

NGĀTI HORI FRESHWATER RESOURCES MANAGEMENT PLAN



“OPERATION PATIKI”

2009/2012

**Ko Te Amorangi kia mua ko te hapai o ki muri te
tuturutanga mahi pono o te Maori Mana motuhake**

INTRODUCTION

Ma wai ra e Taurima

If not we then who?

1. Purpose and scope of this plan

This document presents Ngāti Hori's priorities and objectives in relation to freshwater. This document will play an important part in achieving our aspirations for freshwater in our Rohe. It provides a foundation for our planning for freshwater and represents a continuous process of management, from past to current times, of the Karamu Stream and its resources.

This plan is also designed in large part to influence the regional policy on freshwater and flows, including the Karamu Stream Enhancement Plan. It is hoped that the Hawkes Bay Regional Council will take this plan, and any other related future documents, into account when they are changing or making plans in relation to freshwater. In particular, we expect that this document and the plan that it envisions will be taken into consideration as Hawkes Bay Regional Council proceeds with its current Karamu Catchment Enhancement Plan.

Our plan is based around the following priorities of Ngāti Hori in freshwater:

- Achieving sufficient water flow
- Improving water quality
- Protection and restoration of traditional riparian vegetation
- Protection and restoration of fish and fish habitat

These priorities are based on Ngāti Hori's values in the Karamu stream. They were articulated through various hui held through 2008 and 2009 as well as a cultural mapping exercise and a customary fisheries survey undertaken by Ngāti Hori in partnership with fisheries biologist Ian Kusabs.

This plan is organised around these priorities and related issues. Each issue is then considered in relation to the desired outcomes that we are working towards as well as our plan for achieving these outcomes.

2. Whakapapa



ABOVE: Tanenuiarangi Pa, a fortified village in Hawke's Bay. Artist unknown, 1859?;
Alexander Turnbull Library, Wellington.

Te Tahatu ote Rangi belonged to Te Whatuiapiti of Poukawa and he was sent for to help defend Tanenuiarangi Pa. The Pakake of Tanenuiarangi Pa asked first for Te Rangikoianake the Tuakana of Te Tahatu ote Rangi but the Rangatira Manawakawa would not agree and sent Te Tahatu ote Rangi instead.

Defending Tanenuiarangi along with Te Tahatu ote Rangi were Te Tutura and Rangikamangungu. When Te Rangikoianake heard of this he rushed to assist his brother. Together they fought and defeated the war party. The name of the battle was called Whakamarino.

However Ngati Porou wanted to avenge their defeat and returned. Te Tahatu sent messengers to Kouturoa Pa and Motukumara Pa on Lake Oingo for reinforcements. Half the warriors returned to assist Te Tahatu ote Rangi at Tanenuiarangi. Ngati Porou attacked Motukumara first, killing all there, and then turned their attention on Tanenuiarangi.

The attack began by surrounding Tanenuiarangi but by night fall the attack failed. As well, they tried to burn down the Pa, tunnel under it and even attempted to pull down the pallisades with the help of waka. Every attempt to take the Pa failed.

In the war party was Te Ruruku who saw his daughter Hineioroia Te Rangi. She was married to Rangikamangungu's son. Te Ruruku sent his younger brother Meke and a party of warriors who landed their waka at Te Rae o Kore seeking a peace. An Adze was exchanged by Rangikaunuhia giving this to Meke calling a truce and averting bloodshed. Meke took his canoe then went on to the ford at Ihanganui turned around and returned to their Kainga.



Kohupatiki, 16 Hui-tanguru, 2012

Kohupatiki was established in the 1860's by Te Waka Kawatini, who had no Heirs so invited his nephew Paora Totoro to join him. On November 18th, 1869 the Rotopounamu No 1. block was Crown-granted to the following five grantees: Paora Totoro, Te Waka Kawatini, Tamehana Pekapeka, Tareha Te Moananui and Ahere Te Koare. Ahere Te Koare having no issue saw his title inherited by his grand neice Ngamihi Te Kehu Chadwick who repatriated from Taumarunui Tuwharetoa. Her grandmother Te Hoerakau had been taken captive during the musket wars of 1824 at the battle of Te Pakake Ahuriri.

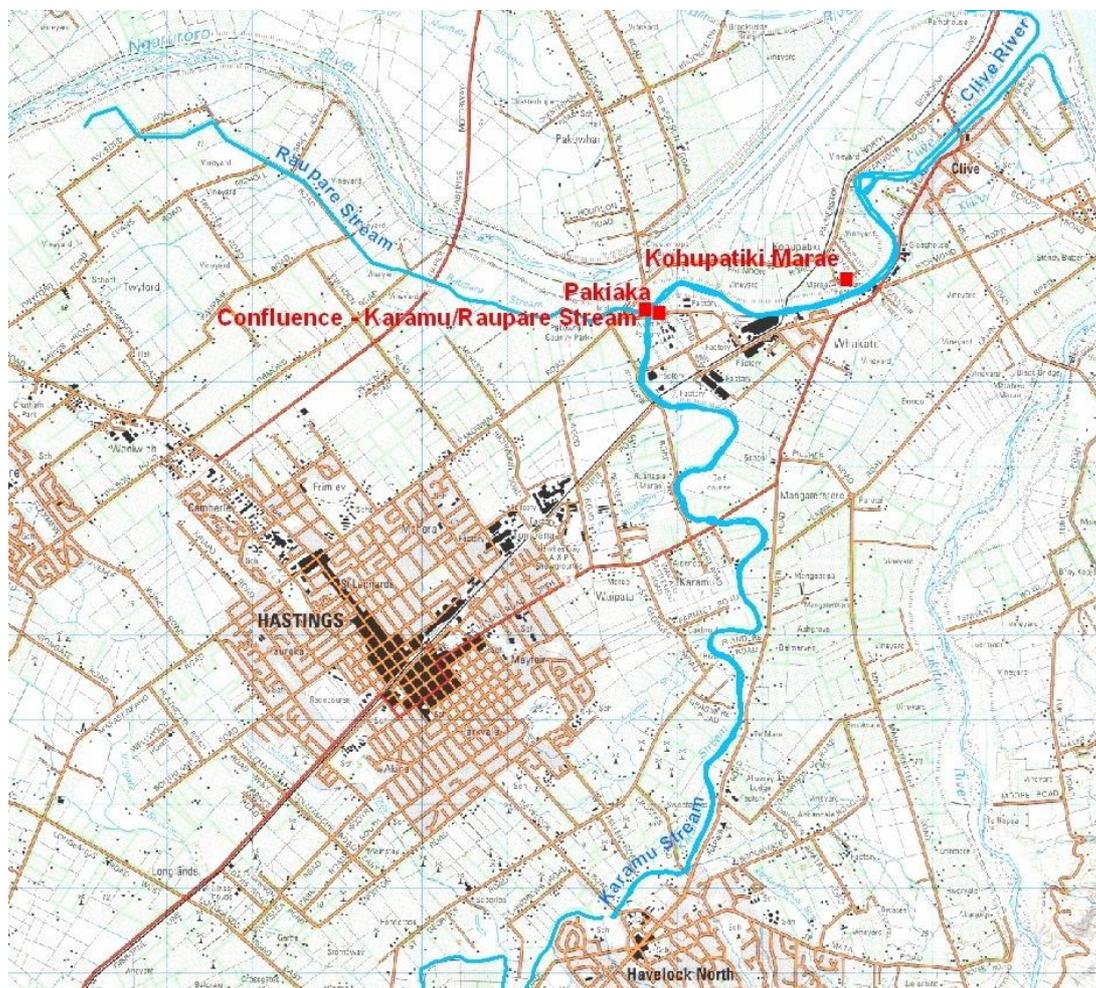


Kohupatiki, Riparian strip, 14 Mahuru, 2010

3. Kohupatiki

Ngāti Hori is a hapū of Ngāti Kahungunu ki Heretaunga. Ngāti Hori ki Kohupatiki are kaitiaki of the lower Karamu Stream and have a close historic and traditional relationship with the Karamu and the former course of the Ngaruroro River. The Ngaruroro, was very much part of daily life for Ngāti Hori ki Kohupatiki and provided an abundant source of mahinga kai (wild food resources such as fish, waterfowl and plants). The importance of the Ngaruroro River to Ngāti Hori is reflected in the location of Kohupatiki Marae which is situated on the true left bank of the lower Karamu Stream.

This plan covers from the river's mouth to where the Karamu Stream flows past Kohupatiki up to Pakowhai the beginning of the Raupare stream.



4. Policy and legal context

This plan for the management of our freshwater is related to the current Heretaunga-Tamatea Treaty of Waitangi claim and the Hawkes Bay Regional Council's Karamu Stream Enhancement Project that was in its early stages of implementation during the drafting of this plan.

The Hawke's Bay Regional Council's Stream Enhancement Project is a comprehensive enhancement programme for the Karamu catchment that aims to eventually improve water quality and fisheries values in the lower Karamu Stream. This programme includes riparian planting, restricted stock access to the riparian margins, enhanced public access, screening of industry and development of wetlands for stormwater treatment and enhancement of mahinga kai species (such as plantings for inanga spawning). Under the current strategy for enhancement of the Karamu Stream, Maori values are provided for under the generic category of "Amenity" values. This is of primary concern to Ngāti Hori because their cultural values are not necessarily in line with other amenity values such as "beauty" and "landscape" values nor are they fully encompassed within the notion of amenity values. This plan then will assist us to realise our unique cultural values within the larger social-ecological system of the Karamu Stream.

Resource managers are obliged under Part II of the Resource Management Act 1991 in their exercise of functions and powers under the RMA to recognize and provide for matters of national importance including "the relationship of Maori and their cultures and traditions with their ancestral lands, water, sites, wahi tapu and other toanga" (s.6). Under section 7, decision makers must have particular regard to certain other matters in carrying out the purpose of the Act. These matters include kaitiakitanga (section 7(a)). Kaitiakitanga is defined in the Act as the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori. Section 8 provides that in achieving the purpose of the Act, all persons exercising functions and powers under it, in relation to managing the use, development and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi.

5. Strategy for achieving recognition of this Plan

Operation Patiki will be driven by a working group that will meet on a bi-monthly basis. This plan will also be lodged with the Hawkes Bay Regional Council and will include Consultation Guidelines to assist people when consulting with Ngāti Hori ki Kohupatiki on this plan and other matters.

PRIORITY 1

- Achieving sufficient water flow

The Karamu Stream is a low gradient waterway that drains a catchment area of 490 km². The Karamu flows through Havelock North and the small townships of Whakatu and Clive before entering an estuarine river mouth which it shares with the Tutaekuri and Ngaruroro rivers. The current Karamu Stream was once a former course of the Ngaruroro River, until 1867 when a large flood changed the course of the river. Flooding of the productive, southern area of the Heretaunga Plains has been an issue since the time of settlement, and in 1969, as part of the Heretaunga Plains Flood Protection scheme, the Ngaruroro River was diverted to the north, leaving the Karamu and Raupare streams to feed the lower Karamu Stream or as it also known the Clive River.

The diversion of the Ngaruroro River in 1969 dramatically altered the lower Karamu Stream, that is, from the Karamu/Raupare confluence downstream to its mouth at Waitangi Estuary. Prior to the diversion this section was dominated by the Ngaruroro River – a large, rapid-flow river, with high water quality and a gravel bed substrate. This change of flow regime, in conjunction with substantial landuse changes in the Karamu Stream catchment has increased the volume of nutrients, sediments and pollutants entering this section of the Karamu Stream. Without the flushing ability of the Ngaruroro River, this section of river has become a soft-bottomed channel, lacking the riffle and pools previously associated with it. Moreover, the diversion has resulted in a reduction in the dilution properties of the Karamu Stream and increased the concentration of nutrients and pollutants. A new river ecosystem, including fisheries values, has evolved in response to these changes.

In 2008, when Ngāti Hori conducted a fisheries survey of the Karamu Stream, it flowed at a moderate velocity over a predominantly gravel and sand stream bed substrate. In the middle and lower sites, the river flowed slowly over a mud and sand stream bed with few pools. The Hawkes Bay Regional Council extracts gravel at random times and locations, which further destroys the systems supported by the Karamu Stream.

Ngāti Hori's values in the Karamu Stream, especially in relation to customary fisheries, depend on the restoration of minimal flow levels that have largely been destroyed due to the extensive historic river diversion. Flow levels in the Karamu Stream are thus of primary importance to Ngāti Hori's role as kaitiaki of the area and the species once well supported by the stream system. The futures of both the Karamu Stream and the values it provides for are uncertain. This is because the Karamu Stream continues to be viewed and treated as a flood channel and the long term plan of the Hawkes Bay Regional Council is to increase protection against floods through the widening of the Karamu Stream where it passes by Kohupatiki marae. As this will potentially result in even lower water flows and greatly alter the riverbank even further, these plans directly conflict with Ngāti Hori's aspirations for the long-term management of the Karamu Stream and the species it supports.

Issues

1.1 The Hawkes Bay Regional Council plans for widening the Karamu Stream directly conflict with Ngāti Hori's aspirations for the long-term management of the Karamu Stream and the species it supports.

Outcome: *Influence Hawkes Bay Regional Council plans for widening the Karamu Stream.*

Method	Actions	Timeframe	Authority
1. Information stocktake of all past, current and future actions of the Hawkes Bay Regional Council for the management of the Karamu water flows.	1. Get access to any HBRC's engineering reports	Ongoing	TM, AP
	2. Read HBRC's Karamu Enhancement Plan	Ongoing	NH
	3. Attend all HBRC consultations on the Karamu Stream	Ongoing	NH
2. Find ways that Operation Patiki can influence plans for widening the Karamu Stream.	1. Identify contacts in HBRC in relevant areas	Ongoing	TM, AP
	2. Take HBRC staff, engineers and mayor on river	Jan/Feb 2010	TM
	3. Find data on past state of Karamu and past management	Jan-March 2010	AP
	4. Building on cultural mapping exercise from 2008 and database to gain data on past state of Karamu & how values and ways of using have changed	Jan 2010	NH
	5. Work with HBRC to come up with solutions	Ongoing	NH

1.2 Management of the Karamu Stream has created a change of flow regime that, in conjunction with substantial landuse changes, has destroyed the flushing ability of the river. In the past the water flowed rapidly and the bottom was made of gravel bed substrate. The Karamu has now become a soft-bottomed channel that is choked with weeds.

Outcome: *Restore the bottom of the river to shingle to create a steady flow.*

Method	Actions	Timeframe	Authority
1. Dredge/Digger to clear the bottom.	1. Identify contacts in HBRC in relevant area	Ongoing	TM, AP
	2. Take HBRC staff, engineers and mayor on river	Jan/Feb 2010	TM
	3. Find data on how dredging was done in the past	Jan-March 2010	TM
	4. Approach other groups for support for this method	Ongoing	NH
	5. Exert political pressure	Ongoing	NH
	6. Find culturally appropriate diggers for sections with wahi tapu sites	Jan-March 2010	TM, MM, AP
2. Pump water in periodically	1. Identify contacts in HBRC in relevant area	Ongoing	TM, AP
	2. Take HBRC staff, engineers and mayor on river	Jan/Feb 2010	TM
	3. Find data on how this could be achieved	Jan-March 2010	TM
	4. Approach other groups for support for this method	Ongoing	NH
	5. Exert political pressure	Ongoing	NH
3. Clear the silt.	1. Identify contacts in HBRC in relevant area	Ongoing	TM, AP
	2. Take HBRC staff, engineers and mayor on river	Jan/Feb 2010	TM
	3. Find data on how this could be achieved	Jan-March 2010	TM
	4. Approach other groups for support for this method	Ongoing	NH
	5. Exert political pressure	Ongoing	NH

PRIORITY 2

- Improving water quality

Explanation

There are many contributing factors to the increasingly poor water quality in the Karamu Stream. The Karamu Stream catchment includes the urban and industrial areas of Hastings, Havelock North, Whakatu and Clive. There are a range of different land uses in the area including Kohupatiki Marae, residential housing at Whakatu, orchards and heavy industry.

Ngāti Hori is concerned about the potential for stormwater run off from urban, roads and industrial areas that may contain contaminants such as heavy metals (arsenic, cadmium, chromium, copper, lead mercury, nickel and zinc) and hydrocarbons. Additionally, in the area many crops are treated repeatedly with herbicides, insecticides, fungicides and other chemicals. There is also a long history of significant discharge of contaminants by industry. The cumulative discharge of such chemicals when combined with elevated amounts of sediment and nutrients can result in an overall degradation of fisheries and aquatic values. These contaminants are not only toxic to fish but also have the potential to accumulate in the environment and food chain.

Another effect is the build up of nutrients (such as animal waste, fertiliser and industrial discharge) that is causing eutrophication in the Karamu which leads to abundant growths of aquatic macrophytes (aquatic plants that grow in or near water and are either emergent, submergent, or floating) and algae. A recent fisheries survey by Ian Kusabs revealed dense aquatic macrophytes beds, comprised mainly of *Potamogeton crispus*, present at all sites, while the marginal aquatic plant, *Apium nodiflorum* or water celery, proliferates in the upper site. Suspended sediments and weeds also make it difficult for fish to visually find food.

Industrial development on the margins of the Karamu has the potential to further decrease the water quality, thus adversely effecting the environment. Despite iwi and hapū resistance in the area, new zoning for industry continues and Maori remain unable to significantly influence council's decisions in this regard.



Issues

2.1 Industry continues to discharge into the Karamu, both through permitted and non-permitted discharges, which negatively affects water quality.

Outcome: *Less contaminants discharged into the Karamu by industry.*

Method	Actions	Timeframe	Authority
1. Develop a monitoring plan for water quality	1. Get training for water quality monitoring	Completed	
	2. Identify sites for monitoring.	Completed	Based on Ian Kusab's report
	3. Identify team and establish a monitoring plan.	Early 2010	NH
	4. Investigate culturally relevant ways of monitoring alongside scientific measures (ie. Cultural Health Index)	Ongoing	NH
	5. Develop baseline data with regular monitoring (ie. weekly).	To be determined	NH
2. Investigate an opportunity to receive/use development levies for remedial projects to be undertaken by Ngāti Hori that could enhance the quality of the Karamu Stream	1. Approach HBRC to see where levies go	To be determined	
	2. Lobby HBRC to receive some of those levies	To be determined	
	3. Set up a structure and plan for dealing with levies received	To be determined	

PRIORITY 3

- Protection and restoration of traditional riparian vegetation

Explanation

One of the focus areas of the Karamu Stream Enhancement Plan is the re-vegetation of riparian zones. Riparian vegetation throughout the area is presently comprised mainly of pasture grasses and weeds with occasional groups of willow (*Salix spp.*) and poplar (*Populus spp.*) trees.

In the past these banks were abundant with native species such as flax, toetoe and cabbage tree. Overhanging vegetation provided natural habitat for fish species. The high light level now getting through to the stream increases the growth of aquatic weeds.

At present, native vegetation is extremely sparse and most native wetland species on the stream margins have either been grazed or sprayed out.

Contributing to the problem is that the course of the stream has been highly altered throughout the 1900s as a flood channel and for development purposes. Prior to development, it would have had a greater variation of depth and width, and wetland areas would have formed as the stream shifted after floods. Now, however, the streams course is mostly uniform and it lacks the natural pools, riffles and runs that would have in the past provided in-stream habitat.



Issues

3.1 The destruction of natural vegetation along the Karamu Stream over the years means that there no longer is a filter system to prevent run-off nutrients from reaching the water and has destroyed much of the in-stream habitat for fish.

Outcome: *Increased natural vegetation for Karamu Stream along Kohupatiki Marae*

Method	Actions	Timeframe	Authority
1. Planting project for Kohupatiki Marae 2010-2011.	1. Define project boundaries	Completed	AP
	2. Identification of plant types and number	Completed	AP
	3. Site inspections of other groups	Completed	AP
	4. Memorandum of Understanding with Periodic Detention for maintenance	Completed	AP & MM
	5. Submit application for Department of Conservation funding	Completed	AP
	6. Community planting day (advertised & sausage sizzle)	Mid-2010	AP
2. Creating a long-term source of plants	1. Memorandum of Understanding with Mangateretere School	Ongoing	AP & MM
	2. Memorandum of Understanding with Chadwick Trust	Completed	MM
	3. Explore other sources of funding (Genesis Trust, community sponsorships)	Ongoing	NH

3.2 The destruction of natural vegetation along the Karamu Stream has decreased its natural beauty and impacts negatively on Ngāti Hori’s relationship to the Stream.

Method	Actions	Timeframe	Authority
1. Signal to Hawkes Bay Regional Council and wider community the rekindling of kaitiaki	1. Notify Maori standing committee of Hawkes Bay Regional Council of intention to submit this plan to regional council.	Jan 2010	AP
	2. Submit this plan to Maori standing committee of Hawkes Bay Regional Council.	March 2010	AP & MM
	3. Submit this plan to Hawkes Bay Regional Council.	March 2010	AP & MM



Kohupatiki, river bank riparian planting, 14 Mahuru, 2010

PRIORITY 4

- Protection and restoration of fish and fish habitat

Explanation

In September 2008, Ngāti Hori completed a fisheries survey with Ian Kusabs, a fisheries biologist, which recorded a diverse fish assemblage with 8 species of native freshwater fish: common bully, common smelt, goldfish, inanga, mosquito fish, shortfinned eel, torrentfish and yelloweyed mullet. The Karamu Stream also supports important customary and recreational fisheries for whitebait, eel, black flounder and yelloweyed mullet.

The diversion of the Ngaruroro in 1969, in conjunction with extensive land development in the Karamu Stream catchment, has created a new ecosystem in the lower Karamu. This ecosystem is characterised by a soft-bottomed channel, lacking riffles and pools and elevated concentrations of nutrients, pollutants, abundant growths of aquatic weeds and a fish community dominated by hardy, lowland fish species such as shortfinned eel, inanga and yelloweyed mullet. Fisheries values in the lower Karamu Stream have been adversely affected by these changes and other river channel and drainage works. It was recommended from the 2008 fisheries survey that Ngāti Hori implement a fisheries monitoring programme, based on traditional fishing methods, to monitor fisheries resources in the lower Karamu Stream. This will enable Ngāti Hori to establish baseline fisheries data and to monitor any future changes in the lower Karamu Stream fishery.

Issues

4.1 As tangata whenua, Ngāti Hori seeks to have increased powers of management for their fisheries.

Outcome: *Establishment of measures that will allow Ngati Hori to revitalize and protect fisheries and fish habitat in the Karamu Stream.*

Method	Actions	Timeframe	Authority
1. Explore which measures are appropriate, including rahui and maitaitai reserves.	1. Talk to people to gather necessary data.	Ongoing	AP, MM
	2. Decide on appropriate measures.	Ongoing	AP, MM
	3. Identify appropriate sites.	Ongoing	AP, TM, MM
	4. Prepare and submit application to relevant authority (ie. Ministry of Fisheries).	To be determined	
2. Implement a fisheries monitoring programme.	1. Seek funding to set up and implement a program.	Ongoing	All

CONSULTATION GUIDELINES

1. When consulting with Ngāti Hori ki Kohupatiki it is essential that in each matter the appropriate person or group from within the hapū is identified. The identity of this person is likely to vary from each matter and steps should be taken in each case to ensure that consultation is taking place with the appropriate person/groups.
2. Effective consultation is likely to take place over three face-to-face meetings. The first meeting will serve as a basic introduction of key persons and of the issue to be discussed. The second and third meetings will ensure that the hapū has had time to gather/discuss relevant data and has a full understanding of the issue.
3. In recognition of the daily commitments of hapū members, flexible times for meetings should be the norm and reflect the hapū's preference for early evening meetings.
4. Advance notification of consultation is required. This notification will be deemed adequate where it is given two weeks in advance and followed up with a reminder notice.
5. It should also be noted that meetings will be more meaningful where they are held on the marae though Ngāti Hori will be flexible with location of meetings.
6. It should also be noted that adequate consultation involves more than a committee of people around a table. Rather it requires that all key parties are brought to the table and given full information on the matter.
7. It is expected through the series of three meetings that both parties will compile data including a hard copy list of all contacts and make this available to each other.

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