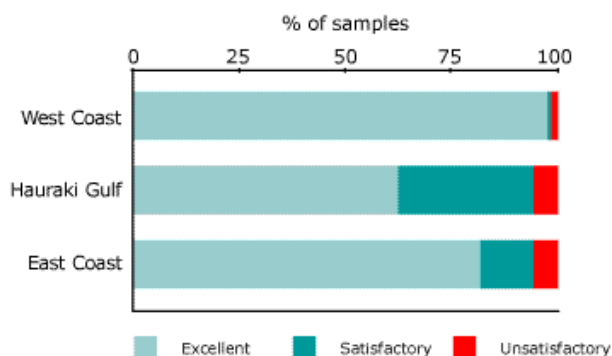
5.7 Coastal Water Quality

*Contact Recreation*

Environment Waikato routinely monitors enterococci (bacteria) levels at 26 coastal swimming beaches. The levels of these bacteria show us whether the water quality is suitable for contact recreation (for example, swimming).

The Waikato region’s coastal waters are usually satisfactory or better for contact recreation such as swimming. Often, water quality is excellent. However, some beaches occasionally have high bacteria levels. The following table highlights this.

**Percentage of samples meeting our guidelines for excellent, satisfactory or unsatisfactory coastal water quality for contact recreation**



Source: Environment Waikato

West Coast Water Quality Monitoring Map

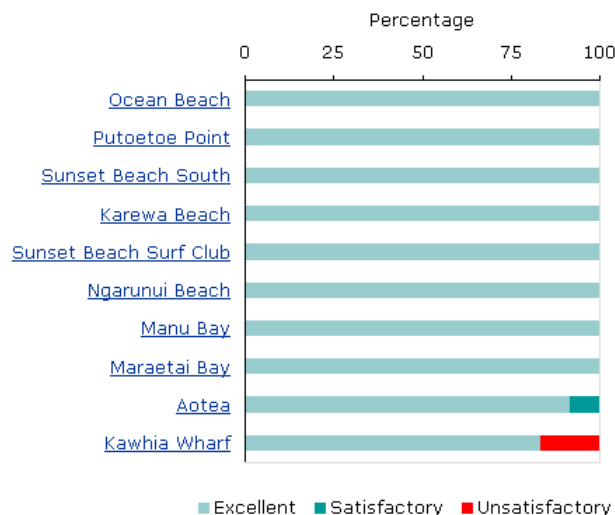
Water quality has been monitored in Aotea and Kawhia Harbours.



Source: [www.ew.govt.nz](http://www.ew.govt.nz)

Environment Waikato monitors a range of sites at weekly intervals during the summer - usually during the months of December to February. In the 2005 West Coast survey 12 samples were collected at each of the above 10 sites.

Samples are collected by wading into the sea to about thigh depth and collecting water from just below the surface. Water temperature and salinity is measured on site, as well as the numbers of people swimming and on the beach.



Source: Environment Waikato

Of the ten collection sites, samples from Kawhia Wharf exceeded Environment Waikato guidelines of 280 enterococci per 100 mL.

- Kawhia wharf measured between 620 and 1,020-enterococci per 100 mL.

## Coastline Ownership

Public and private ownership of the Waikato Region's coastline is measured. The results are presented as privately owned, publicly owned or road edge (assumed public ownership).

The West Coast of the Waikato Region:

- has 19 percent of the coastline in public ownership,
- is considerably less developed than the Coromandel Peninsula coast,
- has a large portion of the coastline currently in farmland or forestry,
- has a very small percentage of coastline fronted by road reflecting the remote and relatively undeveloped nature of the Region's West Coast. This makes public access to many parts of the West Coast difficult or impossible.

Summary by coastal area							
	Total Length (m)	% of total		Harbour (m)	%	Open coast	%
<b>West Coast</b>							
Ambiguous	17,836	3.2		15,359	4.4	2,476	1.2
Private	40,6431	72.2		258,982	73.4	147,449	70.3
Public	109,642	19.5		50,472	14.3	59,169	28.2
Road	28,741	5.1		28,007	7.9	734	0.3
Sub-total	562,650			352,821		209,829	

Source: Environment Waikato

## Estuaries – extent of coastal habitats

This table illustrates the extent of vegetated habitat in estuaries in Kawhia and Aotea Harbours from photographs taken in 2002-2003.

Kawhia		ha	%
Sea grass		793.63	11.29
Mangrove		1.39	0.02
Salt marsh		177.64	2.53
Invasive species		12.39	0.18
Inter-tidal flats and channel		6,044.69	85.99

Aotea		ha	%
Sea grass		533.38	17.15
Mangrove		0.24	0.01
Salt marsh		59.2	1.9
Invasive species		3.33	0.11
Inter-tidal flats and channel		2,513.07	80.83

Source: Environment Waikato

As west coast harbours such as Kawhia and Aotea are very large, even a low percentage of cover can amount to large areas. For example, the total area of sea grass beds in Kawhia Harbour is 794 ha, which is more than twice as much as all the sea grass beds of the Coromandel Peninsula harbours combined.

Invasive exotic plants (for example the cord-grass *Spartina* and saltwater *Paspalum*) are also found in Aotea and Kawhia Harbours. Invasive exotic species make up a less than 1% of the total vegetated habitat of Aotea Harbour and 1-4% of Kawhia. However this is over 15 hectares of combined invasive vegetation.

In 2005, Environment Waikato commissioned the Estuarine Vegetation Survey - Kawhia Harbour. The report provides a comprehensive summary of the status of the native and introduced flora and fauna within the area.

*"The seagrass 'Zostera' covers a large area of the harbour flats and provides a significant habitat for invertebrates and fish within the harbour. There is also a population of swans that feed on the sea grass. It is recommended that a watching brief be kept on swan numbers to ensure they do not escalate to densities that may be detrimental to the overall sea grass habitat.*

*All salt marsh is significant in Kawhia Harbour due to its limited extent – primarily dictated by the harbour geology. Similarly all remaining freshwater wetlands/swamp forest that adjoins estuarine wetland are significant for their scarcity and habitat value and should be actively preserved and enhanced.*

*Weeds are a significant threat to the health and integrity of the harbour's vegetation. The Department of Conservation is currently undertaking an aerial spraying programme in an attempt to eradicate spartina from Kawhia Harbour.*

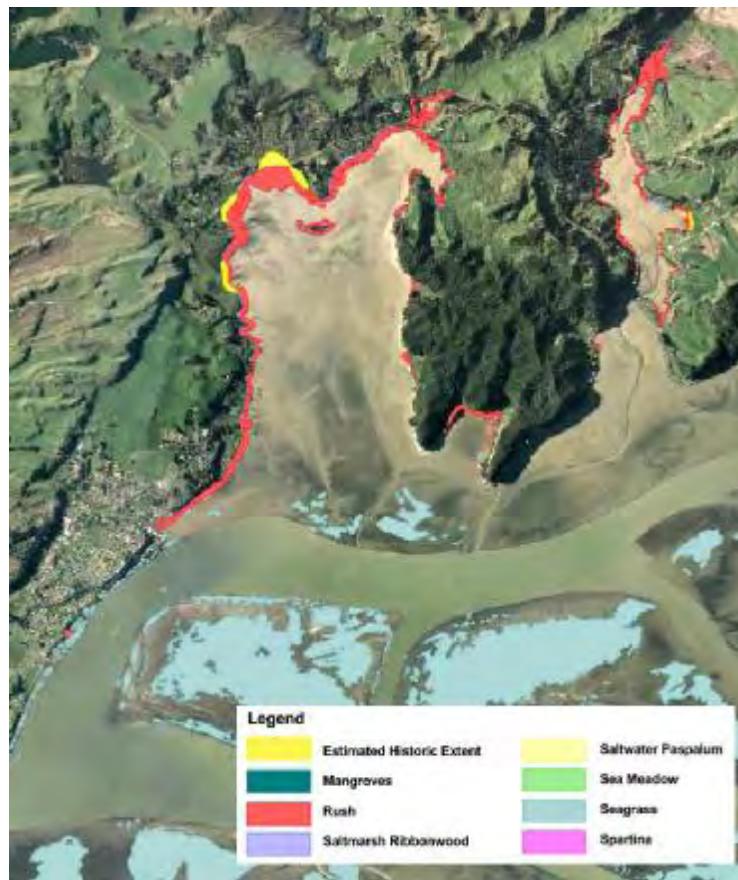
*The other significant estuarine weed is saltwater paspalum. This invasive grass is only just starting to establish in Kawhia Harbour. The survey found only four patches of saltwater paspalum. It particularly threatens low-stature sea meadow communities.*

*These few pioneer populations of saltwater paspalum should be eradicated as soon as possible. This can be undertaken using gallant and so it would be a wise use of resources to co-ordinate the spraying of saltwater paspalum with the spartina control programme. Access by stock to the harbour is a widespread and serious problem around the harbour.*

*The protective benefits of the regenerating coastal forest around the harbour edges is degraded by the grazing of the undergrowth by goats".*

The following maps are taken from same report to illustrate the different vegetation in the Kawhia harbours.

Estuarine Vegetation Survey - Kawhia Harbour - Map A



Source: Meg Graeme Kawhia Estuary Study & Environment Waikato

Estuarine Vegetation Survey - Kawhia Harbour - Map B



Source: Meg Graeme Kawhia Estuary Study & Environment Waikato

Estuarine Vegetation Survey - Kawhia Harbour - Map C



Source: Meg Graeme Kawhia Estuary Study & Environment Waikato

5.8 Air Quality

Map depicts Air Quality Regions:



Source: [www.ew.govt.nz](http://www.ew.govt.nz)

## West Coast

### *Features*

Exposed to strong winds off the Tasman Sea. Varied landscapes. Very low population density.

### *Air Quality Issues*

Air contaminants in the West Coast area are mostly from natural sources such as sea spray and dust. Other sources are occasional vegetation burning and agricultural spray drift.

Air quality declines as:

- ✓ our population increases,
- ✓ we use more resources,
- ✓ we increase industrial activity.

Environment Waikato measures the amount of PM<sub>10</sub> (particles smaller than 10 microns) in the air. During winter, the majority of PM<sub>10</sub> in Hamilton, Taupo, Te Kuiti and Tokoroa comes from home fires, mainly from burning wood.

Contaminants from home heating are generally more of a problem in winter when wood burners and open fires tend to be used. This happens especially in inland towns, such as Tokoroa and Te Kuiti where frequent calm conditions and inversion layers mean the smoke stays around.

Air pollution can also come from natural sources such as from geothermal areas, salt spray and plant pollen.

Industrial emissions were the most commonly mentioned activity damaging air quality in South Waikato, Taupo and Otorohanga district council areas. Most industrial air emissions are released by a relatively small percentage of industrial sites.

Many of these large emission sources are near Tokoroa and Huntly, such as pulp and paper manufacturers and thermal power plants. The table below shows the percentage of six key contaminants produced by industry types.

Estimated percentage emission of contaminants by major industry type						
Industry type	PM <sub>10</sub>	CO	NO <sub>x</sub>	SO <sub>x</sub>	VOC	CO <sub>2</sub>
Chemical manufacturing	6.8	16.7	3.6	2.3	0.4	3.4
Food processing	12.8	17.0	13.3	42.5	0.1	12.6
Quarrying and mining	48.5	0.6	0.2	0.1	1.7	0.1
Power generation	0.5	21.3	73.7	0.1	32.4	55.0
Timber and paper processing	21.3	39.9	5.7	16.0	65.3	23.8
Other	10.1	4.5	3.5	39.0	0.1	5.1

Key: CO = Carbon Oxide, NO<sub>x</sub> = Nitrogen Oxide, SO<sub>x</sub> = Sulphur Oxide, VOC = Volatile Organic Compounds, CO<sub>2</sub>= Carbon Dioxide

Source: Environment Waikato

## 6. ENVIRONMENTAL ISSUES WITHIN MANIAPOTO

Maniapoto waterways, forests, coastline, land and air quality concerns must be taken into consideration when planning for the overall environmental welfare of the region. The following information has been provided by Ngāti Maniapoto kaumātua, groups and individuals who participated in one of the four regional hui that were held to gather information for the Maniapoto Iwi Environmental management Plan. Additional responses through the tribal questionnaire also informed this section.

### 6.1 Environmental Hotspots

The objective of this section is to illustrate areas of environmental stress and concern within the Maniapoto region. This section is a small snap shot of the results of poor planning or actions that will have long term impact on the environment. There is much that can be achieved by changing habits and taking responsibility for our actions. Because we live in a predominantly rural community, many of us have a false sense of the environmental impact of our actions. It is essential that we all take responsibility to reduce waste, to put in place responsible waste disposal activities including recycling and to ensure our decisions reduce as much as possible, detrimental environmental impacts.



Image 1: Car body dumped at the top of a tomo on the main road between Marokopa and Kiritehere. Leaching into waterway and land. ©Kōwhai Consulting Ltd (KCL)



Image 2: Wrecks on the side of the road at the same site as image 1. © KCL



Image3: Land erosion on the Marokopa to Kiritehere road. Shows major slip requiring re-stabilisation. © KCL



Image 4: Large inorganic items discarded at Marokopa's main road dumping station. © KCL



Image 5: Marokopa River. Shows the different landscapes with native bush, cleared land for agriculture and unfenced scrub plains. Stock has access to the river. © KCL



Image 6: Main road between Te Kuiti and Benneydale. Shows soil erosion due to lack of riparian planting and heavy stock grazing. © KCL



Image 7: Te Kuiti to Benneydale Highway. This shows algae build-up where farm runoff enters the waterway. © KCL



Image 8: Mangaokewa Reserve – Te Kuiti. This drainage waterway is on the RHS of the main entrance into the reserve. It is polluted with chemicals and rubbish. © KCL



Image 9: Mangaokewa Reserve – Te Kuiti, rubbish on the side of the road of main entrance way. © KCL



Image 10: Stock in wetland area on road between Hangatiki and Waitomo. This area feeds directly into the stream way which is currently unfenced. © KCL



Image 11: Kawhia – small bay between Awaroa Inlet and Waikorire Creek. Stock tracks through an oioi fringe. Photo Meg Graeme © Environment Waikato.



Image 12: Kawhia – The true left bank of the Waikorire Creek arm is fenced along the harbour edge. This means that the cattle do not have access to the salt marsh and harbour flats but there is no room for riparian vegetation to filter land run off including sediment, nutrients and pathogens. Photo Meg Graeme © Environment Waikato.



Image 13: The True Right Bank of the Waikorire Creek arm is not fenced and cattle wander through the salt marsh and over flats. NB: The important riparian vegetation (kanuka and punga) has been sprayed but the invasive pampas taking over the pasture has been left unsprayed. Photo Meg Graeme © Environment Waikato.



Image 14: Pugged harbour sediments and cattle dung, west of Te Waitere. Photo Meg Graeme © Environment Waikato.

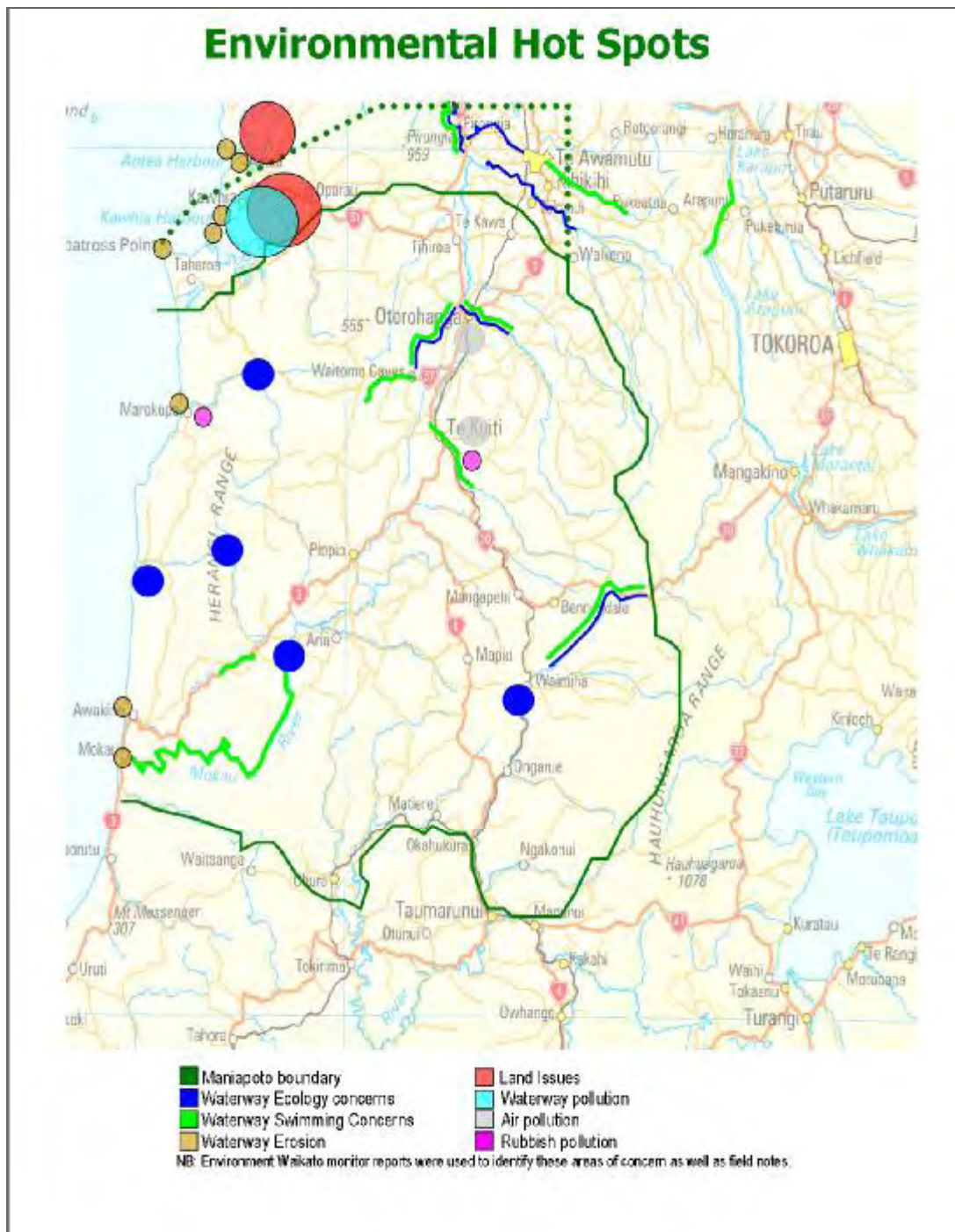


Image 15: Te Maika shows rubbish being dumped directly into the ocean. © Bevan Taylor 2006



Image 16: Rubbish on farmland in the Te Maika area. © Bevan Taylor 2006

The following map highlights important environmental hot spots identified via field notes as well as from Environment Waikato monitoring reports.

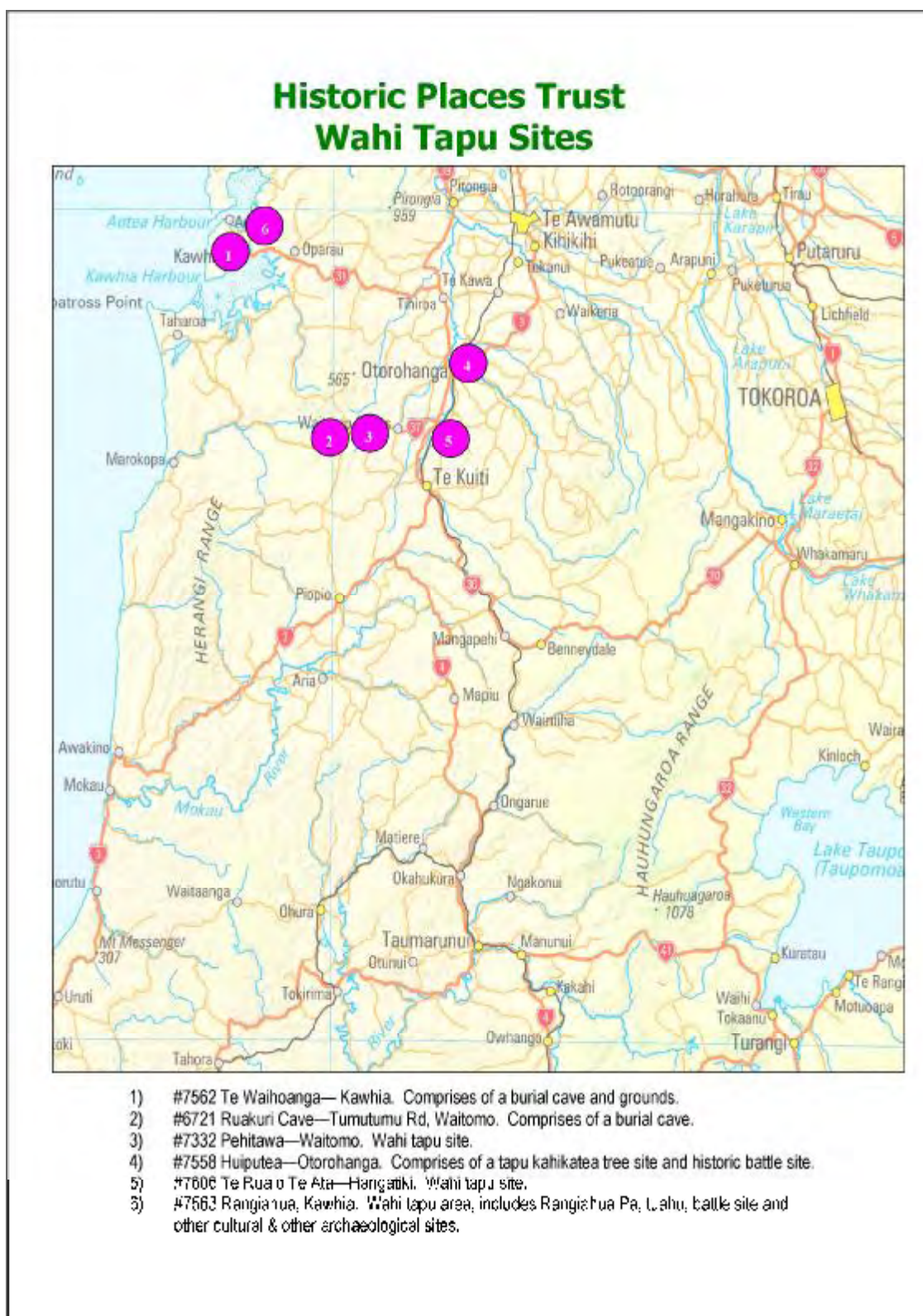


Source: Environment Waikato, © Terralink NZ Ltd

## 6.2 Sites of Cultural Significance

The following map shows the registered culturally significant sites within the Maniapoto region that are currently recorded with The Historical Places Trust. While these six sites are registered with the Historical Places Trust, there are many other significant cultural sites within the Maniapoto region that are not.

There are different reasons as to why these sites have not been registered and perhaps are purposefully guarded due to the taonga that are located at these sites. While it is important to protect these sites it is also imperative that the cultural knowledge and history surrounding these sites is not lost.



Source: Historic Places Trust, ©Terralink NZ Ltd

## 7. MANIAPOTO ENVIRONMENTAL CASE STUDIES

The following case studies are a small sample of some of the positive environmental activities within the Maniapoto rohe.

### 7.1 Mangapeehi Marae

Raewyn Ormsby and Jim McDonald who are affiliated with the Mangapeehi marae in Benneydale have identified an area of land next to the marae that is overgrown, under utilised and unsightly and needs to be addressed for the following reasons:

1. Improving biodiversity,
2. Encouraging wildlife (both water wildlife and birds) back to the area,
3. Ensuring cleaner waterways,
4. Improving aesthetics of the marae.

The land behind the marae is predominantly scrub and swamp and the urupā is surrounded by a pine forest plot which is ready for harvest within two-years. The majority of the land between the marae buildings and the urupā is covered in either broom or gorse. The stream-way running behind the establishment is overgrown with willow.

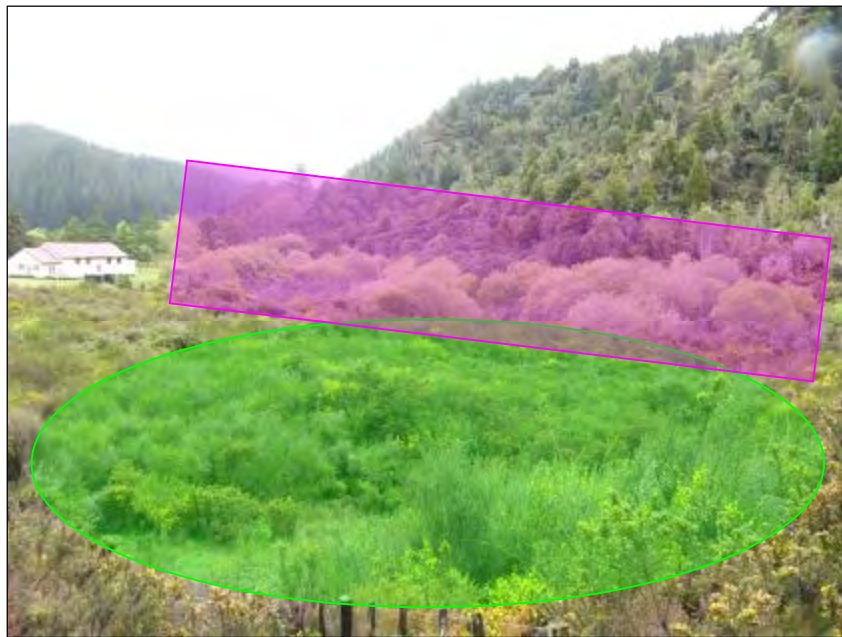


Image 17: The area of land highlighted in green needs to be cleaned up and the pink area is the current stream way which is overgrown with non-native and other plants.  
© KCL

There is a Department of Conservation (DOC) reserve on the eastern side of the river, which Raewyn and Jim are able to negotiate with DOC to source native trees and shrubs for a future native nursery. It is their intention to clear the waterway of willow (shown in images 19 & 20) and to replant the banks with flax and native plants. Raewyn and Jim are passionate about providing a clean, healthy environment for future generations and utilising the land around the marae to produce useful resources.



Image 18: This is a shot from the marae looking back toward the native DOC reserve. Note the gorse and line of willows which run along the stream way. © KCL

There is a large swamp area behind the marae which has broom, gorse and manuka growing in it. It is the intention of the project team to clear this area of non-native plants and re-plant flax for weaving classes and native trees that co-exist with the biodiversity of the environment. On the southern side of the marae there is a natural wetland area, which the couple hope to plant up with additional wetland grasses and plants to enhance this area and to attract back native birdlife.



Image 19: Shows the only visible water from the stream way which runs behind the marae. This is clogged with willow trees and foliage. © KCL

## Mangapeehi Native Nursery

Jim and Raewyn would like to establish a native nursery and resting place for transplanted native plants. The existing marae property has an old swimming pool area with sheds that will be ideal for this purpose. However, it does need some work in terms of access and covering with shadow cloth to create an environment for native plants that have been transported. The idea of having a native nursery is to provide native plants for the site that currently has pine on it as well as for the marae and for whānau who want to plant flax and native trees at their homes.



Image 20: This is the proposed area for the native plant nursery. There is existing shelter but it needs renovations in order to become a functional nursery area. © KCL

The first priorities for this group are to clear the waterway and then establish a native nursery. This project is at a conceptual stage and needs to be planned over a five to ten year period with existing resources and personnel.

## 7.2 Wahamahanga Project – Marokopa

The Wahamahanga project began in 2000 and is spear headed by Kahu Hohaia and the Ngāti Toa Tupahau Trust (NTTT). The aim of the project is to replant the entire Wahamahanga reserve pictured in Image 23. This reserve has significant cultural value as it is a historic burial site (urupā) with many bones in danger of being exposed to the elements due to coastal erosion.

The reserve also acts as a buffer for the Marokopa Township as seen below. Without the reserve the township will be directly exposed to the elements of the sea. It also serves as a resting spot for migrating birds and wildlife. Kahu Hohaia has reported sightings of penguin, seals, dotterels, albatross and various species of sea gull. It is the future intention of the trust to list the reserve as a historical site with the Historic Places Trust.

Kahu has worked with community members, whānau, Environment Waikato, Department of Conservation and the community probation office to plant 75,000 native grasses and pingao in the Wahamahanga reserve over the past six years. The NTTT has an environmental mission which is,

*"To ensure the protection of our environment, our culture, our tikanga and our whenua for future generations."* (NTTT Strategic Plan)

Their goal is to ensure that the burial sites are not exposed to high water and strong winds and that the reserve remains a continued buffer between the township and coastline.



Image 21: The outlined area is the Wahamahanga reserve which acts as a buffer from coastal wind and waves and is also a burial site. The highlighted areas still require planting which is an ongoing project to reduce erosion and introduce birdlife back to the area. © KCL



Image22: The highlighted points show land erosion at the mouth point of the Marokopa River. This hillside area also has cultural significance for the local residents. © KCL



Image 23: This image of Wahamahanga reserve shows the establishment of planted pingao and native grasses. The reserve also acts as a sanctuary and rest stop for migrating animals. Local residents have spotted penguins, dotterels, albatross, sea gulls, and seals here. © KCL



Image 24: Another section of the Wahamahanga reserve which has been partially planted but requires additional planting to minimise bank erosion. Signs will be erected requesting that people stay off the dunes due to cultural and environmental significance. © KCL



Image 25: Another section of Wahamahanga reserve which still needs to be planted to minimise erosion. © KCL

Key issues that Kahu highlighted for the Marokopa area and for Maniapoto as a whole were:

- Lack of funding for environmental initiatives and
- A lack of whānau, hapū and iwi participation

Kahu also agreed that the state of the environment of Maniapoto has changed over the past fifty years with the Marokopa River slowly eroding the banks of the Wahamahanga reserve and Marokopa Township. There is also an increase in temperatures with global warming issues, depletion in shell fish stock, fish stock and a reduction in native bird and animal life. Kahu would like to see more birdlife in the area, less erosion, wāhi tapu sites established and protected in the Wahamahanga reserve and an increase in fish stock and native trees.

*"The Wahamahanga was once covered in native trees!"(Kahu Hohaia, 2006)*

It is the long term plan of the NTTTT to establish a native nursery for plant stock in order to reduce reliance on Environment Waikato and to eventually establish a community hall or centre for the younger generation to use as an educational base.

The work that NTTTT and Kahu have undertaken in Marokopa is a credit to the tribe but there are still issues of land erosion, dumping and environmental education that need to be addressed with Māori as well as non-Māori residents.

Overall, the key issues facing these organisations that are undertaking environmental initiatives are relatively similar. Each organisation has issues with funding their projects, as well as gaining and maintaining support for these important initiatives.

While the importance of our environment has for too long been overshadowed by the need for commercial gain, we do have some entrepreneurs within Maniapoto who are environmentally conscious and their livelihood depends on state of their immediate environment. Maniapoto has a business owner who is looking into the possibilities of producing bio-fuel. There are local organic farms that are producing niche products and a retailing store that sells organic produce and environmentally friendly products. There are also Maniapoto community organisations that support native riparian planting, wetland planting and environmental initiatives. There are a number of non-Māori organisations, particularly in the outdoor tourism industry, that are constantly maintaining their resources so that they are sustainable and have a reduced impact on the cave and karst environment. The livelihoods of these organisations depend on the state of their immediate environment and they are ensuring that this is not threatened.

Conversely, there are still many organisations within Maniapoto who do not plan for environmental impacts and who do not contribute to maintaining a sustainable environment. The impacts of an increasing population, a lack of environmental awareness and education, intensive farming practices and some poor industrial practices will cause significant impacts on our immediate environment as well as surrounding regions if we do not plan future environmental initiatives. If we do not plan for a sustainable environment and value the life sustaining resources that are provided by Papatuanuku and Ranginui, we will potentially leave our mokopuna with an environmental disaster that will require many generations to rectify.

## 8. REGIONAL MANAGEMENT COMMITTEES

The Maniapoto rohe is made up of the following RMC's. Each RMC is responsible for marae within their boundary. A list of marae and corresponding RMC's are posted on the Maniapoto Māori Trust Board website at [www.maniapoto.iwi.nz](http://www.maniapoto.iwi.nz)

Following is a boundary map of Maniapoto and a break down of RMC territories within the tribal boundary.

## Maniapoto Regional Management Committees



- |   |                        |
|---|------------------------|
| 1) Hauauru Ki Uta RMC                           | 2) Nehenehenui RMC     |
| 3) Te Tokanga Nui a Noho RMC                    | 4) Mokau Ki Runga RMC  |
| 5) Rereahu RMC                                  | 6) Tuhua Hikorangi RMC |
| 7) Te Tai o Kawhia RMC (in process of defining) |                        |

Source: MMTB, © Terralink NZ Ltd

### Issues and Concerns relevant to each of the Maniapoto Regional Management Committees

A summary of the environmental diversity and concerns within each of the Maniapoto Regional Committee rohe is outlined in this section. These summaries have been taken from Te Pūrongo, the Maniapoto State of the Environment report published in 2002.



## Rereahu Regional Management Committee

The territory of Ngāti Rereahu is characterised by large tracts of indigenous forest, interspersed by farmland and pine forests. A key feature of this area is that it contains the headwaters of the Waipa, Mokau, Mangaokewa and Waimiha streams, as well as a number of associated tributaries.

Ngāti Rereahu contains the mountains Pureora and Titiraupehu and the beautiful forests and streams of Waihaha and Waipapa. It boasts dense stands of virgin podocarp forest of national significance – one of the few such areas remaining in the North Island including a tanekaha and rata forest. It shelters numbers of rare and endangered species such as kokako, kaka and the Mahoenui giant weta. It contains tracts of coal, and is home to Miringa Te Kakara – a nationally and tribally significant site of the whare wānanga, the traditional school of learning. Bird resettlement programmes have seen the return in numbers of kaka, robin and kokako.

### **Awa me ngā Manga**

Of grave concern is the health of the waterways. Once clear, clean and abundant in aquatic life, these waters were a key food source for the people of Rereahu. However, with the onset of farming, forestry and industry, the rivers and streams have deteriorated to the point that the water is polluted and aquatic life is depleted. If the rivers are polluted at their source, what chance is there for the downstream life; aquatic and other, including those tribes that depend on the rivers to supply clean water and food?

### **Te Ngāhere**

A further concern is the clearing of forestry land. In some cases of clear felling within the Rereahu territory, forestry companies have left the land scarred and ripped after removing forestry logs, with no intention of reforesting or restoring the land in any way. This has a significant impact on the natural environment. This is an untenable situation and is aesthetically and culturally offensive showing no regard for the environment or the people who live in the region. Rereahu considers that foresters (a group to which some iwi and hapū of Rereahu RMC belong) should be required to restore land that is no longer required for forestry by replanting in native forest.

### **Wāhi Tapu**

Rereahu RMC is concerned to ensure that none of its wāhi tapu are further damaged or desecrated through the activities of farmers, foresters and others. Ngāti Rereahu currently assists some foresters to identify and protect wāhi tapu within forests. Rereahu RMC would like to see this practice become a standard part of all environmentally based activities in the Rereahu territory, which includes farming (another activity in which iwi and hapū are involved).

Iwi and hapū members within Rereahu also work closely with DOC to ensure that the conservation estate is properly managed.

Pureora Forest is home to a number of rongoā (medicinal plants), endangered native species of bird and insects, as well as containing a myriad of sites of historical and cultural importance.

## Consultation and Tribal Management

Rereahu RMC recognises that commercial activity is an important part of our society and participates in these activities through iwi and hapū farming, forestry and abattoir interests. However, commercial activities and sound environmental practice are not mutually exclusive and Rereahu is committed to improving the natural environment. They have occupied the region for many centuries and will do so for many more, so to Rereahu the natural environment is the food cupboard of the iwi. As it becomes denigrated and depleted, their iwi and hapū are adversely affected.

The current threats to the region are goats, deer, possum, wild pines, rats, farm livestock, logging and land development.



### Tuhua Hikurangi Regional Management Committee

The Tuhua Hikurangi RMC has been heavily involved in environmental matters and has established an office and dedicated team within Taumarunui. The RMC also plans to develop a hapū management plan for the Tuhua Hikurangi area.

Relationships with local and regional authorities are generally good, although resource consent processes sometimes overlook consultation with tangata whenua. The RMC is supported by a strong team of dedicated people.

Some of the issues the Tuhua Hikurangi RMC is currently dealing with include:

- ✓ Waste water from washing cattle transport leaching into ground water,
- ✓ Dead sheep being buried below groundwater, and
- ✓ Metal being extracted from the river, potentially changing the course of the river.

### Awa me Ngā Manga

The Tuhua Hikurangi region includes a number of rivers and tributaries including:

- ✓ Ongarue
- ✓ Taringamotu
- ✓ Okahukura
- ✓ Uepango
- ✓ Paratau
- ✓ Mangakahu
- ✓ Kahikatea
- ✓ Waihuka
- ✓ Waione
- ✓ Mangatukituki
- ✓ Waikoura
- ✓ Ohura
- ✓ Wairere

The loss of ngāhere (forest) along the banks of the streams and rivers has affected the quality of the waterways as traditional sources of food for the hapū within the area. The Ongarue River was once resplendent with kaio (fresh water mussels). However, the native forest has been stripped the length of the river resulting in an increase in silt and farm run-off.

The water levels of the river are also being affected by the activities of power generation. This causes changes in the water levels. As water levels drop, kaio are exposed and die. In addition to being an important traditional food source, kaio filter water and can flush up to 900 litres of water per day. The hapū are concerned about the risk to stock levels of kaio.

The Ohura River also suffers from pollution from septic tanks that overflow into the river during periods of flood. The food sources that are affected by the pollution of the rivers include:

- ✓ Tuna (eels)
- ✓ Watercress
- ✓ Kaio
- ✓ Crayfish (waitaonga).

## Ngāhere

The recent national epidemic of ti kouka (cabbage tree) disease took its toll on traditional stands of ti kouka in the Tuhua Hikurangi region.

Predators such as goats, pigs, possums, rats, stoats and deer continue to pose a significant threat to the ngāhere (forest). 1080 drops have been successful in knocking back predator numbers, and while having an adverse impact on bird life in the short term, in the long term the RMC has noticed an overall increase in bird life. In the future, the RMC would like to see the 1080 drops followed up with a programme of controlled maintenance.

Bait stations are not favoured. The first animal to the bait station eats most of the bait and dies a short distance from the station. Other animals feed on the carcass and they too travel before dying. Poisoned animals can die in or close to waterways.

The RMC would like to see a clearer definition of boundaries between local and regional authorities. A forest area of 1,200 acres was excluded from the 1080 eradication programme due to unclear boundaries when the remaining ends of the forest were poisoned. As a result sensible animals would have sheltered in the middle!

Weta populations have reduced as manuka stands have been cut.

The hapū of Tuhua Hikurangi would like to ensure that the upper reaches of the Pureora Forest region are protected. Any negative impacts in this area will have downstream effects on the Tuhua Hikurangi region. Of recent concern is the illegal bulldozing of roads into Pureora Forest.

## Manu

There are still fair numbers of kereru (native pigeon) and tui in the Tuhua Hikurangi ngāhere. However the RMC suspects illegal poaching in large numbers is threatening the kereru population.

There have been no recent surveys of kiwi numbers and no kaka sighted in recent years. Numbers of ruru and kawau have noticeably reduced. Kawau were once seen on every branch in every willow tree along the river banks but are now only occasionally seen. There is also a greater number of introduced bird species in the area.

As a result of the 1080 eradication programme hapū members worked closely with members of the Forest and Bird Society to monitor the impacts of the poisoning. This assisted hapū members to learn more about the health and habitats of the bird and plant life and one hapū member has used this knowledge to run an eco-tourism programme.

## Maunga

The maunga of the Tuhua Hikurangi region include:

- ✓ Tuhua
- ✓ Hikurangi
- ✓ Pukepoto
- ✓ Ngariha
- ✓ Turanga
- ✓ Kawakawa
- ✓ Te Wairere
- ✓ Nga Puhi
- ✓ Tihikorerorero
- ✓ Tutewehi
- ✓ Paratau.

One of the main issues for the RMC in relation to maunga in Tuhua Hikurangi is the erection of telecommunications towers on the hills within their region. The RMC would like to know the impacts of having these towers on these sites.

## Wetlands

The drainage of wetlands for dairy farming has resulted in a decreasing number of habitats for wetland birds. Changing the landscape in this manner not only affects the wetland but also has impacts on life in streams and on saltwater tributaries. For example, native frogs and lizard's numbers have dropped off due to the change in the environment.

## Main Environmental Risks

The main threats to the environment in the Tuhua Hikurangi region are:

- ✓ Dairy farm run-off,
- ✓ Predators such as goats, pigs, possums, rats, stoats, and deer, and
- ✓ The drainage of wetlands.

## Whānau Strategies

The Tuhua Hikurangi RMC urges whānau to look after remaining food sources and prevent them from becoming polluted. An important part of this is to ensure that the tuna are able to thrive by monitoring the state of the rivers and streams. Whānau are also encouraged to plant and look after harakeke as it is an important plant for filtering pollutants.



## Hauauru ki Uta Regional Management Committee

Hauauru ki Uta includes Hauturu, Kinohaku, Taharoa, Waitomo, Marokopa, Kiritehere, Te Anga, and Hangatiki.

This region is characterised by its limestone and karst formations with significant international and national attention given to the caves in the Waitomo area, which resides in Hauauru ki Uta. The Hauauru ki Uta region therefore contains one of the most significant areas of karst in the country and is of national importance due to its ecological and eco-tourism value.

The iwi and hapū of Hauauru ki Uta have made significant forced contributions to the enjoyment of tourists and conservationists through the legislated loss of their lands and natural features. One of the first Treaty of Waitangi claims to be settled by the Crown was compensation for the taking of the glowworm and other tourist caves, which had provided significant profit to the Crown over many years.

### Te Rohe

There are over 8kms of underground passages, with disappearing streams and rivers, natural bridges, tomo, and rocky outcrops. There are some 28 significant cave systems in the region, many of which are historic burial sites. The Waitomo region is of course world famous for its colonies of glowworms. The Waitomo Caves area alone comprises of approximately 300 caves systems.

The Hauturu area is home to kokako, kaka, kiwi, and the rare karearea falcon, brown teal and long tailed bats. There are historic Māori rock drawings, pingao, and DOC has recorded a rare fungus in the Awaroa scenic reserve.

The Waipuna region contains raupo swamps and wetlands and is home to many wetland animals.

Hauauru ki Uta rohe includes the Ruakuri reserve which shelters karearea, long tailed bats, pa and burial sites, and the Uekaha reserve, which covers Owhawhe maunga and stretches towards the historic Pohatui whare wananga.

The Waitomo glowworm caves reserve, now reverted to Ruapuha-Uekaha hapū ownership and partly administered by DOC, contains the Hikitikiora Pa site. Further eastward is the Opapaka pa site.

The Marokopa sand dunes contain wāhi tapu significant to our histories. Hapū in the Marokopa area have been implementing protection measures for wāhi tapu along the beach including protecting burial sites in the sand dunes from erosion and public traffic. They have also been active in trying to protect food gathering sea beds from recreational destruction.

### Karst

Hauauru ki Uta RMC is concerned about the damage that has been caused to the caves of its regions through tourism, wild caving and so-called conservation. Caving and "exploration" activities have damaged and destroyed century-old formations.

Farming activities have seen tomo and caves used as rubbish dumps and land excavation and quarrying have seen them destroyed or damaged. Water pollution and silting has resulted in a noticeable decline in cave life.

Caves are a significant feature of tribal custom. They were used as dwelling places, burial places, and corridors for travel. The iwi and hapū of Hauauru ki Uta RMC have had to remove ancestral remains and taonga from caves as a result of the threat posed to them from tourism and developers.

Hauauru RMC considers all caves to be worthy of protection and tourism should only be undertaken where protective measures are in place to ensure that the cave and karst are not adversely affected. The amount of underground traffic is high and increasing in the Hauauru ki Uta region. Protective measures are hard to implement in areas where activities are hidden. Hauauru RMC would like to have an active role in monitoring the protection of all karst related activities.

## Environmental Features

The environmental features of the Hauauru ki Uta region include:

- ✓ Glowworms and cave wetas,
- ✓ Swamp karst,
- ✓ Iron sands,
- ✓ Fossil sites, including Moa bone and egg sites,
- ✓ Native bat habitats,
- ✓ The Marokopa Estuary, including 12 Species of coastal and wading birds such as the threatened reef heron, banded rail, NZ dotterel and Caspian tern,
- ✓ Sightings of Hector's dolphins along the Marokopa and Taharoa coastline,
- ✓ New Zealand Fur Seals at Albatross Point,
- ✓ Serpentine (polymorph rock),
- ✓ Limestone, and
- ✓ Coastline.

## Threats

Threats to Hauauru ki Uta are:

- ✓ Soil erosion,
- ✓ Siltation,
- ✓ Uncontrolled caving practice,
- ✓ Flooding, and
- ✓ Landslips.

The natural infilling of estuaries with sediment has accelerated because of land clearance in surrounding catchments.

During the 1970's and 1980's, damage from siltation threatened the ecology of the Waitomo glow worm caves. In order to combat this, 300 hectares of grazing pasture has since been planted in production trees. As a result the sediment load in the Waitomo stream has dropped 60%; water quality has improved, and there is increased stock shelter and shade.



## Mōkau ki Runga Regional Management Committee

### Environmental Features

The environmental features of Mōkau ki Runga include:

- ✓ Mapara Wildlife Reserve Colonies of kokako at Te Mapara,
- ✓ Mahoenui giant weta,
- ✓ The Mōkau river and estuary, including 15 wetland bird species such as the threatened reef heron, NZ dotterel and rare variable oystercatcher,
- ✓ Sightings of Hector's dolphins,
- ✓ Mōkau, the landing site of Tainui waka and home of Te Haika o Tainui (Tainui canoe anchor stone),
- ✓ The Awakino river, a well known white baiting area,
- ✓ Serpentine, and
- ✓ Wairere Rosenhahnite, the only known occurrence of rosenhahnite in New Zealand.

### Water quality

Mōkau ki Runga RMC has significant concerns about the state of the waterways in its region and has accorded a high priority to improving water quality. There are instances of effluent being discharged into the rivers and streams either as direct discharges from effluent ponds or from land irrigation. Trucks have also released effluent tanks onto roadsides close to the Mōkau River and streams. Mōkau ki Runga will not support the discharge of sewage into streams or onto land. An RMC member reported the exposure of a tomo in a Pio Pio backyard through the sinking of land. The tomo dropped to an underground stream that reeked of sewage. There are also known instances of farmers' domestic sewage overflow being diverted from septic tanks into the river. Mōkau ki Runga is concerned that all its waterways are polluted with sewage.

### Dams

Dams on the Mōkau River are artificial barriers to the natural progression of eels and in particular elvers from the river mouth to the riverheads. Mōkau ki Runga have been working to see that dams on the Mōkau River provide for the up-stream movement of its eels.

### Erosion

Rivers and streams are suffering from the erosion and silting effects of land clearing for farming and clear felling of forests. Mōkau ki Runga considers that a 30-metre riparian strip along each side of the streams and rivers should be re-forested in native trees. This strip would reduce the effects of silting and erosion and would filter run-off from farms and forests.

### White baiting

White baiting is a popular activity on the Mōkau River. The Whitebait season runs for approximately three and a half months from August to November and whitebait stands are erected as permanent fixtures to the river on land that was taken for scenic purposes. Mōkau ki Runga requires whitebait stands to be erected at a distance greater than 100m apart and a provision of only one stand per family. Currently individuals can own several stands and trade access to them on a commercial basis.

Mōkau ki Runga considers that license holders should draw lots from an annual ballot for stands to avoid commercialised competition. License applications should also require the applicants to make provisions for the removal and disposal of their waste including excrement (e.g. portaloos). Furthermore resource consents to dig into the riverbed should be sought for the establishment of whitebait stands, which should involve consultation with tangata whenua.

Fishing from boats is permitted where the applicant has a disability. Mōkau ki Runga have observed that able-bodied persons have frequently exploited this provision and do not support having such a dispensation.

White baiters are also exploiting the conventions of fishing through the use of wings or extensions to sides of whitebait nets that guide all whitebait the breadth of the river into their nets. Mōkau ki Runga consider that there should be a provision to counter this.

The current designated whitebait period coincides with the beginning of the whitebait's journey up-river. This provides fishers on the lower river with an advantage. These fishers are able to catch significant proportions of the whitebait before they venture further up the river. Mōkau ki Runga RMC considers that the season should be delayed by two weeks to allow the first schools of whitebait to travel further up the river, giving all fishers along the river a fair opportunity.

### Air Quality

There are a number of quarries in the Mōkau ki Runga region that are located close to rivers, where waste water discharges into the river. The RMC is also concerned about the effects of diesel on air quality. There are a number of diesel engine trucks and machines in the district.

### Dumpsites

Almost all dumpsites in the Aria, Pio Pio and Mōkau area are sited close to rivers or streams. Mōkau ki Runga RMC is concerned about the polluting effects of the dumps leaching into waterways.

### 1080

The dropping of 1080 poison is another source of pollution in the area, with particular affect on the water life. The RMC reports that unless the area where mixing occurs is sprayed to kill the grass, 1080 is readily taken up by the grass and can kill grazing stock. This belies the current belief that 1080 is quickly dispersed by rain.

### Roading

Road and access ways to landlocked blocks are another key concern of Mōkau ki Runga. Māori landowners are often disadvantaged through not having access to their land. Roothing has generally been developed to meet the needs of non-Māori landowners. Street run-off is in many cases diverted onto Māori land blocks, bringing with it rubbish.

### Wetlands

Mōkau ki Runga would like to see provisions being made for the retention and protection of wetlands.

Wetlands provide an important habitat for eels and kokopu (native trout), and are progressively being destroyed through the efforts of landowners to drain the wetlands and convert them to pasture.

### Culverts

Mōkau ki Runga will seek to have open tops on any culverts installed in its area. This will reduce the dangers associated with children being swept into culverts. Similarly the covers to offal pits should be well secured to reduce the dangers to children.

### Wāhi Tapu

Another concern for the RMC is the protection of numerous wāhi tapu sites. These include burial caves, urupa, pa, and puna-wai (springs). The RMC aims to achieve this by being consulted on all resource consent matters to ensure that these areas are not interfered with.



### Te Nehenehenui Regional Management Committee

The Nehenehenui region contains stands of Kahikatea forest and raupō reed lands at Ruahoanga. Moa bones, long tail bats and king ferns are found at Te Raumauku. Burial caves are located at Mangamahoe, and native fish in many of the tributaries in the region. Whios, kaka, bats and native frogs are found at Mangatutu. Ranginui is home to many historic sites, and other sites of significance to Maniapoto abound throughout the Nehenehenui region.

The Nehenehenui RMC has been active in securing their environmental interests in the state of the Te Kawa Quarry and Tokanui Pa site.

Te Mauri o Maniapoto has also been active in the Nehenehenui region protecting the Waipa River from toxic discharges.

### Te Rohe

The Nehenehenui region includes:

- ✓ Orangiwhao volcanics,
- ✓ Te Kawa olivine basalt lava,
- ✓ The last phases of Waipa River,
- ✓ Kokako in the Rangitoto range,
- ✓ The Te Kawa swamp, which has now disappeared because it was drained to make way for farm animals and as a result killed off many wetland plants and animals,
- ✓ Kakepuku maunga,
- ✓ Te Kawa maunga,
- ✓ Mangatoatoa,
- ✓ Otorohanga, and
- ✓ Puniu River.

## Ngāti Unu

The following information was submitted by Ngāti Unu who reside within the Nehenehenui RMC. This hapū would like to see the following environmental initiatives progress.

- ✓ Riparian strip on flat below Unu beside Waipa river.
- ✓ Plants and trees on our banks alongside Waipa River to stop erosion.
- ✓ Return of river authorities to monitor river condition on more regular basis.
- ✓ Return of flora and fauna.
- ✓ Return of eel life, freshwater crayfish and other marine life.
- ✓ Return of the river's health so that we can once again enjoy its benefits NOW.
- ✓ Retire farmland further down the river so that the river bed no longer will continue to rise, and our land is no longer flooded and lost also to the river.
- ✓ Re look at rates and the land lost to the river and information on the amount of land that has been lost and then a reduction in the rates paid for land no longer there.
- ✓ Better monitoring of farms that have not fenced their stock from using the river.
- ✓ A full on all out assault on restoring the health of the river, more resources, money thrown at it, and no more reports. Act now!



### Te Tokanga Nui a Noho Regional Management Committee

#### Awa me ngā Manga

The quality of the water in rivers and streams that pass through the Te Tokanganui a Noho region is of paramount concern to Te Tokanganui a Noho RMC. The Mangaokewa stream has two meat works, two mills, a rubbish dump and an oxidation pond located on or near its banks.

The Te Tokanganui RMC reports that as a result of pollution to the waters, the local hapū can no longer allow their children to swim in the stream, or their families to catch eels from the stream for food.

The RMC would like to see Maniapoto involved in regular monitoring of the water quality throughout the rohe, and that persons with environmental expertise should undertake this testing and monitoring.

#### Sewerage Pond

Te Tokanganui a Noho RMC is particularly concerned about the discharge of sewerage into the streams and rivers that pass through its area. The Te Kūiti sewerage pond is located adjacent to the Mangaokewa stream and is more than likely to be affecting the water quality of the stream.

Te Tokanganui a Noho RMC and Te Mauri o Maniapoto have been meeting with the Waitomo and Otorohanga District Councils to encourage them to find options that will stop sewerage and other pollutants discharging directly or indirectly into Tokanganui a Noho waterways.

### Forestry

Te Tokanganui a Noho RMC is also concerned about the effects of forestry clear felling on streams and rivers. The RMC recommends that foresters be required to either plant a permanent strip or border along streams, or to leave existing trees as a border along streams and rivers, that is, they should not fell trees close to these waterways, but leave them standing as a protective strip.

### Quarrying

There are a number of quarries in the Te Tokanganui a Noho region, all located close to streams or rivers. Te Tokanganui a Noho RMC is concerned about the effect that these quarries have on the water quality. A retired quarry is now the site of the new waste disposal station and dump.

### Wāhi Tapu

Te Tokanganui a Noho RMC is mindful of the importance of protecting wāhi tapu, not only to protect tribal interests but also to protect non-Māori from unknowingly transgressing the tapu of sacred sites. Such acts can result in negative consequences for those desecrating wāhi tapu and the RMC would prefer to see all such sites adequately protected.

### Farming

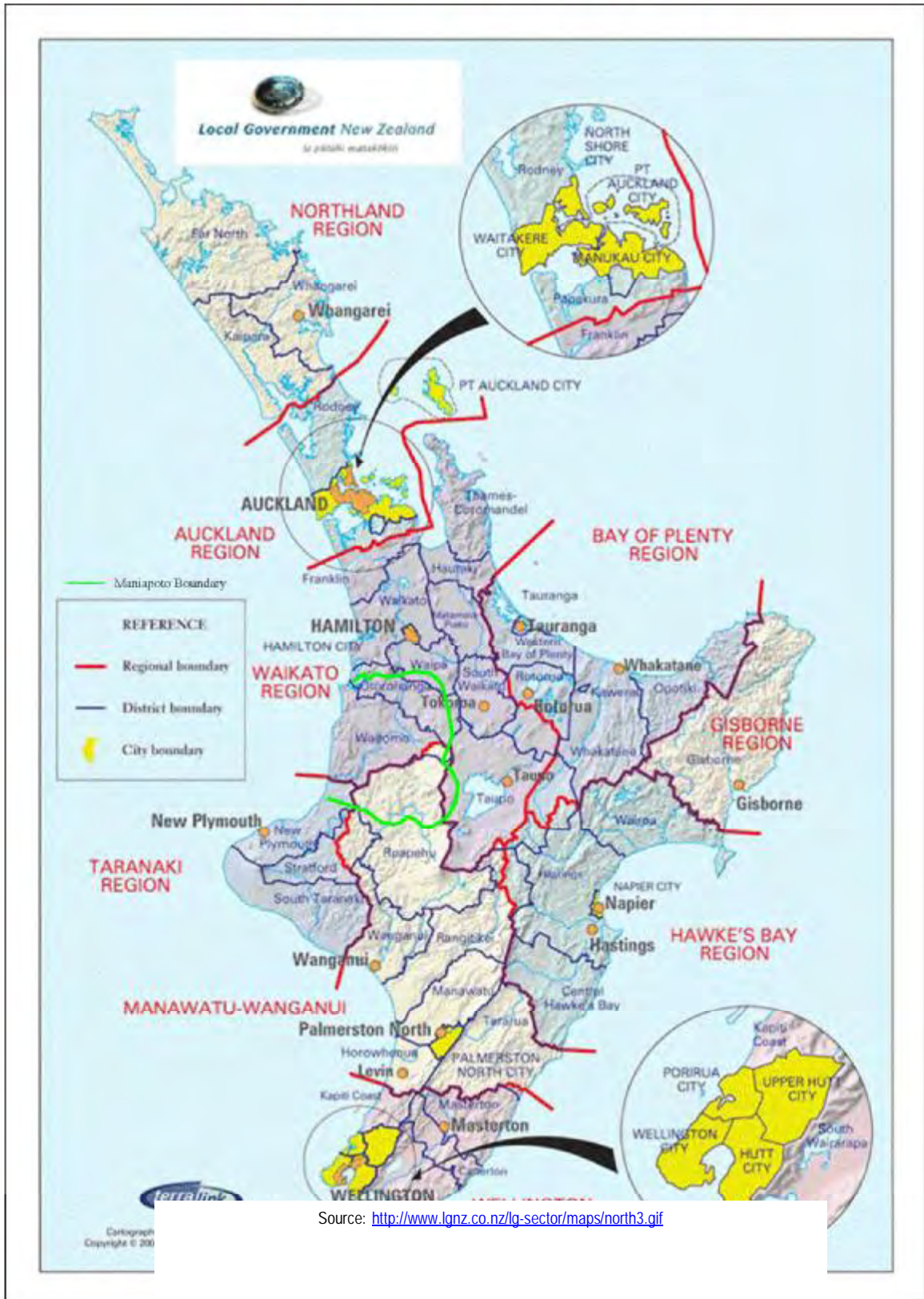
In many areas along the coastline, land is cleared and farmed to the waters edge. This results in run-off from the farms polluting the coastline. Te Tokanganui a Noho RMC recommends that farmers be encouraged to grow a protective strip along the coastline. The RMC acknowledges that this may be difficult to achieve, as farmers will see this as a loss of productive land but the RMC suggests that incentives such as rate relief and education on environmental values may assist.

## 9. REGIONAL AND LOCAL AUTHORITIES

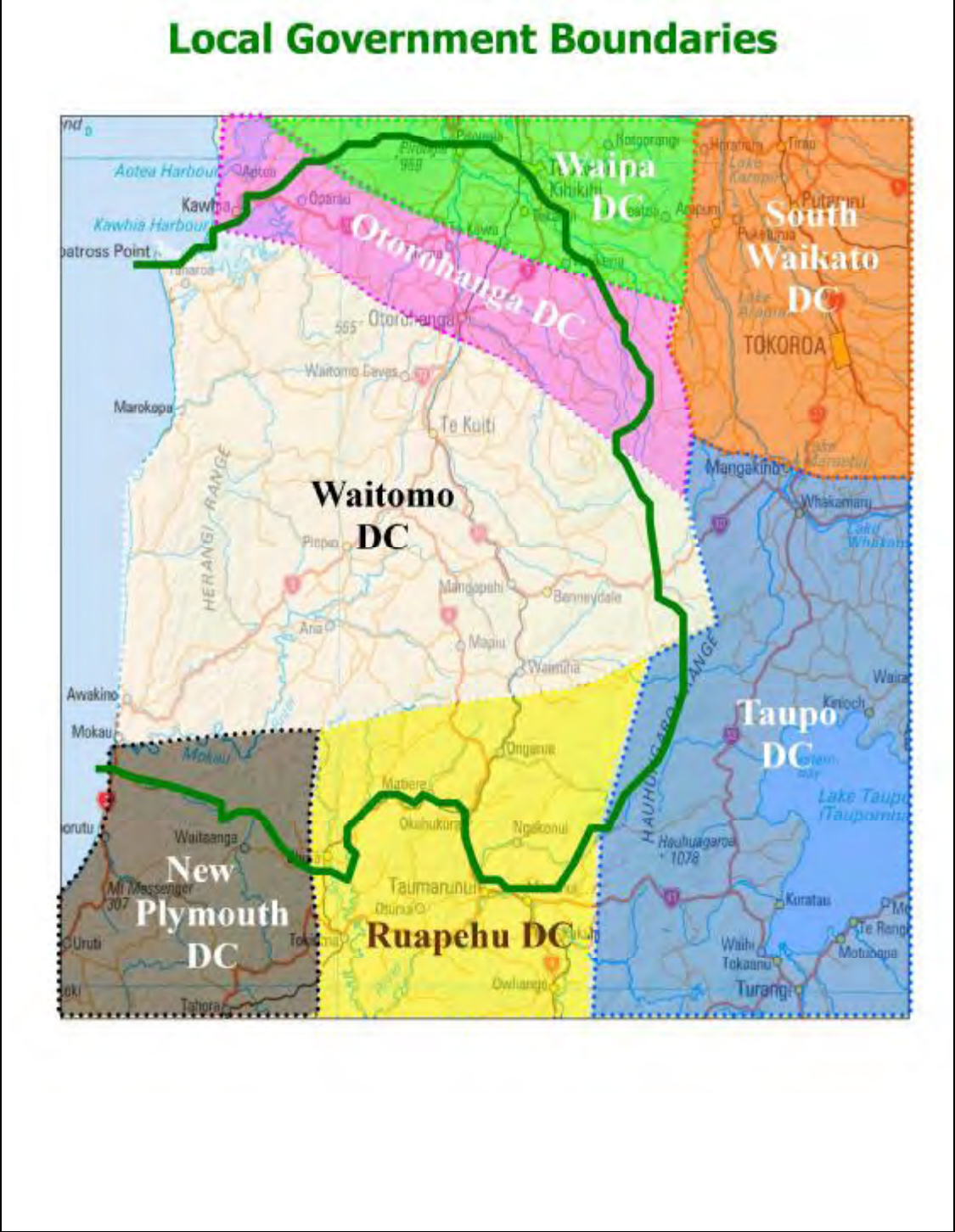
The following map outlines the regional authorities and how the Maniapoto tribal boundary crosses these. Maniapoto is part of the Waikato, Manawatu-Wanganui and Taranaki regions. Adding to this is the number of local government bodies that are included within the Maniapoto district. This is highlighted in the regional authorities map as well as the local government map with follow. Local authorities included in the Maniapoto boundary are:

- ✓ Waipa
- ✓ Otorohanga
- ✓ Waitomo
- ✓ Taupo
- ✓ Ruapehu and
- ✓ New Plymouth

# Regional Authorities



The following table highlights the local government territories within the Maniapoto tribal boundary.



Source: MMTB, <http://www.lgnz.co.nz/lg-sector/maps/>, © Terralink NZ Ltd

## 10. CONCLUSION

The Maniapoto Iwi Environmental Management Plan summarises the current state of the environment with the Maniapoto rohe, the issues and concerns Maniapoto have for their environment and sets some goals and objectives for the future. The plan is a tool to assist effective environmental decision making and practices. Environmental issues can no longer be ignored. The challenge is to change some of the practices of the past and the present and to set positive goals for the future. This will increase the potential for our children and grandchildren to inherit a healthy and safe environment.

Tēnā koutou katoa.



*A muri kia mau ki te kawau maro, whanake ake, whanake ake'*

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*Manatū Mō Te Taiao*

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