

**THE RANGITIKEI RIVER, ITS TRIBUTARY  
WATERWAYS, AND OTHER TAIHAPE  
WATERWAYS**

**SCOPING REPORT**

**A report commissioned by Crown Forestry Rental Trust**

**David Alexander**

**February 2012**

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# **1 INTRODUCTION**

## **1.1 The author**

My name is DAVID JAMES ALEXANDER. I am an environmental and planning consultant, and historical researcher, of Auckland. I hold a BA (Honours) degree in Geography, and a MSc degree in Conservation.

From 1975 to 1987 I was a planner in the Department of Lands and Survey. This enabled me to gain a thorough understanding of land status matters, including the titles and ownership status of riverbeds. In 1987, after a short period working for the Department of Conservation, I established my own consultancy. The following year I prepared my first brief of evidence for the Waitangi Tribunal, which was hearing the Ngai Tahu claim. Since then I have prepared a number of other reports for claim hearings. I have prepared reports (and presented them as evidence in most cases) on the Ngati Rangiteaorere, Pouakani, Te Roroa, Whanganui-a-Orotu, Ngati Awa, Mohaka River, Ika Whenua Rivers, Turangi Township, Ngati Pahauwera, Hauraki, Muriwhenua, Rongowhakaata, Te Tau Ihu, Tuhoe, Central North Island, Tauranga, Northland, East Coast, Whanganui and Te Rohe Potae claims.

Reports I have prepared for the Whanganui-a-Orotu, Mohaka River, Ika Whenua Rivers, Northland and Whanganui claims have addressed waterways matters, while reports prepared for the Turangi Township claim have examined certain Crown activities associated with the Tongariro Power Development scheme.

## **1.2 Project brief**

This report was commissioned by the Crown Forestry Rental Trust as part of the Taihape inquiry technical research programme. As a scoping report, its purpose is to identify what issues to do with rivers and waterways are likely to be relevant to a Waitangi Tribunal inquiry for the Taihape Inquiry District, whether further research (beyond what is included in this report) would be beneficial, and if so what that further research might require in terms of skills and resources.

Some issues of potential relevance were identified in the project brief. These are:

- Customary use and significance of the Rangitikei River, tributaries and the other relevant rivers.
- European settlement and the expansion of the economic and farming frontier, including the impact of extractive industries, as these affected the Rangitikei River its tributaries and the other relevant rivers.
- Post-colonisation impacts on the river system and tributaries (aggradation, erosion, water quality, physical changes in river beds, gravel extraction, etc.) and the impact of any changes on Maori communities.
- ‘Water-take’ issues, such as the water diversion from the Moawhango River for the Tongariro River Hydro Scheme, and any irrigation schemes identified, such as the Erewhon Rural Water Scheme.
- Issues of ownership of the bed of the river – the *ad medium filum* rule – and the impact, if any, of the Coalmines Act Amendment Act. (These matters receive coverage in the Whanganui River Report.)
- The impact of local government management and control of the Rangitikei River, tributaries and the other relevant rivers including water quality issues (general pollution, industrial and urban waste discharges, dairy farm run-off, swamp drainage impact on water quality, etc.).
- The nature and extent of flood control activities (stop banks, river-straightening, diversions, removal of eel weirs etc.) along the Rangitikei River, tributaries and the other relevant rivers, and the impact of these on Maori land owners and Maori communities.
- The impact of acclimatisation activities and the introduction of exotic species of fish into the River system, including Maori consultation and involvement with this, as well as identifying the exotic fish management regimes in place.
- The present health or condition of the Rangitikei River.
- An overall focus on the recognition by central or local government, if any, of Maori environmental cultural practices along the Rangitikei River.
- Mana Wahine: any issues relating to Mana Wahine will be considered throughout the brief when evaluating the experiences of tangata whenua within the scope of this project.

The purpose of this scoping report is to address these issues, and any others that are identified.

The area studied in this report is different from the area covered by other reports in the Taihape Inquiry technical research programme. This is because of a recommendation in the technical research scoping report, endorsed by claimants to the Waitangi Tribunal, that the whole of the Rangitikei River and all its tributaries be included in a single report, rather than dealt with in separate reports for individual inquiry districts. The Waitangi Tribunal has approved this course of action with respect to the preparation of this scoping report<sup>1</sup>, and is waiting on the recommendations of the scoping report, to be followed by discussions between the presiding officers for the Porirua ki Manawatu and Taihape district inquiries (and possibly by a joint judicial conference), before deciding whether or not to adopt a similar approach in a more comprehensive full report of Taihape Inquiry District rivers. In looking at the Rangitikei and its tributaries from source to sea, this scoping report examines parts of the river in the Tribunal's National Park, Whanganui, and Porirua ki Manawatu Inquiry Districts.

The report also looks at other rivers that flow through the Taihape Inquiry District. Although it was originally envisaged as a report only about the Rangitikei River and its tributaries, requests to the Tribunal asked that other rivers not be lost sight of. While the Tribunal agreed to this with respect to this scoping report, it has reserved judgment at this stage on whether any final report should cover other rivers in the inquiry district, or be confined to the Rangitikei River and its tributaries<sup>2</sup>. As a result the project brief specifically identifies portions of the following rivers and their tributaries to be included in the scoping report:

- Ngaruroro River
- Oroua River
- Kiwitea Stream
- Turakina River and Mangapapa River

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<sup>1</sup> Waitangi Tribunal, Taihape: Rangitikei ki Rangipo District Inquiry (Wai 2180), Directions #2.5.18 dated 14 December 2010.

<sup>2</sup> Waitangi Tribunal, Taihape: Rangitikei ki Rangipo District Inquiry (Wai 2180), Directions #2.5.18 dated 14 December 2010.

Investigations during the preparation of the scoping report have identified that the Taihape Inquiry District also contains small parts of the catchments of the following rivers:

- Pohangina River
- Whangaehu River

The net result is that the study area for the scoping report consists of the following:

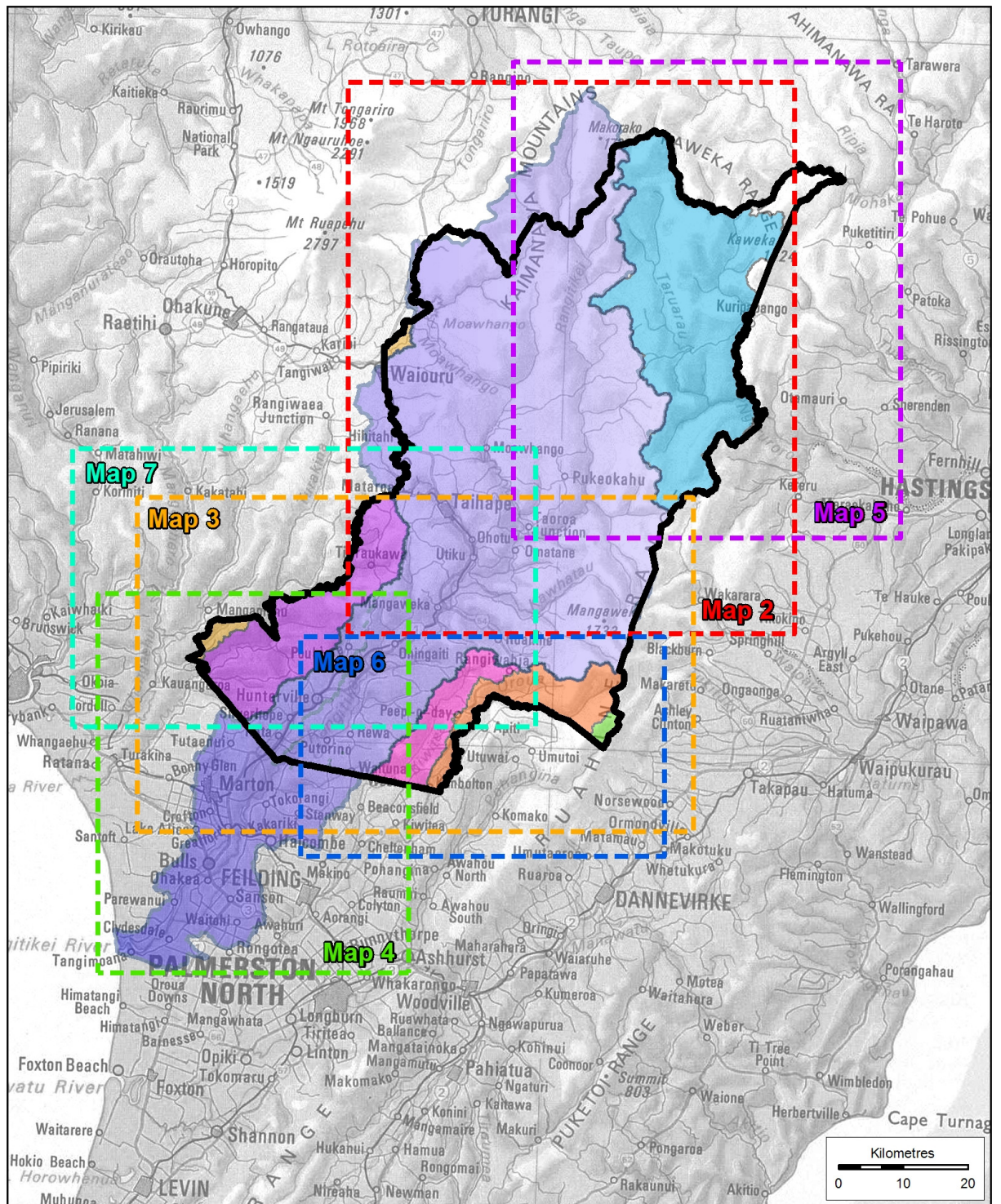
- The whole of the catchment of the Rangitikei River system and its tributary waterways, regardless of which inquiry district any waterway is located in.
- The catchments of the other river systems listed above, but only those parts of the catchments and associated waterways that are located within the boundaries of the Tribunal's Taihape Inquiry District.

The extent of the study area is shown in Map 1, being all of the shaded areas (variously coloured to indicate the different catchments). The different catchments are shown in greater detail in Maps 2 to 7.

During the consultation with claimants as this report was being prepared, it became apparent that the term 'Rangitikei River and its tributaries' was a source of some confusion. Questions were asked whether this term included the Hautapu River and the Moawhango River, both of which flow into the Rangitikei River (and therefore come within the geographical definition of the term 'tributary'). It is apparent that there is a cultural and traditional understanding among claimants that there are three rivers in the upper catchment, being the Hautapu River, the Moawhango River and the Rangitikei River, each of which has its own tributaries and its own catchment. This distinction has been adopted in the terminology used in this report.

Claimants have also pointed out that some place names have become corrupted. The correct name for the Porewa Stream is Pourewa, and the correct name for the Onepuhi bridge is Onepuehu. The corrected names are used in this report.

Map 1 Study Area



The Rangitikei River, its Tributary Waterways, and Other Taihape Waterways Scoping Report: Study Area

Map 1

**Legend**

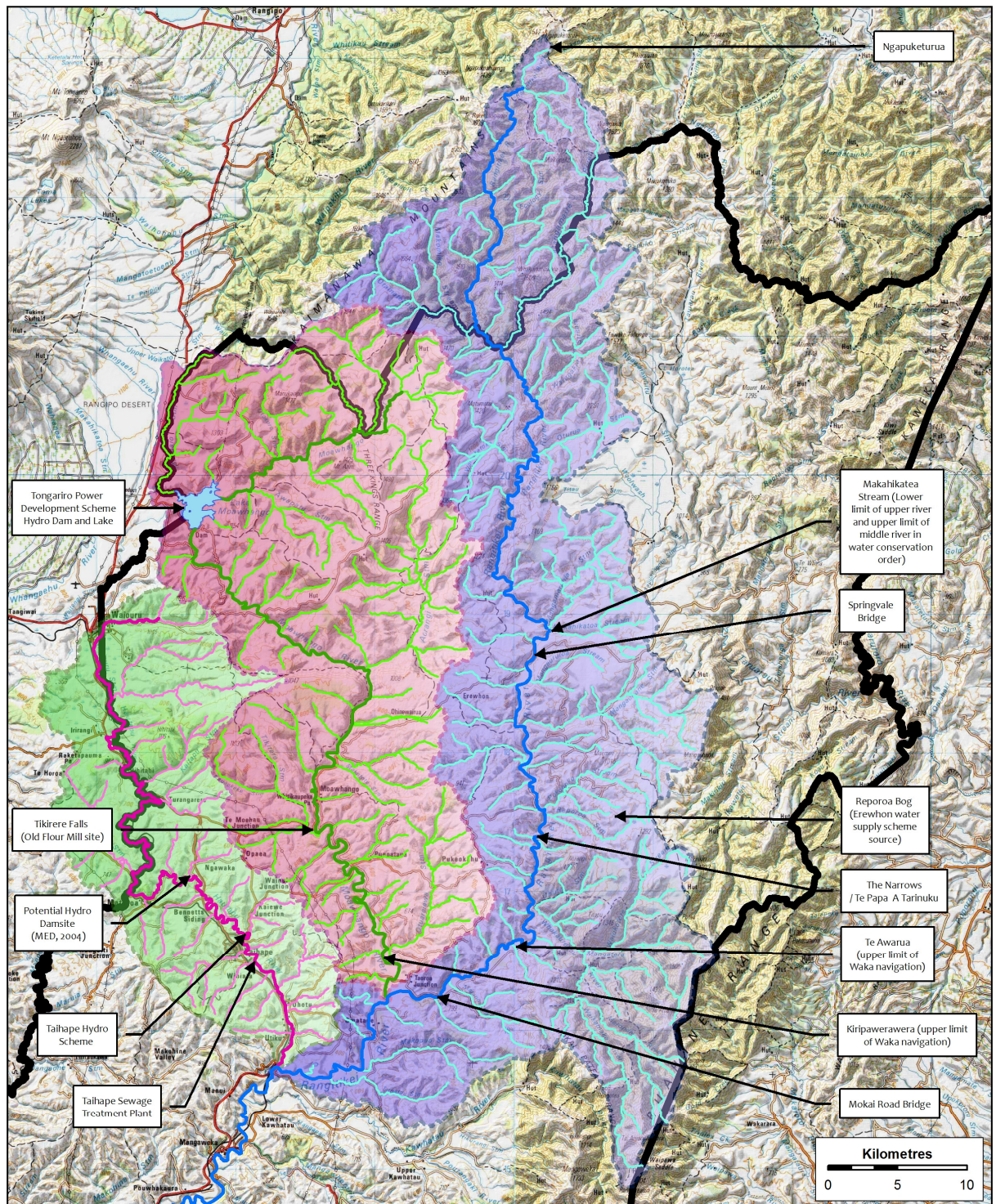
- |                                   |                          |
|-----------------------------------|--------------------------|
| Taihape Inquiry District Boundary | Ngaruroro Catchment      |
| Rangitikei River Catchment        | Kiwitea Stream Catchment |
| Turakina River Catchment          | Oroua River Catchment    |
| Pohanghina River Catchment        | Whangaehu Catchment      |



Data: NZ Topographic Raster data sourced from Land Information New Zealand. Crown Copyright reserved.  
Catchment boundary data sourced from NIWA (2011).  
Catchment boundaries were generated from 20 metre contour data.  
Author: Crown Forestry Rental Trust (2011)  
Scale 1:750,000 at A4

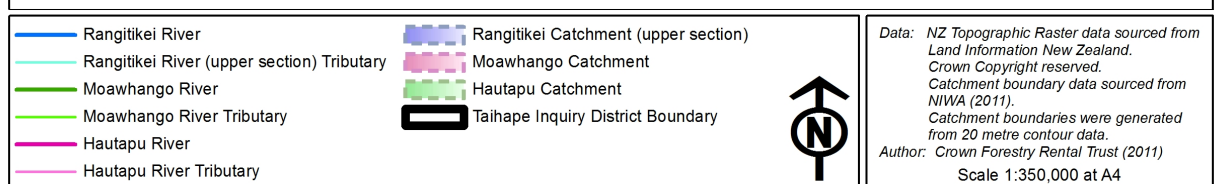


Map 2 Rangitikei Catchment (upper section)



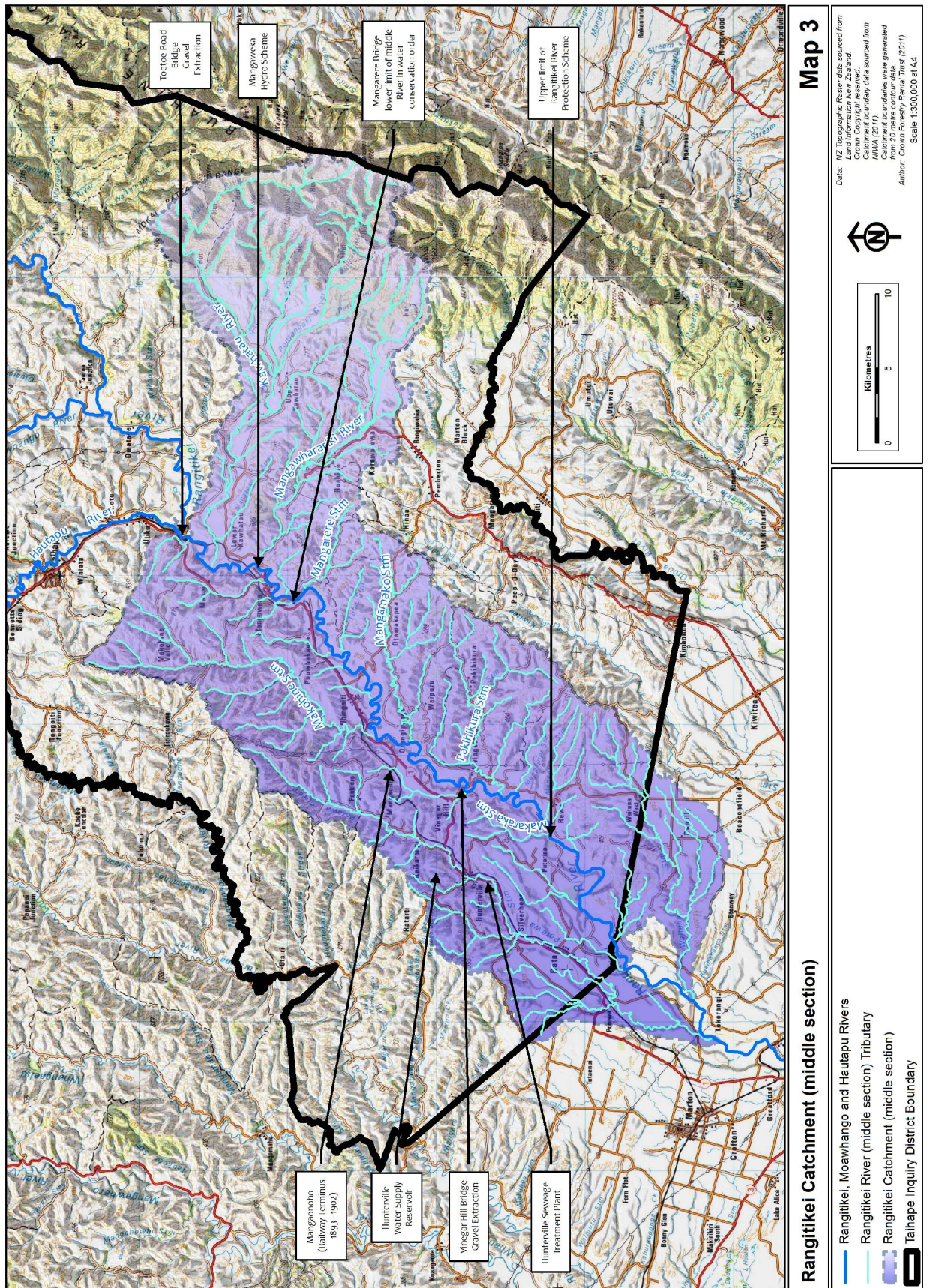
Rangitikei Catchment (upper section)

Map 2



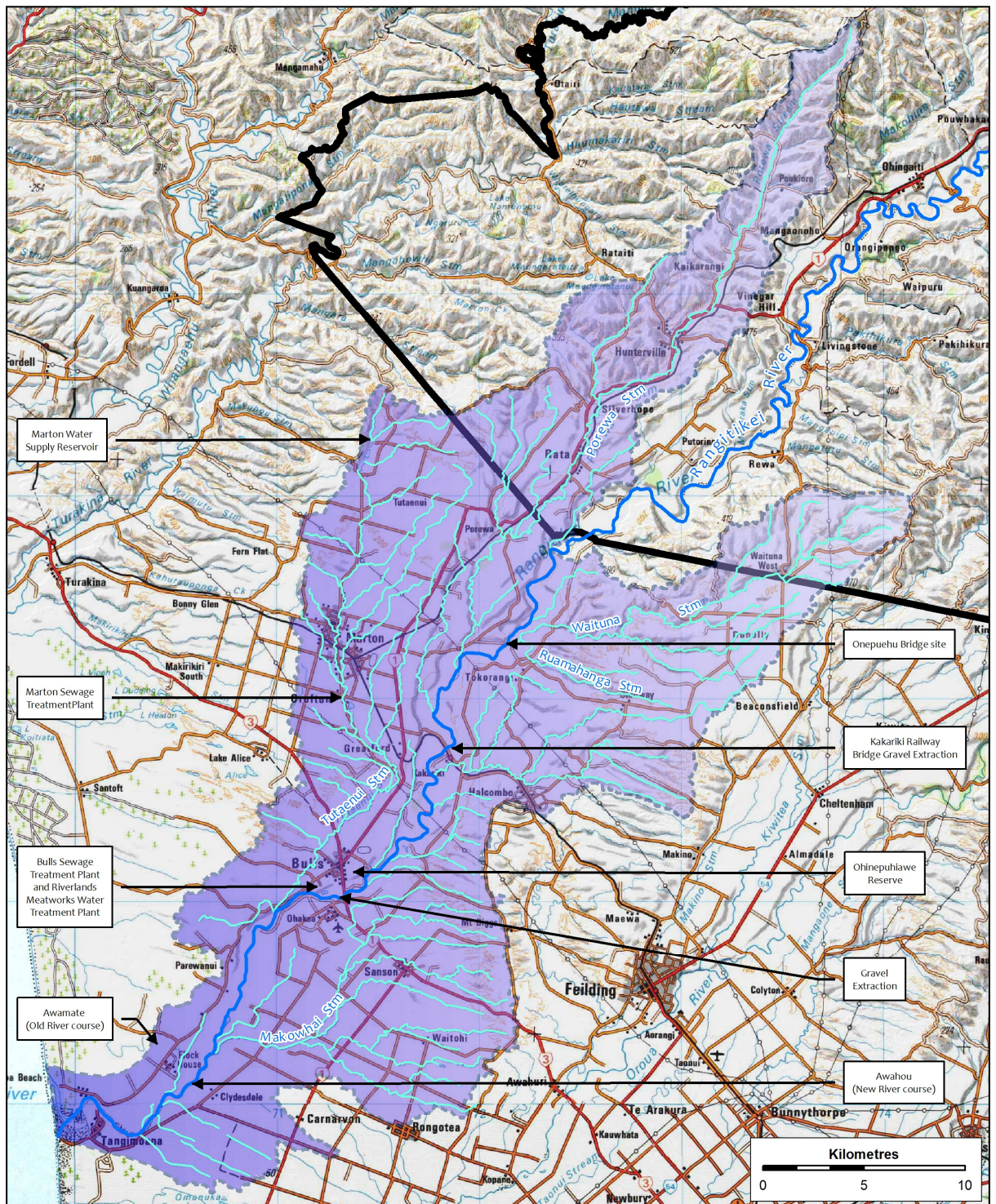


Map 3 Rangitikei Catchment (middle section)





Map 4 Rangitikei Catchment (lower section)



Rangitikei Catchment (lower section)

Map 4

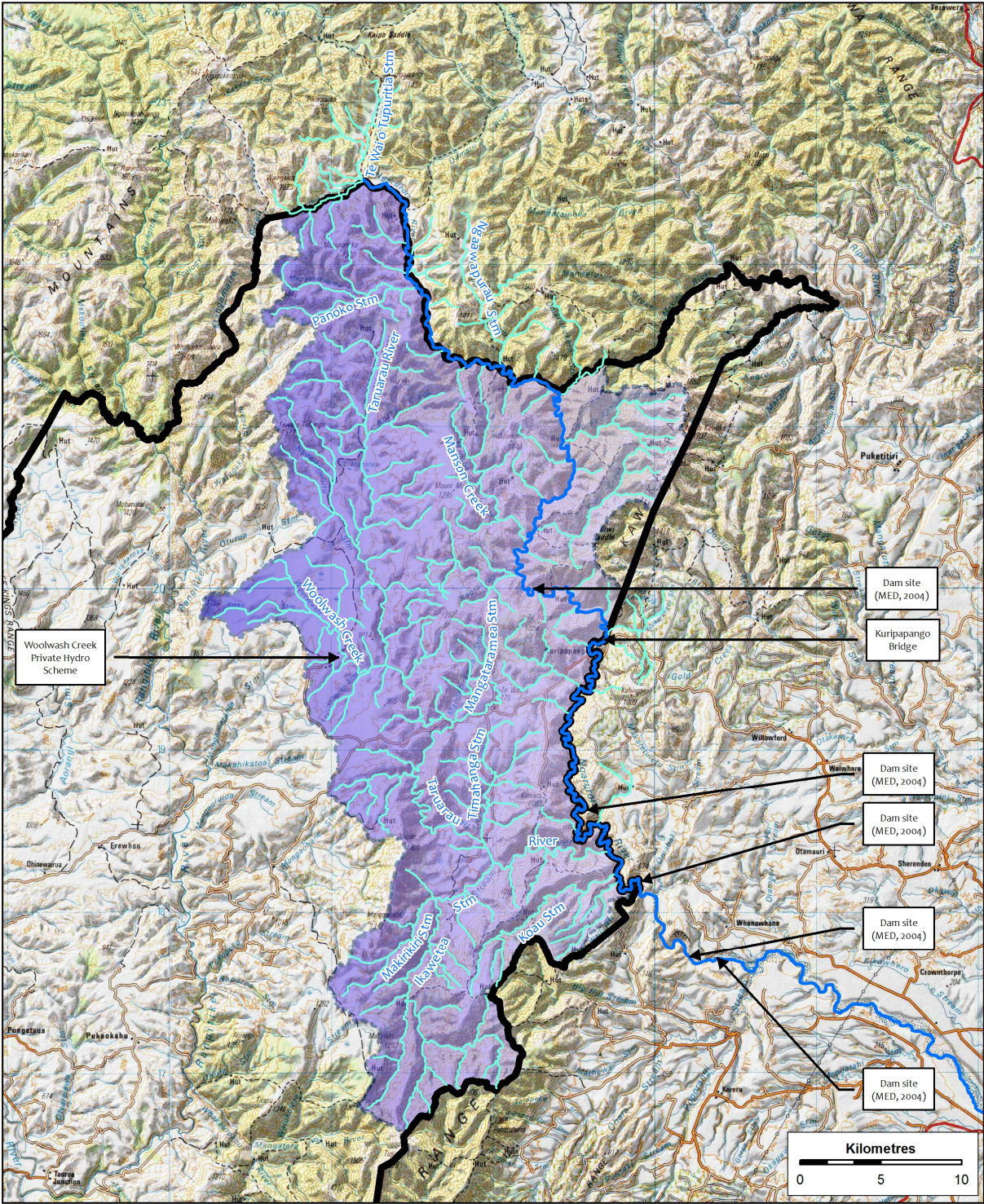
- Rangitikei River
- Rangitikei River (lower section) Tributary
- Rangitikei Catchment (lower section)
- Taihape Inquiry District Boundary



Data: NZ Topographic Raster data sourced from Land Information New Zealand. Crown Copyright reserved.  
 Catchment boundary data sourced from NIWA (2011).  
 Catchment boundaries were generated from 20 metre contour data.  
 Author: Crown Forestry Rental Trust (2011)  
 Scale 1:240,000 at A4



Map 5 Ngaruroro Catchment



**Ngaruroro Catchment**

**Map 5**

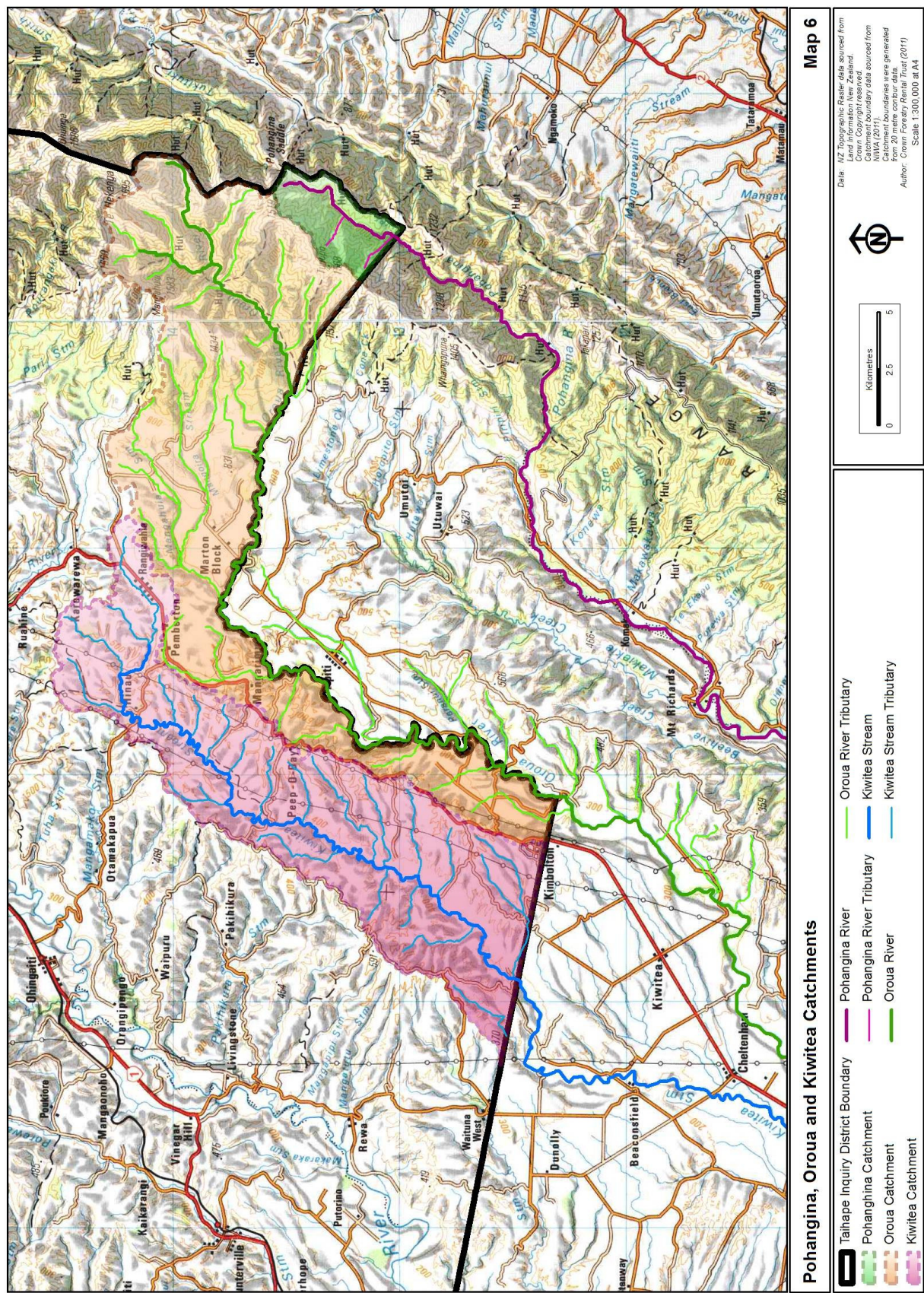
- Ngaruroro River
- Ngaruroro River Tributary
- Taihape Inquiry District Boundary
- Ngaruroro Catchment



Data: NZ Topographic Raster data sourced from Land Information New Zealand. Crown Copyright reserved.  
Catchment boundary data sourced from NIWA (2011).  
Catchment boundaries were generated from 20 metre contour data.  
Author: Crown Forestry Rental Trust (2011)  
Scale 1:300,000 at A4

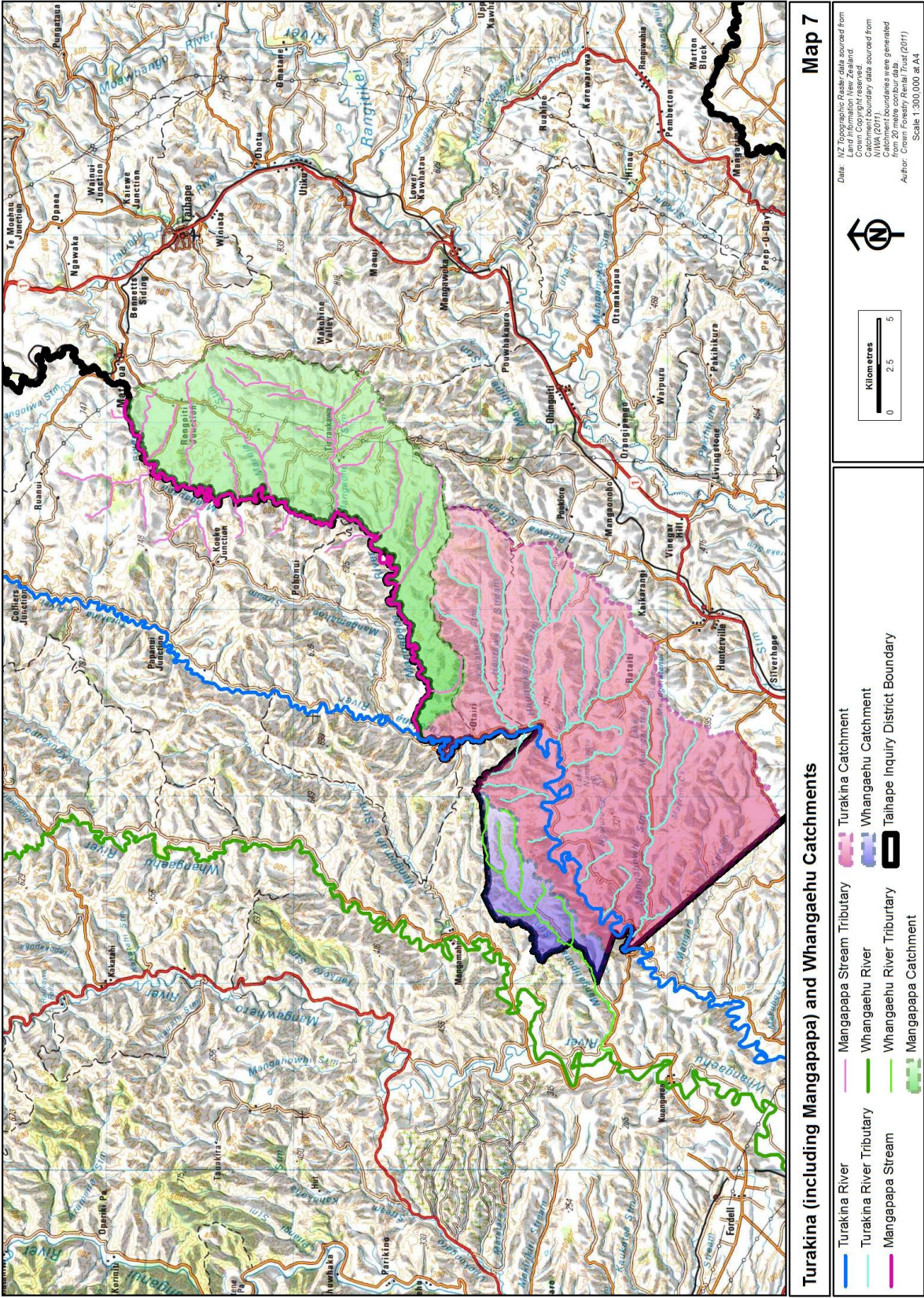


Map 6 Pohangina, Oroua and Kiwitea Catchments





Map 7 Turakina (including Mangapapa) and Whangaeahu Catchments



### **1.3 The structure of the report**

The wording of the project brief leaves open the possibility that the scoping report could provide sufficient information and discussion of the issues such that it is capable, on its own, of providing a competent enough evidential basis for a Tribunal inquiry. It is theoretically possible for one of the recommendations of this report to be that no further research or comprehensive full report is necessary.

However, at an early stage it became apparent that there are a wide range of issues that would need to be comprehensively examined in order to properly cover, to Tribunal casebook standard, all the waterway-related matters identified in statements of claim. The combined effect of all these issues is more substantial than a short research period and a short report can properly investigate. The large number and extent of the potential reference sources identified in this report for further research also shows that it would not be possible in the time available to do them all justice in the scoping report.

Accordingly, rather than leave open the question of whether a further historical research report should or should not be prepared, and only answer it at the end of the report in the recommendations, this scoping report has been written as if that question has already been answered in the affirmative, and that a further report would be necessary. It therefore sets out what is known about the issues likely to be relevant to a Tribunal inquiry, and identifies potential research sources that could usefully be followed up during the research to be undertaken for such further report.

### **1.4 The kaupapa for the report**

Stirling and Subasic, in their technical research scoping report<sup>3</sup>, summarised the main general issues set out in statements of claim as:

- The ability of hapu and iwi to retain, maintain, and exercise te tino rangatiratanga
- Loss of hapu and iwi authority to the Crown, Crown agencies, and local government

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<sup>3</sup> Stirling, Bruce, and Evald Subasic, *Taihape: Rangitikei ki Rangipo Inquiry District: Technical Research Scoping Report*, report for Crown Forestry Rental Trust, August 2010.



- The ability of hapu and iwi to retain ownership and authority over their customary lands (with reference to the Native Land Court, land alienation, and Maori land administration)
- The compulsory acquisition of Maori land, especially Public Works takings
- The ability of hapu and iwi to exercise kaitiakitanga over (and customary interests in) lands, forests, wahi tapu, and the environment generally, particularly with respect to waterways

This report looks at these issues and associated events with respect to the rivers and waterways of the study area, and their associated waters. It identifies where there might have been intrusions by the Crown without consent on to the “space” occupied by tino rangatiratanga rights and kaitiakitanga responsibilities. These possible intrusions, whose operation in the study area has still to be confirmed by further district-specific historical research, have their genesis in the following pieces of statute law (among others):

- Various Public Works Acts declared that bank protection works, the alteration or diversion of watercourses, and soil conservation and river control works, were to be considered to be public works, for the purposes of which land and riverbed could be compulsorily taken and public monies could be expended
- The Salmon and Trout Act 1867 authorised the release of introduced fish species into rivers, while the Protection of Animals Act 1867 provided statutory recognition for acclimatisation societies
- The Timber-floating Act 1873 regulated the use of rivers for the floating of logs from the forest down to the sawmill
- The Fish Protection Act 1877 gave the Crown the responsibility for the protection and administration of fisheries in rivers, lakes and the sea
- The Harbours Act 1878 gave the Crown the authority to regulate navigation and the use of rivers by boats and other small craft
- The Coal-mines Act Amendment Act 1903 declared that the beds of navigable rivers were to be vested in the Crown
- The Water-power Act 1903 vested in the Crown the sole right to develop hydro-electric power schemes

- The Soil Conservation and Rivers Control Act 1941 established regional catchment boards, which were given the task of controlling rivers to prevent flooding, and provided for Crown approval and funding of these engineering works
- The Water and Soil Conservation Act 1967 vested in the Crown the right to control and regulate the use of all natural waters

Each of these pieces of legislation had successor statutes that continued the powers that they granted to the Crown when they were repealed. Many of the statutory powers reside today in the Resource Management Act 1991, making them the day-to-day responsibility of regional and local authorities.

It is this progressive spread of Crown authority into a greater range of aspects of the use and management of waterways and water that is the kaupapa underlying the various events that are described in the report. The historical facts about the traditional exercise of tino rangatiratanga over the study area's waterways by iwi, and the Crown's involvement with rivers in the study area, will inform the debate before the Waitangi Tribunal about whether the actions and inactions of the Crown were consistent with its responsibilities under the Treaty of Waitangi. This debate is, of course, as much a matter for legal submissions as it is an examination of historical facts.

## **2 BIBLIOGRAPHY AND ARCHIVAL SOURCES**

A key task has been a search of published, unpublished and archival references relevant to the rivers of the study area. The results of the search are presented in an Appendix to this report.

Both the bibliography and the list of archival references were developed by means of a search in online databases of keywords applicable to the study area and to the study themes set out in the project brief. No claim is being made that the lists of references are complete. Indeed, an examination of the references cited in the Appendix as part of further research is likely to result in further published, unpublished and archival references being identified.

While some of the published sources have been examined, many have not, and only a few of the archival sources have been looked at. Although a number of the references may turn out to be of little usefulness, it has been considered better to be over-inclusive rather than under-inclusive.

As an example of variable potential relevance, many of the archival references are to do with bridges across the rivers, with a likely emphasis on their construction and funding. Some bridges over the Rangitikei are high level and will have little engineering connection with the river itself. Others cross the river at a lower level, giving them a greater engineering connection with the river. However, references to the river may be limited, remarking only about occasions when flood flows threaten the piers and approaches of the bridges. Until the files are examined, their relevance to a report on the rivers cannot be determined.

With the exception of reports by the former catchment and regional water boards, and the current regional councils, few published works by European authors are devoted to the rivers, most mentioning them only in passing or in brief remarks. A remark by Young about the Rangitikei River in its middle reaches may provide some partial explanation for this.

Once bridges went up in the district, they immediately changed settler psychology. As long as they were able to cross the river from on high, locals

could keep their distance from the Rangitikei far below them. Usually that is how they preferred it.

Apart from the odd river flat between Mangaohane and Mangaweka, the few farmers who dwell along the Rangitikei are “highlanders”. They need not fear the unwanted encroachments of their river. The “Tiki”, as some locals call it, is something they might look into from afar, noting its change in colour or depth, but they are rarely on intimate terms with it. They were taught, all the old people, that the river was dangerous – something to keep away from.<sup>4</sup>

A surprising feature of the archival reference list is the small number of Maori Affairs Department files that have been identified as potentially relevant. These are normally one of the most fruitful sources of information about the interactions historically between iwi and the Crown. One possible reason is a general absence of complaints to the Crown by Maori communities along the rivers of the study area; this will need to be followed up by further research. A pattern identified in research in other districts is that Maori very quickly worked out which types of complaints were most likely to be acted upon by the Crown and which were not; rivers, waters and fishing rights tended to be areas the Crown did not respond to in any meaningful fashion, so have not been the subject of many complaints.

Local government archives are only partially catalogued online. For all of the study area except the Ngaruroro catchment (which is in the Hawke’s Bay region) they are part of a major project known as Archives Central, which is a collective body of local councils that is being coordinated by Horizons Regional Council<sup>5</sup>. Once a suitable storage building is obtained, all the archives of the constituent councils will be assembled and available to view in one location. Until then, they are held by the constituent councils, some of whom (such as Horizons and Manawatu District Council) have catalogued their collections, while others (such as Rangitikei District Council) are in the process of doing so. By the time a full report on the rivers is commissioned, access will be more advanced and easier.

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<sup>4</sup> David Young, *Faces of the River*, 1986, page 171.

<sup>5</sup> The Council is officially known as Manawatu-Wanganui Regional Council, but has adopted the name Horizons Regional Council for its dealings with the public. Horizons Regional Council is the organisation’s name used in this report.



Time did not permit an examination and analysis of local newspapers for their relevance. They can be expected to yield small snippets of information that will help to fill out the information contained in official reports. One difficulty researchers face is that the Marton-published *Rangitikei Advocate*, and various Taihape-published newspaper titles, are not yet included in Papers Past, the National Library's searchable online archive of New Zealand newspapers. This is unlikely to be remedied prior to the commissioning of a full research report. However, it would appear that a number of stories from the *Rangitikei Advocate* did get reprinted in other newspapers published in other centres that are available in Papers Past. In addition, the newspaper holdings of the National Library, at present inaccessible due to building modifications at the Library, will again become available in mid 2012.

In the discussion about particular river issues in this report, potential reference sources are identified. These provide a cross-referencing to the bibliography and list of archival references.

### **3 VIEWS EXPRESSED BY CLAIMANTS**

#### **3.1 Analysis of Statements of Claim and Submissions to the Waitangi Tribunal**

This section looks at those claims to all or part of the study area that identify wrongdoing by the Crown with respect to water and watercourse matters. A claim is not included in this analysis where it clearly addresses only land grievances.

The description of each claim relies on the initial statement of claim, unless stated otherwise. The statements of claim relied on for this analysis are those that have currently been lodged with the Waitangi Tribunal; because the Tribunal inquiry process allows for amended statements to be lodged at any time up to a date prescribed by the Tribunal, there is still an opportunity for claimants to prepare more detailed and comprehensive statements of claim.

Claims have been grouped in the following fashion:

- Claims emanating from within Taihape Inquiry District
- Claims ‘looking in’ on Taihape Inquiry District from the west
- Claims ‘looking in’ on Taihape Inquiry District from the north
- Claims ‘looking in’ on Taihape Inquiry District from the east
- Claims to the lower Rangitikei River and ‘looking in’ on Taihape Inquiry District from the south

Given that a separate tribal landscape report forms part of the Taihape Inquiry District research programme, it is not the role of this scoping report to identify the web of iwi and hapu relationships in the study area. However, some brief remarks about the nature of the claimants are included below.

For the sake of completeness, the settlement already reached between the Crown and Ngati Apa, and the proposed settlement between the Crown and Rangitane, are also discussed.

##### **3.1.1 Claims emanating from within Taihape Inquiry District**

##### **Claims by Ngati Hinemanu / Ngati Paki**

WAI-127 Claim by Ngati Hinemanu

WAI-1835 Claim by Ngati Hinemanu and Ngati Paki

Ngati Hinemanu and Ngati Paki are Kahungunu peoples, some of whom reside in Heretaunga and some of whom reside within the study area (with a marae at Winiata, just south of Taihape).

The most recent statement of claim for WAI-127 is dated August 2009<sup>6</sup>. The claimants state that they suffered loss to their unspecified taonga within the Taihape Inquiry District by legislation, policy, and Crown acts and omissions, in particular by:

- Failure to ensure that Ngati Hinemanu retained their resources and taonga
- Failure to ensure that Ngati Hinemanu could exercise tino rangatiratanga
- Failure to ensure that Ngati Hinemanu could develop, exploit and manage their resources in a manner consistent with their own cultural preferences

The WAI-1835 statement of claim states that Ngati Hinemanu and Ngati Paki claim mana linkages and authority, and strong whakapapa connections, with the following rivers and their tributaries: Rangitikei, Kawhatau, Hautapu, Moawhango, Taruarau, Ngaruroro. The Crown failed to protect these rivers from erosion and pollution, failed to protect the fisheries associated with these waterways, and failed to protect the authority of Ngati Hinemanu and Ngati Paki over the waterways and the right to control, manage and protect them.

In submissions, the WAI-1835 claimants have asked that the Rangitikei River be researched in a holistic manner that incorporates the main stem of the river and all tributaries, together with all other waterways within the Inquiry District. The rivers are linked both ecologically and culturally to the lands that they drain, and together the land and the rivers link to the whakapapa of the claimants<sup>7</sup>.

**Claims by Mokai Patea Iwi**

WAI-581 Claim by Te Runanga o Ngati Hauiti

WAI-588 Claim by Ngati Tamakopiri and Ngati Whitikaupeka

WAI-1639 Claim by Jack Hoani Cribb

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<sup>6</sup> WAI-127, Document #1.1(c).

<sup>7</sup> Waitangi Tribunal, Taihape: Rangitikei ki Rangipo (Wai 2180) District Inquiry, Document #3.1.134.

WAI-1705 Claim by Mokai Patea Waitangi Claims Trust

WAI-1888 Claim by Ngati Whitikaupeka

Ngati Tamakopiri, Ngati Whitikaupeka and Ngati Hauiti are predominantly Kahungunu peoples who reside within the study area. Ngati Tamakopiri and Ngati Whitikaupeka (whose closeness to one another means they are sometimes combined and referred to as Ngati Tama Whiti) are based in the north of the study area, with marae at Moawhango and Opaea, and have whakapapa links to iwi (such as Ngati Tuwharetoa) to the north. Ngati Hauiti, with marae at Rata, are based in the southern part of the study area, and have whakapapa links to iwi (such as Ngati Apa) in the lower Rangitikei River and south of the study area. The claimants have customary interest in all the significant waterways: the Rangitikei River, the upper reaches of the Ngaruroro River, Kiwitea Stream and Oroua River, and all tributaries of those main-stem rivers.

The WAI-581 statement of claim refers to Ngati Hauiti's tribal estate broadly extending on the Rangitikei River from the confluence with the Moawhango River in the north to the confluence with the Waitapu Stream in the south. The eastern boundary of the tribal estate is defined by the Ruahine Range, and the western boundary by the Turakina River. The tribal estate is referred to as being both land and waterways, with the Rangitikei River at its heart, providing both physical and spiritual sustenance to the iwi for generations. The river is a spiritual awa and a taonga over which Ngati Hauiti has held rangatiratanga and kaitiakitanga, but the Crown has upset that relationship by:

- Dispossessing the iwi of all rights over the river, its water, fisheries, minerals and other taonga associated with it
- Failing to protect the Ngati Hauiti interest in the river by allowing large-scale gravel extraction, without consultation or compensation
- Denying Ngati Hauiti a place in the decision making process concerning the river at both central government level and local government level

The statement of claim refers to the Taraketi 5 block, which was the portion of the Taraketi block that had been encroached upon by a change of course of the Rangitikei River, leaving it either under water or a shingle bed; this encroachment was defined as a separate partition block in 1894. It became lost to Maori ownership in 1959 when

the Rangitikei River was deemed to be a navigable river, and thereby was deemed to have always been the property of the Crown by virtue of the Coal-mines Act Amendment Act 1903. As Crown property it was set apart in 1959 as a soil conservation and river control reserve.

The WAI-588 claim started as a grievance only about the Kaimanawa wild horses, but has since been expanded to include the lands and other features of the northern part of the inquiry district. The effect of the Moawhango Dam, constructed without consent on the Moawhango River, is part of the claim. The reduced water flow below the dam has affected native fish species, once an abundant food source for Ngati Tamakopiri and Ngati Whitikaupeka (collectively referred to as Ngati Tama Whiti), and has also affected the spiritual healing properties associated with the river.

The WAI-1639 statement of claim describes the claimant's area of interest by awa as well as by land. To the north are the headwaters of the Hautapu, Moawhango and Ngaruroro Rivers. To the east the boundary follows the Ngaruroro River downstream to the confluence with the Waitutaki Stream, then follows the Ruahine Range. The confluence of the Rangitikei River and the Waitapu Stream marks the southern boundary, and the western edge is Te Whakauae o Tamatea Pokai Whenua. The rivers within this territory are the Hautapu, Moawhango, Rangitikei, Taruarau and Ngaruroro and their tributaries. The claimant refers to suffering cultural, social and economic disadvantage as a result of the Crown taking responsibility for all matters relating to fisheries and the protection of rivers from erosion and pollution (and other land-related matters).

The WAI-1705 claim refers to mana over and strong whakapapa connections with the Rangitikei, Hautapu, Moawhango, Kawhatau, Ngaruroro and Taruarau Rivers and their tributaries. The Crown has failed to protect the awa from erosion and pollution, and by allowing diversion and damming. This has led to an undermining of rangatiratanga, lore and custom, and to the Mokai Patea claimants being unable to possess, control and manage their traditional resources (including the rivers).

The WAI-1888 claim concerns the Moawhango River and related lands. The river was an integral part of the Ngati Whitikaupeka tribal estate, which has been adversely affected by unspecified Crown legislation, policies, practices, actions and omissions.

In submissions on behalf of all the Mokai Patea Iwi claimants, support is given for a report covering the whole of the Rangitikei River, as a split into two different reports would be contrary to tikanga, and would not be able to properly address the holistic nature of the environmental issues affecting the river<sup>8</sup>.

### **Claim relating to Mana Wahine**

WAI-2091 Claim by Maori Women of Ngati Hauiti

This claim is about the failure of the Crown to recognise the historic status, rangatiratanga and mana of Ngati Hauiti women in Maori custom and Maori law, and the disempowering of these women from their properties and water, with resultant socio-economic impact, including mental and other health issues. There has also been a failure by the Crown to consult with Ngati Hauiti women.

### **3.1.2 Claims ‘looking in’ on Taihape Inquiry District from the west**

#### **Claims by Ngati Rangi**

WAI-151 Claim by Ngati Rangi

WAI-1263 Claim by The Rangiteauria Uri

These include a claim to all waterways in the Ngati Rangi tribal area (which includes the Waiouru army lands), as they are a taonga of the iwi.

#### **Claim by Tamakana Council of Hapu**

WAI-954 Claim by Tamakana Council of Hapu

This is a non-specific claim concerning the Crown’s failure to protect the claimants tino rangatiratanga over their taonga. While the general rohe of the claimants is in the Whanganui Inquiry District, it also includes lands in the Kaimanawa and Motukawa areas.

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<sup>8</sup> Waitangi Tribunal Taihape: Rangitikei ki Rangipo (Wai 2180) District Inquiry Document #3.1.161.

### **3.1.3 Claims ‘looking in’ on Taihape Inquiry District from the north**

#### **Claims by Ngati Tuwharetoa**

WAI-61 Claim by the Trustees of Rotoaira Forest Trust

WAI-575 Claim by Ngati Tuwharetoa

Ngati Tuwharetoa are based to the north of the study area, but claim an interest that extends as far south as the Rangitikei rivermouth. They consider that Ngati Waewae, located at Te Reureu, are the upholders of and maintain the ahi kaa for that wider area of interest.

The most recent revised statement of claim for these and other Ngati Tuwharetoa claims was lodged in July 2005<sup>9</sup>, as a preparatory step before the hearings for the Tribunal’s National Park inquiry. In this revised statement of claim (described as the “Fourth Amended Statement of Claim” for “the Ngati Tuwharetoa Comprehensive Claim”) are the following matters:

- The Tongariro Power Development (TPD) scheme was established without giving adequate consideration to the effects of the scheme on Ngati Tuwharetoa’s taonga tuku iho, in particular to the permanent transformation of rivers, a failure to make good on initial promises made to Ngati Tuwharetoa, restricting Ngati Tuwharetoa’s exercise of tino rangatiratanga over its land and development, the exclusion of Ngati Tuwharetoa from active involvement in the ongoing operation of the TPD scheme, a failure to provide an opportunity for Ngati Tuwharetoa to obtain economic benefit from the assets of the TPD scheme, the desecration of waterways and riparian lands in environmental and spiritual terms, and a failure to compensate for such desecration
- The Crown has failed to protect Ngati Tuwharetoa’s mana and tino rangatiratanga over rivers, including customary rights to use and control the waters of the rivers, and has excluded Ngati Tuwharetoa from management and development rights for energy purposes by vesting the right to develop hydroelectric resources in the Crown under the Water-power Act 1903 and subsequent legislation

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<sup>9</sup> WAI-61, Document #1.1(c), and WAI-575, Document #1.1(f).

The claims of Ngati Waewae, a hapu of Ngati Tuwharetoa, are discussed below in connection with the claims of Nga Iwi o te Reureu.

### **3.1.4 Claims ‘looking in’ on Taihape Inquiry District from the east**

#### **Claims by Ngati Kahungunu**

WAI-69 Claim by the Ahuriri Executive of Ngati Kahungunu, the Heretaunga Executive, and the Here Ararau Incorporated Society

WAI-263 Claim by Ngati Hinemanu

WAI-378 Claim by Wero Karena and Owhaoko CB3 Owners

WAI-382 Claim by Ngati Hinemanu, Ngai Te Upokoiri and Hapu of Ngati Kahungunu

WAI-1425 Claim by Ngati Hinemanu

Ngati Kahungunu are primarily located in Heretaunga (Hawke’s Bay). They see their whanaunga claimants resident in the study area as maintaining ahi kaa over the western portion of the tribal rohe. Heretaunga-resident hapu of Ngati Kahungunu have a particular interest in the upper Ngaruroro part of the study area and the Owhaoko block.

Since being lodged, these claims have been grouped together as a comprehensive claim on behalf of the whanau and hapu of Ngati Kahungunu. The grouping has been achieved under an iwi organisation known as He Toa Takitini. The most recent revised statement of this comprehensive claim (described as the “amended statement of claim”) was lodged in July 2008<sup>10</sup>. The claim includes:

- The Crown’s failure to protect and/or enhance the Ngaruroro River and its tributaries, and other rivers in the tribal area, and denial of the ability of claimants to exercise tino rangatiratanga and/or kaitiakitanga over these rivers, including by permitting and/or facilitating the modification, pollution and overall degradation of the rivers, by passing legislation, and by failing to recognise the cultural and spiritual significance of the waterways to claimants
- The Crown’s failure to actively protect the exercise by the claimants of tino rangatiratanga and kaitiakitanga in regard to their desire to protect the natural environment, including by passing legislation, and by permitting and

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<sup>10</sup> WAI-69, Document #1.1(c); WAI-263, Document #1.1(b); WAI-378, Document #1.1(b); WAI-382, Document #1.1(d); and WAI-1425, Document #1.1.1(a).



encouraging the destruction or substantial modification of rivers, swamps and wetlands as a result of legislation and policy favouring settlement, agriculture and horticulture

- The Crown's failure to actively protect the claimants from the effects of water pollution

### **3.1.5 Claims to the lower Rangitikei River and 'looking in' on Taihape Inquiry District from the south**

#### **Claims by Ngati Raukawa**

WAI-113 Claim by Ngati Raukawa ki Te Tonga

WAI-1618 Claim by Ngati Te Au, Ngati Turanga and Ngati Rakau

WAI-1619 Claim by Ngati Parewahawaha

WAI-2197 Claim by Parewahawaha Hapu mai ki Ohinepuhiawe

Some Ngati Raukawa travelled down the Rangitikei River valley and settled in the Manawatu district during the early part of the nineteenth century (prior to 1840). They distinguish themselves from Ngati Raukawa resident in the Waikato by referring to themselves as Ngati Raukawa ki Te Tonga. They were granted a number of reserves (including Ohinepuhiawe near Bulls) on the eastern bank of the Rangitikei River as part of the Manawatu purchase.

The WAI-113 claim describes the Rangitikei River as one of the tribal boundaries of Ngati Raukawa. Crown actions, omissions, policies, practices and legislation have resulted in the loss of many assets implicit in tino rangatiratanga over Ngati Raukawa resources, including waterways and fisheries. Ngati Raukawa have suffered a loss of use and consequent deterioration of fisheries and other resources.

The WAI-1618 claim is by three hapu of Ngati Raukawa who describe themselves as Nga Hapu o Himatangi. Along with the Manawatu and the Oroua, the Rangitikei is one of the rivers that is included in their claim area. The rivers are taonga and of extreme cultural significance, as well as being mahinga kai sites. Together with their associated waterways and swamps, they have been destroyed, degraded or changed by unspecified Crown legislation, policies, actions and omissions, and bird life and customary fisheries have been adversely affected. There has been a failure by the

Crown to support hapu environmental management initiatives to preserve the waterways.

The WAI-1619 claim on behalf of Ngati Parewahawaha refers to failures by the Crown to:

- Protect against the depletion and pollution of waters, environments and resources, in particular the Rangitikei River
- Provide for and recognise the intellectual property rights of the hapu to fauna and flora, foods, rongoa and other taonga within the waters possessed and enjoyed by the hapu
- Recognise customary rights and title to rivers and waterways (including waters, groundwaters and associated resources)
- Protect te tino rangatiratanga and the role of the hapu as kaitiaki over rivers and waterways
- Protect non-commercial customary fishing and customary fisheries in rivers and waterways
- Protect the physical and spiritual health of the rivers and waterways

The WAI-2197 claim, lodged on behalf of owners at Ohinepuhiawe (near Bulls), refers to public works takings from the block for soil conservation and river control, and for river protection, to the removal of metal from the bed of the Rangitikei River, and to underhand dealings over the payment of royalties for metal excavated from Ohinepuhiawe block lands. An amended Statement of Claim dated October 2009 also refers to old riverbed being treated by special legislation as Crown Land rather than as land to which Ohinepuhiawe owners were legally entitled as riparian owners. It states that the Ohinepuhiawe owners have been impeded in their enjoyment of their traditional fishing rights by the actions of the Crown.

### **Claim by Rangitane**

WAI-166 Claim by Rangitane o Tamaki-nui-a-rua

The most recent statement of claim was lodged in April 2003<sup>11</sup>. This claimed that the Crown has pursued policies and legislation that have adversely affected the

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<sup>11</sup> WAI-166, Document #1.1(c).

environment and resources of Rangitane, in particular by affecting sites of food sources such as eels, freshwater crayfish and freshwater mussels, by failing to recognise customary fishing rights when legislating for the salmon and trout fisheries, and by excluding Rangitane from participation in environmental management systems (paragraph 15).

### **Claims by Ngati Kauwhata**

WAI-784 Claim by Kauwhata Treaty Claims Komiti and Nga Uri Tangata o  
Ngati Kauwhata ki Te Tonga

WAI-972 Claim by Kauwhata Treaty Claims Komiti and Nga Uri Tangata o  
Ngati Kauwhata ki Te Tonga

WAI-1461 Claim by Nga Kaitiaki o Ngati Kauwhata

WAI-1936 Claim by Ngati Kauwhata ki Te Tonga

WAI-2167 Claim by Ngati Kauwhata

Ngati Kauwhata are a branch of Ngati Raukawa ki Te Tonga who are resident in the Feilding district. Their rohe falls within both the Taihape and the Porirua ki Manawatu Inquiry Districts.

The most recent statement of claim for WAI-784 is dated August 2009<sup>12</sup>. Ngati Kauwhata claims customary interests, mana and authority along the Rangitikei River, Kiwitea Stream, Oroua River and Manawatu River. The Crown affected these rivers when it passed legislation in 1903 confiscating the beds of navigable rivers, whenever it claimed title to riverbeds on the basis of the *ad medium filum aquae* principle, and by passing legislation vesting in itself marginal strips along riverbanks. The Crown has also adversely affected the food and other resources of rivers through ongoing damage to the environment, including deforestation and pollution.

In correspondence with the author of this report, counsel and the researcher for the WAI-784 claimants have advised that the tribal territory of Ngati Kauwhata follows the Rangitikei River inland to Papauku. A petition to the Crown from Ngati Kauwhata in 1866 referred to the following locations on the tribal boundary:

The boundary commences at Whitirea, in the region of Manawatu, thence towards the sea by way of Te Atutahi to Otupere; the boundary turns off there

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<sup>12</sup> WAI-784, Document #1.1(f).

and goes to Kaikokopu, thence to Kakukuera, Omanuka, Puketotara, Te Kawau, Totarata pa, Kopuapokoro Te Pua, Whakamoetakapu, Paeroa, Papauku; there it strikes off, goes to Umutoi on the Oroua, Te Awahuri, thence following the course of the Oroua to Puketotara, meeting the formed boundary at Whitirea.

An amended statement of claim for WAI-972 was filed in January 2011<sup>13</sup>. It splits the claims for the southern peoples of Ngati Kauwhata into two parts, those claims relating to the Porirua ki Manawatu Inquiry District, and those claims relating to the Taihape (“Rangitikei ki Rangipo”) Inquiry District. However, the statement of claim does not then proceed to particularise any claims at all for the Rangitikei ki Rangipo District. With respect to the Porirua ki Manawatu District, the claim concerns the same rivers as those listed by WAI-784, plus the Pohangina River, all of which Ngati Kauwhata identify with and have a spiritual connection to. The same legislative effects and damage to the environment are referred to as WAI-784. However, the WAI-972 claim goes further, and claims that the waterways are now the day-to-day responsibility of local government, which has permitted the discharge of effluent, chemicals and other pollutants, contributed to environmental instability (particularly with respect to the Oroua River) by removing native trees and encouraging willows, and allowing narrowing of the channel (due to silt build-up) that has resulted in the loss of islands in the river and flooding of riparian lands.

In submissions, the WAI-784 and WAI-975 claimants explain that their claims to waterways apply both within and without the Taihape Inquiry District. While supportive of a single report covering the Rangitikei River in both the Taihape and Porirua ki Manawatu Inquiry Districts, their preference is for this single report to also encompass the whole of the Oroua, Pohangina and Manawatu Rivers, and the whole of the Kiwitea Stream, because of the links that exist between all these waterways. They add that the research needs to cover the drainage of swamps, because the swamps and their resources were inextricably linked to the rivers. They consider that only by looking at all waterways in the Ngati Kauwhata rohe can a full understanding of Ngati Kauwhata’s connections with the waterways be gained<sup>14</sup>.

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<sup>13</sup> WAI-972, Document #1.1(b).

<sup>14</sup> Waitangi Tribunal, Taihape: Rangitikei ki Rangipo (Wai 2180) District Inquiry, Document #3.1.151.

An amendment to the claim for WAI-1461, filed in August 2008<sup>15</sup>, had the effect of adding a claim for natural resources (including waterways) to the initial claim. Ngati Kauwhata claims a customary and ongoing interest in the whole of the Oroua River and Kiwitea Stream, plus other waterways located solely within the Porirua ki Manawatu District. In submissions, the WAI-1461 claimants have emphasised their customary connections with the Oroua River<sup>16</sup>, have supported the part of the Oroua River situated in the Taihape Inquiry District being covered by this scoping report<sup>17</sup>, and have expressed a wish that the remainder of the Oroua River be covered by a Porirua ki Manawatu District Inquiry rivers report<sup>18</sup>. Their support for two separate reports, to be conducted sequentially, with the Taihape district report being undertaken first, is based on differing cultural interests being analysed in each report, and a more complex relationship that exists with that part of the river in the Porirua ki Manawatu District.

The statement of claim for WAI-1936 concerns unspecified takings for public works purposes, which could include takings for river protection and other river-related purposes.

WAI-2167 is at this stage a generalized claim by Ngati Kauwhata, which does not include any specifics.

### **Claims by Nga Iwi o Te Reureu**

WAI-651 Claim by Waewae, Pikiahu, Matakore and Rangitahi

WAI-1260 Claim by Ngati Waewae

WAI-1623 Claim by Ngati Rangatahi kei Rangitikei

WAI-1872 Claim by Ngati Pikiahu

The Rangitikei River is a key feature of all these claims. All four hapu, Ngati Waewae, Ngati Pikiahu, Ngati Matakore and Ngati Rangatahi, are based on the Te Reureu block between the Waitapu Stream and the Rangitawa Stream (at Kakariki). They see themselves as a “river people”, as traditionally their whole way of life has been centred around the Rangitikei River and the tributaries that pass through the

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<sup>15</sup> WAI-1461, Document #1.1.1(a).

<sup>16</sup> Waitangi Tribunal, Taihape: Rangitikei ki Rangipo (Wai 2180) District Inquiry, Document #3.1.129.

<sup>17</sup> Waitangi Tribunal, Taihape: Rangitikei ki Rangipo (Wai 2180) District Inquiry, Document #3.1.148.

<sup>18</sup> Waitangi Tribunal, Taihape: Rangitikei ki Rangipo (Wai 2180) District Inquiry, Document #3.1.160.

block, and it is the river that connects them to their whanaunga in the central North Island.

An amended statement of claim for WAI-651 was lodged in August 2008<sup>19</sup>. It claims that the Crown has failed to recognise the tino rangatiratanga of the four hapu to their resources, including lands, waters, fisheries and other taonga. In allocating the Te Reureu reserve to the four hapu, the Crown fixed boundaries that failed to incorporate existing mahinga kai sites including eel fishing sites. Since then:

- The Crown has failed to provide flood protection to the reserve, although it has provided flood protection on the western (opposite) bank of the river; together these two influences have had the effect of allowing regular flooding and encroachment by the river on to the reserve, causing the loss of many acres of reserve land (including the loss of an urupa)
- Maori title to reserve land has been extinguished where river encroachment has occurred
- A dramatic change to the course of the river just south of the Waitapu Stream has meant that some reserve land is now on the western (opposite) side of the river, so that its use and benefit has been lost to the Maori owners
- Part of the reserve land was also lost to Maori ownership when it was compulsorily taken under the Public Works Act in 1939 for river protection works; there were notification, consultation and compensation failures associated with this taking

Outside the reserve boundaries, the Crown has failed to recognise the ownership right of the four hapu to the riverbed associated with the reserve, and the resources of the riverbed. This has meant:

- Access to the riverbed and its resources (including shingle) has been prevented and restricted
- The hapu have been excluded from decision making processes in relation to the riverbed and its resources
- Gravel and shingle extraction has occurred without consent and without compensation

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<sup>19</sup> WAI-651, Document #1.1(a).

- The extraction has directly damaged the plant life of the riverbed, altered the river's course and caused erosion
- The extraction has created pollution, damaging plant life and fisheries, and resulting in a loss of mahinga kai
- Allowing abstraction of water for irrigation and domestic purposes has dramatically lowered water levels in the river
- Allowing the aerial application of fertilizer and chemical weed control on farmlands has polluted the waters of the river and its tributaries
- A failure to retain the spiritual value and the mauri of the waters of the river, from which the four hapu gain material and spiritual sustenance, including spiritual, healing, domestic and recreational use and enjoyment
- A loss of waiora and purity of the water, which has "damaged the life blood" of the four hapu
- Desecration of a taonga as a result of the deterioration in the quantity and quality of the waters of the river

Ngati Waewae is a hapu of Ngati Tuwharetoa with land interests (and related waterway interests) in the north of the Inquiry District (Rangipo Waiu 1 block) and in the lower Rangitikei at Te Reureu. Their WAI-1260 claim identifies unspecified spiritual, cultural and economic loss, and environmental impacts as a result of the Crown's management, policies and practices.

Ngati Rangatahi is a hapu of Ngati Maniapoto; they are closely linked to Ngati Matakore, also a hapu of Ngati Maniapoto, and who also reside on Te Reureu block. Their WAI-1623 claim states (among other things) that the Crown's failure to provide for the Ngati Rangatahi interest in the Rangitikei River adjoining Te Reureu Block was prejudicial to the hapu.

Ngati Pikiahu is a hapu of Ngati Raukawa whose WAI-1872 claim is for all lands, waterways, waters and ancestral waters, spring and groundwaters, forests, fisheries and other taonga within the general area "Te Reureu including the Waitapu Stream, Whitianga, Umutoi, Te Patu, Miria te Kakara and Rangitikei River". With respect to waters and waterways, the Crown:

- failed to protect customary title and rights
- failed to protect against depletion of resources and pollution
- failed to protect physical, spiritual and environmental health

Particular grievances referred to in the statement of claim are the application of the *ad medium filum aquae* common law rule, compulsory takings for reserves and other public purposes, lack of protection and provision for non-commercial customary fisheries, and lack of recognition of rangatiratanga and kaitiakitanga.

### **Claim by Hinemata Hapu**

#### **WAI-1944 Claim by Hinemata Hapu**

The Hinemata hapu are a group of hapu of Ngati Raukawa, who operate autonomously from and have not been included in the generic Raukawa claim. Their amended statement of claim is dated December 2010<sup>20</sup>. They have traditional interests in the Rangitikei, Manawatu and Otaki Rivers, and seek to have claims to those rivers elevated to a separate claim, in a similar manner to the Waikato River claim.

#### **3.1.6 Ngati Apa Settlement**

Ngati Apa's rohe lies in the southern part of the Taihape Inquiry District and south of the Inquiry District. While it traditionally lay to both the east and the west of the Rangitikei River, the Crown purchases had the effect of confining Ngati Apa to the area to the west of the river.

A settlement has already been reached between the Crown and Ngati Apa<sup>21</sup>. It was legislated for in the Ngati Apa Settlement Act 2010. The settlement identified Ngati Apa's interest in the Rangitikei River as far upstream as the northern boundary of the Rangitira block (near Mangaonoho), and in the Oroua River as far upstream as a point 17 kilometres above Kimbolton (near Marton Block). For each of these rivers, statements of association have been prepared as part of the settlement documentation<sup>22</sup>. The statements set out the significance of each river to Ngati Apa (including links to ancestors), acknowledge that other iwi also have interests in each

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<sup>20</sup> WAI-1944, Document #1.1.1(a).

<sup>21</sup> The Deed of Settlement is accessible via <http://www.ots.govt.nz>.

<sup>22</sup> The Statement of Association for the Rangitikei River is included as an Appendix to this report.



river, identify traditional sites of kainga, pa, urupa, cultivation and food gathering (including pa tuna), and discuss the environmental concerns that Ngati Apa feel need to be improved and remedied. A further statement of association for the coastal region refers to the special significance of the Rangitikei River mouth to Ngati Apa as a fishing site and a waka landing place. The settlement returns to Ngati Apa ownership of two small properties on the eastern bank of the Rangitikei River, at Pakapakatea and at Waitapu. Prior to return each property had been a reserve for river protection or river control purposes under the control and management of the Manawatu-Wanganui (Horizons) Regional Council.

### **3.1.7 Rangitaane o Manawatu Heads of Agreement**

Rangitaane o Manawatu (Wai-182 claim) has entered into a heads of agreement with the Crown as a preliminary to a full settlement of all historical (pre-1992) claims<sup>23</sup>. The heads of agreement defines the iwi's area of interest on a map, which shows that the area's north-western boundary follows the Rangitikei River from its mouth to just south of Ohingaiti. The area includes the Kiwitea Stream, Oroua River and Pohangina River. The parties have agreed that the settlement will include statutory acknowledgements recognising Rangitaane o Manawatu's interest in that part of the Rangitikei River within the iwi's rohe, in the Oroua River and in the Pohangina River.

## **3.2 Consultation with claimants**

The project brief assumed that statements of claim on their own would not be sufficient to express the full range and intensity of views held by claimants about the rivers and the waters. It therefore identified that a significant aspect of the project was to be consultation with claimant groups.

Crown Forestry Rental Trust organised four hui for meeting with claimants:

- An introductory hui in Taihape on 25 October 2011, where the contractors responsible for seven different research projects (including this rivers project) were introduced to those claimants and their representatives who attended
- A further hui at Parewahawaha Marae at Bulls on 21 November 2011, to provide an opportunity for claimants in the Porirua ki Manawatu Inquiry

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<sup>23</sup> The Heads of Agreement are accessible via <http://www.ots.govt.nz>.

District, with an interest in the lower portion of the Rangitikei River and its tributaries, to meet the contractor responsible for this rivers report and present to him the river-related issues of concern to them; the opportunity provided by this hui was used by Ngati Parewahawaha and Ngati Kauwhata claimants to speak about the Rangitikei River

- A hui at Taihape on 25 January 2012, where a draft version of this scoping report was presented, and feedback sought; the opportunity provided by this hui was used by Ngati Hinemanu and Ngati Paki claimants to provide their comments
- A hui at Bulls on 26 January 2012, where a draft version of this scoping report was presented, and feedback sought; the opportunity provided by this hui was used by Te Hono ki Raukawa Council and Ngati Parewahawaha to provide their comments

A series of additional meetings have also been held with some of the claimant groups. These meetings were:

- An introductory meeting with Mokai Patea Claims Trust representatives and their counsel at Moawhango Marae on 26 October 2011, at which there was agreement to hold a second meeting. The second meeting was held at Taihape on 22 November 2011. Both of these meetings were attended by the contractors for the rivers, environmental and local government scoping reports
- An introductory meeting with Ngati Hinemanu and Ngati Paki representatives at Winiata Marae on 26 October 2011, at which there was agreement to hold a second meeting. The second meeting was held at Winiata Marae on 21 November 2011. Both of these meetings were attended by the contractors for the rivers, environmental and local government scoping reports
- An introductory meeting at Te Tikanga Marae on 27 October 2011 with representatives of claimants based on Te Reureu block, at which there was agreement to hold a second meeting. The second meeting was held at Te Tikanga Marae on 23 November 2011. Both of these meetings were solely with the contractor for this rivers report

- A meeting with Mokai Patea Claims Trust representatives at Taihape on 31 January 2012, at which they provided their comments on the draft version of the scoping report

Contact has also been made with other claimant groups. Those consulted have been:

- Ngati Kauwhata (WAI-972); e-mail contact and personal contact at hui with Stephen Bray (researcher for this claim)
- Ngati Kauwhata (WAI-1461); personal contact at hui with Dennis Emery (claimant)
- Hinemata Hapu (WAI-1944); telephone contact with Te Kenehi Teira (claimant), and personal and e-mail contact with counsel for the claimants
- He Toa Takatini (WAI-69, WAI-263, WAI-378, WAI-382 and WAI-1425); telephone contact with Marei Apatu (the WAI-263 claimant, and a contact person for the wider claimant group)

## 4 THE DIFFERENT RIVERS IN THE STUDY AREA

The Rangitikei River is the third longest river in the North Island, with a total length of 241 kilometres. In terms of volume of water, it is the sixth largest in the North Island. Its source is in the Kaimanawa Range, rising from springs on Ngapuketurua.

The character of the river, and the country through which it passes, can be divided into three general parts, each of which also has its own distinctive cultural and European settlement history. Some of the remarks below about each part of the river are drawn from the writings of the Egarrs<sup>24</sup>, who represent kayakers and rafters; these users are probably the non-Maori group that has had the closest contact with the river in recent years.

The headwaters flow through open tussock-covered country that was only temporarily occupied before European settlement and is today occupied by large stations grazing sheep. It has wilderness characteristics because of its isolation, and its waters are of high quality. Between the Mangamaire confluence and Springvale (on the Taihape – Napier Road), the river flows through three gorges. Between the gorges the river is fast-flowing over a shingle bed.

In its middle portion the river has cut down into papa country of mudstones and sandstones as those rocks were experiencing a series of periods of uplift. The banks are vertical cliffs below a series of terraces, each terrace representing a pause in between the periods of uplift where erosion by the river created a wide flat-bottomed valley. The high cliffs lining the river, overhung by trees along the top, while scenically impressive, mean the river is only easily accessible at a limited number of places. The country used to be covered in native forest, but much has been cleared for farm development. In the Pukeokahu locality the river descends steeply, with a long series of rapids, interspersed with quieter, deeper water, one stretch of which is

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<sup>24</sup> Egarr, Graham, *New Zealand's North Island rivers: a guide for canoeists and rafters*, David Bateman, Auckland, 1989.

Egarr, GD and JH Egarr, *New Zealand recreational river survey: an investigation into the recreational potential of New Zealand's inland waterways: Part II, summaries of North Island Rivers*, National Water and Soil Conservation Organisation for New Zealand Canoeing Association, Wellington, Water and Soil Miscellaneous Publication No. 13, 1981.

descriptively named The Narrows (known to Maori as Te Papa a Tarinuku). Further downstream the rapids become less frequent, less challenging to navigate, and separated by sluggish, deeper, glassy-smooth reaches of the river. Water quality is affected by point-source pollution from poorly-performing sewage treatment plants, and non point-source discharge of nutrients from farmland. In this middle portion the river is joined by a number of tributaries (e.g. Whakaurekou, Kawhatau, Mangawharariki) on its true left (eastern) bank that rise in the Ruahine Range and are similarly downcut and gorge-like by the time they meet the Rangitikei.

In the lower portion, from near Rewa to the sea, the river flows through a wider valley before emerging on to the coastal plain. It meanders and braids across the plain, threatening the banks with erosion and dropping out large amounts of gravel and shingle that mostly have their source in the Ruahine Range. Willows and poplars are the characteristic vegetation of the banks. Water quality is affected by the pollution occurring in the middle portion, and by similar point and non-point discharges from a closely settled and heavily farmed lowland area. The Pourewa and Tutaenui Streams are the largest tributaries joining the river in this portion.

The Moawhango River rises close to the Rangitikei near Waiouru, and flows first through tussock country and then through formerly forested lands to join the Rangitikei east of Taihape. Moawhango township is approximately on the boundary between tussock and forest country. South of the township it flows through a deep, very narrow gorge that receives little sunlight, and that is impossible to navigate because of rapids and waterfalls. This gorge fixed the upper limit of waka travel at Kiri-pawerawera (near the Otua-reiawa Stream tributary). The river has been significantly affected by a draw-off of water in the headwaters for the Tongariro Power Development scheme.

The Hautapu River rises close to Waiouru, runs parallel with the Moawhango, and flows into the Rangitikei near Utiku (below the Moawhango confluence). Above Taihape it has a small flow over a steep rocky bed overhung by willows. Below Taihape it flows in a narrow gorge past Utiku. Taihape's sewage treatment plant has a negative effect on water quality.

The Ngaruroro River rises in the Kaimanawa Range in close proximity to the source of the Rangitikei, and flows south-eastwards to discharge into the sea in Hawke Bay. While the catchment of this river in the study area (particularly the valley of the Taruarau tributary) is predominantly tussock country, the Ngaruroro itself flows through a steep-sided forested valley. The river separates the Kaweka Range from the Ruahine Range to its south.

The Pohangina River rises on the southern flank of the Ruahine Range, and flows into the Manawatu River. Only the headwaters of the river, in the mountainous country of the range, are included in the study area. The catchment within the study area, in the former Otumore block, is today part of the Ruahine Conservation Park.

The Oroua River rises in the southern part of the Ruahine Range and flows southward to join the Manawatu River. Only the upper part of the valley, where settlement and farming is less intense, is in the study area, and the river is not as affected as further downstream where it emerges on to the floodplain of the Manawatu district. The river is shallow, flows over a shingle bed, and has willow growth along its banks.

The Kiwitea Stream rises in lower country near Rangiwhia, and joins the Oroua River near Feilding. Only the less-intensively-developed upper part of the catchment is in the study area. Willows dominate the stream channel.

The Mangapapa River is a tributary of the Turakina River. It rises near Mataroa. It is generally a narrow stream choked with willows. The portion of the Turakina River itself that is located within the study area runs in a narrow valley and is also dominated by willows along its banks.

The Waitangi Stream and the Makiokio Stream, minor upland tributaries of the Whangaehu River, drain a small part of the study area at Waiouru. Although contributing less acidic water to the Whangaehu than the other tributary streams that drain the slopes of Mount Ruapehu, the Waitangi Stream is compromised by discharge from the Waiouru sewage treatment plant. One reference to releases of overflow water from the Waitangi Stream into the Waiouru Stream has been

located<sup>25</sup>; this needs to be investigated further as, if correct, it means there are occasional transfers of water from the Whangaehu catchment into the Hautapu catchment.

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<sup>25</sup> Tonkin and Taylor, *Water resources of the Rangitikei River*, prepared for the Rangitikei Wanganui Catchment Board, Marton (being also Rangitikei Wanganui Catchment Board Report No. 80/1), 1980.

## 5 CUSTOMARY USE AND SIGNIFICANCE

Tupuna Awa, the nurturing, cleansing, healing waters bringing life to every organism on the land, is the cultural reminder of who we are, our identity as Maori, and the rights to claim back what has been stripped away by stealth, the brutal acts of white colonisation which has almost destroyed our people, our whenua and our Tupuna Awa Rangitikei.<sup>26</sup>

To Ngati WhitiTama, mountains and rivers are metaphysical as well as physical elements.... Those natural elements constantly remind us of the Beginnings of the World, the Creation – something many relate to, and wonder about in awe. Maori treat these elements with respect – they have their moods!

Mountains and rivers are “beings”, not “things”. Consequently the names of these “beings” were personified – people referred to them in friendly but respectful manner as “Moawhango” and “Rangitikei” – not *Moawhango River*, nor *Rangitikei River*.

Building the dam severed a Moawhango limb, its flow of life-giving water staunches as if by a tourniquet. Though it may appear the river lost only a tributary, Moawhango in fact lost one of its children. Moawhango was permanently diminished.<sup>27</sup>

All Maori have a special relationship with awa. This chapter relies upon the descriptions of that special relationship provided during hui and meetings held with claimant groups as part of the research for this report. While those descriptions are about the Rangitikei River, they cover themes that will be generally applicable to other rivers in the study area as well. This chapter contains a series of statements about different aspects of the river.

The river is a living being. It has a mauri - a life force - that means that the river interconnects with the people, and the people interconnect with the river. It both nurtures and sustains the people, and is accorded respect. Any damage done to the river is harm done to the mauri of the river and harm done to the people.

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<sup>26</sup> Oma Heitia (Ngati Parewahawaha, WAI-2197 claimant), personal communication, 30 January 2012.

<sup>27</sup> Graeme Gummer, submission of Ngati WhitiTama (Ngati Whitikaupaka and Ngati Tamakopiri) to Resource Consent Hearing Panel on Genesis Power Ltd application for Tongariro Power Development Scheme, 23 October 2000.



The river provides the iwi and hapu along its banks with a sense of identity. Some of those consulted refer to themselves as a “river people”, and consider that earlier generations were as much at home on the water as they were on the land. The river runs through their lives. A statement made at one of the consultation hui was, “take away our river, and we are lost”.

The river is a tupuna (ancestor). It is integral to, and provides a compelling background to, the web of whakapapa connections shared by the different iwi and hapu along its banks. It is not possible to discuss whakapapa without bringing the river into the discussion. It is not possible to talk about the river without mentioning a crossover to whakapapa links.

The Rangitikei River was a means of communication; it was the main highway between the middle of the island and the sea, with waka (canoe) transport used as far upstream as the Moawhango River. While that role for the river itself has disappeared nowadays, the wider river valley is still followed by the Main Trunk Railway and State Highway 1, so that the historical pattern is maintained, albeit in a different form. The river was also an access to the sea for those resident along its banks, especially if they enjoyed rights to harvest kaimoana recognised by the coastal-living peoples.

For those iwi along the river with Ngati Tuwharetoa, Ngati Raukawa and Ngati Maniapoto links, the river is an integral part of a southward movement that has spanned generations. It was this more longstanding connection that was relied upon during the 1820s and 1830s, when iwi used the Rangitikei River valley as a main migration route.

Similarly, the first movements of people inland from Heretaunga are defined in stories today by reference to the rivers. Parties journeying into the interior via the Mohaka River and the Ngaruroro River met up at the confluence of the Taruarau River and Ikawetea Stream<sup>28</sup>. A rock in the stream is variously known as Te Toka a Tamatea and Te Toka a Kahungunu.

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<sup>28</sup> The confluence of the Taruarau River and Ikawetea Stream forms a common boundary point between the Mangaohane, Timahanga and Te Koau land blocks.

Use of the Rangitikei River could not have been achieved if the iwi and hapu along its banks remained in conflict with one another. Any antagonism that different groups might have felt towards one another was overcome by linking the people through whakapapa. Strategic marriages were made, offspring were born, and lineages became linked in order to heal past wounds and smooth the way for the future. Once started, the process became self-perpetuating. The river, as a route transcending iwi and hapu boundaries, became both a physical link between the people, and a core part of the relationship link between the people.

The river is important to the ancestor stories told by the people about themselves and their rohe. When Tamatea Pokai Whenua first arrived in the district, he left a number of his mokai (pets) at different locations to act as guardians and as representatives of his authority over the district. At the confluence of the Hautapu and Rangitikei Rivers, he left patiki (flounder). At Aorangi he left Pohokura (a lizard). In a pool below Tikirere Falls (near Moawhango township) he left koura (freshwater crayfish). These stories are also indicative of the importance of the river to the iwi as a food source.

The river feeds the people. It used to provide an abundance of tuna (eel), koura (freshwater crayfish), patiki (flounder), inanga (whitebait, also used in conversations to describe smelt), kakahi (freshwater mussel) and piharau (lamprey, also used in conversations to describe blind eel). Pa tuna (eel weirs) and hinaki (trapping baskets) were set for tuna, and tipi (stone walls) were used to drive and then trap inanga. Relocations of freshwater food species from one part of the river to another part are known to have occurred. It also used to provide whio (blue duck) and other waterfowl. Surpluses could be traded with people in other districts. Many of the traditional food species are no longer present in the river in the quantities that they used to be, and the people mourn this depletion of resources they used to rely on and consider to be a part of their cultural heritage. For them it is a matter of sadness and regret that the wider community, in its resource management policies for the river, has failed to look upon the survival of healthy populations of these food sources as indicators of the health of the river and a worthwhile goal to be aimed for. It irks them that the introduced trout species are considered to be of more value as indicator species than the original inhabitants of the river.

The river clothes the people. Flax is prepared for weaving in the waters of the river. Paru (black dye) is taken from creeks and wetlands.

The river cleans the people. Maori used to bathe and play in the rivers, and still visit certain spots for recreational swimming. However, in some places, such as the Hautapu River, bathing is no longer appropriate because of water pollution, principally from the Taihape sewage treatment works. The local swimming place is now in the Rangitikei River immediately above its confluence with the Hautapu. At Tokorangi there is a belief that provided proper respect to the river is shown, the mauri of the river will protect swimmers from drowning. Pumice picked up from the river is used as an abrasive to clean teeth and remove old skin from the heels of feet.

The river heals the people. Rongoa (traditional medicines) are cleaned and prepared in the river or in water from the river. The waters of the river are a spiritual cleanser, and have been used in ceremonies to heal persons suffering from illnesses believed to be related to infringement of cultural standards and norms.

Te Kere Ngataierua was a nineteenth century spiritual leader of the Pae te Uihau movement who had strong connections with the Rangitikei River, and for whom the river was a central part of his existence<sup>29</sup>. He was the grandfather of Titi Tihu of Tokorangi (Rangitikei River) and Tawata (Whanganui River), and a mentor (“his mana was passed on”) to Mere Rikiriki of Parewanui. Mere Rikiriki, who is described today as a prophet, mixed customary beliefs with Christianity in her Church of the Holy Spirit. She gained her spiritual strength in part from a ritual immersion in the Rangitikei River (on 27 July 1910)<sup>30</sup>. She in turn mentored Tahupotiki Wiremu Ratana (who was brought up at Parewanui before moving with his Ratana Church followers to Ratana village), and Hori Enoka Mareikura, founder of the Maramatanga religious movement<sup>31</sup>.

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<sup>29</sup> A biography of Te Kere Ngatai-e-rua is at [www.teara.govt.nz/en/biographies/2t21/1](http://www.teara.govt.nz/en/biographies/2t21/1).

<sup>30</sup> Young, David, ‘Mere Rikiriki’, in Macdonald, C., M. Penfold and B. Williams (eds), *The book of New Zealand women: ko kui ma te kaupapa*, Bridget Williams Books, Wellington, 1991.

<sup>31</sup> Sinclair, Karen, *Prophetic histories: the people of the Maramatanga*, Bridget Williams Books, Wellington, 2002.

To Maori, the intimate connection that these spiritual leaders had with the river was readily accepted, because it arose naturally out of the deep relationship that they themselves also had with the river on a day-to-day basis. The traditional spiritual and religious values of the river have been continued into the post-contact era, with its use for christenings and baptisms, although these are less likely to be performed now that the mauri of the river has been damaged.

The river has a one-ness from its source to the sea (“mai te puna ana ki Tangaroa”). The people do not need to have visited the source of the Rangitikei River at Ngapuketurua in the Kaimanawa Range to know that it is an important place with a deep spiritual significance, as it is the birthplace of many rivers (including the Ngaruroro, Mohaka, Tauranga Taupo, and Waimarino) that flow in different directions from that locality.

Within this pattern of customary use and significance are some particular features of relevance to women. Women provide the whakapapa link, through marriages with new arrivals, back to the original people of the land, and therefore are the maintainers of the mana whenua inter-generational connections of which the river is a central part. Women have been affected when the state of a river prevents them carrying out the tasks they are skilled at, such as food gathering, weaving and dyeing.

It is the deep links that the people have with any river that make the changes that the rivers have experienced since the arrival of Pakeha so traumatic for Maori. Depleting the rivers' food-sustaining capacity, polluting their waters, treating them as little more than drainage channels, altering flows and allowing large-scale gravel extraction, are all injuries that have affected not just rivers and their mauri, but also Maoridom.

The connection that iwi have with the rivers is as strong with smaller tributary streams as it is with the main stem watercourses. The conversations held at Winiata Marae with Ngati Hinemanu and Ngati Paki representatives were as much about Mangaone Stream, a small tributary near the marae, as they were about the Hautapu and Rangitikei Rivers. The conversations held at Tokorangi Marae with representatives of the iwi of Te Reureu were as much about the Waituna Stream and the Rangitawa Stream as they were about the Rangitikei River. A conversation with a Hinemata

Hapu claimant identified that the reason for the laying off of a number of reserves along the Makowhai Stream as part of the Rangitikei-Manawatu Purchase was because of the food supplies available there. These side streams, often being more easily accessible and having gentler flows shaded by bank vegetation, have always been particularly important as sources of food. In many cases, however, their character has been changed by vegetation clearance and farm drainage even more dramatically than the main stem watercourses, sometimes to the extent of not flowing at all during dry periods.

A more in-depth and more complete overview of the cultural significance of the rivers is required than can be provided in this scoping report. Such an overview would require more intensive discussions with the iwi and hapu along the rivers. It would also examine the effect on the iwi and hapu of the changes that have occurred since contact with Europeans. While the feelings that the people have for the rivers have remained constant, the patterns of traditional use have changed. The importance of the lower Rangitikei River to the people is apparent in the concentration along the riverbanks of the reserves provided at the time of Crown purchases in the 1850s and 1860s. It is also apparent in the location of the Taraketi block alongside the river when the owners were willing to part with the remainder of the Rangatira block. Evidence given to the Maori Land Court when title to land blocks with river frontage was first investigated can identify pa tuna sites and seasonal camping spots. These are aspects that can be researched at the same time as elders are interviewed, to build up a picture of traditional use of the rivers. This pattern can then be compared with the remnant pattern of use that survives today, to gain an understanding of what has become lost, and what might be revived and restored.

An example of the research that is still needed can be seen in the Ngati Apa statement of association for the Rangitikei River. This statement is included in an Appendix to this report. It is a summation of a wider body of research work that was drawn on to describe the connections that iwi have with the river, the significance the river has for the iwi, and the concerns held by the iwi about the current state of the river.

Further research of this nature would not be a substitute for claimant briefs of evidence provided by individuals (in the event that the Waitangi Tribunal held

hearings). Rather it could complement those briefs of evidence by providing more of an overview perspective about rivers generally and about the Rangitikei, Moawhango and Hautapu Rivers as an indivisible whole.

## 6 THE FIRST YEARS OF EUROPEAN SETTLEMENT (UP TO 1897)

The major features marking the arrival of European settlers in the study area are well-known:

- Purchase of the Rangitikei – Turakina block in 1849
- Purchase of the Rangitikei – Manawatu block in 1866
- First lease of Inland Patea high country in 1867
- First bridge across the Rangitikei River at Bulls in 1873
- Crown and private purchasing of Otamakapua, Rangatira and Otairi blocks in late 1870s and 1880s<sup>32</sup>
- The Main Trunk Railway had reached northwards as far as Hunterville by 1887, and as far as Mangaonoho by 1893; Mangaonoho remained the railhead until 1902, when the Makohine Viaduct was completed<sup>33</sup>

These matters are important background that will need to be covered in an introductory manner in any further report. The block history reports, at present being prepared, will provide a ready-reference to the spread of European settlement, as measured by land purchasing activity, across the study area. Land purchasing was a preliminary to settlement, although in the case of Crown purchases there was a short gap between purchase and the cutting up and offering of sections to European settlers.

With respect to an understanding of the state of the rivers during this early period, the writings of the first European visitors to the district are important. Travellers through the study area included:

- Richard Taylor<sup>34</sup>, 1845, 1860
- William Colenso<sup>35</sup>, 1847-1852

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<sup>32</sup> By virtue of the Waitapu and Otamakapua purchases by the Crown (notified in *New Zealand Gazette* 1880 page 451 and 1884 page 1215 respectively), all of the Oroua and KIWITEA catchments within the study area had been acquired by 1884.

<sup>33</sup> Land as far north as Mangaohane was taken for railway in 1892 (*New Zealand Gazette* 1892 page 1456), while land to the north of Mangaohane (including the Makohine Viaduct site) was taken for railway in 1898 (*New Zealand Gazette* 1898 page 1583).

<sup>34</sup> Mead, AD, *Richard Taylor: missionary tramper*, Reed, Wellington, 1966.

<sup>35</sup> Colenso, W, *An account of visits to, and crossings over, the Ruahine Mountain Range, Hawke's Bay, New Zealand, and of the natural history of that region, performed in 1845-1847, cum multis aliis: in*

- Stephenson Percy Smith<sup>36</sup>, 1858
- James Crawford<sup>37</sup>, 1862

What they, and any other early travellers, have to say about the rivers and their use by Maori is important in establishing a baseline against which subsequent changes can be compared. Any further report will need to quote from and discuss the records left by these travellers in some detail.

*Potential reference sources: Taylor, Mead, Colenso, Bagnall and Petersen, Smith, Crawford*

One feature the early traveller records refer to is the use of waka on the Rangitikei River as far upstream as the lower Moawhango River. Crawford's book has a sketch showing a waka, with five or six occupants, at the confluence of the Moawhango and Rangitikei Rivers. This waka appears to be similar in size and character to those recorded in later photographs, such as one taken at Onepuehu in 1897 that shows two river waka with shallow draft and low freeboard<sup>38</sup>. Despite this, there are stories of more substantial waka on the river. At one of the hui at Te Reureu it was noted that the waka Te Paranihi, currently held in Otago Museum, was at one stage located on the river, before being moved to the Whanganui River, from whence it was taken to Dunedin. Church, in his history of the Port of Rangitikei, refers to two waka, each crewed by 50 men, that towed a sailing ship out over the bar at the rivermouth in 1854<sup>39</sup>. Waka were regularly used to distribute up the river cargoes discharged at the rivermouth port, and to carry farm products such as wool bales down the river to the port<sup>40</sup>. Further research may provide a fuller understanding of the use of the river by waka. This might then allow an assessment to be made about the relative importance of the river as a transport route, as compared to the use of overland tracks following the Rangitikei valley.

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*two papers read before the Hawke's Bay Philosophical Institute, 1878: with additional and copious notes.* Daily Telegraph, Napier, 1884.

Bagnall, AG and GC Petersen, *William Colenso, printer, missionary, botanist explorer, politician: his life and journeys*, Reed, Wellington, 1948.

<sup>36</sup> Smith, S Percy, *An 1858 journey into the interior*. Taranaki Herald, New Plymouth, 1953.

<sup>37</sup> Crawford, James Coutts, *Recollections of travel in New Zealand and Australia*, Trubner and Company, London, 1880.

<sup>38</sup> *Appendices to the Journals of the House of Representatives* (AJHR), 1898, C-1, Appendix 14, opposite page 129.

<sup>39</sup> Church, Ian, 'The port of Rangitikei', in *New Zealand Marine News*, Volume 34(3), pages 72-85, Volume 34(4), pages 119-127, and Volume 35(1), pages 16-24, 1984.

<sup>40</sup> Knight, Rob, *Poyntzfield: the McKenzies of Lower Rangitikei*, Wright & Carman, Lower Hutt, c.1975.



*Potential reference sources: Crawford, Church, Knight, Wilson*

Early writings will also provide information that can serve as a baseline about the use of the rivers by Maori for food gathering. In pre-European times, Maori tended to move around their territory to harvest foods in season. Certain places along the rivers would have been important as sites of pa tuna (eel weirs) or as camping places. While some of this type of information has been handed down, what is known today is not as full as the knowledge that would have been required then to live off the land. Writings of early European visitors, and evidence of occupation provided to the Native Land Court during investigation of title to the initial blocks, can add to the knowledge still held by iwi and hapu today. An understanding of the importance of the rivers to Maori during the early days of European settlement will provide some context for assessing the impact of what has been lost as a result of changes to the rivers initiated or supported by the Crown in subsequent years.

*Potential reference sources: Maori Land Court minute books*

A matter that research to establish a baseline will need to address is what the rivers looked like during the early days of European settlement. How the Rangitikei River is today is the combined result of the 1897 flood, plus subsequent natural readjustments since then, plus changes in flow patterns caused by removal of native forest cover and agricultural development in the catchment, plus changes to the river channel caused by engineered flood protection works. What the river looks like to present generations is not a good guide to what it looked like in 1840, or in 1896. For instance, after the 1897 flood the lower reaches of the Rangitikei were characterised by a wide, meandering, braided river channel passing through a wide bed of gravel and shingle. However, before the flood the river may have been a single channel passing through low-lying well-vegetated terraces. Wilson waxes lyrical about kowhai flowering on the river flats, when mourning what was lost as a result of flooding<sup>41</sup>. However, even before 1897 the river had been an unstable environment, being subject to frequent, though smaller, floods. Further research is needed to gain a comprehensive understanding of the nature of the Rangitikei River and other

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<sup>41</sup> Wilson, James G, *Early Rangitikei: a few notes, collected from various sources of the settlement on the Rangitikei River of a number of Māoris of different tribes. A short history of the purchase and colonization of the land between the Turakina and Oroua Rivers, and an account of the various pioneers*, Whitcombe and Tombs, 1914 (reprinted Capper Press, Christchurch, 1976).

waterways before 1897, in order to be able to present a detailed word picture of the area at that time.

The baseline nature of the rivers, and their characteristics in the early days of European settlement, need to be well established by this research, because it will be necessary to be able to critically examine the pros and cons of a particular argument relevant to Treaty claims. The two sides of this argument are:

- The changes to the waterways were induced by European settlement. The clearing of the native vegetation cover in the catchment as a result of European settlement and farming practices, plus other Crown interventions such as flood protection works, caused changes to the river both before and after 1897, the Crown was a major player in bringing about those changes, and it knew at the time that those changes would occur
- The changes to the waterways were natural events. Floods, and in particular the significant 1897 flood, were so overwhelmingly influential that the Crown had little or no control over events

In reality, both reasons for the changes probably have some merit. However, the relative proportions of the two drivers of change do need to be teased out, and understanding how and to what extent the character of the rivers had been changing before 1897 as a result of vegetation clearance in the catchments will help in this regard.

In the tussock country of the upper catchments, there would by 1897 have been a history of 30 years of firing and burning of the tussocklands, and the scrubland transitional zone between tussocklands and forest lands<sup>42</sup>. These would have changed the composition of the vegetation cover. However, the extent to which the changes in vegetation would have changed the patterns of runoff into the rivers is not known, and needs to be researched.

In the forested country in the middle reaches of the rivers, the extent of forest clearance by 1897 needs to be identified. In general terms, clearance was spreading

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<sup>42</sup> Rogers, GM, *Landscape history of Moawhango ecological district*, PhD thesis in Botany, Victoria University, Wellington, 1987.

northwards as land passed into settler hands, either by direct purchase by settlers from Maori, or by purchase by the Crown and then the granting of sections to settlers. However, much of the forest and much of the Crown-owned land was, in 1897, still intact and undisturbed, because its clearance by logging and burning did not commence until after the railway had arrived. The dates of the Crown's published offers of sections for sale can provide a timeline for the arrival of settlers on the land.

On the coastal plain, much of the native vegetation would have been removed and replaced by grass and crops by 1897. Timber milling along the eastern bank opposite Bulls was how James Bull became such a prominent citizen of the district. Wholesale vegetation change would certainly have occurred with the best well-drained land<sup>43</sup>. However, there may have been a zone of lesser development along the riverbanks where wetness, poor drainage, or a risk of annual flooding made them less attractive as farmland. As with the tussocklands and the forest lands, the consequences of these vegetation changes for runoff patterns and the nature of the rivers, as well as the understanding at that time about the ecological consequences, needs to be researched.

There were certainly some changes occurring to the river prior to 1897. In 1893 the residents of Ohinepuhiawe petitioned Parliament that the Rangitikei River had changed its course and cut through their reserve<sup>44</sup>. This new course is a different one to the course that was later adopted by the river after the 1897 flood. The nature of the change to the river at Ohinepuhiawe, and the response of the Crown to the petition, need to be researched, as the petition provides a window into what was happening on a larger scale on the river as a whole, as well as an example of the adjustments that Maori were having to make during the early years of European settlement.

*Potential reference sources: Department of Lands and Survey head office registers and files, local newspapers*

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<sup>43</sup> Wilson, James G, *Early Rangitikei: a few notes, collected from various sources of the settlement on the Rangitikei River of a number of Māoris of different tribes. A short history of the purchase and colonization of the land between the Turakina and Oroua Rivers, and an account of the various pioneers*, Whitcombe and Tombs, 1914 (reprinted Capper Press, Christchurch, 1976).

<sup>44</sup> Petition 495/1893 of Hare Reweti Rongorongo and 29 others.

## 7 THE FLOOD OF 1897

While there have been floods before and since, the flooding that occurred in April 1897 was the most extreme and damaging natural event that has happened to the Rangitikei River since the start of European settlement. All the other rivers in the study area were also affected. Destroyed bridges were the most immediate consequence, while a wide floodway filled with gravel and silt, a constantly shifting river channel within the floodway, and a new wariness and respect for the river among the European population, were longer-term effects. The description below primarily relies on contemporary reports by Government officials<sup>45</sup>.

The storm that caused the floods was centred in the high country in the headwaters of the Rangitikei and the Hawke's Bay rivers. Only a few rain gauges were in existence at that time. Rainfall during the 48 hour period from 9am on 15 April to 9am on 17 April 1897 was measured as follows:

Erewhon	8.12 inches (206 millimetres)
Ruanui <sup>46</sup>	10.13 inches (257 millimetres)
Raetihi	6.31 inches (160 millimetres)
Tutira (Hawke's Bay)	8.62 inches (219 millimetres)
Bulls	0.86 inches (24 millimetres)

Despite being near the epicentre of the storm, the upper reaches of the rivers recorded less damage than the lower reaches. Bridges were destroyed at Kuripapango on the Ngaruroro River, and at Turangarere on the Hautapu River, while the approaches to the ford across the Moawhango River at Moawhango township were washed out. The Moawhango reportedly showed signs of having risen up to 60 feet above its normal level in the narrow, gorged portion below Moawhango township. The sparse levels of development and the deeply incised valleys saved this part of the study area from more severe damage.

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<sup>45</sup> 'Roads and bridges damaged by the Easter floods of 1897', in *Appendices to the Journals of the House of Representatives*, 1898, C-1, Appendix 14 (pages 126-135).

<sup>46</sup> West of Mataroa, near the watershed between the Hautapu River and the Turakina River.

In the middle section of the Rangitikei, the waters roared through the cliff-sided river channel. While the cliffs contained the floodwaters, and prevented damage to surrounding lands, bridges at Otara, Mangaweka and Vinegar Hill were lost. A bridge on the Kawhatau Valley Road over the Mangawharariki Stream, some 27 feet above stream level, was covered by 6 feet of water before a tree carried down by the flood smashed into it and destroyed it. Totara trees on a river flat upstream of Vinegar Hill that were known to be more than 300 years old, because their growth rings had been counted before the flood, were washed away. Measurements at the Mangaweka bridge showed the floodwaters at their peak to be 32 feet (9.75 metres) higher than normal flows.

Emerging on to the coastal plain, the Rangitikei flooded riverbank lands, drowned stock, washed away homesteads, and destroyed road bridges at Onepuehu and Bulls and the railway bridge at Kakariki. The area flooded (mostly below Bulls) was mapped by surveyors at more than 5700 hectares. The river also carried down a large volume of silt and stones, so that river flats became covered by up to two feet of new material.

Damage caused by the associated flood in the Ngaruroro River was, with the exception of the loss of the Kuripapango bridge, centred downstream of the study area, on the lower reaches of the river on the Heretaunga plains<sup>47</sup>.

The 1897 flood was a particularly severe event. It was estimated in 1980 that the volume of flow at Mangaweka would have a return frequency of 1000 years<sup>48</sup>. Not only did it cause major changes to the Rangitikei River at the time, but the river could hardly be expected to adjust quickly and readily to the dramatically changed circumstances. Any natural adjustment period could probably be measured in decades. However, the river was not given a chance to adjust to a new equilibrium state naturally, because the imperatives of European settlement meant continued change in the catchment, and engineered interference to the river channel.

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<sup>47</sup> Armstrong, David, Phillip Cleaver, Terence Green and James Taylor, *Heretaunga – Tamatea Environmental Overview*, commissioned by Crown Forestry Rental Trust, Wellington, 2010, pages 278-279.

<sup>48</sup> Tonkin and Taylor, *Water resources of the Rangitikei River*, prepared for the Rangitikei Wanganui Catchment Board, Marton (being also Rangitikei Wanganui Catchment Board Report No. 80/1), 1980.

Contemporary Government reports record damage suffered by Maori in the lower reaches of the Rangitikei River, including flooding of farmland and stock losses. However, the emphasis of these records is on the losses suffered by the European community and the damage to public infrastructure. Further research is needed to better understand the losses suffered by Maori, and also to understand what, if any, response the Crown had to the hardships that Maori communities suffered as a result. For instance, Maori at Ohinepuhiawe petitioned Parliament in 1900 seeking a grant of land to replace land that had been washed away by a change in the river channel<sup>49</sup>; they did not receive additional land until 1929 (see section on navigable rivers). In another instance, Maori at Te Reureu were cut off from the western side of the river until a new Onepuehu bridge was built in 1919; during that time their children had to cross the river by waka to be able to go to school. A further consequence of the flood for Maori was the relocation of burials from an urupa at Matahiwi to higher ground<sup>50</sup>.

Whether the 1897 flood changed patterns of Maori food gathering is not known, and needs to be investigated. While the stone and wooden structures used for tuna and inanga trapping would undoubtedly have been washed away, Maori were probably familiar with this from previous flood events and expected to have to restore them after each flood. However, the disruptions to traditional Maori patterns of existence caused by European land purchase and settlement may have also upset past patterns of restoration.

Any further report needs to be able to distinguish the natural changes to the rivers wrought by the 1897 flood from the human-induced changes and subsequent responses presided over by the Crown. Although to do that in any clearcut fashion may not be possible, even a partial distinction of the two effects (natural and human) will help to narrow down the extent to which the Crown may bear responsibility for the overall changes to the river that have occurred over time.

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<sup>49</sup> Petition 264/1900 of Riria Aperahama and 17 others.

<sup>50</sup> Rangitikei Wanganui Catchment Board, *Significance of the Rangitikei River to the Maori people of the district*, Rangitikei Wanganui Catchment Board, Marton, Report No. 85/3, 1985.



*Potential reference sources: Department of Lands and Survey 1898, Soil Conservation and Rivers Control Council, Wilson, Department of Lands and Survey head office files, Maori Land Court minute books, local newspapers*

## 8 TIDAL RIVERS, NAVIGABLE RIVERS, EROSION AND ACCRETION: LEGAL ISSUES

To Maori a river and its banks was a single interconnected functioning system that was the responsibility of the hapu through whose territory the river passed. However, to the Crown and the European community there was no such simplicity. Indeed the legal position of rivers has become increasingly complex over the years. Nowhere is this more so than with respect to title and ownership of the bed of a river. Today the legal status of a riverbed can fall into one of four categories, each of which is discussed in more detail below:

- Bed of a tidal river
- Bed of a navigable river
- Riverbed not in a title and subject to the *ad medium filum aquae* rule
- Riverbed (and former riverbed) in a title

All these categories apply with respect to the main stem of the Rangitikei River, and the last two categories apply with respect to tributaries of the Rangitikei River and to the other rivers covered by this scoping report.

Excluded from these four categories is the concept of Maori ownership of riverbeds by virtue of a right held since before 1840 and never extinguished. That is because the possibility of such ownership was itself legally extinguished by the decision of the Court of Appeal in 1962 with respect to the bed of the Whanganui River<sup>51</sup>. The Court ruled that there was no separate tribal title to the river, and that the investigation of title to riparian lands by the Native / Maori Land Court extinguished customary title to those riparian lands and thereby extinguished any rights (apart from *ad medium filum aquae* rights on non-navigable rivers) that those riparian lands enjoyed to the riverbed.

It needs to be said that the very complexity of the law with regard to rivers and riverbeds leaves open a fertile ground for legal argument<sup>52</sup>. This argument can extend to the courts themselves, where dissenting judgements have sometimes been given.

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<sup>51</sup> *Re the Bed of the Wanganui River* [1962] NZLR 600.

<sup>52</sup> The legal considerations surrounding river ownership have been discussed in reports by the Waitangi Tribunal about the Mohaka River, Ika Whenua Rivers, and the Whanganui River.

These are matters to be taken up by legal counsel. Where historical research can assist counsel is in identifying particular instances where the law (as interpreted by the Crown and other bodies such as Catchment Boards and the Maori Land Court) has been applied to the waterways of the study area.

## **8.1 Bed of a tidal river**

A tidal river is thought of as part of the sea, or as an arm of the sea. This means that the bed is considered to be either seabed or foreshore. Seabed is continuously covered in water at all stages of the tide, while foreshore is covered and uncovered by water during the tidal cycle. As an illustration of the complexity of the law of the water's edge, there are two statutory definitions with respect to tidal waters. In the Crown Grants Act 1908, dealing with land title boundaries, the edge of the land for title granting purposes is set at high water mark as measured at ordinary tide level. In the Harbours Act 1878, dealing with the management and administration of the foreshore and harbours, the upper boundary of the foreshore is the land at high water mark as measured at ordinary spring tide level.

Despite this specific and apparently scientific basis, defining a tidal river can in practice still be something of an art form, particularly when it comes to determining where, when moving upstream, a river ceases to be tidal. This is because at high tide there will be a certain amount of back-up in the freshwater flow, as its movement downstream gets impeded by the tidal water flowing upstream. The other issue is that observers such as surveyors simply do not have the luxury of enough time to wait around for an ordinary tide or an ordinary spring tide that is not unduly influenced by the effects of onshore winds or by variations in freshwater flow. A commonsense best estimate of the upstream limit of a tidal river has tended to be relied upon.

The boundary distinction between an arm of the sea and a non-tidal river is not to be confused with the boundary of the coastal marine area, which is a different concept (for a different purpose) set out in a formula in the Resource Management Act 1991. This and the different high water mark definitions referred to above are micro-distinctions, but differences nevertheless, and can generate a disproportionate amount of legal debate.

For any part of a river that is tidal, the bed has until recently been considered to belong to the Crown by prerogative right. The absolute right of the Crown was challenged in the Ngati Apa Marlborough Sounds case. When the Supreme Court declared that in certain limited circumstances aboriginal occupation could take precedence over the Crown's prerogative right and Maori could therefore have a right to parts of the foreshore, the Foreshore and Seabed Act 2004, and subsequently the Marine and Coastal Area (Takutai Moana) Act 2011, were passed. The latter statute provides for Maori to take a case to Court to seek title.

Prior to the Supreme Court decision and the passing of the recent legislation, the Crown operated as though it owned the beds of tidal rivers. This claim was repeated regularly by the Marine Department, and the Harbours Acts gave the Crown authority to issue titles to reclamations and to port areas.

While Crown ownership might now be less certain, it has accepted responsibility for management and administration of the beds of tidal rivers. This includes giving itself powers to permit and regulate reclamations, jetties, whitebait stands, and moorings<sup>53</sup>.

The Rangitikei River had a port at its mouth between the 1850s and the 1897 flood. This was a combination of ships arriving to drop off supplies and departing with produce from the hinterland, and a ferry service across the river for travelers using the beach as a highway between Wellington and Wanganui<sup>54</sup>. The port was serviced by canoes traveling up and down the river. As a result of the 1897 flood the rivermouth changed so drastically that the port was no longer able to be used by shipping. Although the ferry service across the river was restarted after the flood, it ceased in 1908. The Crown (via powers under the Marine Act 1867 delegated to the Wellington provincial government) was involved with the appointment of a pilot in 1876<sup>55</sup>, and with the building of a signal station. It is not known whether these steps were seen by local Maori as assertions of authority by the Crown with respect to the

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<sup>53</sup> These powers have now been delegated to regional councils under the Resource Management Act 1991.

<sup>54</sup> Church, Ian, 'The port of Rangitikei', in *New Zealand Marine News*, Volume 34(3), pages 72-85, Volume 34(4), pages 119-127, and Volume 35(1), pages 16-24, 1984.

<sup>55</sup> *Wellington Provincial Gazette* 1876 page 19.

port, which challenged or superseded any Maori authority over the rivermouth and port area that already existed. This requires further research.

*Potential reference sources: Church, Melody (1999), NZ Pilot, Marine Department head office files, Wellington Provincial Government records*

With the Crown claiming, in connection with the Rangitikei River, both the bed of the tidal river and the bed of the river upstream of the tidal river, because it was navigable (see next category), the boundary between the tidal and non-tidal riverbed has not been regarded as a significant issue. Further research might, however, identify some more subtle nuances.

*Potential reference sources: Department of Lands and Survey district office files, Horizons Regional Council (re RMA boundary of coastal marine area)*

## **8.2 Bed of a navigable river**

The concept of a navigable river derives from English common law, but its definition has been a part of New Zealand statute law (and has replaced English common law<sup>56</sup>) since 1903. In 1900, in a Court of Appeal case known as *Mueller v Taupiri Coal Mines Ltd*<sup>57</sup> (Gerhard Mueller was the Auckland Commissioner of Crown Lands), the Crown had argued that part of the Waikato River was a navigable river, and that by Crown prerogative under common law with respect to navigable rivers the riverbed was therefore vested in the Crown. While the Court by a majority agreed with the Crown with respect to the particular circumstances argued before it, it left some doubt in its decision about the general applicability of the prerogative the Crown claimed. The Crown then passed a law change to put the matter beyond doubt. Section 14 of the Coal-mines Act Amendment Act 1903 declared that the bed of a navigable river in New Zealand (including all minerals) was, and always had been, vested in the Crown. This law change stated the English common law as the Crown had always considered it to be, but which the Court of Appeal had found to not be the case. ‘Navigable river’ was given a particular statutory definition by the law change, which covered present (as at 1903) or future navigability by boats, barges, punts or rafts, but not past navigability before 1903.

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<sup>56</sup> Whether the 1903 statute completely replaced common law, or only replaced it in part, is a matter for legal debate and argument.

<sup>57</sup> (1900) 20 NZLR 89.

The definition left the determination of which rivers in New Zealand were navigable, and which were not, vague and inconclusive. A Supreme Court decision in 1955 criticised the drafting of Section 14, finding its provisions almost unworkable because so much was left undetermined<sup>58</sup>. It was left open to the Crown to assert that a particular river was navigable, and that its bed was therefore vested in the Crown, but the Crown's assertions were just that, a statement of opinion that could be challenged, or that could be found by a court to be incorrect.

If it got to the stage that a court was asked for an opinion, it would probably view any Crown assertion of title in the context of a legal principle that, because of its confiscatory nature, Section 14 would have to be construed against the Crown, meaning that if there was any doubt on the facts the court would be predisposed to favour private rights in existence before 1903 over rights granted to the Crown by the legislation. However, few cases about the definition have gone to a court hearing.

Without ever seeking the opinion of a court, the Marine Department and its successor the Ministry of Transport took the view during the 1950s to 1980s period that a river that could be used by jet boats was a navigable river. This view was formed in the context of the Harbours Act and boating navigation, rather than in the context of riverbed ownership rights.

With respect to the Rangitikei River, the Crown has asserted that the main stem of the river, from the mouth as far upstream as the confluence with the Kawhatau Stream, is a navigable river making it subject to Section 14 Coal-mines Act Amendment Act 1903 (and its successor statutes<sup>59</sup>). Three occasions where the assertion has been made are known; each of these occasions is discussed separately below. This discussion relies on a single Crown document that has been located during research for this scoping report<sup>60</sup>. This is insufficient for evidence to the Waitangi Tribunal, or for arguing a claim in direct negotiations with the Crown that it has been incorrect in

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<sup>58</sup> *Attorney General ex rel Hutt River Board, and Hutt River Board v Leighton*. [1955] NZLR 750.

<sup>59</sup> Section 206 Coal Mines Act 1925, Section 261 Coal Mines Act 1979, Section 354(1)(c) Resource Management Act 1991.

<sup>60</sup> Draughtsman Maori Section Wellington to Chief Surveyor Wellington, 29 August 1958, attached to Commissioner of Crown Lands Wellington to Director General of Lands, 27 February 1959. Lands and Survey Head Office file 15/244/9.



its assertions, and further research into the background and details of each occasion will be required. Research is also necessary to see if there are any other instances of the Crown claiming that the Rangitikei River was a navigable river, besides the three occasions discussed here.

In the mid 1920s the Maori owners of Ohinepuhiawe block asked the Crown for help with the provision of further lands because their reserve had been affected by the flood of 1897. The Ohinepuhiawe block was originally on a bend of the river on the south-eastern bank, but the flood had cut a new river channel through the bend and the reserve, thereby making part of the reserve unusable, and part then located on the north-western bank of the river opposite the Maori settlement. The old riverbed had become dry land. The Crown took the view that the old riverbed belonged to the Crown, by virtue of the river having been a navigable river before it changed its course. By making this assertion it was then in the Crown's power to grant the old riverbed to the Ohinepuhiawe owners, and the Crown appeared before a Native Land Court inquiry in 1926 to seek the Court's support for its views. If the Rangitikei River had not been a navigable river, then in all likelihood the Ohinepuhiawe owners could have argued that one-half of the old riverbed was able to be claimed as accretion to the reserve under the *ad medium filum aquae* rule. Neither argument (for navigability or accretion) was commented upon by the Court when it recommended that parts of the old riverbed be granted to particular owners of the Ohinepuhiawe reserve. The Court's recommendation was followed by special legislation (Section 58 Native Land Amendment and Native Land Claims Adjustment Act 1929) giving it the power to vest the old riverbed in Maori owners. So although the Crown did not receive judicial support for its assertion that the river was navigable at this point, nor was its assertion rejected.

*Potential reference sources: Department of Lands and Survey district office files, Maori Land Court files and minute books*

The second occasion relates to the proposed sale of a Maori-owned portion of the Otamakapua block to Kiwitea County Council, which required confirmation by the Native Land Court. The particular parcel of land being sold, and the date of these proceedings, is not known. The purpose of the sale was to let the County Council have access to the bed of the Rangitikei River for shingle extraction. When the

County Council sought confirmation, the Court identified that the Maori owners of the land being sold, being riverbank owners, might have *ad medium filum aquae* rights to the shingle in the riverbed, and that if it did confirm the sale of the land on the banks of the river, it might have to reserve to the sellers the rights to the shingle in the riverbed, for which they would then be able to still claim royalty payments. This motivated the Crown to assemble information in support of a claim that the river was navigable, the owners had no *ad medium filum aquae* rights, and it was not appropriate to reserve rights to the shingle in the Maori sellers. A rehearing of the application for confirmation of the sale was held, and this time the Court confirmed the sale of the land without reserving shingle rights. However, in doing so, the Court was apparently silent about the navigability claim, referring instead to the shingle having no royalty value as its reason for making no reservation of the shingle rights. Further research is required into the information put forward by the Crown in support of its navigability claim, the legal arguments advanced, and the nature of the Court's decisions on the initial application and the rehearing application.

*Potential reference sources: Lands and Survey district office files, Maori Land Court files and minute books*

The third occasion was in 1959, when the Crown sought to assist the Rangitikei Catchment Board by giving it control of the riverbed, so that the Board would be able to undertake river control works without challenge or legal impediment. The method it chose to accomplish this was to hold that the river was navigable, the bed was therefore Crown Land, and the Crown Land could be set apart as a public reserve for soil conservation and river control purposes, with the Catchment Board appointed to control and manage the reserve. Because the Crown was debating only with itself when considering whether to take these actions, it was able to successfully determine that the whole of the river from its mouth as far upstream as the confluence with the Kawhatau River was navigable. The whole of the legal riverbed (i.e. between established banks, to take account of rights relating to erosion from and accretion to riparian titles) was then reserved<sup>61</sup> and delegated to the Catchment Board to control and manage<sup>62</sup>. The reservation of the riverbed is a land status that still applies today. Further research is required to see if additional Crown correspondence and

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<sup>61</sup> *New Zealand Gazette* 1959 page 566.

<sup>62</sup> *New Zealand Gazette* 1959 page 563.

memoranda can add to the understanding of the attitudes of Crown officials about the navigability claim held in 1959, and whether it has been questioned at any stage since then.

One issue worthy of further research is why an alternative legal mechanism was not used in 1959 for the Rangitikei River. Section 130 Soil Conservation and Rivers Control Act 1941 allowed the Governor General by Order in Council to place any watercourse under the control and management of a catchment board. If used, this mechanism would have avoided tangling with the issue of navigability. However, it is possible that at the time it was not considered to be all-encompassing enough to include parts of a riverbed not actually underwater. Alternatively, the choice may have been administrative convenience, with the Catchment Board talking to the Department of Lands and Survey (the Department responsible for the Reserves and Domains Act) rather than the Ministry of Works (the Department responsible for the Soil Conservation and Rivers Control Act).

*Potential reference sources: Department of Lands and Survey head office and district office files, Horizons Regional Council records*

Because the issue of navigability has been tied to minerals legislation throughout most of the twentieth century, it has a strong bearing on the ownership of the minerals in and under the riverbed. It has meant that Maori have generally been excluded from being able to claim royalties for sand, shingle and metal extracted from the bed of the Rangitikei River. Declaring the bed of a navigable river to be vested in the Crown may therefore have had a direct economic consequence for Maori, and may have represented a form of compulsory acquisition of Maori rights by the Crown, carried out without consultation or the provision of compensation. This matter is discussed further in this report under the heading of gravel extraction.

If, as the Crown has claimed, the Rangitikei River from its mouth to the Kawhatau River confluence is a navigable river, then the part of the Ohinepuhiawe block referred to in the first occasion set out above, that became (and has remained) the new riverbed as a result of the 1897 flood, would have been deemed to have been eroded land, and to have become vested in the Crown. However, a claim that the riverbed was vested in it was not apparently advanced in the 1970s when the Catchment Board

notified its intention to take the eroded land under the Public Works Act. Instead the taking was allowed to proceed<sup>63</sup>. The discussions that the Catchment Board had with the Crown and with the registered Maori owners needs to be researched to find out why the Crown did not make a claim to ownership of the land, and whether the Maori owners were compensated.

*Potential reference sources: Department of Lands and Survey head office and district office files, Rangitikei Catchment Board files*

### **8.3 Riverbed not in a title and subject to the *ad medium filum aquae* rule**

The general land tenure pattern established in New Zealand has been to survey and issue a title to land adjoining a river up to the riverbank, but not to survey and issue title to the riverbed itself. Where the riverbed has no title, the owner of riverbank (or riparian) land with frontage to the river is deemed to have common law rights to claim ownership to the middle line of the river. This is known by its Latin term of *ad medium filum aquae* rights. These rights apply wherever the river is non-navigable, the rights in the case of navigable rivers having been removed by the statutory vesting in the Crown of the beds of navigable rivers. In legal terminology, the *ad medium filum aquae* rule is a presumption that can be rebutted (or overturned) if evidence to the contrary is presented to and accepted by a court.

In the days (approximately before 1971) when colour on survey plans and land titles was an important signifier of legal status, a riverbank owner could only be said to be a riparian owner with *ad medium filum aquae* rights if the riverbank boundary was marked with a blue wash shading (and the river was not tidal or navigable). If there was no blue wash, the implication to be drawn by its absence was either that the riverbank was not the title boundary, or that the riverbed was in some way reserved such that rights to the riverbed did not go with the riverbank land. The absence of colour might be part of evidence presented to rebut the presumption.

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<sup>63</sup> *New Zealand Gazette* 1974 page 2493, *New Zealand Gazette* 1980 page 3257, and *New Zealand Gazette* 1981 page 1194.

Another instance where the riverbank is not the title boundary is where there is a reserve strip between the titled land and the riverbed. This is sometimes known colloquially as the Queen's chain. Since the passing of the Land Act 1892 there has been a requirement that the Crown, when granting or disposing of any of its own land that abuts on to a river having a width of three metres or more, or the sea coast, or a lake with an area of 8 hectares or more, shall retain in its own ownership a one chain or 20 metre wide strip of land along the riverbank, sea coast or lake edge. The retention of this strip (known in present day legislation as a marginal strip) as Crown-owned land means that it is the Crown that holds the riparian rights, and has the right to claim under the *ad medium filum aquae* rule to the centre line of the river. Similar provisions apply if a legal road has been laid off along a riverbank, where the *ad medium filum aquae* rights go with the road rather than with private land behind the road. Before 1892, and for any land that was ordered by the Native Land Court, the requirement did not apply and the title was issued to the riverbank.

In the last 50 years, under subdivision legislation, land with a title to the riverbank can have a public reserve strip along the riverbank (an esplanade reserve) imposed upon it, if the land being subdivided meets certain conditions. Any *ad medium filum aquae* rights would then pass to the territorial local authority as a result of the setting aside of the reserve.

These different provisions mean that unraveling the status history of riverbank land is necessary to determine if *ad medium filum aquae* rights apply, and who is the beneficial rights holder, in any particular instance. The 1892 date is relevant with respect to the Rangitikei River, because of the spread of colonisation (and granting of land by the Crown to settlers) up the river both before and after that date. Lands in the lower parts of the catchment and in the grassland zone of the upper catchment are likely to have titles that extend to the riverbank, while lands in the upstream part of the forested zone are likely to have been surveyed by the Crown after 1892 and so have roads or reserves along the riverbanks.

The right of ownership to the middle line of the river is not absolute to the same degree as a right of ownership to land where the owner has been granted a title. All the powers the Crown has vested in itself with respect to natural waters, and common

law rights of passage by boats, will apply to place limits on the manner that a landowner whose titled land is under water can make use of the title rights. There is also a strict procedure that has to be followed to convert untitled riverbed subject to *ad medium filum aquae* rights into titled land (see next section below).

*Potential reference sources: legal textbooks*

## **8.4 Riverbed (and former riverbed) in a title**

The Rangitikei River is an example of a river that has changed its course to such an extent that in some instances dry land has been eroded away and become part of the course of the river, and in other instances former riverbed has become dry land.

Where land in a title has been eroded and become part of the course of a river, the title to the eroded land does not cease to exist (although the vesting in the Crown of the bed of a navigable river would take precedence over the private title ownership). This is because the change putting the titled land underwater might be reversed by another change of river course making the land dry again.

Taking this right to the next stage, and having it acknowledged by the issue of a Crown-guaranteed land title, is, however, another matter. The common law principle is that a riverbed remains a riverbed, subject to the *ad medium filum aquae* rights, until such stage as it becomes recognised as permanently dry land, and that a title to a dry land portion can only be claimed if the bed has ceased to be part of the riverbed by gradual and imperceptible accretion. The theory is that a dry portion of riverbed that has become dry by a sudden change of the course of a river might just as easily be affected by another sudden change of course and become underwater again. Only if the change to dry land has been gradual and imperceptible is it considered likely to be a permanent change of circumstance. An application to the Land Registry office (nowadays Land Information New Zealand) for the issue of a title to dry riverbed (a title to accretion) needs to be accompanied by a survey of the accretion, a statement from the surveyor, and statements in support from at least two persons with longstanding knowledge of the land in question.

The general nationwide rules with regard to Maori Land for the issue of a Maori Land Court title are not necessarily the same as for General Land, and need to be researched



to see whether they are comparable. If they are not comparable, this might lead to a claim under Article 3 of the Treaty of Waitangi that Maori and Pakeha have not been treated equally.

Along the Rangitikei River, where there have been significant changes in river course since the riverbank was first laid down by survey, there are instances of title to accretion being issued both to Pakeha by the Land Registry office, and to Maori by the Maori Land Court. These titles to accretion tend to go with the riparian land, rather than be separate titles just for the accretion. For instance, a partition of a riverbank block of Maori Land may result in the sum of the partition block areas being greater than the area of the block being partitioned, because the partition blocks comprise portions of the partitioned block plus portions of accretion lands. There are also instances where erosion has been reflected in title boundaries. As one example, the WAI-581 Statement of Claim refers to the ordering by the Native Land Court of the Taraketi 5 block, which was defined as all of the Taraketi block that had already been eroded away by a change of the course of the Rangitikei River. Further references to this particular block have not been located, but should be easier to identify once the block history report for Taraketi has been prepared. This and other examples need to be researched in depth, to demonstrate the processes that were followed.

*Potential reference sources: legal textbooks, Maori Land Court files and records*

## 9 FLOOD PROTECTION WORKS

While the fertile soils on the banks of a river were an attraction for European settlers, they also put the settlers in harm's way if the river broke its banks and flooded surrounding lands. This tension has driven substantial efforts to develop stopbanks, groynes and other engineering works that allow the lands closest to the rivers to be farmed and utilised while at the same time being protected from the risks of flooding. In many instances the tension is driven also by a land tenure pattern that, at the beginning of the era of European settlement, made over-ambitious assessments of where the legal riverbank should be placed, and in doing so failing to give the river sufficient space to move around. The Rangitikei River, in its lower 65 kilometres between Rewa and the sea, has been no exception to this general New Zealand pattern.

Elsewhere in the study area, protection works have usually been considered only for particular circumstances, rather than providing more blanket protection for a stretch of river. The most common of these particular circumstances is where roads cross rivers, and the bridges or their approaches need protection.

### 9.1 Lower Rangitikei River (Rewa to the sea)

This has been the part of the study area most affected by flood control works. Memories of the 1897 flood that carried away all the bridges across the river, and eroded many of the low-lying flats alongside the river, encouraged efforts to tame what was viewed as a savage river that could leave a useless wasteland of gravel and shingle in the aftermath of a flood. Since 1897 the river has continued to be affected by floods. There was a large flood in 1926, which carried about half the volume of the 1897 flood. The most recent significant flood, the third largest since 1897 and with an estimated 50 year return period, was in 2004<sup>64</sup>.

As early as 1879 the need for flood protection was being recognised implicitly when two reserves for “the improvement and protection of the Rangitikei River” were set

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<sup>64</sup> Mulholland, M, P Riley, D Tate and A Sutherland, *Preliminary review of flood protection failures on the Manawatu and Rangitikei river systems*, Horizons Regional Council, Palmerston North, Report No. 2004/EXT/583, 2004.

aside along the riverbank at Ohakea<sup>65</sup>. Protection “of” the river is probably a misnomer, and should have been rephrased to be about protection of farmed land “from” the river. The first engineering response that has been identified came in 1915, when a diversion cut was proposed to cut off a bend in the river opposite Tangimoana that was threatening to erode and undercut the road between Bulls and Scotts Ferry. As a preliminary to the work being constructed, the necessary legal authority had to be obtained. As early as 1882, Section 126 of the Public Works Act of that year had allowed the Governor to declare that any particular bank protection measure or river diversion was a public work. This statutory provision was repeated in subsequent Public Works Acts in 1894, 1905 and 1908. It was used to authorise the diversion cut at Tangimoana<sup>66</sup>. Research is needed to determine whether Maori were consulted and gave their consent prior to the issue of the authority, or prior to the construction of the diversion cut.

*Potential reference sources: Ministry of Works and Development head office files, Rangitikei District Council records*

Whether any other protection works were undertaken during the 1910s and the 1920s is not known, and research about this period is necessary. In 1933 a set of eight survey plans were prepared covering the river downstream of Bulls<sup>67</sup>. These are described as being plans of a Rangitikei River Investigation Survey. The purpose of the survey is unknown, and requires further research. It may have been directed at identifying what riverbed lands the Crown could lease to local farmers (i.e. related to assertions that the riverbed was Crown owned because of its status as the bed of a navigable river), rather than at protecting lands from floods.

*Potential reference sources: Department of Lands and Survey district office files, Ministry of Works and Development head office files*

The next works undertaken on the river, that have been identified during research for this scoping report, occurred in the 1930s. They were associated with the bridges at Bulls and Onepuehu, and were designed to train the river to follow a course that would pass safely beneath the bridges and not cause damage to their piers or

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<sup>65</sup> Sections 282 and 283 Town of Sandon. Wellington plan SO 10965. *New Zealand Gazette* 1879 page 469.

<sup>66</sup> *New Zealand Gazette* 1915 page 4229.

<sup>67</sup> Wellington Survey Office plans SO 19337-9, SO 19360-3, SO 19466.

approaches. Land was taken upstream of the Bulls bridge in 1932<sup>68</sup>, and upstream of the Onepuehu bridge in 1939<sup>69</sup>. Both takings involved Maori-owned land. Research is needed to understand why it was necessary to compulsorily acquire private land, whether the consent of the Maori owners was obtained, and how they were dealt with throughout the takings and compensation process.

*Potential reference sources: Ministry of Works and Development head office files*

While still to be researched further, it appears that a side-effect of the interest of the Rangitikei County Council in protecting the Onepuehu bridge was the development during the 1930s of some proposals to protect from flooding some Maori-owned land alongside the river upstream of the bridge. These proposals were prepared by the County Engineer, and received the support of both the Reureu Maori community and the Crown. To pay for the protection works the Crown advanced the cost, and secured the money then owed to it by establishing the Reureu Development Scheme and arranging to be repaid by the owners who would benefit under the accounting provisions common to Maori land development schemes at that time<sup>70</sup>.

*Potential reference sources: Department of Maori Affairs head office files, Maori Land Court records*

It was not until 1952 that protection works on the Lower Rangitikei were brought together under a single comprehensive scheme. This was accomplished by the Rangitikei Catchment Board under powers granted to it by the Soil Conservation and Rivers Control Act 1941. This Act, “to make better provision with respect to the protection of property from damage by floods”, established an administrative structure of a National Soil Conservation and Rivers Control Council and regional catchment boards. Catchment boards were given the responsibility to carry out catchment schemes, subject to any scheme receiving the consent of the National Council and the Minister of Works. Subsidies were available from central government to augment monies collected from rates. The Rangitikei Catchment Board was constituted in 1944<sup>71</sup>, and held its first meeting in April 1945<sup>72</sup>.

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<sup>68</sup> *New Zealand Gazette* 1932 page 315.

<sup>69</sup> *New Zealand Gazette* 1939 page 3062.

<sup>70</sup> Maori Affairs Head Office file 65/16.

<sup>71</sup> *New Zealand Gazette* 1944 page 1503.

<sup>72</sup> *New Zealand Gazette* 1945 page 386.

In 1939, before the Catchment Board was established, a Public Works Department engineer had prepared a comprehensive report on the river, which proposed channel training and flood protection work. Under the first scheme (Rangitikei River Scheme No. 1), given Government approval in 1952, the new Board put in stopbanks, planted belts of willows and poplars, and reinforced bends with railway irons and rock rip-rap. At this time the river was wide, braided and prone to considerable channel movement. The scheme was aimed at reversing the widening process and limiting the movement of the channel, in so doing reclaiming some riverbed land for farming use, protecting riparian land from flooding, and improving drainage of low-lying land.

It was within the context of this work that in 1959 the river was deemed to be navigable as far upstream as the Kawhatau confluence, and the riverbed was reserved for soil conservation and river control purposes, with the Catchment Board made responsible for the reserve's control and management (see section on navigable rivers).

Rangitikei River Scheme No. 2 was instituted in 1963, again with Government approval and attracting Government subsidies<sup>73</sup>. It aimed to confine the channel further, keeping it in a single thread with easy curves. Further expenditure was approved by Government in 1971, 1977 and 1983, the approvals given in 1977 and 1983 being based on formal reviews of the scheme<sup>74</sup>.

There have been further reviews of Scheme No. 2 in 1994 and 2010<sup>75</sup>. Each of the four reviews has identified problems with implementation of the scheme. The meander pattern of the river sets up attack points where the river erodes the banks; although the banks at these points have been reinforced by tree planting, this has often been insufficient to prevent erosion. Another dynamic feature of the river is the amount of gravel and stone transported downstream, which has tended to settle below

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<sup>73</sup> Rangitikei Catchment Board, *Report on the Rangitikei River Control Scheme No. 2*, Rangitikei Catchment Board, Marton, 1964.

<sup>74</sup> Rangitikei Wanganui Catchment Board, *Rangitikei River Consolidation Scheme*, Rangitikei Wanganui Catchment Board, Marton, Report No. 83/11 (and Appendix 1 to the Scheme report, *River hydrology, hydraulics and channel characteristics*, being Report No. 83/8A), 1983.

<sup>75</sup> Horizons Regional Council, *Rangitikei River scheme review number 4: final draft report*, Horizons Regional Council, Palmerston North, Report No. 2010/EXT/1070, 2010.

Bulls. This settling raises (aggrades) the bed of the river, reducing the capacity that the channel can hold during floods and resulting in overtopping of the bank protection measures. The 1994 review aimed at making gravel extraction a management tool to meet the purposes of the flood protection scheme, and proposed a shift of gravel extraction from sites where it was not necessary to maintain the flood channel's capacity, to sites where the channel was aggrading. The 2010 review has shown that this intention was not achieved during the 1994-2010 period, with gravel extraction still occurring in existing sites because operators have been unwilling to leave established locations. This is covered further in a separate section on gravel extraction.

The various schemes have had a significant effect on the river. After the 1897 flood changed the river landscape, continued clearing of forest cover in the river's catchment encouraged more rapid runoff from the hills and maintained a pattern of higher peaks of flow during floods. However, all attempts by the river to establish a new equilibrium in response to these large-scale changes have continually been thwarted by central and local government's desire to return it to a narrow single channel that allows the privately-owned riverbank land first granted to settlers in the 1860s to be maintained as productive farmland.

It needs to be appreciated that the 2010 review was Review Number 4 of Scheme Number 2, which was first initiated in 1963. The overall objectives of the scheme are therefore nearly 50 years old. The objectives have tended to be single-focused, aimed at allowing as much water as possible to slip smoothly and quickly down to the sea with the minimum of damage to riparian lands<sup>76</sup>. The river has been viewed primarily as a drainage channel, with other viewpoints taking a secondary position or being ignored altogether. What may have been appropriate as policy objectives in the 1960s or 1970s may not necessarily be as inclusive of all community aspirations in the 2010s.

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<sup>76</sup> The single objective focus is apparent in a review by engineers of stopbank failures on the Rangitikei River during the 2004 flood (Mulholland, M, P Riley, D Tate and A Sutherland, *Preliminary review of flood protection failures on the Manawatu and Rangitikei river systems*, Horizons Regional Council, Palmerston North, Report No. 2004/EXT/583, 2004), which remarked:

The overall objective of a stopbank or river control system is to prevent uncontrolled release of floodwater (termed a breach).



What the Maori attitude has been to the Rangitikei River Schemes needs to be researched. While they have been ratepayers who have paid their share of the locally collected funds that have paid for the protection works, they have been only a small percentage of all affected ratepayers, so that their voice may not have been heard above the views of other ratepayers. In addition, it is one thing for Maori to speak as ratepayers, and another thing for Maori to be consulted and to speak in the capacity of holder of tino rangatiratanga over the river as a taonga. The extent of consultation and consent needs to be a major focus of any further report.

There would have been much for Maori to comment on. Maori at Parewanui abandoned the settlement. While a move to Ratana Pa, encouraged by Tahupotiki Wiremu Ratana, is usually said to be the reason for abandonment, the influence of flooding difficulties and the work of the scheme also needs to be investigated. In 1981 Maori at Ohinepuhiawe had land that had become the new course of the river since 1897 taken under the Public Works Act, and had to fight to be properly compensated by the Catchment Board. Fish life in the river has been affected by the emphasis on a single channel, often at the expense of wetlands and backwaters. As one example of the effect of the scheme, there are now fewer sandy areas forming the bed of the river, which has reduced the area of habitat for patiki, and threatened the continuity of that habitat up the river. The habitats and populations of fish traditionally relied on by Maori as food sources have been casualties of the emphasis placed by the Crown, the Catchment Board and the Pakeha community on drainage and flood control. The extent of the depletion of these food sources, and the extent to which the control scheme has been a factor in the depletion, needs to be researched in some depth.

*Potential reference sources: Horizons Regional Council records, Ministry of Works and Development head office files, Ministry of Works and Development district office files*

A further matter that will need to be explored is whether the No. 1 and No. 2 schemes displayed any bias towards protection of the west bank over the east bank, or vice versa. There is a view among iwi and hapu of the lower Rangitikei that the Maori reserve lands have historically not received the same degree of protection from the river as European-owned lands, and that measures to protect European-owned lands

had the effect of pushing the river towards, and damaging, Maori lands. Whether this is true or not needs to be researched. If it were true, the reasons may be similar to, or a subset of, a more widespread bias against Maori landowners displayed by local authorities dominated by, or even exclusively run by, European landowners. The extent to which the Crown was aware of any bias, and sought to remedy any such bias, also needs to be investigated.

*Potential reference sources: Horizons Regional Council records, Ministry of Works and Development head office files, Ministry of Works and Development district office files*

## **9.2 Other parts of the study area**

There have been protection works elsewhere in the study area. These include:

- Pourewa flood control scheme
- Tutaenui flood control scheme
- Road crossings

The Pourewa flood control scheme was established after a flood in the Pourewa valley in 1955 left the settlements of Hunterville and Rata underwater. The problem was identified as immediate runoff from bare hills causing a peak in flood flows. As a result the scheme was designed to slow down flows off the hills into the Pourewa Stream. A series of small detention dams on private farms, plus other dams on the main river, ponds water and releases it slowly, at a rate that can be accommodated by the stream channel downstream, in an attempt to mimic the sponge effect of the original forest cover. The scheme has been hailed as a successful solution that was cheap to construct and is cheap to operate<sup>77</sup>. Research is needed to identify whether Maori were consulted at the time that the scheme was being designed and approved, and what effect (if any) the scheme has had on in-stream fish and other life in the river.

*Potential reference sources: Horizons Regional Council records, Ministry of Works and Development head office files, Ministry of Works and Development district office files*

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<sup>77</sup> Horizons Regional Council, *Pourewa Valley flood control scheme*, Horizons Regional Council, Palmerston North, 1998.

The Tutaenui scheme was a response to a flood in 1950 that left the centre of Marton under water. The details of the scheme, and its effect on matters of particular interest to Maori, need to be researched.

Besides the main rivers, flows of water in tributary streams have been affected. Soil conservation works on farms, and catchment control schemes providing for more comprehensive works covering a number of farms, have encouraged the development of detention dams on these tributaries, which have affected flows further down. The tributaries have always been particularly important to Maori, because their quieter and often shaded waters tend to be preferred by fish species such as tuna and koura. Research is needed to identify whether Maori have voiced any concerns about the changes that have affected the tributary streams, and how any concerns have been responded to.

*Potential reference sources: Horizons Regional Council records, Ministry of Works and Development head office files, Ministry of Works and Development district office files*

## 10 WATER POWER DEVELOPMENTS

Harnessing the power of moving water has been carried out since the early days of European settlement. Near Moawhango, at the mouth of the Tikirere Stream, there is a small historic reserve named the Tikirere Mill Race Historic Reserve on the site of an early flour mill<sup>78</sup>. At Marton, a weir dammed the Tutaenui Stream to provide a head of water and draw off water into a race to power a waterwheel for another flour mill<sup>79</sup>. There may be other instances of early mills along the rivers covered by this scoping report; one or more could be researched to see if any information can be identified about whether Maori gave consent for the use of water for this purpose.

More substantial uses of water for power purposes concern the development of hydro-electric power. This is a water use that the Crown has taken a central role in regulating, and also in developing. The Crown's involvement began in 1903, when it passed the Water-power Act. This Act vested in the Crown a particular development right related to water, the right to carry out hydro-electric schemes in New Zealand. This was in order to ensure that sites with hydro-electric potential were developed to their full potential, rather than becoming used by undercapitalised schemes that failed to extract the maximum number of megawatts available. In vesting this right in itself, the Crown then gave itself the statutory power to licence schemes developed by other bodies and individuals, once these had been vetted for their efficiency of use. The issuing of licences also included an ability for the Crown to profit from its monopoly position, by charging a royalty based on the amount of electricity produced.

Previous research in other inquiry districts has failed to identify any consultation that the Crown had with Maori prior to passing the Act. The legislation was apparently a unilateral action taken by the Crown.

The use in the study area of the legislative power that the Crown gave itself in 1903 is discussed under the following headings:

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<sup>78</sup> Lot 3 DP 32968 (formerly part of Motukawa 2A2B), reserved by *New Zealand Gazette* 1972 page 2840.

<sup>79</sup> Melody, Paul, *They called it Marton: the life and times of Marton*, 1866-1979, Cadsonbury Publications, Christchurch, 1999.

- Early hydro-electric power investigations
- Mangaweka hydro-electric scheme
- Taihape hydro-electric scheme
- Private hydro-electric schemes
- Tongariro Power Development scheme
- Recent hydro-electric power investigations

## 10.1 Early hydro-electric power investigations

In 1904, immediately after the legislation had been passed, an engineer in the Public Works Department, PS Hay, drew together in a report all that was known by the Crown at that time about the potential for hydro-electric power development in New Zealand<sup>80</sup>. For this exercise the Rangitikei River between the Hautapu River and Vinegar Hill bridge was examined. Although the river was not particularly conducive to power schemes (flats alongside the river that might be sites for power stations were prone to flooding, and the erosion-prone nature of papa country was not particularly suitable for canals), one site at Makohine was identified. This would involve drawing off water just below the junction with the Kawhatau River into a 15 kilometre long canal on the western (true right) side of the river. If the water was taken out of the river at river level, the canal would provide a 100 metre fall through the power station, though this fall could be increased if a dam to raise the water level in the river was built at the water draw-off site.

This was a large scheme in a part of the country without any substantial population or electricity demand. It was described in the report as a scheme for “the distant future”. There was never any further investigation by the Crown into its prospects.

Another investigation report was carried out by another Public Works Department engineer, L Birks, in 1924<sup>81</sup>. This report has not yet been examined during research for this report, and needs to be researched. It is possible that it only repeats the findings of Hay’s 1904 report so far as the Rangitikei River is concerned.

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<sup>80</sup> Hay, PS, ‘Report on New Zealand water-powers etc’, in *Appendices to the Journals of the House of Representatives*, 1904, D-1A.

<sup>81</sup> Birks, L, *Hydro-electric power development in New Zealand*, Government Printer, Wellington, 1924.

In 1954, there was interest expressed in Hawkes Bay in constructing a combined hydro-electric and flood retention dam in the upper Ngaruroro valley, so as to regulate the quantity of floodwaters flowing down to the Heretaunga plains, and also control gravel movement down the river. However, nothing further seems to have come of this proposal<sup>82</sup>.

In 1967 a Ministry of Works engineer, G Natusch, looked at the feasibility of a power scheme that would utilise the combined water resources of the upper Rangitikei, Ngaruroro and Mohaka Rivers<sup>83</sup>. This scheme would have been similar in scale to the Tongariro Power Development or the Waitaki schemes. So far as is known, this proposed scheme never moved beyond being some desk-based musings. However, it is indicative of the Crown's willingness to "think big" in its manipulation of rivers as it struggled to keep up with a rapidly increasing demand for electricity.

*Potential reference sources: Hay, Birks, Natusch, Ministry of Works and Development head office files*

## **10.2 Mangaweka hydro-electric scheme**

The Mangaweka Town Council constructed a dam and small-scale power station on the Mangawharariki Stream in 1911. This was part of a larger scheme to pump water from the Rangitikei River (beside the Mangaweka bridge) up to a water reservoir above Mangaweka township. The power station supplied power to operate the pumping stations as well as supplying electricity to the town. Besides a weir on the Mangawharariki Stream at the water draw-off point, the power scheme involved a diversion of the stream so that it now flows into the Rangitikei River at a different point to its natural course. The effects of the weir and the diversion on fish life in the stream are not known. The station was decommissioned in 1937, in part because a large totara log got caught in the inlet structure to the water race at the weir during a flood and could not be removed.

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<sup>82</sup> Armstrong, David, Phillip Cleaver, Terence Green and James Taylor, *Heretaunga – Tamatea Environmental Overview*, commissioned by Crown Forestry Rental Trust, Wellington, 2010, page 289.

<sup>83</sup> Natusch, GG, 'Hydro-electric power resources of New Zealand', in *New Zealand Engineering*, Volume 22(8), pages 309-316, 1967.



To be able to build the scheme the Town Council had to get the permission of the Crown in terms of the 1903 legislation (and its successors – its provisions have been incorporated in the Public Works Act since 1905). A licence was granted in May 1913<sup>84</sup>. The relevant file in former Electricity Department records has not yet been examined. Based on research for reports prepared in other inquiry districts, it is unlikely that the Crown sought the views of Maori before issuing consent.

*Potential reference sources: Rennie, Electricity Department head office files*

In 1914 the Mangawharariki Stream and its bed from the Kawhatau Road bridge for a distance of one mile upstream was declared to be a sanctuary for imported and native game<sup>85</sup>. This is the location of the hydro scheme. The background to this sanctuary, whether it was supported or opposed by Mangaweka Town Council, and whether Maori were consulted or expressed any views about it, all need to be researched. How long the sanctuary remained in existence is unknown; all sanctuaries had to be re-notified following the passing of the Animals Protection Act 1921-22, and no record of this sanctuary being re-notified has been located as yet.

*Potential reference sources: Mangaweka Town Council records, Department of Internal Affairs head office records*

### **10.3 Taihape hydro-electric scheme**

Another small hydro scheme was developed by Taihape Borough Council on the Hautapu River in 1913. This involved the construction of a weir just below the point where Hautapu Street crosses the river. Water was run from the weir through a tunnel that cut off a substantial bend in the river, and then through a power station on the riverbank just upstream of Papakai Road. The bend in the river is part of Taihape Domain, so the tunnel and the power station were built beneath and on Crown-owned land. A 42-year licence to use water from the Hautapu River was issued in December 1913<sup>86</sup>. The licence was renewed in 1953<sup>87</sup>, but was revoked in 1955 when the power station was closed<sup>88</sup>.

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<sup>84</sup> *New Zealand Gazette* 1913 pages 1602-1606. Electricity Head Office file 10/75/1.

<sup>85</sup> *New Zealand Gazette* 1914 page 2784.

<sup>86</sup> *New Zealand Gazette* 1914 pages 7-11. Electricity Head Office file 10/90/1.

<sup>87</sup> *New Zealand Gazette* 1953 page 1309-1310.

<sup>88</sup> *New Zealand Gazette* 1955 page 1731.

As with the Mangaweka scheme, the relevant file covering the Crown's consent of the scheme needs to be examined.

*Potential reference sources: Rennie, Robertson, Electricity Department head office files*

#### **10.4 Private hydro-electric schemes**

Outside of the towns such as Mangaweka and Taihape, it was up to private individuals to develop their own hydro-electric power schemes. While a Wanganui Rangitikei Electric Power Board was established to reticulate electricity through the district, there was often no publicly-organised distribution lines network servicing the more remote rural areas until the 1960s. Two private hydro schemes are known of in the study area, and further research may identify more. While each private scheme would have been on a small scale, it is not known how widespread was the practice of settlers developing their own hydropower sources. Each private scheme required Crown approval, because of the Crown's monopoly control of the right to use water for hydro-electric power purposes.

A licence to develop a hydro scheme on an unnamed stream on Section 1 Block XIV Pukeokahu Survey District (on the true left bank of the Rangitikei River just downstream of the confluence of the river and the Whakaurekou Stream) was issued to the landowner in 1935<sup>89</sup>. However, this licence was revoked three years later<sup>90</sup>, which may mean that the landowner never went ahead and constructed the scheme.

A small scheme to serve Ngamatea Station was constructed on Woolwash Creek, a tributary of the Taruarau River. The scheme operated from the early 1950s to 1972<sup>91</sup>. Research is required to identify the details of the licence issued by the Crown, and discover whether there was any consultation with Maori before the licence was issued.

*Potential reference sources: Riseborough, Electricity Department head office files*

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<sup>89</sup> *New Zealand Gazette* 1935 page 2659.

<sup>90</sup> *New Zealand Gazette* 1938 page 2471.

<sup>91</sup> Riseborough, Hazel, *Ngamatea: the land and the people*, Auckland University Press, Auckland, 2006.

## **10.5 Tongariro Power Development scheme**

By far the biggest impact on the Rangitikei River catchment as a result of hydro-electric works has been caused by the Tongariro Power Development (TPD) scheme. This scheme takes waters from the Whanganui, Whangaehu, Moawhango and Tongariro Rivers, and passes them through Lake Rotoaira and the Tokaanu power station to discharge into Lake Taupo. The extra water from the Whanganui, Whangaehu and Moawhango Rivers supplements the water in the Waikato River system as it passes through the series of power stations on that river.

Water in the headwaters of the Moawhango River, plus additional water from the Whangaehu catchment carried into the Moawhango catchment by the Wahianoa Aqueduct, is impounded behind a dam north-east of Waiouru. From the lake behind the dam it travels in a tunnel out of the Moawhango (and Rangitikei) catchments and into the Tongariro catchment. While the Moawhango was diverted in 1979, there was a 20-year history of the TPD scheme before then.

There were three occasions where the Crown made substantive decisions about constructing the TPD scheme. The period leading up to each of these occasions would have been the most appropriate timing for any consultation with Maori about the scheme. The three occasions were:

- The issue of a legal authority to investigate and construct hydro-electric works (in 1958)
- Cabinet approval in principle to proceed with the TPD scheme, given once the investigations had been completed and had proved the feasibility of the project (in March 1964)
- Cabinet's final approval to proceed (in September 1964)

Section 311 Public Works Act 1928 was the successor to the Water-power Act 1903, requiring the issue of an Order in Council allowing the use of waters for hydro-electric power development. The consent had the effect of making a power scheme a public work, and its classification as such then allowed entry on to private land to carry out investigations and undertake preliminary works. So when the investigations for the TPD scheme were ready to move beyond office-based studies, and involve on-

the-ground examination of suitable sites, the Section 311 Order in Council was required. That stage was reached in 1958. When the Order in Council was issued it allowed the Minister of Electricity:

... to erect, construct, provide, and use such works, appliances and conveniences as may be necessary in connection with the utilisation of water power from the Wanganui, Tokaanu, Tongariro, Rangitikei and Whangaehu Rivers, and all their tributary lakes, rivers and streams ... for the generation and storage of electrical energy; and with the transmission, use, supply and sale of electrical energy when so generated; also to use electrical energy when so generated in the construction, working, or maintenance of any public work, or for the smelting, reduction, manufacture or development of ores, metals or other substances; also to raise or lower the level of all or any of the said rivers and their tributary lakes, rivers and streams, and impound or divert the waters thereof; also to construct tunnels under private land, or aqueducts and flumes over the same, erect pylons, towers or poles thereon, and carry wires over or along any such land, without being bound to acquire the same, and with right of way to and along all such works and erections; and also to supply and sell electrical energy and recover monies due for the same.<sup>92</sup>

The Order in Council provided all the legal authority necessary for the Crown to divert water from the Whangaehu catchment into the Moawhango catchment, then from the Moawhango catchment into the Lake Taupo and Waikato catchment, and to decide how much water it was prepared to release down the Moawhango River from the dam in the headwaters.

The 1958 Order in Council retained full legal force and effect through to 2001. It survived the passing of the Water and Soil Conservation Act 1967, requiring the issue of water rights to divert waters, because there was a transitional provision protecting all prior rights to use of water that had been lawfully exercised during the three-year period between September 1963 to September 1966. It also survived the repeal of the 1967 Act and its replacement with the Resource Management Act 1991, though in the 1991 Act there was a sunset clause (Section 386(3)) specifying that any holder of pre-1967 water rights had to apply for resource consents (time-limited water permits) within ten years.

The investigations into the feasibility of the TPD scheme were completed in 1963 when the Ministry of Works accepted a report from consultants from England. The Crown officials then sought Cabinet approval in principle for the scheme. Their

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<sup>92</sup> Order in Council, 29 October 1958. *New Zealand Gazette* 1958 page 1463.

attitude at this time was that diversion of water for the TPD scheme out of the Moawhango / Rangitikei catchment was not of significant public interest, as inflows from tributaries downstream of the proposed Moawhango dam would offset the effects of diversion, making the effect unlikely to be noticeable. Of far more concern to officials at this time was the effect on the Tongariro River sport fishery, and the effect of reduced flows in the Whanganui River. Cabinet gave its approval in principle in March 1964, and the decision was widely notified in newspapers at the time. There was a considerable amount of public disquiet and protest, in particular in connection with the Tongariro and Whanganui Rivers, and the Government sought a report from the Nature Conservation Council. When the Council advised it had no objection, provided the recreational values of the Tongariro River were preserved, Cabinet gave its final approval in September 1964.

The sequence of events outlined above has been well canvassed in reports for the National Park inquiry<sup>93</sup> and the Whanganui inquiry<sup>94</sup>. These reports show that consultation by the Crown was minimal with the iwi most affected by the TPD scheme, Ngati Tuwharetoa, and was nonexistent with other affected iwi. The reports also indicate that the consequences for the Moawhango / Rangitikei catchment were of less concern to the Crown than the consequences for the other major catchments affected by the TPD scheme. However, because these Inquiry District reports were prepared with a focus on those other Inquiry Districts, it would be advisable to go through the reference sources again to check whether there was anything else specifically relating to the Moawhango and Rangitikei catchments that might have been overlooked. One feature particular to the Moawhango was a change in the design of the scheme in mid 1967, when the water impoundment in the Moawhango headwaters was changed from a two-lake configuration<sup>95</sup> to the single lake that exists today. What consultation took place as this change was being decided upon, and what wider impacts it had, need to be researched.

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<sup>93</sup> Walzl, T, *Hydro-electricity issues: the Tongariro Power Development scheme*. Evidence to the Central North Island Inquiry (WAI-1200) and the National Park Inquiry (WAI-1130), February 2005. Walzl, T, *Environmental impacts of the Tongariro Power Development scheme*. Evidence to the National Park Inquiry, July 2006. WAI-1130, Document #E12.

<sup>94</sup> Alexander, D, *Some aspects of Crown involvement with waterways in the Whanganui Inquiry District*, Evidence to the Whanganui District Inquiry (WAI-903), August 2008.

<sup>95</sup> Davie, J, 'A general description of the Tongariro hydro-electric power development', in *New Zealand Engineering*, Volume 22(9), 1967.

*Potential reference sources: Walzl, Alexander, Electricity Department head office files, Ministry of Works and Development head office files, Ministry of Works and Development Moawhango Residency files, newspapers*

The Eastern Diversion portion of the TPD scheme which affected the Whangaehu and Moawhango catchments was constructed later than the northern portions that affected Lake Rotoaira and the Tongariro and Whanganui catchments. The filling of the lake behind the Moawhango Dam, together with the diversion of Whangaehu catchment waters into the Moawhango Lake, did not begin until 1979. There was then no flow at all in the Moawhango River immediately below the dam, as all water in the lake was being diverted by tunnel into the Tongariro catchment. Flows further downstream were totally dependent on inflows from side streams entering the river below the dam. Only during large floods in the Moawhango headwaters might there be a flow over the Moawhango Dam spillway.

Before commissioning there had been some studies into the likely effect of the TPD scheme on the Moawhango / Rangitikei catchment. Modelling had predicted that there would be a two-thirds reduction in the mean flow in the river at Moawhango village<sup>96</sup>. This flow reduction would affect fish life<sup>97</sup>, and would reduce the dilution effect in the river on any pollution entering the river. Since the TPD scheme was commissioned, actual measurements of flow have shown that the mean flow has been reduced by 62% at Moawhango Bridge, and by 13% at Mangaweka after the Moawhango had joined the Rangitikei River<sup>98</sup>. The effects on the Moawhango River were even greater during times of lower-than-mean flow, with analysis of low-flow records showing an 80% reduction at Moawhango, though a lesser difference in effect in the Rangitikei River with a 14% reduction at Mangaweka, and 12% reduction at Kakariki<sup>99</sup>.

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<sup>96</sup> Rangitikei Wanganui Catchment Board, *Rangitikei-Wanganui Regional Water Board involvement with aspects of the Eastern Diversion of the Tongariro Power Development scheme*, Rangitikei Wanganui Catchment Board, Marton, Report No. 77/1, 1977.

<sup>97</sup> Woods, CS, *Fisheries aspects of the Tongariro power development project*. Marine Department, Wellington, Fisheries Technical Report No. 10, 1964.

<sup>98</sup> Tonkin and Taylor, *Water resources of the Rangitikei River*, prepared for the Rangitikei Wanganui Catchment Board, Marton (being also Rangitikei Wanganui Catchment Board Report No. 80/1), 1980.

<sup>99</sup> Tonkin and Taylor, *Water resources of the Rangitikei River*, prepared for the Rangitikei Wanganui Catchment Board, Marton (being also Rangitikei Wanganui Catchment Board Report No. 80/1), 1980.

According to Walzl, the Marine Department and the Ministry of Agriculture and Fisheries (the Government agencies responsible for fisheries matters during the construction period), and the Wellington Acclimatisation Society, raised concerns about sedimentation in the Moawhango as a result of construction activities, and about the wellbeing of the fishery when the water was diverted. Both the Electricity Department and the Ministry of Works and Development were generally unreceptive to these approaches, and resisted any suggestion of spilling over the dam any water that would provide a residual flow in the river below the dam<sup>100</sup>.

*Potential reference sources: Rangitikei Wanganui Catchment Board (1977), Tonkin and Taylor (1980), Horizons Regional Council records, Ministry of Works and Development head office files, Ministry of Works and Development Moawhango Residency files, newspapers*

When the authority for the TPD scheme expired in 2001, Genesis Energy Ltd (the State-Owned Enterprise that was operating the TPD scheme) was obliged to make application under the Resource Management Act 1991 for resource consents for the scheme's continued operation. Because there is an obligation built into the Act for an applicant to demonstrate how it would "avoid, remedy or mitigate" any environmental effect of any water permit, and to demonstrate that it has consulted with affected parties, Genesis sought discussions with iwi associated with the Moawhango and Rangitikei catchments, and examined whether some flow down the river from the dam could be provided. The applications for the Moawhango Lake and for diversion from the lake were heard together with the applications for all other resource consents for the operation of the whole of the TPD scheme, in a joint hearing during 2001. Genesis offered to release a continuous residual flow of 0.6 cumecs from the dam down the Moawhango River, and to supplement this with four flushing flows each summer (December to March) of 30 cumecs, each of nine hours duration. In further mitigation, willows would be removed from the river banks near Moawhango village (at a rate of 200 metres a year), and the Wellington Fish and Game Council would receive an annual contribution towards a rainbow trout enhancement programme.

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<sup>100</sup> Walzl, T, *Environmental impacts of the Tongariro Power Development scheme*. Evidence to the National Park Inquiry, July 2006. WAI-1130, Document #E12.



Discussions with iwi prior to the hearing of the applications included contact with Ngati Tuwharetoa, Ngati Hauiti, Ngati Whitikaupeka, Ngati Tamakopiri and Ngati Rangi. Those discussions led to formal agreements being reached between Genesis and each of those iwi except Ngati Rangi prior to the hearings. The agreements with Ngati Whitikaupeka and Ngati Tamakopiri were covered by a single written document. While agreement could be considered to be a pleasing outcome, one consequence was that the voices of those iwi were silent during the hearing of the applications, and the subsequent hearing of appeals. Besides iwi, Genesis also held discussions with other stakeholders. One of these was the Wellington Fish and Game Council, which put in a submission in support of Genesis' application, because of Genesis' offer of financial support for a trout enhancement programme in the upper Rangitikei River in compensation for the loss of the trout fishery in the Moawhango River.

Submissions in opposition were made to the hearings committee by both iwi and Pakeha. While Ngati Hauiti had earlier been dissatisfied with the degree of consultation it had had with Genesis, by the time of the hearings it had reached agreement and supported the proposed mitigation measures. However, Ngati Hauiti continued to have cultural and spiritual concerns, and remained opposed in principle to the transfer of Whangaehu waters into the Moawhango catchment, to any disturbance to flows in the Moawhango River, and to setting a residual flow requirement below the Moawhango Dam. Ngati Rangi was also opposed to a residual flow, both iwi believing that this would be culturally inappropriate as it would include water originating in the Whangaehu catchment. A Pakeha farmer, J Marshall, felt that both the proposed residual flow and the proposed time limitation on the flushing flows were inadequate, and would be of no real benefit to the Moawhango River. Another Pakeha, A Appleton, considered that the proposed residual flow was being set without any regard for the needs of periphyton, macroinvertebrate and fish populations. Both the Department of Conservation and the Royal Forest and Bird Protection Society sought a higher residual flow, of 2.0 and 2.7 cumecs respectively, and a reduction in the rate of the flushing flows.

The joint hearing committee of the Manawatu – Wanganui Regional Council and the Waikato Regional Council, in its report in August 2001, approved the mitigation

offers made by Genesis, and incorporated them into a set of conditions attached to the issue of the resource consents. The consents were granted for a term of 35 years. The consents issued by the regional councils were then appealed to the Environment Court by Ngati Rangi and Whanganui River iwi. Ngati Rangi's appeal meant that the diversion of water between catchments and the spilling of water over the Moawhango Dam were matters for the Environment Court's consideration. In giving its decision on the appeals in May 2004, the Court confirmed the issue of the resource consents and made no change to the conditions, while reducing the term of the permits to 10 years. This was primarily due to the lack of consultation between Genesis and Maori, and a need, as the Court saw it, for there to be a "meeting of the minds". Genesis then appealed the Environment Court's decision granting a 10-year term to the High Court. The High Court's decision found fault with how the Environment Court had interpreted the requirements of the Resource Management Act and referred the case back to the Environment Court for further consideration. Before that could happen, the two iwi appealed the High Court's decision to the Court of Appeal. When this appeal failed, the iwi appealed to the Supreme Court. Only at this stage did Genesis and the two iwi agree to suspend legal proceedings and enter into discussions together. Those discussions resulted in relationship agreements being reached in December 2010. With these agreements in place the appeals to the Supreme Court were withdrawn and the Environment Court has reinstated a 35-year term for the consents.

The consents themselves, with all their conditions (apart from the term), have been treated as being operative since the end of 2004. Acting in anticipation of one of the conditions that was attached to the Moawhango consent, Genesis has been discharging 0.6 cumecs down the Moawhango River since January 2001. It has regularly commissioned research from independent scientific research organisations to monitor the effect of the scheme and the resource consent conditions on the Moawhango River and Lake since then. An annual environmental report is produced.

The agreements entered into by Genesis with Ngati Whitikaupeka and Ngati Tamakopiri, with Ngati Hauiti, with Ngati Rangi, with the Wellington Fish and Game Council, and with the Department of Conservation, provide for ongoing dialogue and discussions between the parties to each agreement. Results of monitoring are reported

back to these parties, and are considered by them in the context of the Moawhango River being regarded as a “healthy, high-country lake-fed waterway”. What this term means from both scientific and cultural perspectives (and whether the term is being correctly interpreted) has not been examined. Both this matter and whether the ongoing consultation is of a standard that respects tino rangatiratanga and kaitiakitanga of iwi needs to be researched.

Water levels in Lake Moawhango can vary by as much as 15 metres. The wetting and drying of the exposed lakeshore increases its risk of erosion and the possibility of dust storms. There is no public access to the lake, as it is on Defence Department land and was formerly a firing range. There are no agreements between iwi and the Defence Department of a similar nature to the relationship agreements with Genesis.

The environmental effects of the TPD scheme on the Moawhango and Rangitikei Rivers system need to be examined in some detail, because they represent a significant (and ongoing) change to the river system that has occurred in recent times. Discussing the TPD scheme and its effects from the perspective of the Rangitikei River system is important because most previous analyses (e.g. Walzl) have tended to look at the scheme and its effects as a whole, and in doing so, because the Moawhango / Rangitikei has always been regarded by the Crown as being less affected than the Tongariro, Whanganui and Whangaehu systems, may have under-represented the impact on the Moawhango and Rangitikei Rivers and their iwi. To fail to fully have regard for the impact on the iwi of the Moawhango and Rangitikei Rivers would be to do those iwi an injustice.

*Potential reference sources: Walzl, Horizons Regional Council records, Ministry of Works and Development head office files, Ministry of Works and Development Moawhango Residency files.*

The technical evidence for the Whanganui District Inquiry with respect to the Whangaehu River examined the environmental impact of the TPD scheme under the following headings<sup>101</sup>:

- Changes of flow

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<sup>101</sup> Alexander, D, *Some aspects of Crown involvement with waterways in the Whanganui Inquiry District*, Evidence to the Whanganui District Inquiry (WAI-903), August 2008.

- Impact of sedimentation
- Impact on water quality
- Impact on river fauna
- Impact on riparian lands
- Impact on the landscape

These would seem to be appropriate headings for assessing the impacts on the Moawhango and Rangitikei Rivers (including Moawhango Lake) as well. Besides the environmental impact, the manner in which the consultation mechanisms between Genesis and iwi of the Moawhango / Rangitikei catchment have developed also needs to be discussed.

## 10.6 Recent hydro-electric power investigations

The period from the 1920s to the 1970s was marked by the development of large-scale hydro-electric power schemes by central Government, delivering power to consumers through a national transmission network. After the Tongariro Power Development scheme came the upper Waitaki power schemes and the Clutha Dam. Attention then shifted to the potential of smaller more localized power schemes serving a more local market. This prompted a series of investigations looking at the hydro-electric potential of individual rivers, including the Rangitikei<sup>102</sup> and the Ngaruroro<sup>103</sup>. These reports represent desk-based pre-feasibility studies, with little or no detailed on-ground investigation, and with little or no more detailed follow up since they were published. While the issue of water conservation orders since these reports were prepared (see chapter on fisheries) prevents some of the prospective developments proceeding, the possibility of others being developed continues to the present day<sup>104</sup>.

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<sup>102</sup> Tonkin and Taylor, *Water resources of the Rangitikei River*, prepared for the Rangitikei Wanganui Catchment Board, Marton (being also Rangitikei Wanganui Catchment Board Report No. 80/1), 1980. Tonkin and Taylor. *Assessment of local hydro-electric potential: Rangitikei – Wanganui Catchment Board and Manawatu – Oroua Electric Power Board Area*, Tonkin and Taylor, Auckland, 1985.

<sup>103</sup> Tonkin and Taylor, *Hydroelectric development with particular reference to the Ngaruroro River*, prepared for Hawke's Bay Electric Power Board, 1978.

Tonkin and Taylor, *Local hydroelectric assessment, Hawke's Bay region, stage 2 report*, Tonkin and Taylor, Auckland, 1981.

<sup>104</sup> Ministry of Economic Development, *Waters of national importance: identification of potential hydroelectric resources*, East Harbour Management Services Ltd for Ministry of Economic Development, Wellington, 2004.

On the Rangitikei River, the potential of the upper part of the catchment is linked with the potential of the adjoining Ngaruroro (including Taruarau) catchment. Water can be diverted from the Rangitikei River into either the Taruarau River or the Ngaruroro River, to supplement flows in these rivers. The diversion of waters in this manner is as culturally inappropriate as the Tongariro Power Development scheme's movement of waters between catchments.

Further down the Rangitikei River, in the gorged portion, there is the potential for a sequence of dams and storage lakes. Three proposals have been identified, which together would mean that most of the length of river between Mangaweka and Vinegar Hill would become lake storage. They are:

- A dam at Mangaweka with lake storage backing up to near Taorua Junction
- A dam at Soldiers Road with lake storage backing up to the Mangaweka Dam
- A dam above Vinegar Hill Bridge with lake storage backing up to near the Soldiers Road Dam

Above this sequence, other dam sites have been identified at specific sites at Mokai Road bridge, Pukeokahu and Mangaohane, and more generally on the Hautapu River upstream of Taihape.

A limiting factor for all Rangitikei dams is the nature of the geology. Any dam built on papa foundations is less stable, and in the case of the Atene proposal on the Whanganui River was deemed too risky to construct. A dam built on a foundation of the greywacke rock that underlies the papa would be more stable and present fewer problems. All of the dam proposals on the Rangitikei are considered to be less favourable for development than some other proposals in other catchments, because the schemes examined were found to be only marginally economic, and of course the diversion of Moawhango waters by the Tongariro Power Development scheme has reduced the flow volume in the Rangitikei that can be relied upon (thereby reducing the economics further).

Since the investigations in the late 1970s, the ability to develop the hydro-electric potential of the upper and middle Rangitikei and the upper Hautapu Rivers has in many respects been prevented by the implementation of the Rangitikei River national

water conservation order and the Hautapu River local water conservation notice respectively (see chapter on fisheries). The Hautapu River notice is now covered by regional rules in the Horizons regional plan (the One Plan). Only a small development on the Hautapu River, near the Ngawaka Road deviation, was considered by a recent national assessment to be a 'live' possibility today, in that it had a high to medium level of confidence of being developed in the next 20 years<sup>105</sup>. However, separately there has been some interest shown in reviving the old Taihape Borough Council hydro-electric scheme<sup>106</sup>.

On the Ngaruroro River, two proposals on the main river above Kuripapango involve damming of the river, diverting the water into tunnels, and then discharging the water back to the river further downstream through power station turbines. Both these proposals would result in dramatically reduced river flows between each dam and power station. There is also a proposal for a small scheme on the Waikarokaro Stream, a tributary of the Ngaruroro above Kuripapango.

Similarly, there are two proposals for the Taruarau involving diversion through tunnels, and one small side-stream proposal, on Woolwash Creek at the site of the old abandoned scheme that used to serve Ngamatea Station. The schemes diverting water through tunnels would discharge into the Ngaruroro River rather than into the Taruarau River further downstream, as they are making use of the elevation of the Taruarau River being higher than the neighbouring Ngaruroro River. These diversions would mean the Taruarau would be left with dramatically lower flows.

There are a number of alternative proposals for the Ngaruroro River below the confluence of the Ngaruroro and Taruarau Rivers. These are based around a dam and power station at Whanawhana, being the downstream end of the Ngaruroro's gorge section. Of all the Hawke's Bay schemes examined, one of the Whanawhana schemes was potentially the most attractive, with the lowest costs of development.

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<sup>105</sup> Ministry of Economic Development, *Waters of national importance: identification of potential hydroelectric resources*, East Harbour Management Services Ltd for Ministry of Economic Development, Wellington, 2004.

<sup>106</sup> Hydro Energy Ltd, *Feasibility study for Taihape Community Development Trust to upgrade and recommission the existing hydro power facility of the Taihape weir*, December 2008. Located at [www.eeca.govt.nz/sites/all/files/dg-fund-taihape-oct-2010.pdf](http://www.eeca.govt.nz/sites/all/files/dg-fund-taihape-oct-2010.pdf)

Most of the other Ngaruroro River proposals are only marginally attractive economically, while the Taruarau River proposals (apart from Woolwash Creek) are less attractive than those relying on the Ngaruroro River, because the Taruarau's flow is about half that of the Ngaruroro. Any development on the Ngaruroro has to take into account the high amount of shingle movement in the river, and the impact on already existing uses of the river's water, such as water abstraction on the Heretaunga Plains.

Two of the alternative dams at Whanawhana, one dam below the Taruarau confluence, one dam on the Ngaruroro above the Taruarau confluence, and one of the upper Ngaruroro schemes, remain 'live' possibilities today, being assessed as having a high to medium level of confidence of being developed in the next 20 years<sup>107</sup>.

It is the authority to regulate hydro-electric power developments provided initially by the Water-power Act 1903 that in part underlies the authority vested in the Crown (and delegated to regional councils) to issue or refuse water rights under the Resource Management Act 1991. The 1991 Act's expectations of consultation with affected parties such as iwi should, in theory, overcome the failures to involve iwi that are demonstrated by the experience of the Tongariro Power Development scheme. However, consultation under the 1991 Act may still have its flaws, especially if there is endorsement by the Crown or local bodies of just a token attempt at engagement with iwi about a proposal that has already been fully developed. None of the 'live' hydro-electric development opportunities is imminent, certainly not within the likely timeframe of any Waitangi Tribunal hearings and the Treaty of Waitangi settlement process. It could therefore be thought that current hydro-electric proposals do not deserve attention in a report directed towards concluding Treaty settlements. On the other hand, for iwi to be forewarned about hydro-electric proposals is to be forearmed. In addition, some discussion of 'live' opportunities may assist iwi in analysing settlement offers against one likely practical use to be made of any consultation and/or governance mechanisms contained in those offers. Inclusion of such information in the report may also serve notice on hydro-electric proponents of

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<sup>107</sup> Ministry of Economic Development, *Waters of national importance: identification of potential hydroelectric resources*, East Harbour Management Services Ltd for Ministry of Economic Development, Wellington, 2004.



the need to actively consult with iwi and involve them in the development of any proposals.

## **11 FISHERIES**

The rivers of the study area were traditionally important for their fish stocks and other indigenous wildlife. Fishing in the rivers continued on an extensive basis after 1840, and often survived the transfer out of Maori ownership of the riverbank lands. The decline of Maori fishing can be attributed more to the changes to the character of the rivers, including water pollution, channel engineering works and gravel extraction, than to changes to land ownership.

What defines the fishing suitability of the waterways today is the presence of introduced species such as trout and salmon. These species have assumed a greater importance as stocks of indigenous fish have declined. They have been introduced by acclimatisation societies, and it is these societies that have adopted a role of being protectors of the natural environment of the waterways, albeit for the end-benefit of the introduced fish and fishers. The national water conservation order for the upper and middle Rangitikei River, notified in 1993 and still operative today, was originally applied for and promoted by the acclimatisation movement.

### **11.1 Traditional fisheries**

Maori resident in or travelling through the study area in traditional times relied heavily on foods sourced from the waterways. Seasonal camps were established alongside the rivers, especially where pa tuna (eel weirs) and tipi (whitebait and smelt stone-wall traps) were constructed. The deeper and quieter pools where koura (freshwater crayfish) and kakahi (freshwater mussels) are to be found were well known and regularly visited. The upokororo (grayling), which became extinct shortly after European settlement caused changes to the rivers, was also fished for in the study area.

The knowledge of fishing sites, and their ongoing use, was an important statement about ahi kaa and a hapu's right to its rohe. References to these sites can be gathered from Native Land Court minute books, as well as early European writings, to build up a picture of patterns of traditional fishing in the study area. While that picture has not

been developed for this scoping report, it deserves to be the subject of a major effort in the preparation of a full report.

The listing of pa tuna in the Ngati Apa statement of association for the Rangitikei River (see Appendix) is probably derived, in part at least, from an examination of Native Land Court minutes, and will almost certainly be able to be added to when other iwi along the rivers of the study area are interviewed about their own fishing sites. In the literature, however, the Rangitikei seems to be overshadowed by the greater attention given to the eel fishery of the Whanganui River. For instance Downes, whose familiarity with the Rangitikei district and Ngati Apa is apparent from earlier writings<sup>108</sup>, makes only passing reference to eel fishing in the Rangitikei River while providing numerous examples from the Whanganui River in a paper given in 1918<sup>109</sup>. Whether this is a fair representation of the relative importance of the two rivers is not known, and needs to be researched further. Even if there was less total fishing effort on the Rangitikei, it may be that tuna was just as important a food source to the local people, but the smaller population in the area affected how much fishing was done.

*Potential reference sources: Maori Land Court minute books, Downes, Wilson, early European writings*

The research undertaken so far into potential archival sources suggests that the Crown interest in the indigenous fish species and traditional fisheries of the study area was meagre, and less than its interest in introduced fish and fisheries in the study area. This was notwithstanding an obligation to protect traditional fisheries that was on occasion included in legislation, such as for instance Section 8 of the Fish Protection Act 1877:

Nothing in this Act contained shall be deemed to repeal, alter, or affect any of the provisions of the Treaty of Waitangi, or to take away, annul, or abridge any of the rights of the aboriginal natives to any fishery secured to them whatsoever.

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<sup>108</sup> Downes, TW, 'Early history of Rangitikei, and notes on the Ngati Apa tribe', in *Transactions of the New Zealand Institute*, Volume XLII (1909), pages 74-114.

Downes, TW, *Early history of Rangitikei, and notes on the Ngati Apa tribe*, Government Printer, Wellington, 1910.

<sup>109</sup> Downes, TW, 'Notes on eels and eel-weirs (tuna and pa-tuna)', in *Transactions and Proceedings of the New Zealand Institute*, Volume 50 (1918), pages 296-316.

The indigenous fish that the Crown seems to have taken the greatest interest in, with respect to the Rangitikei River, was whitebait. That, however, was only because of concerns expressed by European whitebait fishers. Nationwide regulations governing whitebait fishing were issued in 1908<sup>110</sup>, and updated in 1932<sup>111</sup>. In the 1932 update (at Regulation 24), one of only two locations in New Zealand where whitebaiting was prohibited was Amons Drain, a drain near the mouth of the Rangitikei River that was the outlet to Awamate Lagoon. This lagoon was believed to be the sole spawning site for Rangitikei whitebait, and the prohibition was regarded as a conservation measure to ensure the continued existence of the Rangitikei whitebait population.

With respect to tuna, the Crown generally took a passive stance nationally, maintaining only a watching brief on the species, until the 1960s. It did not intervene when acclimatisation societies, in the belief that eels were damaging trout stocks, encouraged eel trapping by Europeans. Only when Europeans developed commercial eel fishing using fyke nets in the 1960s did the Crown include tuna in its list of fish species that it monitored. Commercial eel fishing, which apparently peaked in the Rangitikei and Hautapu Rivers in 1978-1979<sup>112</sup>, has since been included nationally in the quota management system.

Even up to the present day, indigenous fish species in the study area have received less attention than introduced trout and salmon. A national assessment of wild and scenic rivers conducted by the Ministry of Agriculture and Fisheries in 1982 acknowledged that patiki (black flounder) penetrate a considerable distance upstream in the Rangitikei River<sup>113</sup>. However, a more specific assessment of the fish and fisheries of the Rangitikei River three years later referred to just a single sighting of a black flounder in the river, and made no comment on any fishing of patiki, while

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<sup>110</sup> *New Zealand Gazette* 1908 page 2583.

<sup>111</sup> *New Zealand Gazette* 1932 pages 2086-2088.

<sup>112</sup> Hicks, BJ and NRN Watson, *Fish and fisheries of the Rangitikei River, New Zealand*, Ministry of Agriculture and Fisheries, Fisheries Research Division, Wellington, Occasional Publication No. 48, 1985.

<sup>113</sup> Tierney, LD, MJ Unwin, DK Rowe, RM McDowall and E Graynoth, *Submission on the draft inventory of wild and scenic rivers of national importance*. Ministry of Agriculture and Fisheries, Fisheries Environmental Report No. 28, 1982.

discussing in considerable detail the trout fishery, and in lesser detail the whitebait fishery and the eel fishery<sup>114</sup>.

Further research is required into the Crown's involvement with indigenous fish and fisheries of the study area. In particular, research is required into any interaction the Crown has had with fishing by Maori in the rivers of the study area, and what the Crown's response has been.

*Potential reference sources: Marine Department files, Ministry of Agriculture and Fisheries files*

Of concern is a recent instance of an apparent failure to have regard for the fishing needs of Maori in the study area. For the preparation of Horizons Regional Council's One Plan (the regional policy statement and plan), a "technical report to support policy development" about "recreational fishing and spawning values in the Manawatu – Wanganui region" was prepared. Its assessment of fishing for indigenous species covered only whitebaiting, and offered no policy proposals for indigenous fish traditionally fished by Maori<sup>115</sup>. Research is needed to determine if this report was the sole report commissioned for the One Plan about fishing for indigenous species, and what other material about fishing of rivers in the study area by Maori was collected and relied upon when developing resource management policy.

*Potential reference sources: Horizons Regional Council records*

Given the gaps in knowledge and analysis exposed by the technical report referred to above, it is perhaps not surprising that the One Plan's treatment of indigenous fish matters is angled towards protection and conservation of species identified by biologists as rare and endangered (such as short-jawed kokopu, red-finned bully, brown mudfish and giant kokopu), rather than aimed at encouraging river conditions that would allow a build-up of populations of those species of traditional value to Maori as food sources (such as patiki, koura and kakahi).

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<sup>114</sup> Hicks, BJ and NRN Watson, *Fish and fisheries of the Rangitikei River, New Zealand*, Ministry of Agriculture and Fisheries, Fisheries Research Division, Wellington, Occasional Publication No. 48, 1985.

<sup>115</sup> Horizons Regional Council, *Recreational fishing and spawning values in the Manawatu – Wanganui region: technical report to support policy development*, Horizons Regional Council, Palmerston North, Report No. 2007/EXT/797, 2007.

## 11.2 Introduced fisheries

The Salmon and Trout Act 1867 and the Protection of Animals Act 1867 were the first pieces of legislation governing introduced species of fish, and rights to liberate and catch those species. There has been a continuous sequence of successor legislation up to the present day. Along the way the legislative provisions have formed, validated and regulated the activities of acclimatisation societies.

In Crown records, the administrative supervision of acclimatisation societies has been divided. The Department of Internal Affairs was responsible for regulating the societies themselves, and their animal game introduction and hunting activities, while the Marine Department (and the Ministry of Agriculture and Fisheries after 1972) was responsible for their fish introduction and fishing activities<sup>116</sup>. This division ceased in 1987 when Crown supervision of all acclimatisation society activities became the responsibility of the Department of Conservation.

As with European settlement generally, there were two movements into the district by acclimatisation societies, one from the east into the Ngaruroro and upper Rangitikei, and the other from the south into the lower Rangitikei. The Hawke's Bay Society liberated brown trout into the Ngaruroro and the upper Rangitikei in the late 1870s<sup>117</sup>, while the first record of a liberation by the Wellington Society was in the late 1880s<sup>118</sup>.

An analysis of Wellington Acclimatisation Society annual reports by Rodway<sup>119</sup> shows a number of releases of brown trout between 1886 and 1897, then releases of both brown trout and rainbow trout from 1899 onwards. The location of these releases, and the speed and extent of establishment of the trout populations following

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<sup>116</sup> McDowall, RM, *Gamekeepers for the nation, the story of New Zealand's acclimatisation societies, 1861-1990*, Canterbury University Press, Christchurch, 1994.

<sup>117</sup> Arthur, W, 'History of fish culture in New Zealand', in *Transactions of the New Zealand Institute*, Volume 14 (1881), pages 180-210.

<sup>118</sup> Rodway, Maurice Allan, *The relative abundance, movement and growth of rainbow trout (*Salmo gairdneri*) and brown trout (*Salmo trutta*) in the Rangitikei River, New Zealand*, MSc thesis in Zoology, Massey University, 1984.

<sup>119</sup> Rodway, Maurice Allan, *The relative abundance, movement and growth of rainbow trout (*Salmo gairdneri*) and brown trout (*Salmo trutta*) in the Rangitikei River, New Zealand*, MSc thesis in Zoology, Massey University, 1984.

release, is not known and further research may identify these. For instance, Rodway records occasional comments from Wellington Society annual reports, which suggest that during the early part of the twentieth century the fishing on the Rangitikei was variable, some years being good and some poor. A review of Internal Affairs and Marine Department files may offer some further information. In general the views of Maori about any releases of introduced fish, and the impact of introduced fish on indigenous fish relied on for food by Maori, are not well recorded in Crown files, unless there has been a petition to Parliament. Where there has been a petition on the subject from anywhere around New Zealand (and none is known of from Rangitikei River iwi and hapu), there was usually no action taken by the Crown to alleviate the hardship that Maori were complaining about.

*Potential reference sources: Department of Internal Affairs head office files, Marine Department head office files, Department of Maori Affairs head office files*

The boundaries of the various acclimatisation districts (being the districts of the different acclimatisation societies) have varied over time and have not been fully researched; this deserves further study. The general pattern seems to have been that introductions of fish were undertaken by different acclimatisation societies, as follows:

Wellington Society	Rangitikei (except headwaters), Hautapu, Oroua, Turakina (including Mangapapa)
Hawke's Bay Society	Rangitikei headwaters, Ngaruroro

The Turakina and Whangaehu catchments may have been part of the Wanganui Acclimatisation Society during the nineteenth century.

Within the Wellington district, a separate Feilding and Districts Acclimatisation Society operated between 1899<sup>120</sup> and 1937<sup>121</sup>. This district was excised from the Wellington Society's district on its formation, and absorbed back into the Wellington Society's district when it was abolished. Its boundaries were defined by the Kawhatau River to the north, the Ruahine Range to the east, the Awahuri to Bulls

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<sup>120</sup> *New Zealand Gazette* 1899 page 895.

<sup>121</sup> In recognition of the abolition of the Feilding and District Acclimatisation Society, acclimatisation district boundaries were altered to include the Feilding district in the wider Wellington district by *New Zealand Gazette* 1937 page 1847.

Road to the south, and the Rangitikei River to the west<sup>122</sup>. Its relationship to the Wellington Society while it was in existence, and the role of the Wellington Society on the Rangitikei River while the Feilding Society existed, is not known and needs to be researched. The Wellington Society had a series of branches throughout its district; Taihape, Hunterville, Marton and Palmerston North were the locations of four of its branches, though it is not known over what time period each branch was actively in existence.

*Potential reference sources: Department of Internal Affairs head office files, Marine Department head office files, MacDowall*

All acclimatisation societies were replaced by regional Fish and Game Councils in 1990 as part of the Government's restructuring of environmental qangos (Conservation Law Reform Act 1990). The Wellington Fish and Game Council (headquartered in Palmerston North despite its name) is responsible for the Rangitikei and Manawatu (including Oroua and Kiwitea catchments), while the Hawke's Bay Fish and Game Council is responsible for the Ngaruroro catchment, and the Taranaki Fish and Game Council (headquartered in Wanganui despite its name) is responsible for the Turakina and Whangaehu catchments.

Acclimatisation societies exercised their powers with respect to the management of introduced fish by issuing licences to fish and by setting fishing seasons. These matters were provided for by regulations issued by the Crown under various acts, including the Fisheries Conservation Act 1884, the Fisheries Act 1908 and the Fisheries Act 1983. The societies also sought to protect the introduced fish from predation. Both eels and shags were looked upon as predators of trout, with the 1928 annual report for the Feilding Society recording that an eeling competition (with prizes for the greatest number of heads) had been held, and there was a bounty offered for the delivery of the feet of dead shags to the society<sup>123</sup>. Further research is needed to determine the extent of these and similar predator control activities in the study area, the impact they had on Maori communities, and the role of the Crown in these

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<sup>122</sup> *New Zealand Gazette* 1925 page 750.

<sup>123</sup> Feilding and District Acclimatisation Society annual report for the year ended 31 March 1928. Copy viewed at Ian Matheson City Archives, Palmerston North Public Library.



practices that prioritised introduced wildlife over native wildlife and Maori food resources.

Today introduced fish are distributed throughout the rivers of the study area, from the headwaters to the sea<sup>124</sup>. In the headwaters of the Moawhango, both above Mount Azim Gorge (located above the dam) and in Aorangi Stream<sup>125</sup> (located below the dam), are populations of North American brook char. In the Rangitikei River system, North American rainbow trout concentrate in the upper catchment, while English brown trout, able to tolerate higher water temperatures, concentrate in the Hautapu River and the lower catchment. Quinnat salmon are seen and caught only occasionally.

*Potential reference sources: Hicks, Hicks and Watson, Rodway, Rangitikei Wanganui Regional Water Board, 1985*

For the regional Fish and Game Councils the stretches of the rivers of most interest are those parts where access is straightforward and the fishing is good, and those parts that are the spawning beds for the introduced fish.

The Rangitikei River produces rainbow and brown trout of trophy quality, and is considered to be a nationally important recreational fishery. Anglers from throughout the country visit the catchment, especially the headwaters. A Ministry of Agriculture and Fisheries assessment in 1982 described the headwaters as a wilderness river fishery of national importance, because they were awarded the highest possible scenic beauty and solitude ratings, and because of the size of the rainbow trout they contained<sup>126</sup>. This headwaters area is principally the area within Ngamatea Station.

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<sup>124</sup> Hicks, BJ and NRN Watson, *Fish and fisheries of the Rangitikei River, New Zealand*, Ministry of Agriculture and Fisheries, Fisheries Research Division, Wellington, Occasional Publication No. 48, 1985.

Hicks, BJ, *Potential effects of hydro-electric development on the fish and fisheries of the Rangitikei River*, Ministry of Agriculture and Fisheries, Fisheries Research Division, Wellington, Fisheries Environmental Report No. 52, 1985.

Rangitikei Wanganui Catchment Board, *Rangitikei River fishery values*, Bioresearches Ltd for Rangitikei Wanganui Catchment Board, Marton, Report No. 85/5A, 1985.

<sup>125</sup> The correct name is Oarenga Stream. Richard Steedman, personal communication, 28 February 2012.

<sup>126</sup> Tierney, LD, MJ Unwin, DK Rowe, RM McDowall and E Graynoth, *Submission on the draft inventory of wild and scenic rivers of national importance*. Ministry of Agriculture and Fisheries, Fisheries Environmental Report No. 28, 1982.

Access to the equally significant wilderness fishery for rainbow trout on the Taruarau River is also controlled through Ngamatea Station.

While little spawning occurs in the middle and lower sections of the Rangitikei, brown trout do spawn in the main channel. Rainbow trout spawn in the headwaters, an annual migration upstream being associated with this. Further research would identify the prime spawning sites in more detail, and thereby identify whether there is any clash between the needs of introduced fish spawning and the needs of indigenous fish species of particular interest to Maori.

During the establishment of the Tongariro Power Development scheme, the impact of the hydro-electric power scheme on the trout fishery was treated by the Crown as an issue that needed to be resolved, or at least where some accommodation between energy generation and fishing values was required. Ministry of Works discussed the fishery with the Marine Department (later the Fisheries Division of the Ministry of Agriculture and Fisheries), and with the acclimatisation societies. In these discussions, concern for the internationally recognised trout fishery on the Tongariro River tended to overshadow any concerns for the Rangitikei River, the Moawhango River, and their tributaries. Walzl records how one fisheries scientist was particularly upset about the lack of consideration given to the trout fishery on the Moawhango while the Moawhango Dam and diversion was being planned and developed<sup>127</sup>.

*Potential reference sources: Walzl, Cudby (1979), Ministry of Works and Development head office files, Ministry of Works and Development Moawhango Residency files, Ministry of Agriculture and Fisheries head office files*

### **11.3 National Water Conservation Order**

It was the high quality of the trout fishery, and the threat of further hydro-electric power schemes arising from the push at the time to develop local power schemes, both of which had been highlighted in the 1982 Ministry of Agriculture and Fisheries report, that encouraged water conservation order applications for the Rangitikei and the Hautapu Rivers in the mid 1980s. Other features of the rivers were included among the reasons why the orders should be made, but the trout fishery was the main

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<sup>127</sup> Walzl, T, *Environmental impacts of the Tongariro Power Development scheme*. Evidence to the National Park Inquiry, July 2006. WAI-1130, Document #E12.

driving force for the applications. Wellington Acclimatisation Society and the Council of North Island Acclimatisation Societies lodged the applications.

The ability to proclaim water conservation orders was provided by the Water and Soil Amendment Act 1981. The Crown's authority to act was therefore a subset of the power it had given itself in the Water and Soil Conservation Act 1967 whereby all rights to the use of natural water were vested in the Crown. The 1981 amending act implemented a policy of recognizing and protecting wild and scenic rivers; this characterization of rivers being a concept that had developed in North America, where creeping incremental change to rivers was seen as threatening those river environments that had wilderness qualities. By declaring a river to be subject to a water conservation order, policy lines could be defined beyond which development was not allowed to go.

The 1981 amending act provided for both national water conservation orders and local water conservation notices. National orders, as the name implies, were for those rivers of national significance for their wild and scenic characteristics, and could only be imposed by the National Water and Soil Conservation Authority. Local notices were for regionally or locally important rivers, and could be imposed by regional water boards.

The applications prompted reviews of the Rangitikei fishery<sup>128</sup>. The Hicks report showed that the series of hydro-electric schemes between the Hautapu River confluence and Vinegar Hill Bridge would result in dams that would be a barrier to fish migration, and almost total replacement in that stretch of the river of a free-running river channel by storage lakes. Smaller power scheme sites upstream of the Moawhango confluence and on the Hautapu River, and also any diversions of

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<sup>128</sup> Hicks, BJ and NRN Watson, *Fish and fisheries of the Rangitikei River, New Zealand*, Ministry of Agriculture and Fisheries, Fisheries Research Division, Wellington, Occasional Publication No. 48, 1985.

Hicks, BJ, *Potential effects of hydro-electric development on the fish and fisheries of the Rangitikei River*, Ministry of Agriculture and Fisheries, Fisheries Research Division, Wellington, Fisheries Environmental Report No. 52, 1985.

Rangitikei Wanganui Catchment Board, *Rangitikei River fishery values*, Bioresearches Ltd for Rangitikei Wanganui Catchment Board, Marton, Report No. 85/5A, 1985.

Rangitikei water in the headwaters into the Ngaruroro and Mohaka catchments, would also affect the Rangitikei fishery.

In 1986 the National Water and Soil Conservation Authority decided that the Rangitikei River should be covered by a national water conservation order. This decision was appealed against, but the appeals were subsequently withdrawn, and the Planning Tribunal approved the issue of the order in 1992. The order itself was made the following year<sup>129</sup>. It applies to two stretches of the Rangitikei. From the source to the Makahikatoa Stream (about 4 kilometres upstream of the Taihape – Napier Road river crossing at Springvale), and including all tributaries upstream of the Makahikatoa, is defined as the ‘Upper River’, the waters of which are declared to have outstanding wild and scenic characteristics, and outstanding recreational, fisheries and wildlife features. The Rangitikei River between the Makahikatoa Stream and Mangarere Bridge (a short distance downstream of Mangaweka), plus the Whakaurekau Stream (and all its tributaries) and the Kawhatau River (and two of its tributaries, the Pouranaki River and the Mangakokeke Stream), are defined as the ‘Middle River’, the waters of which are declared to have outstanding scenic characteristics and outstanding recreational and fisheries features. No damming of either the Upper or the Middle River is allowed, and no damming below the Middle River can allow water to pond up beyond the confluence of the Rangitikei and Hautapu Rivers. The waters of the Upper River are to be left in their natural state, and the waters of the Middle River cannot be reduced below their 95% flow volumes. Limits are set on the extent to which any resource consents that might be granted will alter water quality. There are provisos allowing water rights to be granted for fisheries and wildlife research and enhancement, for maintaining roads, bridges and other public utilities, and for soil conservation works, and allowing renewal of existing water rights.

The National Water and Soil Conservation Authority declined to issue a water conservation order for the Hautapu headwaters, on the grounds that the Hautapu fishery was not nationally significant, and instead referred the application to the Regional Water Board for it to consider whether a local water conservation notice

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<sup>129</sup> Water Conservation (Rangitikei River) Order 1993 (Statutory Regulations 1993/15), notified in *New Zealand Gazette* 1993 page 473.

should be issued. A local water conservation notice was ordered for the Hautapu headwaters in 1990 and notified the following year<sup>130</sup>. This notice declared that the Hautapu River from its source downstream to its confluence with Oraukura Stream (on the northern outskirts of Taihape township) was a brown trout fishery of regional significance, no damming of this stretch of the river was to be permitted, and no water right was to be granted “if the effect would be to diminish significantly the fisheries habitat of any part of the waterway”. There were similar provisos to those listed above for the national order.

The various decisions of the National Water and Soil Conservation Authority, the Planning Tribunal, and the Central Districts Regional Water Board and/or Rangitikei Wanganui Regional Council, need to be researched in detail, to identify what public submissions were made on the applications, whether Maori stated any opinion about the applications while the opportunity to make submissions was available, and whether any consultation with Maori was initiated by the respective agencies. When the Regional Water Board gathered together hydrological and water quality information about the Hautapu River during the lead-up to its consideration of the Hautapu local notice application<sup>131</sup>, it made no mention of any Maori viewpoint about the river.

*Possible reference sources: Ministry of Works and Development head office files, Nature Conservation Council files, Rangitikei Wanganui Regional Water Board files*

The national water conservation order remains in force today. The local water conservation notice, although not notified until after the Resource Management Act 1991 had replaced the Water and Soil Conservation Act 1967, was issued under the 1967 Act because it had originally been applied for and made under that earlier act. It then became one of the transitional regional rules under the Resource Management Act 1991, and remained in force until a new set of regional rules was written. There was no requirement in the 1991 Act that any new rules should provide for continuation of the local notice; instead it was up to the regional council to decide what rules it chose to have for the Hautapu River in the future without any reference

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<sup>130</sup> Local Water Conservation (Hautapu River) Notice 1990, notified in *New Zealand Gazette* 1991 page 2123.

<sup>131</sup> Central Districts Catchment Boards, *Aspects of the hydrology and water quality of the Hautapu catchment*, Central Districts Catchment Boards, Palmerston North, Report No. 89/5, 1989.

back to the local notice. The new regional rules were included in the Manawatu Wanganui Regional Plan, and draft regional rules (to supercede the Regional Plan's rules) have been included in the Horizons One Plan that is yet to become fully operative. The rules need to be examined closely to see if there has been any change in the quality of protection they provide to the Hautapu River.

*Potential reference sources: Horizons Regional Council records*

## 12 WATER USES

This section examines the following uses to which waters in the rivers have been put;

- Timber floating
- Abstraction of water for township, rural and industrial water supplies
- Recreational swimming, canoeing and jetboating

### 12.1 Timber floating

Using rivers to carry logs out of the forests and down to the mills was primarily a feature of the North Auckland and Coromandel districts as the kauri forests were decimated. While only one instance of timber floating in the study area is known, more may have occurred. It is significant because it is another example of the Crown passing legislation affecting rivers and affecting Maori authority over rivers.

The Timber-floating Act 1873 prescribed a two-stage process. First a river was declared to be open, or available, for the floating of timber down it. Then a licence would be issued to an operator to float timber down that river. A licensee was obliged to cause as little damage as possible, and pay compensation to riparian owners for any damage done to riverbank land. Only licensed operators were allowed to use a river for timber floating. The 1873 Act was administered by Provincial Superintendents, then, after the provinces were abolished in 1876, by Commissioners of Crown Lands. A new Timber-floating Act in 1884 repeated the 1873 Act's provisions and, in addition, allowed for the damming of rivers to create a head of water for driving timber down rivers.

No opening of the Rangitikei River, or other rivers in the study area, to timber floating has been located. However, there is a reference to some timber floating having occurred on the Rangitikei. Moar, writing in a 1955 thesis, stated:

At Taoroa, a settlement a few miles south of Taihape, sleeper splitting was quite an industry. The farmers on whose land the timber stood were paid 6d to 8d royalty for each tree by splitters who cut and split the timber, and then floated it down the river to receive 3s 6d for each log delivered at Ohingaiti. There was much hard work and considerable hazard in this business. On one occasion a flood broke the boom across the river at Makohine and carried some hundreds of sleepers to the sea. On another occasion, a raft with all

stores and bedding hit a boulder in a rapid and split from end to end. Losses from heavy timber that would not float were considerable. One settler, a Mr Percy Smith, lost his life in the river at Makohine while engaged in this work.<sup>132</sup>

Moar does not provide any date for this activity, though the reference to sleepers suggests that the timber being cut and split was totara for railway sleepers, putting the likely period, when sleepers were required by the Main Trunk Railway construction at Ohingaiti, in the early 1900s decade. This is consistent with another reference quoted by Moar, from evidence to a Supreme Court case in 1905, when a witness said, “I only know of sleepers and straining posts floating down the river”<sup>133</sup>.

Further research is needed to identify the extent of timber floating on the Rangitikei River, whether it was sanctioned by the Crown, whether Europeans during these initial settlement years regarded Maori as holding any authority over the river, and whether Maori gave their consent for this activity.

*Potential reference sources: Moar, Robertson, local newspapers*

## **12.2 Abstraction of water for township, rural and industrial water supplies**

Abstraction of water has only been controlled by the Crown since 1967<sup>134</sup>. This came with the passing of the Water and Soil Conservation Act 1967, which vested in the Crown the sole right to take natural water. The only exceptions where the Crown could not invoke its vesting power were water abstractions for domestic needs, stock watering and fire fighting purposes, which all remain common law rights to water. The same legislation also vested in the Crown the sole right to dam, divert or discharge natural water, including a right to discharge waste into natural water.

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<sup>132</sup> Moar, NT, *The origins of Taihape: a study in secondary pioneering*. MA thesis in history, Victoria University College, 1955, page 48.

This extract is quoted word for word, but without attribution, in Robertson, Dennis, *Give me Taihape on a Saturday night*, 1995, page 47.

<sup>133</sup> Moar, NT, *The origins of Taihape: a study in secondary pioneering*. MA thesis in history, Victoria University College, 1955, page 46.

<sup>134</sup> There were previous instances of a Crown authority to regulate certain water abstractions being written into statute law, with the Underground Water Act 1953 applying to groundwater abstraction where powers of regulation could be given by Order in Council to a specially constituted underground water authority, and with the Geothermal Energy Act 1953 vesting in the Crown all rights to geothermal resources. However, neither of these statutes had been invoked by the Crown in the study area. (Alexander, D, *Some aspects of Crown involvement with waterways in the Whanganui Inquiry District*, Evidence to the Whanganui District Inquiry (WAI-903), August 2008).



Natural water is free-flowing water, both above ground in watercourses and below ground as groundwater, rather than water in pipes and tanks.

The vesting of these uses of water was in effect a confiscation by the Crown of common law rights previously held by owners of land through or under which natural water flowed or stood. There was no attempt at consultation with Maori before the legislation was passed<sup>135</sup>.

With the use of water vested in it, the Crown then established regional water boards and delegated to them the power to administer how water was used by means of the issue of water rights. In general around the country, the regional water boards assumed they had sole authority with respect to water rights, and saw no need to consult with Maori or seek Maori consent prior to issuing any right; this attitude needs to be confirmed as also applying in the study area. Three different regional water boards were involved, the Hawke's Bay Board for the Ngaruroro catchment waters, the Manawatu Board for the Pohangina, Oroua and Kiwitea catchment waters, and the Rangitikei (later the Rangitikei – Wanganui) Board for the waters of all other catchments in the study area.

Many of the larger townships drew in the past, or draw today, their communal water supplies from rivers in the study area. Waiouru army camp takes its water from the Waiouru Stream. Taihape draws its water from the Hautapu River at Ngarukehu<sup>136</sup>. Mangaweka abstracts its water from the Rangitikei River; the township's hydro-electric power station was constructed to provide the power to pump water from the river to a reservoir above the township. Hunterville obtains its water from a tributary of the Pourewa River; the reservoir site and the catchment upstream of the reservoir is land reserved for water conservation purposes in 1968<sup>137</sup>, but was probably in use for water supply purposes before that date. Bulls pumps water from wells alongside the Rangitikei River channel. Lake Alice hospital also relied on wells beside the Rangitikei; this water supply required the taking of Maori Land in the Ohinepuhiawe

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<sup>135</sup> Alexander, D, *Some aspects of Crown involvement with waterways in the Whanganui Inquiry District*, Evidence to the Whanganui District Inquiry (WAI-903), August 2008.

<sup>136</sup> Robertson, Dennis, *Give me Taihape on a Saturday night*, Waikanae Heritage Press, Waikanae, 1995.

<sup>137</sup> *New Zealand Gazette* 1968 page 2038. Department of Lands and Survey head office file 4/1173.

block under the Public Works Act in 1951<sup>138</sup>. Marton has dammed Folly Stream (a tributary of the Tutaenui Stream) to create two reservoirs. Ohakea air base is believed to source its water supplies from the Rangitikei River. Most of these abstractions began before the passing of the 1967 Act. The nature of the consents that the local authorities obtained, in particular whether Maori were included in the consenting process, needs to be researched. Where an abstraction was pumped from groundwater alongside a river channel, it is likely that the consent of the landowner was considered adequate under the common law provisions applying at the time (although the taking for Lake Alice hospital appears to contradict this). Where an abstraction was from a river or a riverbed, the absence of a land title for the riverbed may have meant that obtaining consent was ignored altogether.

*Potential reference sources: Ministry of Works and Development head office files, Ministry of Works and Development district office files, Health Department head office files, Horizons Regional Council records, Hawke's Bay Regional Council records, Rangitikei District Council records*

Community water supply schemes in rural areas developed from the 1960s onwards. A number have been established in the study area, including the Erewhon, Omatane, Hunterville and Stanway rural water supply schemes. Each scheme was subsidised by the Crown, and required Crown approval (following a recommendation from the Water Resources Council) before it could be constructed. With each of these schemes, research is required to identify whether there was any consultation with Maori by the Crown as part of its approval process.

The Erewhon scheme draws water from the Reporoa Stream running out of Reporoa Bog (one of 73 wetlands of international importance in New Zealand<sup>139</sup>), and distributes it to farms on both sides of the Rangitikei River (involving a piped crossing of the river). This bog is located on the boundary between Mangaohane station and Aorangi maunga Maori-owned land, and the draw-off weir is located on Maori Land. Apparently only verbal approval to the draw-off and piping of water was obtained by Rangitikei County Council (promoter of the scheme) from so-called

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<sup>138</sup> *New Zealand Gazette* 1951 page 771. Ministry of Works and Development head office file 24/2602/1.

<sup>139</sup> Cromarty, Pam and Derek A Scott (eds), *A directory of wetlands in New Zealand*, Department of Conservation, Wellington, 1996.

“senior” Maori owners<sup>140</sup>; there was no formal consent or occupation right arranged prior to construction, although an easement has since (in 2006<sup>141</sup>) been granted to Rangitikei District Council by the trustees for the Maori owners. The limited nature of the verbal approval, particularly in the context of the regional water board’s issue of a water right, needs to be researched. The draw-off from the Reporoa Stream has consequences for the management of the catchment area upstream of the weir, in particular with respect to ensuring high water quality. How this is dealt with by the relationship between the Council and the Maori owners needs to be investigated, to see if the scheme has required any limitations on land use that create hardship for the owners.

The Omatane scheme draws water from a small tributary of the Makino Stream on the property of one of its farm-owner beneficiaries. The Hunterville scheme pumps water from wells immediately alongside the Rangitikei River a short distance downstream of the Vinegar Hill road bridge. The Stanway scheme takes water from a well in river gravels beside the Rangitikei River, on land that is either part of Te Reureu reserve or riverbed adjoining Te Reureu reserve; while the pipe traverses the reserve and Maori landowners are apparently rated for the scheme, few have chosen to join the scheme and use the water supply. This and other impacts of the different schemes on Maori need to be investigated further.

*Potential reference sources: James, Ministry of Works and Development head office files, Ministry of Works and Development district office files, Horizons Regional Council records, Rangitikei District Council records, Manawatu District Council records*

There have been and are still a small number of industrial users of water in the study area that developed their own water supplies. Examples include a former dairy factory at Rata, a former freezing works and wool scour at Kakariki, and a meatworks at Bulls. The details of these industrial abstractions is not known, and need to be investigated further to identify what impact they might have had on Maori interests,

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<sup>140</sup> James, Gareth, ‘It’s all downhill from here: the Erewhon rural water supply scheme’, in *Soil and Water*, Volume 17(2), pages 10-16, 1981.

<sup>141</sup> Maori Land Court minute book 167 AOT 219-221.

and whether there was any consultation with Maori as they were developed and during their use.

*Potential reference sources: Ministry of Works and Development head office files, Horizons Regional Council records*

### **12.3 Recreational swimming, canoeing and jetboating**

These uses are sometimes referred to as in-stream uses, in that they do not involve any consumption of water or any alteration to watercourses. They are, however, dependent on particular characteristics of a river, including high water purity and qualities of naturalness and wilderness. Recognition of in-stream uses as a valid use of water gained some prominence from the 1970s onwards, primarily because there was a feeling that, although recreation was mentioned in the long title to the Water and Soil Conservation Act 1967, it was at risk of being overwhelmed by all the other recognised uses of water, many of which were destructive of passive and amenity values of water.

Swimming in the rivers relies on public access, and is associated with road crossings of the rivers. Examples are the confluence of the Hautapu and Rangitikei Rivers, the domain at the Vinegar Hill bridge, and London Ford on the Oroua. There are few issues associated with swimming that need to be researched further, although the ability to swim is one of the drivers of a concern about water quality (see elsewhere in this report).

Canoeing and jetboating are attractive where the waterways (including rapids) are suitable for these activities, and where the river environment is attractive to visit. On a national scale the Rangitikei and Ngaruroro Rivers rate highly in these regards.

Egarr has catalogued the value of rivers in New Zealand to canoeists and rafters<sup>142</sup>. He rated the Rangitikei River (upper river and Pukeokahu sections), and the

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<sup>142</sup> Egarr, GD and JH Egarr, *New Zealand recreational river survey: an investigation into the recreational potential of New Zealand's inland waterways: Part II, summaries of North Island Rivers*, National Water and Soil Conservation Organisation for New Zealand Canoeing Association, Wellington, Water and Soil Miscellaneous Publication No. 14, 1981.  
Egarr, Graham, *New Zealand's North Island rivers: a guide for canoeists and rafters*, David Bateman, Auckland, 1989.

Ngaruroro River (upper river and gorge sections), as two of the best rafting and kayaking rivers in the country. The Pukeokahu section is the most technically challenging. The Hautapu River contains stretches of water that are impassable because of bad falls and fallen trees. The Moawhango River has been badly affected by the Tongariro Power Development scheme's diversion of water out of the catchment.

Farrant has catalogued the value of the rivers in the study area for jetboating, as follows<sup>143</sup>:

<b>River</b>	<b>Easy boating</b>	<b>More advanced boating</b>	<b>Difficult boating</b>	<b>Not suitable for boating</b>
Rangitikei	Rivermouth to Ohingaiti	Ohingaiti to Pukeokahu	Mangaohane to Springvale	Pukeokahu to Mangaohane Above Springvale
Moawhango			Rangitikei River to Pungataua	Remainder of the river
Ngaruroro		Whanawhana to Taruarau confluence		Above Taruarau confluence

The Hautapu, Taruarau, Oroua, Kiwitea and Mangapapa Rivers were not rated as suitable for jetboating.

While boating activities are subject to only a limited amount of Crown intervention, the Crown's involvement in boat navigation issues on rivers has been longstanding, and can be traced back to as early as 1878. In that year a Harbours Act was passed, which had a very broad definition of "harbour", including "any harbour properly so called, whether natural or artificial, and any haven, estuary, navigable lake or river, dock, pier, jetty". At Section 212(2) the Act allowed for the passing of regulations providing for "the safe navigation of any harbour, navigable river or navigable lake".

The Harbours Act 1878 was passed to accommodate the changes in government arising from the abolition of provincial government in 1876, which included the

<sup>143</sup> Farrant, RI (ed), *Handbook 1979*. New Zealand Jet Boat Association Inc, Christchurch, 1979.

transfer of responsibility for the Port of Rangitikei at the mouth of the river from Wellington Provincial Government to central government. Research is required to identify the extent of the Crown's involvement with the port, and the relationship it had with local iwi with respect to the port. There was a dispute in connection with the siting of the signal station at the mouth of the river, but so far as is known this dispute was over the leasing of Maori-owned land for the station rather than over the Crown's authority with respect to the river.

The involvement of the Crown with rivers under the Harbours Act 1878 (and its successors the Harbours Act 1923 and the Harbours Act 1950) is not fully known, and needs to be researched further. One instance that has been identified was the passing of a general regulation in 1906 prohibiting the placing of any obstruction to navigation in a navigable river, and making it an offence to fail to remove the obstruction<sup>144</sup>. Another instance was the passing of General Harbour Motor Launch Bylaws in 1934, which among other things prohibited motor launches from travelling at more than five knots within 200 yards of any erosion protection works<sup>145</sup>. By 1958, with the passing of Motor Launch Regulations in that year, the prohibition had been expanded to cover boats within 200 yards of any riverbank. The prohibition was continued in the successor Motor Launch Regulations 1962 and Water Recreation Regulations 1979.

With the development of jetboats, which needed to travel at more than 15 knots to be able to plane across the surface of the water, it became necessary to allow exemptions to the 5 knot maximum speed. Following an application made to the Ministry of Transport by the New Zealand Jet Boat Association, the removal of speed restrictions on the Rangitikei River from the source to the sea was notified in 1979<sup>146</sup>. The notice was reissued two months later, as a result of representations from the Wellington Acclimatisation Society, with an additional provision reducing the operation of the exemption from the source to the Mangaohane bridge between May and September

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<sup>144</sup> *New Zealand Gazette* 1906 page 2653.

<sup>145</sup> *New Zealand Gazette* 1934 page 2744.

<sup>146</sup> Water Recreation (Rangitikei River) Notice, 1979, notified in *New Zealand Gazette* 1979 page 1546.

each year, in order to protect trout spawning areas<sup>147</sup>. This indicates that at least some agencies outside government were consulted and had their submissions acted upon. What consultation was undertaken by the Ministry of Transport with iwi, and in particular whether Maori living along the river were consulted, needs to be researched. Fishing and bathing use of the river by Maori stood to be affected by the Crown's approval of jetboating.

A different provision under the Harbours Act 1950 was the ability for the Crown to delegate some of its powers under that Act to local authorities. This delegation, known as a grant of control of waters, was made under Section 8A of the Act, which was added by the Harbours Amendment Act 1961. A grant of control of the waters of the Oroua and Pohangina Rivers, from their source to their confluence with the Manawatu River, plus the waters of other Manawatu region rivers outside the study area, was issued to the Manawatu Catchment Board and Regional Water Board in 1980<sup>148</sup>. The grant was for a fixed term of twenty-one years. Why a grant of control was issued for these rivers, what practical effect it had, and whether Maori were consulted, needs to be researched.

Since the 1990s, the Crown's direct interest in recreational boating has been narrowed to a safety and accident investigation focus, while regional councils have been made responsible for other aspects of boating and riverbed occupation use under the umbrella of the Resource Management Act and regional policies and plans.

*Potential reference sources: Egarr, Farrant, Ministry of Transport head office and district office files*

The amenity value of rivers was recognised by an amendment to the Water and Soil Conservation Act in 1981. This was in response to a desire to see protection of wild and scenic rivers, and the Amendment Act aimed to achieve protection by instituting national water conservation orders or local water conservation notices. The gazetting of conservation orders and notices has been discussed in the chapter of this report

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<sup>147</sup> Water Recreation (Rangitikei River) Notice No. 2, 1979, notified in *New Zealand Gazette* 1979 pages 2293-2294.

<sup>148</sup> *New Zealand Gazette* 1980 page 2181 (amended by *New Zealand Gazette* 1986 page 1653). Bylaws drawn up by the Manawatu Regional Water Board were approved by the Crown at *New Zealand Gazette* 1980 page 2851.

about fisheries, because they were applied for by anglers keen to protect the fishing experience in wilderness areas of the upper Rangitikei. In that section the need for research into how (if at all) the Crown consulted with and involved Maori prior to gazettal was identified. Research is also needed to identify whether there was any consultation with Maori prior to the passing of the 1981 Amendment Act.

*Potential reference sources: Ministry of Works and Development head office files*



## 13 WATER QUALITY

The Crown has had a variable attitude towards pollution and water quality over the years. The Fisheries Conservation Act 1884 allowed regulations to be issued prohibiting the throwing of sawdust or sawmill refuse into rivers. In the interests of good sanitation, the pollution of water supplies, and the pollution of watercourses through towns and boroughs, were made offences under the Public Health Act 1900. However, other legislation accepted the use of watercourses to dispose of and dilute waste. Mining Acts in the nineteenth century allowed a watercourse to be proclaimed to be a sludge channel, in order to carry away arsenic and other polluting wastes of gold mining. As recently as 1967 the Water and Soil Conservation Act deemed the discharge of wastes to water as a valid use to which natural water could be put, because of the dilution effect, and an acceptable reason for the issue of water discharge rights. The attitude expressed in the 1967 Act still prevails today, with discharge to water often preferred to higher-standard treatment of waste or discharge to land.

Any reduction in water quality in the waterways (including related sub-surface groundwater flows) impacts on Maori to a greater degree than the general population. While Maori are part of the general population, and therefore share the general population's concerns with respect to bathing use, the Maori concern for the mauri of waterways, for the health and wellbeing of traditional fisheries, and for the ability to practise other traditional activities such as preparing rongoa and weaving materials, all mean that the iwi and hapu along the rivers take a keen interest in water quality matters. This makes consultation with iwi and hapu on the topic a particularly critical issue.

The worst discharges into rivers in the study area are discharges from sewage treatment plants, because they discharge into the rivers pathogens harmful to human health, which then prevent the rivers from being suitable for drinking or bathing, or for many other uses. Taihape traditionally relied on community septic tanks that discharged into the Hautapu River. A sewage treatment plant was subsequently built downstream of the town (although upstream of Winiata and Utiku). While the

effluent from this plant that is discharged into the Hautapu River has been treated, it has consistently failed to meet the water quality standards set out in its resource consent, and blights not just the Hautapu but also the Rangitikei River below the Hautapu confluence.

The Hunterville sewage treatment plant has also had a history of poor performance. The quality of discharges from other treatment plants in the study area, such as at Waouru, Halcombe, Bulls, Marton and Ohakea, is not known.

Other discharges affecting water quality are from industrial sites. For instance, a sawmill north of Taihape discharges treated water into the Hautapu River. In the past a dairy factory at Rata caused pollution in the Pourewa River. Other industrial sites are further downstream in the more intensively developed lowlands and the coastal plain.

A more insidious form of pollution, because it is less easy to develop clean-up strategies for, is the pollution from chemicals, nutrients and bacteria contained in general runoff from the land, in particular from farmland. While the intensive stocking that goes with modern dairying, including the twice-daily concentration of stock numbers at milking sheds, has a bad reputation, the decline in water quality in the Rangitikei and Turakina Rivers commences in the parts of the catchments where cattle and sheep rearing predominates. Research is needed to determine which parts of the catchments in the study area make the biggest contributions to a decline in water quality, what mechanisms are being used to reduce this type of pollution (known as non point source pollution), and how effective they are.

Research is needed to discover whether Maori were consulted about any of these polluting discharges, whether they have expressed concerns about water quality or pollution in the rivers of the study area, and how any concerns have been responded to by the Crown and local authorities.

*Potential reference sources: Health Department head office files, Horizons Regional Council records*

Research is also required into whether the overall water quality situation is currently improving or not. The Horizons website includes the following summary statement made in about September 2009:

The Rangitikei River is pristine at its headwaters coming out of the Kaimanawa Forest Park. Several tributaries have poor water quality as a result of town sewage discharges from Taihape, Hunterville, Marton, Halcombe and Sanson. The river is generally safe for swimming at low flows. However, below the Bulls Bridge the water quality degrades as a result of industrial discharge and intensive land use in coastal parts of the catchment. The river is subject to green slime throughout much of its main channel at times, however it does not suffer from blue-green algal blooms like other rivers.<sup>149</sup>

Although the wording used is different, this recent assessment appears to be very similar in sentiment to statements about water quality made in the Regional Council's two 'state of the environment' reports dated 1999<sup>150</sup> and 2005<sup>151</sup>. If this is a correct interpretation of the various assessments, then the implication is that there has been little progress made in recent years to reduce pollution and improve water quality.

The lower Hautapu River, the Pourewa Stream, the Tutaenui Stream and the Rangitawa Stream remain pollution 'hot spots' despite having been identified as such for a number of years. The Turakina River also appears to still have poor water quality. However, a finer analysis of Horizons' data may be able to point to results that show that some improvement is occurring. Any research on this topic could also identify whether the consultation that Horizons Regional Council has with Maori via Nga Pae o Rangitikei forum (see chapter on resource management) has encouraged Horizons and the District Councils to react positively to Maori concerns about water quality.

Besides existing pollution, there is also the threat of additional pollutants being introduced to the rivers of the study area. The didymo algae is present in the South Island, but has not yet been found in North Island rivers. Introduction by anglers with contaminated fishing gear is the biggest threat.

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<sup>149</sup> [www.horizons.govt.nz/about-us/who-what-where/news/water-quality-top-priority/a-snapshot-of-water-quality-in-the-horizons-region/](http://www.horizons.govt.nz/about-us/who-what-where/news/water-quality-top-priority/a-snapshot-of-water-quality-in-the-horizons-region/), report undated, but posted on the website on 2 September 2009.

<sup>150</sup> Horizons Regional Council, *Measures of a changing landscape: state of the environment report, Manawatu-Wanganui Region*. Horizons Regional Council, Palmerston North, 1999.

<sup>151</sup> Horizons Regional Council, *State of the environment report of the Manawatu-Wanganui region*, Horizons Regional Council, Palmerston North, Report No. 2004/EXT/608, 2005.

## 14 GRAVEL EXTRACTION

A significant feature of the Rangitikei River, in particular, is the taking of gravel and shingle from the riverbed. Extraction sites are located throughout the river, from the upper river at Springvale down to the sea, and in side streams such as the Kawhatau River. The Kawhatau, originating in the Ruahine Range, is considered to be a significant source of the gravels in the lower part of the river.

In the papa country, gravel supplies were not easy to come by, and the rivers, with their pre-sorted stones, were a ready and convenient source, provided that access to the riverbed was possible. Almost every low-level road bridge site also became a gravel extraction site. On the coastal plain, where the Rangitikei, and other rivers such as the Oroua have adopted a shallower gradient, gravels carried down by the upstream steeper sections of the river drop out and are deposited in thick beds. The wider construction industry of the Manawatu region looks upon these gravel beds as a readily available supply.

The economic importance of the Rangitikei River gravels to the region should not be underestimated. Horizons Regional Council's 1999 State of the Environment report records that for the period 1992-1998 gravel extraction from river channels in different river catchments in its region was as follows<sup>152</sup>:

<b>River</b>	<b>Extracted Volume 1992-1998 (cubic metres)</b>
Whanganui	31,022
Whangaehu	68,490
Ohau	92,019
Rangitikei	1,001,008
Manawatu	1,430,650

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<sup>152</sup> Manawatu-Wanganui Regional Council, *Measures of a Changing Landscape: State of the Environment Report, Manawatu-Wanganui Region*, 1999, page 41.

The Rangitikei contributed 38% of all riverbed-won gravels in the region. It also contributed additional gravels extracted from dry land alongside riverbeds (referred to as berm area extraction).

The rights to take gravel are bound up with the ownership of the riverbed. By asserting that the riverbed of the Rangitikei upstream to the Kawhatau confluence was a navigable river and was vested in it, the Crown was saying that the riverbed was Crown Land, and gravel could be extracted under licences issued by the Crown (or by the Catchment Board if licensing authority had been delegated to it) in accordance with Section 165 Land Act 1948.

*Potential reference sources: Department of Lands and Survey district office files, Horizons Regional Council records*

Taking gravel is also bound up with the catchment and flood control functions of catchment boards and regional councils. Gravel extraction is an explicit part of the Rangitikei River Control Scheme No. 2, because it can counteract the tendency of the river to drop its gravel load and so fill in the floodway, reducing the capacity of the channel and making it easier for the river waters to overtop bank protection works. Extraction has now become a tool for the ultimate benefit of flood control. However, there have been flaws in this approach. In recent years the infilling of the floodway has occurred downstream of Bulls, but there has been insufficient extraction in this stretch of the river, with more occurring upstream of Bulls than is being deposited there naturally. Downstream of Bulls the bed is aggrading, while upstream it is degrading, so that the flood channel is behaving contrary to the wishes of the flood engineers. In 2010 one consequence was that an application by Ngati Waewae, one of the hapu at Te Reureu, to extract gravel in front of the reserve, and so reduce the threat of erosion to Maori Land, was turned down because, according to the flood engineers, more gravel was either already being extracted from that stretch of the river, or was permitted under existing resource consents for future extraction, than should be allowed to occur. More research is needed to better understand the relationship between gravel extraction and flood control, and the manner in which the regional council is managing the links.

*Potential reference sources: Rangitikei Wanganui Catchment Board (1978), Rangitikei Wanganui Catchment Board (1979), Rangitikei Wanganui Catchment Board (1983), Horizons Regional Council (2010)*

The earliest known Crown involvement with Rangitikei gravels was the use of the riverbed at Kakariki, downstream of the railway bridge, as a ballast pit. Extraction may have commenced as early as the 1870s, when the railway was constructed. For a reason yet to be determined, the Crown considered that it was necessary to take the ballast pit site under the Public Works Act in 1912<sup>153</sup>. Both the extraction from this site during the nineteenth century, and the taking, are of particular relevance to a study of the Rangitikei River, as the site is part of Te Reureu Maori reserve or riverbed fronting Te Reureu reserve. The dealings the Crown had with Te Reureu Maori, during a period that was largely before it asserted that the river was navigable and had become Crown Land, will shed light on the ownership of the gravel before any further discussion about ownership was shut down by the Crown's use of the Coal-mines Amendment Act 1903. In particular, research may show whether or not the Crown was paying Maori for the gravel that was extracted, and whether the compensation paid for the taking of the site included any recognition of Maori ownership of the gravel.

*Potential reference sources: Ministry of Works and Development head office files, Railways Department head office files, Maori Land Court minute books*

One of the key concerns of Maori is the suspicion that the Crown's takeover of the lower Rangitikei riverbed has prevented Maori from being able to obtain an income from royalty payments on gravel extracted. At present extractors pay a royalty on each cubic metre extracted, which goes to the regional council as control and management agency for the reserve that is the riverbed. Whether there is any substance to the suspicion needs to be thoroughly researched. It is why an understanding of the legal rights of Maori before the river was claimed to be a navigable river is so important.

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<sup>153</sup> *New Zealand Gazette* 1912 page 957.

A decision of the Wanganui Land Valuation Tribunal in 1984 has revived suspicion that Maori have missed out on receiving royalty payments. It was asked to determine the amount of compensation to be paid to some Ohinepuhiawe owners for the taking of part of their land under the Public Works Act in 1981 for soil conservation and river control. The Maori owners argued that the compensation value of their land (which because of river movement was actually riverbed) should include the value of the river gravel that it contained. The Tribunal agreed, giving a decision in favour of the Maori owners and against the Catchment Board.

If the further research supports the iwi contention that it has been denied royalty payments for gravel as a result of Crown actions, then research will also be needed to identify the quantities of gravel that have historically been taken from those parts of the riverbed where Maori would have owned the gravel if it were not for the Crown actions.

*Potential reference sources: Department of Lands and Survey head office files, Department of Lands and Survey district office files, Ministry of Works and Development head office files, Ministry of Works and Development district office files, Horizons Regional Council records*

## 15 RESOURCE MANAGEMENT

In the days of the catchment board and regional water board, planning tended to be reactive - to the Tongariro Power Development scheme, to other hydro-electric power investigations, and to floods and the need to control them. With the passing of the Resource Management Act 1991, there has been a surge of more holistic planning about the rivers. Many of the kawanatanga powers to do with rivers and water that the Crown has accumulated over the years now reside in this Act, and the administration of these powers has been delegated by central government to regional and district councils.

Before 1991 catchment boards were responsible for all soil conservation and river control matters in any catchment, but did not have any statutory obligation to develop overarching resource management documents which looked at the issues holistically. They initially developed individual farm plans for soil conservation work, and individual river control plans for particular control works they wished to construct. Both these types of plans were produced primarily for the purpose of obtaining Crown approval for the payment of subsidy funding. Wider catchment control schemes and river control schemes developed over time, though again for the purpose of obtaining subsidy funding from the Crown. In a similar manner, when catchment boards had regional water board functions added to their responsibilities by the Water and Soil Conservation Act 1967, they tended to be focussed on individual applications for water rights to take from or discharge into natural waters, without much regard for the wider context.

This approach did change over time. In the mid 1970s it became a requirement that each catchment control scheme application for Crown funding included an environmental impact assessment. The assessment with respect to a scheme in the Mangatutu Stream catchment looked at such matters as topography, vegetation, geological features, fauna and cultural features. However, the fauna assessment only examined the effects on birdlife and waterfowl, and did not assess the effects on fish life. The cultural assessment looked at farming, forestry and employment issues,



while ignoring effects on Maori<sup>154</sup>. Whether this assessment, and its blind spots, was typical of its time needs to be researched further, be examining other contemporary environmental impact assessments.

From the 1980s more emphasis was placed on resource documents and objectives that could provide a context for the individual decisions being made. The published documents of the Rangitikei Wanganui Catchment Board listed in the bibliography give an indication of the adoption of a wider view. Among these documents was a report on the significance of the Rangitikei River to Maori produced in 1985<sup>155</sup>. While from today's perspective it would be considered a slight document, from the perspective of a Pakeha-centred organisation this was a ground-breaking piece of work that recognised that the Catchment Board had a duty to consider the impact of its work on Maoridom when making decisions. According to the report, it was prepared as a result of Catchment Board involvement in the national water conservation order application. Research is needed to better understand the context in which the document was called for, whether the Crown was involved or provided any guidance at the time on consultation with Maori, and whether the report made a difference to the way decisions were made subsequently by the Catchment Board. Research is also needed into whether there were any other initiatives to involve Maori in the study area prior to 1991.

*Potential research sources: Rangitikei Wanganui Catchment Board records, Ministry of Works and Development head office and district office files*

Since the passing of the Resource Management Act 1991, Horizons Regional Council has been responsible for the Rangitikei, Manawatu, Turakina and Whangaehu catchments. Hawke's Bay Regional Council has been responsible for the Ngaruroro catchment.

Horizons' first planning document was its Regional Policy Statement, which became operative in 1998. As subordinate policy documents, Horizons then produced two regional plans, one for Beds of Lakes and Rivers and Associated Activities (which

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<sup>154</sup> Works and Development Head Office file 96/327120.

<sup>155</sup> Rangitikei Wanganui Catchment Board, *Significance of the Rangitikei River to the Maori people of the district*, Rangitikei Wanganui Catchment Board, Marton, Report No. 85/3, 1985.

became operative in 2001) and a second for Land and Water (which became operative in 2003). The riverbed regional plan had to have regard for the Council having at least three separate responsibilities relating to riverbeds:

- Responsibilities under the Resource Management Act
- Owner of riverbed land by purchase or Public Works Act taking
- Responsibilities under the Reserves Act 1977 for the control and management of public reserves it administers

Both the Regional Policy Statement and the Regional Plans had 10-year operative periods. The new statement and plans to replace them are known as the One Plan, because they have been combined into a single document. The One Plan has been through all the processes of public consultation, and a revised document incorporating all amendments has been produced. Parts of the document, however, are still subject to appeals to the Environment Court, so the whole document has not yet been approved.

While the Regional Policy Statement and the Regional Plans retain some residual effect, the advanced stage that the One Plan has reached means that the residual effect is now minor and the One Plan is the primary planning document.

The planning documents are the principal policies and rules (besides the Act itself) referred to whenever a resource consent is applied for. They define how the council will view any proposal for use of rivers, riverbeds and waters.

District councils administer district plans; these are primarily focused on land use, although they can have some impact on water uses, for instance where access to rivers is concerned.

Maori have been conscious of the central position of these various planning documents, and the requirements of the Resource Management Act about consultation with them. Ngati Hauiti produced an environmental policy statement in 1996, which set out what matters it considered important, and would be pursued whenever it was

given an opportunity under the Act's consultation processes<sup>156</sup>. Te Runanga o Ngati Whitikaupeka, and later Te Runanga o Ngati Tamakopiri, joined in the production of an Environmental Policy Statement at the time of the Tongariro Power Development scheme resource consent applications by Genesis Power<sup>157</sup>. The Ngati Apa settlement legislation requires regional and district councils to have regard (whether or not Ngati Apa are public submitters) for a statement of association about the Rangitikei River that forms part of the settlement, and to forward summaries of all resource consent applications (whether publicly notified or not) to Ngati Apa for the iwi's information<sup>158</sup>.

With respect to the rivers, Maori iwi and hapu on the Rangitikei River have jointly developed a group known as Nga Pae o Rangitikei to speak for them all in discussions with Horizons Regional Council. Research is needed to assess how successful the group has been, from both a Maori and a Council point of view. One view expressed at hui has been that only some of Nga Pae's potential has been acknowledged by Horizons, and that while its involvement in articulating a Maori viewpoint has been welcomed at the policy level with respect to developing planning documents, it has been less successful in fostering a relationship with the council on a more day-to-day basis.

*Potential reference sources: Warren, Nga Pae o Rangitikei records, Horizons Regional Council records*

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<sup>156</sup> Te Runanga o Ngati Hauiti, *Ngati Hauiti: kaupapa taiao - environmental policy statement*, Te Runanga o Ngati Hauiti, Hunterville, 1996.

<sup>157</sup> Richard Steedman, personal communication, 28 February 2012.

<sup>158</sup> Ngati Apa (North Island) Settlement Act 2010.

## **16. RECOMMENDATIONS**

### **16.1 Need for further reports**

A key outcome expected from this scoping report is an assessment of the need for further research work to provide an adequate level of reporting for Waitangi Tribunal casebook purposes.

This scoping report has identified the breadth of topics that will need to be covered by technical research, if the Waitangi Tribunal is to have sufficient factual knowledge of the relationship between the Crown and Maori with respect to the waterways of the Taihape Inquiry District, to enable it to form judgements about that relationship. For every topic discussed, further research opportunities have been identified. The level of knowledge of the waterways contained in this scoping report is not sufficient for casebook purposes, and a fuller research programme and report will be necessary.

That conclusion is not unexpected, and was probably anticipated by all parties even before the scoping report was commissioned. The structure of this scoping report reflects that, identifying in the introduction that further research would be necessary. How the further research might be structured, however, is a matter that deserves some detailed consideration.

Two matters have already been discussed in judicial conferences held by the Tribunal for the Taihape Inquiry District, and have been awaiting the completion of this scoping report before being resolved:

- If a full research report on the Rangitikei River and its tributaries (including the Moawhango River and the Hautapu River) is to be prepared, should it be confined to the stretches of the rivers within the Taihape Inquiry District, or should it cover all the waterways in the whole of the general Rangitikei catchment regardless of Inquiry District boundaries?
- Are full research reports necessary for rivers in those parts of other catchments (Ngaruroro, Pohangina, Oroua, Kiwitea, Turakina, Whangaehu) that are located within the Taihape Inquiry District?

Each major catchment is addressed individually below.

### **16.1.1 Rangitikei catchment waterways**

The Rangitikei River and its tributaries (including the Moawhango and Hautapu Rivers and their tributaries), and their relationship to the Taihape Inquiry District boundaries, are shown on Maps 2 to 4.

Both the technical research scoping report by Stirling and Subasic, and the scoping exercise by Waitangi Tribunal staff, supported a whole catchment approach to research on the Rangitikei catchment waterways. Claimants also supported this approach prior to commissioning of this scoping report, and have been unanimous in repeating their support at hui held during the report's preparation. A widespread expectation has now developed that a whole catchment report is in the best interests of claimants, and would best serve the process of hearing their claims.

The principal argument in favour of a whole catchment approach is that that is the way in which the rivers of the catchment are viewed by all parties. Claimants think of the Rangitikei River as a single entity with intense cultural meaning to them, which cannot be subdivided into parts. The river as a whole governs their view of themselves and their relationships with one another. The Crown takes a similar approach today, by virtue of the Resource Management Act 1991 and the local government reorganisation of 1989 that between them adopted a catchment perspective for agency boundaries and the development of rivers management and policy. Both parties to any settlement of Treaty grievances are likely to agree to terms of settlement that are underpinned by a whole catchment perspective.

Claimants in the lower Rangitikei catchment, within the Porirua ki Manawatu Inquiry District, consider that their interest in the Rangitikei River has a stronger link with the river upstream in the Taihape Inquiry District than with other rivers such as the Manawatu and the Otaki. They are concerned that any further research into rivers issues for the Porirua ki Manawatu inquiry, that looked at all the rivers of that Inquiry District in a single report, might subordinate discussion of the Rangitikei to discussion of the issues surrounding those other rivers, and would fail to adequately express their connections with the upstream parts of the Rangitikei River.

From a researching and report writing perspective, division of the Rangitikei catchment waterways by Inquiry District boundary is possible, but would result in duplication of research effort. To fully capture and express the essence of the cultural significance of the Rangitikei River to claimants in both the Taihape and Porirua ki Manawatu Inquiry Districts would involve writing about it from the source to the sea in reports for each District. The Rangitikei River flood protection scheme in its lower reaches stretches from Rewa to the sea, thereby spanning both Inquiry Districts, and so would need to be covered in reports for both Districts. Natural resource policies and practices under the Resource Management Act cover the whole of the river and would need to be discussed in reports for each District.

*Recommendation:*

*That a full research report be commissioned that addresses all relevant issues relating to all waterways in the Rangitikei catchment (including the Moawhango and Hautapu catchments) from source to sea.*

#### **16.1.2 Ngaruroro catchment waterways**

The Ngaruroro catchment (including the Taruarau River and its catchment) within the Taihape Inquiry District boundaries is shown in Map 5. It includes almost all of the headwater waterways of that river catchment, with just a small part of the headwater catchment in the National Park Inquiry District. It is of interest to Owhaoko block owners. These owners are resident in the Heretaunga district (downstream of the headwater area) and in the Taihape Inquiry District.

While an environmental report for the Heretaunga district (by Armstrong and others) has been completed, it did not address waterway issues in the headwaters of the Ngaruroro catchment. The headwater area is, however, a significant part of the story that Heretaunga-based Ngati Kahungunu iwi tell about themselves, when describing the first exploration journeys by Tamatea and his son Kahungunu. For Heretaunga based owners to have a research report about the headwaters area will complete their coverage of their rohe, so far as the Ngaruroro catchment is concerned. Timing matters, as regards completion of an upper Ngaruroro catchment report and settlement negotiations, are beyond the scope of this report.

For Ngaruroro catchment owners resident in the Taihape Inquiry District, the catchment represents a significant portion of their area of interest. If there was no further research report prepared, there would be a substantial gap in the coverage of grievances they would wish to present before the Tribunal.

The sparse population and relatively undeveloped nature of the Ngaruroro catchment within the Taihape Inquiry District means that fewer issues of concern about the relationship between the Crown and Maori have been identified in this scoping report, as compared to the range of issues identified in the Rangitikei catchment. By being less complex, and being concerned with a smaller proportion of the whole river catchment, a report on the Ngaruroro waterways will be considerably shorter than a report on Rangitikei waterways. The tensions between introduced fisheries and the fishing for indigenous species traditionally caught by Maori, and proposals for hydroelectric dams, are the major concerns that deserve further research effort.

The present-day management of the Ngaruroro waterways by the Hawkes Bay Regional Council, while the remainder of the waterways in the Taihape Inquiry District are managed by Horizons Regional Council, indicates that some different research sources will need to be relied upon. This might suggest that two different reports, one for the Ngaruroro, and a second for the other Taihape District catchments, might be appropriate. However, separate reports increase the risk of differential coverage in the cultural and historical material that is presented to the Waitangi Tribunal.

*Recommendation:*

*That the report on the waterways of the Rangitikei catchment includes, as a separate discrete part, coverage of the waterways of the Ngaruroro catchment within the Taihape Inquiry District.*

### **16.1.3 Pohangina, Oroua and Kiwitea catchment waterways**

The portions of the Pohangina, Oroua and Kiwitea catchments within the Taihape Inquiry District boundaries are shown on Map 6. All three waterways are tributaries of the Manawatu River. The areas within the Taihape Inquiry District are all upper

catchment areas without any population centres (apart from Kimbolton township in the Oroua catchment). They are less intensively farmed than more heavily-settled portions of the same catchments downstream. The portion of the Oroua catchment within the Taihape District is just one bank of the river, the other bank (and all downstream areas) being in the Porirua ki Manawatu Inquiry District.

No particular issues relating to the interactions between the Crown and Maori have been identified in the portions of the three waterways within the Taihape District, apart from general issues of polluting runoff from farmland, and the various Crown exercises of statutory authority over the waterways that are applicable to most other waterways nationally. By contrast, there has been a greater degree of active involvement by the Crown in the more substantial changes to the waterways downstream in the Porirua ki Manawatu District.

The iwi showing the greatest interest in these waterways is Ngati Kauwhata, whose centre of interest is the Feilding area. Rangitane, Ngati Apa and Ngati Hauiti also have an interest, though that interest appears to be more peripheral. Ngati Kauwhata's preference, as expressed at hui during the preparation of this scoping report, is that the portions of the three catchments in the Taihape Inquiry District not be the subject of specific further research for the Taihape inquiry, but instead be covered by any report for the Manawatu catchment that is prepared for the Porirua ki Manawatu inquiry. This preference is not expressed so clearly in earlier submissions to the Tribunal by Ngati Kauwhata claimants, and would need to be confirmed by further submissions.

Inclusion of the portions of the waterways in the Taihape District in any research undertaken into Manawatu catchment waterways would be preferable from a technical research point of view, as similar source material and similar cultural and traditional stories would be involved.

*Recommendation:*

*That no specific further research work into the Pohangina, Oroua and KIWITEA waterways be carried out for inclusion in the Taihape Inquiry District casebook, and the project briefs for any research reports that address waterways in the Manawatu*



*catchment as part of the Porirua ki Manawatu Inquiry allow the portions of the Pohangina, Oroua and Kiwitea waterways in the Taihape Inquiry District to also be covered.*

#### **16.1.4 Turakina and Whangaehu catchment waterways**

The portions of the Turakina and Whangaehu catchments within the Taihape Inquiry District boundaries are shown in Map 7. Only a small proportion of each catchment is involved.

No issues specific to the parts of the waterways within the Taihape Inquiry District have been identified. The Mangatipona Stream is a small tributary, and only its upper catchment is included. The Mangapapa Stream is a longer tributary, but is very isolated, forming the back boundary to farms in the valley and without any public road access running along its length.

The iwi with the greatest interest in these waterways is Ngati Rangi. The larger and core part of its rohe is to the west in the Whanganui Inquiry District. Reports about the waterways of the Whanganui Inquiry District by Marr and Alexander have already been presented to the Tribunal for that District, and a Tribunal report is being written. It can be expected that the reports already presented about the waterways, plus claimant evidence and submissions by counsel, will allow the Whanganui Tribunal to comprehensively report on waterway issues in the Whanganui District relevant to Ngati Rangi. It is unlikely that a report on those parts of the Turakina and Whangaehu catchment waterways in the Taihape Inquiry District could add to the coverage of issues likely to be provided by the Tribunal's Whanganui inquiry report.

Ngati Apa has an interest in the southern part of the Turakina catchment within the Taihape Inquiry District. However, Ngati Apa has already settled their historical Treaty grievances with the Crown.

#### ***Recommendation:***

*That no specific further research work into the Turakina and Whangaehu catchment waterways be carried out for inclusion in the Taihape Inquiry District casebook.*

## **16.2 Scope of further research**

The list of themes and topics set out in the brief for this scoping report (see Section 1.2) has proved to be comprehensive and relevant to an examination of the relationship between the Crown and the iwi and hapu along the waterways. For each of the identified topics further research has been identified as being necessary to fully explore the nature of the relationship. Even for topics where research has so far shown that there appears to have been no interaction between the Crown and iwi, more in-depth research is required to confirm that this is the case.

During preparation of the scoping report it became apparent that the list of themes would be more complete if it included:

- The Crown's involvement in the management of indigenous fish species and other indigenous wildlife whose habitat requirements include the waterways
- Resource management regimes for the waterways, including consultation with Maori, involvement by Maori, and incorporation of Maori perspectives

*Recommendation:*

*That the list of themes and topics for this scoping report, with the two additional themes described above, form the initial template when preparing a project brief for further research requirements.*

Notwithstanding the general adequacy of the coverage of issues in the project brief for the scoping report, a number of practical matters have become apparent, which are discussed in the rest of this section.

### **16.2.1 Cultural significance and Crown/Maori interaction**

For the Waitangi Tribunal to be able to understand (and then to be able to report on in a meaningful fashion) what has happened to the waterways of the Rangitikei and upper Ngaruroro catchments, it needs to be presented with evidence about:

- The cultural significance of the waterways to the iwi and hapu that live alongside them and have an interest in them – their ancestral relationship to the waterways, and the traditional ways they relied on and made use of the waterways prior to the arrival of Europeans

- The Crown's historical involvement with the waterways, and with the iwi and hapu with an interest in these waterways, and the changes to traditional patterns that have occurred since settlement by Europeans

This will enable the Tribunal to comment on the meaning of tino rangatiratanga with respect to the Rangitikei and upper Ngaruroro catchment waterways, and assess the effect of the Crown's actions and inactions on the safeguards for iwi and hapu provided by the Treaty.

Each of these aspects involves a different set of skills for the researchers that examine them and write about them. Comments below assume that the skill sets required cannot be found in a single individual, and that more than one research professional will be needed.

Researching the cultural significance of the waterways relies primarily on obtaining from the iwi and hapu their views about what the waterways mean to them, how they have been affected by the changes to the waterways, and what their experiences have been when dealing with the Crown and local authorities. While the stories and explanations obtained from this source can be supplemented by information from written sources (such as Maori Land Court minute books), most of the information will be obtained from interviewing individuals and small groups. The skills required for this task are those of an oral historian who has the confidence of his or her interviewees, and who has some prior knowledge about the cultural significance of waterways, either from elsewhere in the country or from the Rangitikei / upper Ngaruroro district. Knowledge of te reo Maori may be desirable.

Researching the historical involvement of the Crown since 1840 relies on an understanding of legislation and Government processes, and an ability to search out relevant information from the Crown's historical records. Notwithstanding the extensive resources gathered together in the first round of the technical research programme, there are still numerous Crown, local authority and other written records that need to be examined for their relevance to a rivers report. This work requires the skills of an historical researcher with expertise in finding information in Government archives and other written material.

The above discussion about involvement of an oral historian presupposes that an explanation of the cultural significance of the waterways should form part of the technical research prepared for the Tribunal, and be available to the Tribunal as part of its casebook prior to the commencement of hearings. While cultural significance was included in the project brief for this scoping report, it is by no means a necessary part of a technical research programme of work prepared for casebook purposes. This is because briefs of evidence by claimant individuals will also form part of the material presented to the Tribunal, and those individuals would get the chance to present their views and stories directly to the Tribunal. A report to the Tribunal prepared by an oral historian might be perceived as being an extra step interfering with the opportunity for the Tribunal to hear from the claimants in their own words.

Having evidence presented by claimant individuals is an important feature that adds to the value of the Tribunal hearing process. It is at its most powerful when the personal reminiscences of claimants and the expert evidence of technical witnesses complement each other, and allow a human face to be put on otherwise dry historical facts. However, claimants speak from their own personal experience, and there can be merit in also having evidence from an expert that presents an overview of the cultural significance of the waterways, thereby offering some wider context for the briefs of evidence of each individual.

A cultural significance overview report, while setting out what the rivers mean to each iwi and hapu having a connection with them, would be able to identify common threads in each narrative that bind iwi and hapu together and give them a common purpose when they speak of the rivers to outside agencies such as the Crown, regional councils, district councils, and fish and game councils. From discussions at hui held for this scoping report, it was apparent that the Rangitikei, Moawhango and Hautapu Rivers, in particular, are a unifying force for the iwi and hapu along their banks, regardless of the different geographical directions from which those peoples arrived in the district. An overview technical report on cultural significance could inquire into and expand on this theme, in doing so providing a framework for a better understanding of a series of claimant briefs of evidence.

Such an overview report would benefit claimants in the Taihape Inquiry District. Claimants resident in the District are small in terms of numbers of participants, and those persons who are actively involved in pursuing the claims have multiple calls on their time. While they would undoubtedly rise to the challenge of preparing briefs of evidence about all aspects of the cultural significance of the waterways to them, if that was something they were faced with, that might be at the expense of other aspects of their claim. Having an overview report on cultural significance as part of the technical research programme would enable them to better allocate their time.

In the absence of an overview report on cultural significance, there is a risk that the Waitangi Tribunal, in its reporting by two or more different panels<sup>159</sup> focusing on different groupings of iwi and hapu, may not fully articulate the interconnectedness of the rivers and the cultural linkages between all the iwi and hapu along the rivers from source to sea. This risk may then extend to the Crown's understanding of these matters at the time of settlement negotiations. How real this risk might be is an unknown. If the risk does turn out to be real, however, an overview report will help to hold together the whakapapa and ancestral connections that are woven around the rivers, and avoid unnatural divisions.

*Recommendation:*

*That two reports be prepared, one an overview report on the cultural significance of the Rangitikei and upper Ngaruroro catchment waterways to iwi and hapu (and changes to the involvement that iwi and hapu have had with the rivers since European settlement), and the second an historical report canvassing the Crown's involvement with the waterways of the same catchments (and with the iwi and hapu with respect to those waterways).*

Both reports should be in two parts, one part about the Rangitikei River, and the other part about the Ngaruroro River within the Taihape Inquiry District, so that each is capable of standing alone and apart from the other. This will ensure the relevance and usefulness of each report beyond the Tribunal inquiry process, into the settlement negotiations stage, and beyond the settlements into ongoing relationships with

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<sup>159</sup> The Taihape District Inquiry, the Porirua ki Manawatu District Inquiry, and theoretically any inquiry examining the Hawkes Bay / Heretaunga Inquiry District.

resource management agencies. Having two discrete parts to each report may result in a small amount of duplication, but only in terms of providing a wider context. Thus the reports on the Rangitikei catchment waterways will include material about the cultural and historical connections with the upper Ngaruroro catchment, and vice versa. The cultural significance report for the upper Ngaruroro waterways will also, almost certainly, need to include some contextual material about the linkages with the Ngaruroro catchment downstream of the Taihape Inquiry District.

### **16.2.2 The land's relationship with the rivers**

At the scoping stage the technical research programme for the Taihape Inquiry District has divided the environmental research into a waterways-based project (this report) and a land-based project (being reported upon by a team from Massey University). From an ecological perspective, however, this division can be an artificial distinction. Swamps and wetlands lie on the faultline of the division.

The changes that have occurred on the land, with forest clearance and soil erosion, have had a significant impact on the waterways, changing runoff patterns and increasing silt and sediment flows which, in turn, have affected fish life and riverbed vegetation. Remedial measures adopted by the Crown, such as catchment control schemes and detention dams on farmland, have also had an affect. It is difficult to report in a comprehensive fashion about the waterways without also discussing these related land-based matters.

The opposite can also apply, with the waterways affecting the land, most notably when flooding erodes away riverbank land. This is most dramatically illustrated in the lower Rangitikei River. The 1897 flood so threatened the riverside site of Te Tikanga marae on Te Reureu reserve that the meeting house had to be shifted to the top of the terrace at Tokorangi, where it now sits. When the river cut a new channel through the Ohinepuhiawe reserve, this had a major effect on the resident Maori, because it meant a loss of land that they were not able to make up for with other land elsewhere to meet their needs.

In some respects there is a continuum of a river's impact across the landscape, at its strongest in the riverbed itself, and progressively weakening when moving further

away from the river channel. The issue is then where to draw the line, or where a cut-off point might be, for any waterway-based report.

The draft land-based environmental scoping report prepared by the Massey University team has provisionally identified some topics for further research in a fuller report. Whatever emerges in that scoping report's final recommendations will have a bearing on the bounds of waterways-based further research. If further land-based research were to include an examination of the Crown's soil conservation measures and involvement, then a waterways-based report would not need to delve into this matter very deeply. If, on the other hand, this matter is not being followed up in further land-based environmental research, then a waterways-based report will need to examine the Crown's actions, insofar as they have an effect on the waterways.

Looking more closely at the Ohinepuhiawe example above, the extent of the effect on the people could be quantified, but only by looking at the reserve as a whole and examining other events affecting the reserve before and after 1897, including the overall loss of land out of Maori ownership and control. This is normally an aspect that is covered in a technical research programme by block history reports. In the absence of that wider research coverage, it would be unwise to draw any general conclusions about the effect of river channel change on the social and economic circumstances of Ngati Parewahawaha.

The purpose in mentioning this issue is not to make any specific recommendations, but rather to draw attention to the potential gaps or overlaps in the technical research programme. Rather than recommending either a broad or a narrow focus to any further waterways-based research, the research brief will need to be responsive to the wider circumstances when deciding what does or does not need to be covered. The outcome sought is that any further report includes sufficient context to ensure that any conclusions about harm suffered by iwi and hapu along the waterways as a result of Crown involvement are robust.

### **16.2.3 The Crown's resource management regime**

Another area of potential duplication of research effort lies in the manner in which the Crown has developed its resource management policies and administrative regimes.

As the title of the Soil Conservation and Rivers Control Act 1941 implies, the Crown has determined that to be effective the management regimes it establishes have to cover both the land and the waterways. This approach has continued up to the present day, where the Resource Management Act 1991 covers both land and water functions, and expects all natural resources, both land-based and water-based, to be covered by regional policy statements and regional plans (the responsibility of regional councils), and district plans (the responsibility of district councils).

One of the preliminary recommendations of the draft land-based environmental scoping report is that the relationship between iwi and the Crown's resource management regimes since the 1970s be a focus of further research. This is supported, especially if it examines both land- and water-based regimes. If the recommendation is adopted, then it would mean that a waterways-based report on the Rangitikei and upper Ngaruroro catchment waterways could take much of the statutory background and the various local government planning policies and rules as a given, and focus more tightly on the impact on the waterways and the associated impact on iwi and hapu.

Rather than make recommendations, attention is drawn to the potential for integration between various projects while avoiding duplication.

### **16.3 Possible case studies**

Case studies are a valuable tool to use where there are so many events of a similar nature that to research them all would be too time-consuming, and it is necessary to choose one or two examples to study in detail. Examples where there have been a multitude of similar events would be the bridging of waterways, water abstractions, water discharges and gravel extractions.

On the other hand, some events associated with the waterways do not necessarily suit the case study model. This can be the case where all events of a similar nature are so significant that to concentrate on just one or two examples and ignore the other events would not adequately convey the extent of the impacts that the waterways have experienced. Examples where all events deserve coverage include the effects of the



1897 flood, all the hydro-electric power stations (including the Tongariro Power Development scheme), and the whole of the Rangitikei River flood control scheme.

*Recommendation:*

*That, without being prescriptive, the following features are identified in a project brief for further research into Rangitikei catchment waterways as suitable for adoption as case studies:*

<i>Bridging</i>	<i>Bulls, Onepuehu</i>
<i>Water abstractions</i>	<i>Taihape water supply</i>
<i>Water discharges</i>	<i>Taihape wastewater treatment plant, the series of wastewater discharges (Bulls township, Ohakea air base, Riverlands abattoir) in close proximity to one another downstream of Bulls</i>
<i>Gravel extractions</i>	<i>Toetoe Road (near Utiku), Kakariki</i>

## **16.4 Timeframes and resources for further research**

There seems to be no apparent advantage in undertaking the cultural significance interviews before the historical research, or vice versa, and thereby requiring that the two reports are prepared in sequence. Both reports can be researched concurrently, with a requirement that each report's author liaise with the other. For instance, the interviewer might be told about an historical event involving the Crown, and can ask the historian to search in the Crown records to find corroboration of this. Equally, the historian may find a reference in Crown records to an historical event involving Maori, and by informing the interviewer about it an additional subject for discussion may be uncovered.

This scoping report has identified the broad range of topics that would need to be researched further for an historical report. The bibliography and the potential archival sources in the Appendix demonstrate the extensive material that would need to be examined as part of this further research. The further historical research work being recommended is therefore a large project. The report's author would be an historian with experience in analysing Crown actions. A researcher could assist with the review of the written and archival sources.

The project into the cultural significance of the waterways needs to give the interviewer / report author sufficient time to gain the confidence of interviewees, have more than one meeting with each interviewee, and have the opportunity to obtain agreement that whatever is written up as a result of the interviews has the approval of iwi and hapu along the waterways. Compressing the time available might be counterproductive. The interviewer / report author would have experience in gathering oral history from Maori interviewees. A researcher or researchers could assist with transcribing interviews and identifying corroborating information in Maori Land Court minute books and other written records.

*Recommendation:*

*That both reports be prepared concurrently, and the following timeframes and human resources be accepted for the two strands of work:*

<i>Historical report</i>	<i>1 historian for 44 weeks FTE 1 researcher for 40 weeks FTE</i>
<i>Cultural significance report</i>	<i>1 oral history interviewer for 20 weeks FTE 1 or 2 researchers for combined total of 20 weeks FTE</i>

*FTE = Full time equivalent (i.e. 40 hours per week)*

In identifying the range of work required and the human resources that would be necessary to undertake that work, no recommendation is being made about how the work might be structured. Two separate projects could be undertaken concurrently, with a requirement for close liaison between each project, or a single project with a team approach to the workload could be commissioned.

## **NGATI APA STATEMENT OF ASSOCIATION FOR THE RANGITIKEI RIVER**

*[This statement is taken from the Schedule to the Ngati Apa (North Island) Deed of Settlement, Part 6, pages 55-57, downloadable from [www.ots.govt.nz](http://www.ots.govt.nz). It is presented as an example of a summary end-product that can be derived from more comprehensive overview research into the cultural significance of the Rangitikei River to iwi and hapu.]*

The Rangitikei River is of historical, cultural, spiritual and traditional significance to Ngati Apa (North Island). The Rangitikei River is located in the southern area of the Ngati Apa (North Island) area of interest. The extent of the Ngati Apa (North Island) interest in the Rangitikei River extends some 60 kilometres to the northern boundaries of the Rangitira block.

The naming of the Rangitikei River occurred during Haunui a Nanaia's pursuit of his wife, Wairaka, naming the rivers that he crossed along the way. This event is recorded in the *Oriori mo Wharaurangi*, or the *Lullaby for Wharaurangi*, that was composed by Te Rangitakoru of Ngati Apa (North Island) for his young niece Wharaurangi.

In referring to Rangitikei, the oriori records the following event:

Ka tikeitia te waewae, ko Rangitikei.

*He strode across the land, hence Rangitikei.*

The quote refers to the distance Haunui a Nanaia walked in his journey from Turakina to Rangitikei.

The Rangitikei River is the tribal domain for many hapu of Ngati Apa (North Island), including Ngati Kauae, Ngati Taura, Ngati Tupua, Ngati Tupataua, Ngati Ika / Ngati Tumoetere, and Ngati Tamatea.

The Rangitikei River was occupied by two major descent groups – Ngati Taura and Ngati Kauae, who descend from Papawhenua, and the other group including Ngati Tupua, Ngati Tupataua, Ngati Ika / Tumoetere and Ngati Tamatea, who descend from Tuariki. Ngati Tupua and Ngati Tupataua occupied the central reaches of the Rangitikei on a permanent basis, but many of the other hapu only went to the upper areas of the Rangitikei for refuge from war parties and to snare birds, hunt pigs and catch eels.

The Papawhenua based groups tended to permanently occupy the lower reaches of the Rangitikei River, and also utilise the coastal lakes to the south of the river, and sometimes they would move on a more permanent basis to places on the Oroua River.

The River, and its numerous tributaries, were utilised extensively for their plentiful fishing resources. Pa tuna or eel weirs, including Nganarangi, Kataina, Puapuatauaki, Taporapora, Te Papa Taane, and Hauhau, were built in the River and its tributaries, such as the Waiwhero, Mangawhero, Tuwhare, Kirikiri, Tutaenui, Pourewa, Putorino, Makaraka, Mimi o Ahua, Makowai, Mangapapa, Mangatapu, Rangitawa, Waituna, and Waitapu Streams.

The River also helped sustain the fertile flat lands that were used extensively for cultivations. Named cultivations included Onetangi, Ratahi, Titaha, Ngatuahiwi ki Raukawa, Ngatarawa, Te Oriputaroa, Paiari, Kapakapa, Kurupoke, Kahotea, Kokomutu, Waotatara, Te Karaka, Te Kapuiro, Otapatu, Matahiwi, Onepuehu, Te Pohue, Te Mamaku, Te Ngei, Hauhau, Tawhirihoe, Te Whatiwhati, Taiepa, Pukekuku, Te Awahou, Hinemoa, Korakonui, Potakataka, Pukekura, Kaitoke, Pohueroa, Takirihitau, Pawerawera, Pakapakatea, Puakohanga, Rangitaua, Pukekokeko, Waituna, Waitapu, and Pikitara.

Other traditional resource sites include bird snaring trees at Paiari, Okopai and Te Papa Taane, a number of Karaka groves at Parewanui, Kapakapa and Kahotea, and a fern root gathering site at Hauhau.

The Rangitikei River, with its sheer cliffs, was ideally suited for traditional kainga (settlements) and elevated fortified defensive pa sites, including:

- Kainga – Te Pou o Te Rehunga, Te Hou, Ngapuna, Te Kaiwhakataha, Upokotipua, Whakapuni, Okiwa, Parewanui, Paeroa, Wharekura, Huakitaore, Te Ara Taumaihi, Ruapuatanaki, Te Ana, Te Karaka, Te Pohue, Te Ngai, Te Mahoe, Moengaaitanga, Makaraka, Otuparua, Te Ahi Kawau, Kohairoa, Raipaoa, Whakapuni, Te Waiwhero, Te Whataroa, Pinui, Tawhirihoe, Te Kawau, Pakapakatea, Owetara, Mingiroa, and Waitapu.
- Pa – Te Pou o Te Rehunga, Te Awamate, Pokaitu, Puarere, Raparapatu, Okotare, Otitokotoko, Te Nuku, Paeroa, Okara, Huakitaore, Orehu, Ruapuatanaki, Te Ana, Te Karaka, Te Pohue, Paparangiora, Puapuatauaki, Te Mahoe, Rongomutumutu, Te Maire, Te Awahou, Hokianga, Owetara, Te Ika a Te Mate, Ongaonga, Pukioire, Waitapu, Tura o Kahukura, and Pikitana.

There were also urupa, including Te Akeake, Okotare, Otitokotoko, Paeroa, Okara, Te One a Kara, and Te Ngei.

Congruent with the change in Ngati Apa (North Island) settlement patterns on the Rangitikei River are the changes in land use within the River catchment, and the development of small townships. This has led to some significant environmental impacts upon the Rangitikei River.

The key environmental concerns today regarding the Rangitikei River occur predominantly in the lower reaches and several tributaries. The ratings for contact recreation are poor in the Tutaenui, Pourewa and Rangitawa tributaries. Nutrient enrichment is fair for the lower Rangitikei, but very poor for the Tutaenui, Pourewa and Rangitawa Streams. Turbidity has rated as poor for the lower Rangitikei River. Even the life supporting capacity of the River (which is generally not an issue for Rivers within the Rangitikei region) is rated fair in the Tutaenui Stream and poor in the Rangitawa Stream.

A study commissioned by Manawatu-Wanganui Regional Council on the Native Fishery in the region in 2002 noted surprise at the lack of good reference sites in the Rangitikei, and it felt that specific catchment studies were required in the Rangitikei. Ngati Apa (North Island) would support such studies in order to better understand the impacts occurring in the Rangitikei, in order to develop better guidelines for management of these waterways.

The Regional Council has also noted three aquatic sites of significance on the Rangitikei River relevant to Ngati Apa (North Island), including the Redfin Bully in the lower Rangitikei, the Brown Mudfish in the Tutaenui Stream, and the Giant Kokopu in the Forest Road wetland near Parewanui, which Ngati Apa (North Island) would seek to play a significant role in sustaining their environment into the future.

Water quantity needs to be monitored as Ngati Apa (North Island) want to see as much of the natural flows of the Rangitikei River maintained into the future. The level of gravel extraction that occurs in the River also needs to be managed in terms of significant sites to Ngati Apa (North Island), and also the riparian habitats for bird life that need to be maintained.

As Ngati Apa (North Island) develops its capacity, it looks forward to a time when hapu are fully engaged in upholding the principle of kaitiakitanga in regard to the Rangitikei River.

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39/30	Roads - Wanganui Road District - Rangitikei River Bridge - Onepuhi	1897-1914	ACHL 19111 W1/1111
39/30	Wanganui Road District - Rangitikei River Bridge at Onepuhi, Report of Deputation at Martin Requesting Assistance towards Re-erection	1915-1957	ABKK 889 W4357/143
39/126	Wanganui Road District - Matawhero Road and Otupae Bridge, Waikohu Stream, Rangitikei County	1924-1949	ABKK 889 W4357/144
39/160	Wanganui Road District - Mataroa to Mangaweka Road and School Bridge	1959	ABKK 889 W4357/145
39/192	Wanganui Road District - Somersal Road (Access to Greystoke Settlement Upper Tutaenui) Also Tutaenui Bridge, Rangitikei County	1957-1958	ABKK 889 W4357/145
39/289	Wanganui Road District - Utiku to State Forest No. 70 via Puke Road, also Omatane North Road and No. 1 Bridge, Rangitikei County	1911-1959	ABKK 889 W4357/145
39/304	Wanganui Road District - Porewa Stream Bridge (Hunterville Township), Rangitikei County [Newspaper Clippings]	1923-1954	ABKK 889 W4357/145
39/306	Wanganui Road District - Makohine Valley Road and Healey's Bridge, Rangitikei County	1957	ABKK 889 W4357/145
39/538	Wanganui Road District - Moawhango River Bridge Taoroa, Torere to Horouto Road, Rangitikei County	1946-1956	ABKK 889 W4357/147
39/575	Wanganui Road District - Te Moehau Road Bridge - Tikerere Stream, Rangitikei County	1950-1951	ABKK 889 W4357/148
39/579	Wanganui Road District - Otaihape Stream Bridge - Otaihape Valley Road,	1951-1955	ABKK 889 W4357/148

	Rangitikei County		
39/580	Local Authorities: Wanganui Road District - Rangatira Road, Blocks II, III, VI and X, Ongo SD [Survey District], Rangitikei County, also Bridges on Rangatira Road	1951-1983	AAQU 889 W3428/50
39/583	Wanganui Road District - Moawhango River Bridge, Te Moehau Road, Moawhango, Rangitikei County	1953-1955	ABKK 889 W4357/149
39/595	Wanganui Road District - Kakakino Stream Bridge, Taihape - Napier Road, Rangitikei County	1955	ABKK 889 W4357/149
39/597	Wanganui Road District - Bridges Rangitikei County: Otuaireiawa Stream Bridge No. 1 Moawhango Valley Road, Otuaireiawa Stream Bridge, Otuairei-Pukeokahu Road, Kapuawhai Stream Bridge Moawhango Valley Road	1955	ABKK 889 W4357/149
39/598	Wanganui Road District - Moawhango Valley Road Bridge No. 2, Duncan's Bridge, Rangitikei County	1955-1957	ABKK 889 W4357/149
39/604	Wanganui Road District - Tutaenui Stream Bridge, Kensington Road, Marton Borough [Newspaper Cuttings]	1956-1957	ABKK 889 W4357/149
39/621	Wanganui Road District - Husband's Bridge, Porewa Stream, Pukeko - Kararanga Road, Rangitikei County	1957	ABKK 889 W4357/149
40/21	Roads - Hawkes Bay Road District - Bridges across Rangitikei River	1914-1933	ACHL 19111 W1/1123
40/21	Roads - Hawkes Bay Road District - Bridges across Rangitikei River	1933-1941	ACHL 19111 W1/1123
40/21	Hawkes Bay Road District - Bridges Across Rangitikei River General [Newspaper Cuttings and Photographs]	1942-1960	ABKK 889 W4357/150
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41/161	Wellington Road District - Otara Road and Mangamako Bridge, Kiwitea County	1914-1955	ABKK 889 W4357/159
41/292	Wellington Road District - Mangarere Road and Mangarere Stream Bridge, Kiwitea County	1955-1959	ABKK 889 W4357/163
41/385	Wellington Road District - Kawhatau (Upper) and Hikurangi River Bridges, Rangitikei County	1918-1956	ABKK 889 W4357/164

41/1024	Wellington Road District - Mangapapa Road Kiwitea County, also Pakihikura Stream Bridge	1947-1957	ABKK 889 W4357/173
41/1175	Wellington Road District - Mangamako Stream Bridge No. 2, Sandon Block Road, Kiwitea County	1954-1958	ABKK 889 W4357/177
41/1251	Wellington Road District - Rangitikei River Bridge at Otara, Ohingaiti - Rangiwhia Road, Kiwitea County	1897-1962	ABKK 889 W4357/178
48/10	Rivers Improvement and Protection - Rangitikei River - Scotts Ferry	1937-1946	ACHL 19111 W1/1184
48/10	Rivers Improvement and Protection - Rangitikei River - Scotts Ferry	1946-1951	ACHL 19111 W1/1184
48/15/1	Water and Soil Division - Rangitikei Water Region - Survey Information	1975	ABVD W4703/3
48/65	Rivers Improvement and Protection - Rangitikei River near Ohakea Settlement	1915-1940	ACHL 19111 W1/1189
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49/167	Flood Damage - Borough of Marton	1950	ACHL 19111 W1W2550/1
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50/545	Land Miscellaneous - Local Bodies, Taihape Borough Council. Sewerage and Water Supply	1933-1984	ABKK 889 W4357/311
50/803	Land Miscellaneous - Marton Borough Council, Sewerage	1949-1983	ABKK 889 W4357/323
50/934	Land Miscellaneous - Water Supply and Sewerage, Hunterville	1958-1971	ABKK 889 W4357/335
50/937	Land Miscellaneous - Mangaweka, Sewerage and Water Supply	1958-1962	ABKK 889 W4357/336
50/2102	Land Miscellaneous - Water Supply, Sewerage, Stormwater Drainage, Swimming Pools, Solid Waste Disposal - Marton Borough Council	1985-1987	ABKK 889 W4357/347
50/2176	Land Miscellaneous - Water Supply, Sewerage, Stormwater Drainage, Swimming Pools, Solid Waste Disposal - Taihape Borough Council	1984	ABKK 889 W4357/349
54/171	Miscellaneous - Metal Pits at Kakariki and Harwoods Camp	1923-1964	ACHL 19111 W1/1290

62/8/366/0	Curls Bridge - Upper Tutaenui MH [Main Highway]: Legalisation	1937-1950	AAZZ 889 W4923/15
62/8/366/1	Main Highways - Curls Bridge-Upper Tutaenui - Rangitikei County	1928-1957	ACHL 19111 W1/1391
62/8/366/2	Main Highways - Curls Bridge-Upper Tutaenui - Marton Borough	1928-1958	ACHL 19111 W1/1391
62/8/830/2	Main Highways - Feilding-Cliff Road via Stanway - Rangitikei River Bridge, Onepuhi	1946-1962	ACHL 19111 W1/1396
62/86/8/7	Gravel Pits - Railway Ballast Pit	1943-1962	AAZZ 889 W4923/83
62/86/8/15	Gravel Pits - Hautapu	1955-1959	AAZZ 889 W4923/83
62/86/8/17	Gravel Pits - Moawhango	1950-1967	AAZZ 889 W4923/83
64/4/2/5	Erewhon Rural Water Supply	1975-1980	AATE W3397/3
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64/4/2/22	Stanway Water Supply Scheme	1983-1986	ABMH W4305/16
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74/5/1/42	Operational surveys: Rangitikei-Wanganui Catchment Board	1976-1979	AATE 889 W3321/107
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92/11/46/13	Power Schemes Rangitikei Catchment Areas Job Histories	1986	ABZK 889 W5472/56
92/12/67/6/0/36	Tongariro Power Development - (Moawhango River Diversion): Claim - J H Marshall and Sons	1982	AAQU 889 W3428/469
92/12/81/1	Power Schemes Moawhango Project	1964-1971	ABZK 889 W5472/433
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92/12/81/2	Power Schemes Moawhango Project Investigations	1965-1978	ABZK 889 W5472/434
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92/12/81/6/28	Moawhango Diversion - Tongariro Diversion: Claim - Taihape Pest Destruction Board, Wanganui	1980	AAQU 889 W3428/472
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96/26/HB	Soil, River & Conservation Council - Rangitikei County Council Hunterville 'B' Rural Water Supply Scheme	1987-1988	AAFZ 889 W4143/521
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96/327070	Soil Conservation and River Control: Rangitikei Catchment Board: Porewa Valley Control Scheme	1956-1964	AATE 889 W3404/41
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#### Ministry of Works and Development Wanganui District Office files

File Number	Description	Date	Archives NZ Reference
5/84/40	Miscellaneous - Town & Country Planning - Water Conservation Order - Rangitikei River	1984-1986	AEWC 5114 W5653/149
R 8/1/5/6/2	Mangaweka - Utiku Deviation - Bridges General	1966-1982	AATC W3413/26
R 8/1/5/8	Taihape Deviation - Hautapu Bridge North	1958-1972	AATC W3413/26
R 8/1/5/8	Taihape Deviation - Hautapu Bridge North	1972-1979	AATC W3413/27
R 8/1/5/8	Taihape Deviation - Hautapu Bridge North	1979-1985	AATC W3413/27
R 8/1/5/8	Taihape Deviation - Hautapu Bridge North	1985	AATC W3413/27
R 8/1/5/11	Awanui - Bluff - Hautapu Bridge North	1957-1979	AATC W3413/28
R 8/1/5/11	Awanui - Bluff - Hautapu Bridge North	1980-1985	AATC W3413/28
8/1/14	Kawhatau Bridge	1965-1966	AATC 5114 W3457/154
R 8/1/14	Kawhatau Bridge	1965-1966	AATC W3413/28
8/1/17	Hautapu Stream Bridge	1938-1968	AATC 5114 W3457/155
8/1/19	Hautapu River Bridge (Taihape)	1944-1946	AATC 5114 W3457/155
8/1/20	Mangaone Stream Bridge (Winiata)	1942-1946	AATC 5114 W3457/155
8/1/23	Makohine Stream Bridge	1956-1979	AATC 5114 W3457/155

R 8/1/23	Makohine Stream Bridge	1956-1959	AATC W3413/28
8/1/26	Porewa Stream Bridge (Vinegar Hill)	1932-1946	AATC 5114 W3457/155
8/1/27	Porewa Stream Bridge (Still's)	1932-1959	AATC 5114 W3457/155
R 8/1/27	Porewa Stream Bridge (Still's)	1957-1961	AATC W3413/28
8/1/28	Porewa Stream Bridge (Pound Corner)	1928-1961	AATC 5114 W3457/155
R 8/1/28	Porewa Stream Bridge (Pound Corner)	1957-1962	AATC W3413/28
8/1/29	Porewa Stream Bridge (Ross)	1932-1974	AATC 5114 W3457/155
R 8/1/29	Porewa Stream Bridge (Ross)	1958-1974	AATC W3413/28
8/1/30	Porewa Stream Bridge (Silverhope)	1937-1958	AATC 5114 W3457/155
R 8/1/30	Porewa Stream Bridge (Silverhope)	1957-1958	AATC W3413/28
8/1/31	Ongo Stream Bridge	1932-1962	AATC 5114 W3457/155
8/1/32	Ongo Stream Bridge (Rata Factory)	1958-1965	AATC 5114 W3457/155
R 8/1/32	Onga Stream Bridge (Rata Factory)	1958-1964	AATC W3413/28
8/1/33	Porewa Stream Bridge (Rata Station)	1932-1973	AATC 5114 W3457/155
R 8/1/33	Porewa Stream Bridge (Rata Station)	1961-1974	AATC W3413/28
8/1/61	Hautapu Stream Bridge	1961-1962	AATC 5114 W3457/156
8/1/61	Hautapu Stream Bridge	1961-1970	AATC 5114 W3457/156
8/3/24	Tutaenui Stream Bridge (Bulls)	1962-1977	AATC 5114 W3457/163
R 8/3/24	Tutaenui Stream Bridge (Bulls)	1962-1964	AATC W3413/32
8/3/25	Highways - Hamilton to Woodville via New Plymouth - State Highway 3 No 8 District - Rangitikei River Bridge (Bulls) – General	1952-1979	AEWC 5114 W5653/155
8/3/25	Highways - Hamilton to Woodville via New Plymouth - State Highway 3 No 8 District - Rangitikei River Bridge (Bulls) - General	1973-1985	AEWC 5114 W5653/155
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8/3/25/1	Rangitikei River Bridge (Bulls) River Works	1973-1978	AATC 5114 W3457/163
8/3/25/2	Rangitikei River Bridge (Bulls) River Works	1973-1974	AATC 5114 W3457/163
8/3/25/7	Highways - Hamilton to Woodville - State Highway 3 No 8 District - Rangitikei River Bridge (Bulls) - Claim - Farrington M J (re Bridge Collapse 15.6.73)	1973-1983	AEWC 5114 W5653/155

8/12/10	Rangitikei River Bridge	1937-1944	AATC 5114 W3457/171
8/12/14	Rangitikei River Bridge – Bulls	1937-1944	AATC 5114 W3457/171
8/12/14	Rangitikei River Bridge – Bulls	1938-1947	AATC 5114 W3457/171
8/12/14	Rangitikei River Bridge - Bulls	1944-1945	AATC 5114 W3457/171
8/12/14	Rangitikei River Bridge - Bulls	1946	AATC 5114 W3457/171
8/12/14	Rangitikei River Bridge - Bulls	1948-1952	AATC 5114 W3457/171
8/12/14	Rangitikei River Bridge - Bulls	1937-1941	AATC 5114 W3457/171
8/12/14	Rangitikei River Bridge - Bulls	1947	AATC 5114 W3457/172
8/12/14	Rangitikei River Bridge - Bulls	1947-1948	AATC 5114 W3457/172
8/29/36	Makohine Stream Bridge	1937-1956	AATC 5114 W3457/176
R 8/29/40	Porewa Stream Bridge Contract No. 729	1958-1959	AATC W3413/40
R 8/29/40	Porewa Stream Bridge Contract No. 730	1958-1959	AATC W3413/40
8/54/7	Mangaweka-Palmerston North - Mangaweka Stream Bridge	1945-1979	AATC 5114 W3457/185
8/366/1	Curls Bridge - Upper Tutaenui	1940-1953	AATC 5114 W3457/187
8/830/2	Rangitikei River Bridge (Onepuhi Highway)	1934-1952	AATC 5114 W3457/189
9/1/8	Makowhai Stream Bridge North Branch	1973-1976	AATC 5114 W3457/191
9/1/9	Makowhai Stream Bridge South Branch	1948-1952	AATC 5114 W3457/191
9/54/10	Highways - Mangaweka Palmerston North via Kimbolton - Rangitikei River Bridge	1945-1977	AEWC 5114 W5653/160
14/68	Mangawharariki Bridge Kiwitea County	1908-1966	AATC 5114 W3457/213
14/164	Mangamako Stream Bridge Kiwitea County	1954	AATC 5114 W3457/215
14/165	Mangamako Stream Bridge No. 2 Kiwitea County	1954-1957	AATC 5114 W3457/215
14/178	Waipuru Bridge Sandon Block Road	1958-1959	AATC 5114 W3457/215
14/203	Taonui - Feilding Road - Rangitawa Stream Bridge	1953-1955	AATC 5114 W3457/217
15/5	Rangitikei Gravel Deposits Kakariki	1914-1959	AATC 5114 W3457/219
15/6	Mangaweka and Hautapu Survey Distract	1936-1980	AATC 5114 W3457/219
15/14	Taihapa Village Settlement - Gravel Pit	1955-1958	AATC 5114 W3457/219
15/18	Manawatu County Council Metal Pit at Bulls	1956	AATC 5114 W3457/219
15/20	Kakariki Crusher Plant	1956-1959	AATC 5114 W3457/220

44/102	Hautapu River Bridge at Utiku	undated	AATC 5114 W3457/347
44/187	Otaihape Stream Bridge	1921-1955	AATC 5114 W3457/351
44/240	Pourewa Bridge - Hunterville	1923-1941	AATC 5114 W3457/353
44/257	Upper Kawhatau Bridge	1923	AATC 5114 W3457/354
44/267	Mataphero Crossing Rangitikei River Bridge [Matawhero?]	1924-1925	AATC 5114 W3457/354
44/269	Tutaenui Stream Bridge	1938-1942	AATC 5114 W3457/354
44/311	Hautapu River Bridge - Jacobsens Road Taihape	1934	AATC 5114 W3457/356
44/338	Maowhango River Bridge at Taoroa-Utiku on Torere Road – 12 foot Truss [Bridge]	1943-1956	AATC 5114 W3457/357
44/366	Otupae Bridge - Rangitikei County	1947-1949	AATC 5114 W3457/358
44/404	Tikerere Stream Bridge - Te Moehau Road	1950-1952	AATC 5114 W3457/360
44/410	Bridge in Main Street Hunterville	1951-1954	AATC 5114 W3457/360
44/416	Putorino Road Bridge - Rangitikei County	1953	AATC 5114 W3457/361
44/441	Hunterville Council - Flood Damage	1955-1956	AATC 5114 W3457/362
44/448	Omatane North Bridge - Rangitikei County	1956-1960	AATC 5114 W3457/362
44/449	Moawhango Valley Road Bridge (Duncan)	1956-1957	AATC 5114 W3457/362
44/456	Tutaenui Stream - Rangitikei County	1957-1958	AATC 5114 W3457/362
R 44/456	Tutaenui Stream Bridge - Rangitikei County	1957-1958	AATC W3413/72
44/468	Moawhango River Bridge - Rangitikei County	1958-1959	AATC 5114 W3457/362
R 44/468	Moawhango River Bridge - Rangitikei County	1958-1959	AATC W3413/72
44/472	Makopua Stream Bridge - Rangitikei County	1958-1959	AATC 5114 W3457/362
44/485	Pungataua Bridge - Rangitikei County	1958-1968	AATC 5114 W3457/362
44/491	Mataroa School Bridge - Rangitikei County	1959	AATC 5114 W3457/362
R 44/491	Mataroa School Bridge - Rangitikei County	1959	AATC W3413/73
44/525	Tutaenui Stream Bridge - Rangitikei County	1931-1950	AATC 5114 W3457/365
44/528	Tutaenui Stream Bridge - Marton Borough	1931-1957	AATC 5114 W3457/365
44/531	Rangitikei River Bridge - Vinegar Hill	1937-1973	AATC 5114 W3457/365
R 44/531	Rangitikei River Bridge – Vinegar Hill	1957-1976	AATC W3413/73
44/569	Moawhango River Bridge - Rangitikei County	1937-1946	AATC 5114 W3457/366

44/571	Makokomiko Stream Bridge - Rangitikei County	1937-1945	AATC 5114 W3457/366
44/573	Rangitikei River Bridge - Rangitikei County	1923-1945	AATC 5114 W3457/366
44/575	Onepuhi Stream Bridge - Rangitikei County	1952-1962	AATC 5114 W3457/366
R 44/575	Onepuhi Bridge - Rangitikei County	1962-1966	AATC W3413/74
44/576	Porewa Stream Bridge - Rangitikei County	1938-1957	AATC 5114 W3457/366
44/577	Rangitikei River Bridge - Rangitikei County	1937-1953	AATC 5114 W3457/366
R 44/577	Rangitikei River Bridge - Rangitikei County	1957	AATC W3413/74
44/606	Moawhango River Bridge - Rangitikei	1941-1956	AATC 5114 W3457/367
44/612	Tutaenui Stream Bridge - Marton Borough	1936	AATC 5114 W3457/367
R 44/612	Tutaenui Stream Bridge - Marton Borough	1958-1962	AATC W3413/74
44/627	Kakariki Road Bridge - Rangitikei/Orou	1966-1970	AATC 5114 W3457/368
R 44/628	Omatane Bridge - Rangitikei County	1964-1966	AATC W3413/74
R 44/629	Kakariki Road Bridge - Rangitikei County	1965-1970	AATC W3413/74
44/630	Pukeokahu Road - Rangitikei County	1966-1969	AATC 5114 W3457/368
74/2/15	Omatane Rural Water Supply Scheme	1980-1983	AATC 5114 W3457/469
74/2/15/1	Omatane Rural Series Numbers 1-4	1981	AATC 5114 W3457/470
74/2/15/2	Omatane Rural Series Numbers 5-8	1981-1983	AATC 5114 W3457/470
74/2/15/3	Omatane Rural Series Numbers 9-12	1981-1982	AATC 5114 W3457/470
74/2/17	Rural Water Supply - Hunterville RWS [Rural Water Supply] - General	1981-1984	AATE W3892/3
74/2/17	Rural Water Supply - (Rangitikei County Council)	1984-1985	AATE W3892/3
74/20/1	River Control Works - Flood Warnings and Emergency Equipment	1958-1986	AATE W3892/4
74/20/2	River Control Works - Bridges	1954-1986	AATE W3892/4
74/20/3	River Control Works - Detention Dams & Culverts	1958-1980	AATE W3892/4
74/20/4	River Control Works - Sand & Gravel Extractions	1980-1986	AATE W3892/4
74/21/1	Water and Soil Resource Surveys - Manawatu Catchment	1975-1984	AATC 5114 W3457/482
74/21/1	Resource Surveys - Manawatu Catchment District	1984-1987	AATE W3892/4
74/21/1/1	Water and Soil Resource Surveys - Sand Shingle and Gravel Deposits	1978-1985	AATC 5114 W3457/482
74/21/2/1	Water and Soil Division - Tongariro Power Development etc.	1969-1976	AATE 5114 A951/102/b
74/21/7/4	Water Resource Project Sand and Gravel Survey 1976/158	1976-1979	AATC 5114 W3457/483



74/21/7/5	Water Resource Project Sand and Gravel Survey 1976/157	1976-1979	AATC 5114 W3457/483
74/21/10	Resource Surveys - Wanganui Rangitikei Catchment	1974-1978	AATC 5114 W3457/483
74/21/10/1	Sand Shingle and Gravel Deposits	1978-1984	AATC 5114 W3457/483
74/21/10/6	Resource Surveys - Rangitikei:Wanganui Catchment Board - Minimum Flow Maintenance Forecasting	1983-1984	AATE W3892/4
74/21/10/7	Resource Surveys - Manawatu Catchment Board - Flood Warning - Rangitikei Region	1985-1986	AATE W3892/4
74/30/5/2	Recorder Stations Cableways and Footbridges Rangitikei River at Springvale	1967-1979	AATC 5114 W3457/489
74/30/5/4	Recorder Stations Cableways and Footbridges- Moawhango River Cableway at Waioru	1962-1979	AATC 5114 W3457/489
74/60/5/10	Applications by the Crown in Respect of Natural Water - Rangitikei-Wanganui Catchment	1973-1975	AATC 5114 W3457/493
74/60/5/10	Applications by the Crown in Respect of Natural Water - Rangitikei-Wanganui Catchment	1975-1977	AATC 5114 W3457/493
74/60/10	Applications by the Crown in Respect of Natural Water - Rangitikei-Wanganui Catchment	1977-1979	AATC 5114 W3457/493
74/60/10	Applications by the Crown in Respect of Natural Water - Rangitikei-Wanganui Catchment	1980-1985	AATC 5114 W3457/493
74/60/10/1	Applications by the Crown in Respect of Natural Water - Waioru Military Camp	1975-1985	AATC 5114 W3457/494
75/10	Rangitikei Catchment Board - General	1944-1972	AATC 5114 W3457/499
75/10	Rangitikei Catchment Board - General	1970-1971	AATC 5114 W3457/499
R 75/10	Rangitikei Catchment District	1960-1985	AATC W3413/89
75/10/18	Soil Conservation - Rangitikei Catchment	1966	AATC W3415/91
R 75/10/18	Rangitikei Catchment Board	1957-1971	AATC W3413/89
R 75/10/18	Rangitikei Catchment Board	1971-1975	AATC W3413/89
R 75/10/18/20	River Control Works - Rangitikei Catchment Board	1957-1971	AATC W3413/90
R 75/10/18/20	River Control Works - Rangitikei Catchment Board	1971	AATC W3413/90
75/15	Rangitikei-Wanganui Catchment Board	1947-1973	AATC 5114 W3457/502

75/15/20	Rangitikei River Works	1961-1971	AATC 5114 W3457/503
75/15/50/1	Porewa Valley Control Scheme	1958-1972	AATC 5114 W3457/503
92/11/25/22	Moawhango and Whangaehu River Valleys	1978-1981	AATC 5114 W3457/509
92/11/25/22/1	Moawhango and Whangaehu River Valleys - Wherever Trust Farm Water Supply Scheme	1979-1983	AATC 5114 W3457/509
92/11/46/2	Rangitikei River - Investigations and Surveys	1961-1973	AATC 5114 W3457/512
R 92/11/46/2	Rangitikei River Investigations	undated	AATC W3413/92
R 94/163	Bulls Water Treatment Plant and School	1970-1985	AATC W3413/96
96/327000	Rangitikei River	1949-1959	AATC 5114 W3457/578
96/327000	Rangitikei River	1959-1967	AATC 5114 W3457/578
96/327000	Rangitikei River	1967-1979	AATC 5114 W3457/579
96/327000/0/1/9	Rangitikei River - South Side	1966-1972	AATC 5114 W3457/579
96/327001	Rangitikei River	1954-1956	AATC 5114 W3457/579
96/327001	Rangitikei River	1956-1970	AATC 5114 W3457/579
96/327002	Rangitikei River - Bulls to Kakariki	1950-1981	AATC 5114 W3457/579
96/327003	Rangitikei River – Kakariki	1944-1966	AATC 5114 W3457/579
96/327004	Rangitikei River - Kakariki	1947-1962	AATC 5114 W3457/579
96/327006	Rangitikei River - Flood Damage	1950-1978	AATC 5114 W3457/579
96/327010	Rangitikei River - Amons Drain	1968	AATC 5114 W3457/579
96/327020	Flock House Drain	1953-1954	AATC 5114 W3457/580
96/327030	Makowhai Stream	1949-1976	AATC 5114 W3457/580
96/327040	Folly Stream - Marton Reservoir	1947-1969	AATC 5114 W3457/580
96/327060	Rangitawa Stream	1954-1971	AATC 5114 W3457/580
96/327070	Porewa Stream - Ongo and Maungarapi Stream	1948-1956	AATC 5114 W3457/580
96/327070	Maungarapi - Ongo Stream	1956-1967	AATC 5114 W3457/580
96/327070	Maungarapi - Ongo Stream	1967-1973	AATC 5114 W3457/580
96/327070	Maungarapi - Ongo Stream	1973-1977	AATC 5114 W3457/580
96/327071	Mangaraupi Stream - A L Wheeler	1954-1956	AATC 5114 W3457/580
96/327080	Mangaweka	1951-1969	AATC 5114 W3457/580

96/327090	Waituna Stream	1971	AATC 5114 W3457/581
96/327100	Waitapu Stream	1963-1966	AATC 5114 W3457/581
96/327110	Makaraka Stream	1957-1968	AATC 5114 W3457/581
96/327120	Mangatutu Stream	1975-1977	AATC 5114 W3457/581
96/327143	Mangapapa Stream	1962	AATC 5114 W3457/581
96/327200	Mangaweka Stream	1949-1962	AATC 5114 W3457/581
96/327210	Manga-Te-Weka Stream	1972	AATC 5114 W3457/581
96/327220	Fraser Burn - Papanui Stream - Wairaki	1953	AATC 5114 W3457/581
96/327240	Kawhatau Stream	1952-1960	AATC 5114 W3457/581
96/327241	Mangapae Catchment Control Scheme	1974-1975	AATC 5114 W3457/581
96/327260	Hautapu River	1976	AATC 5114 W3457/581
96/327290	Smith Drain Omatane	1948-1977	AATC 5114 W3457/581
96/327300	Debris Dams see 96/327/290	1975	AATC 5114 W3457/581
FB 10	Bridge Over Hautapu River	1941	AATC W3414/1
FB 443	Horopito - Bulls - Rangitikei River	1937	AATC W3414/6
FB 600	Rangitikei Bridge Approach Bulls Road Development	undated	AATC W3414/7
FB 666	Rangitikei River Bridge	1944	AATC W3414/8
FB 680	Mangaraupi Stream Porewa	1958	AATC W3414/8
FB 729	Makohine Bridge	undated	AATC W3414/8
FB 773	Ongo Bridge - Rata Bridge	undated	AATC W3414/9
LB 23	Taihape Deviation - Hautapu Stream	1966-1967	AATC W3414/10
LB 328	Mangaweka Bridge	1936	AATC W3414/15
LB 446	Horopito - Bulls: Bulls Bridge	undated	AATC W3414/16
LB 646	Rangitikei River Bridge	1948	AATC W3414/18
LB 730	Makohine Bridge and Hunterville	1957	AATC W3414/18
LB 787	Ongo Stream Bridge Sight	1960	AATC W3414/19
PW 8/366/1	Curls Bridge Upper Tutaenui	1937-1944	AATC 5114 W3456/5
PW 12/98	Mangaweka Bridge	1918-1926	AATC 5114 W3456/16
PW 12/105	Rangitikei Bridge - Onepuhi	1914-1920	AATC 5114 W3456/16

PW 12/161	Taihape - Otaihape Bridge	1921-1931	AATC 5114 W3456/19
PW 12/221	Rangitikei River Bridge - Taoroa	1910-1912	AATC 5114 W3456/22
PW 12/224	Kawhatau River Bridge - Potaka Road	1906-1910	AATC 5114 W3456/22
PW 12/228	Upper Kawhatau & Hikurangi Bridge	1920-1923	AATC 5114 W3456/22
PW 12/243	Taihape - Napier Road - Rangitikei River	1927	AATC 5114 W3456/23
PW 13/34	Rangitikei County Council - Curls Bridge Tutaenui	1928-1938	AATC 5114 W3456/27
PW 13/98	Rangitikei County Council - Curls Bridge Upper Tutaenui	1928-1940	AATC 5114 W3456/31
PW 13/99	Rangitikei County Council - Vinegar Hill-Feilding Bridges	1925-1929	AATC 5114 W3456/31
PW 13/99	Rangitikei County Council - Vinegar Hill-Feilding Bridges	1930-1940	AATC 5114 W3456/31
PW 14/75	Mangarere Suspension Bridge - Kiwitea County	1908-1966	AATC 5114 W3456/34
PW 23/51/33	Rangitikei River - Erosion Below Bulls	1940-1946	AATC 5114 W3456/38
PW 23/51/81	Rangitikei River - Raetihi Soil Conservation	1942-1947	AATC 5114 W3456/38
PW 44/280	Mangaweka Town Bridge	1905-1914	AATC 5114 W3456/84
PW 45/85	Hautapu River Bridge - Papaki Road	1901-1904	AATC 5114 W3456/92
PW 45/102	Kakariki Bridge Approaches	1899-1919	AATC 5114 W3456/93
PW 45/124	Proposed Bridge Rangitikei River Rewa	1906	AATC 5114 W3456/94
WG 775	Waiouru-Bulls No. 29 SH [State Highway] Porawa Bridge	1959	AATC W3457/585
WG 884	Awanui No. 1 Ongo Bridge	1961	AATC W3457/585
WGR 155	SH 1 [State Highway 1] Porewa Bridge	1969-1970	AATC W3457/589
WGR 155	State Highway 1 - Porewa Stream Bridge	1969-1972	AATC W3414/21
WGR 197	State Highway 1 Bulls Bridge Underpinning	1974-1976	AATC W3414/22
WGR 197	State Highway 1 Bulls Bridge Underpinning	1976-1977	AATC W3414/23
WGR 775	Number 29 State Highway Waiouru - Bulls: Porewa Bridge	1959-1960	AATC W3414/26
WGR 921	Porewa Stream Bridge at Rata Station	1963-1964	AATC W3414/27

### Lands and Survey Department Head Office files

File Number	File Description	Date	Archives NZ Reference
36108	Rangitikei County Council - Flood Damage	undated	ACGT 18190 LS1/1405
36112	[Hawkes Bay Floods 1897]	1897-1955	ABWN 7609 W5021/829
36149	Reports of Easter Floods Damage	1897	ACGT 18190 LS1/1405
41168	Wellington Land District - Rangitikei County Council Gravel & Other Reserves: Tiriraukawa, Hautapu And Other Blocks. Revoked Roadman's Cottage Reserves Rangitikei County	1899-1977	AANS 7609 W5491/48
50106	P S Hay's Report 1904 on Water supply Resources of New Zealand	1906-1971	ABWN 7609 W5021/837
53936	[Wellington Land District - Occupation by Natives of Crown Land adjacent to town of Bulls/cultivation of Rangitikei River bed]	1902-1984	ABWN 7609 W5021/841
4/1173	Historic & Scenic Reserves - Wellington Land District - Scenic Reserve: Section 144, Paraekaretu Block In Block II, Ongo S.D. [Survey District] Water Conservation Res. [Reserve]	1953-1968	AANS 6095 W5491/12
6/1/1093/1	Local Purpose Reserves - Wellington LD [Land District] - Soil Conservation & River Control Res. [Reserve] Rangitikei County. Secs. [Sections] 13 & 14, Poukiore Village Blk. [Block] XV, Tiriraukawa S.D. [Survey District]	1966-1968	AANS 6095 W5491/29
13/90/17	Public Works Dept - Washing Up Bill 1924 - Vinegar Hill, Bridge over Rangitikei River	1924	ABWN 6095 W5021/365
15/244/9	Rangitikei - Wanganui Catchment Board	1945-1976	ABWN 6095 W5198/3
15/244/9	Wellington Land District - Rangitikei-Wanganui Catchment Board	1976-1984	ABWN 6095 W5021/435
15/244/59	[Wellington Land District]- Water Classification - Rangitikei-Wanganui Regional Water Board	1975	ABWN 6095 W5021/442
16/1049	Roads - Access Rangitikei River	undated	ACGT 18190 LS1/1579
22/3367/3	Navigable Rivers	1967-1981	ABWN 6095 W5021/601
22/5393/3	Reclamations - Wild & Scenic Rivers Protection: Rangitikei River	1984-1986	AANS 6095 W5491/108

### Lands and Survey Department Wellington District Office files

File Number	Description	Date	Archives NZ Reference
1856/210	Commissioner of Crown Lands - Tracing of Rangitiki District showing land applications in 1851 signed by FD Bell, 8 September 1856	1856	ADXS 19480 LS-W2/68
3/13/4	Rangitikei - Wanganui Catchment Board	1972-1983	AFIE 619/83
1/69/22	Acts and Regulations - Section 289 Local Government Act 1974 - Reserves Along Areas Of Water - Riverbank and Esplanade Reserves, Marton Borough	1981-1985	AFIE 619 W5683/70
3/13/4B	Rangitikei - Wanganui Catchment Board Crown Land at Tangimoana - Proposal B	1972-1975	AFIE 619/83
3/13/4C	Rangitikei - Wanganui Catchment Board Stopbank - DP [Deposited Plan] 27944	1972-1973	AFIE 619/83
3/13/4D	Rangitikei River - Land Purchase - Proposal D	1972-1979	AFIE 619/83
3/13/4G	Rangitikei - Wanganui Catchment Board DP [Deposited Plan] 19641 - Proposal 6	1972	AFIE 619/83
3/13/42	Rangitikei - Wanganui Catchment River Control	1979-1980	AFIE 619/83
3/158	Gravel Removal from Rivers	1958-1978	AFIE 619/83
8/4/16	Tikirere Mill Race - Historic Reserve	1971-1984	AFIE 619 W5683/96
8/4/20	Proposed Springvale Bridge Historic Reserve	1973-1980	AFIE 619/110
8/4/20	Springvale Bridge Historic Reserve	1974-1983	AFIE 619/110
8/4/20	Proposed Springvale Bridge Historic Reserve	1981-1994	AFIE 619/110
8/5/466	Rangitikei-Wanganui Catchment Board Reserves	1977-1986	AFIE 619/122
8/5/466/1	Rangitikei-Wanganui Catchment Board Reserves - Sections 618 & 626 - Township of Carnarvon - Block II - Sandy Survey District	1976	AFIE 619/122

8/5/466/2	Rangitikei-Wanganui Catchment Board Reserves - Part Sections 349 & 403 Part Sections 581 & 582 - Town Of Carnarvon - Blk [Block] V - Te Kawanu Survey District	1977-1981	AFIE 619/122
8/5/466/3	Rangitikei-Wanganui Catchment Board Reserves - Sections 786, 787, 794, 795, 796 & 797 - Town of Carnarvon - Situated in Blocks I & II - Sandy Survey District	1972-1980	AFIE 619/122
8/5/466/4	Rangitikei-Wanganui Catchment Board Reserves - Sections 454 - Rangitikei District - situated in Blk [Block] XI - Rangitoto S.D. [Survey District] & Secs. 78 & 79 Block XV - Rangitoto S.D. [Survey District]	1971-1980	AFIE 619/122
8/5/466/5	Rangitikei-Wanganui Catchment Board Reserves - Sections 71 & 80 Blk XV - Rangitoto S.D. [Survey District] and Sec 282 - Town of Sandon - Situated in Blk XV - Rangitoto S.D	1974-1987	AFIE 619/123
8/5/466/6	Rangitikei - Wanganui Catchment Board Reserves - Sections 1 & 2 Blk [Block] IV - Rangitoto S.D. [Survey District]	1972-1980	AFIE 619/123
8/5/466/7	Rangitikei - Wanganui Catchment Board Reserves - Section 453 - Rangitikei District - situated in Blk [Block] II - Sandy Survey District and Sections 455 456 457 - Rangitikei District Situated in Blk [Block] I - Sandy Survey District.	1972-1981	AFIE 619/123
8/5/466/8	Rangitikei - Wanganui Catchment Board Reserves - Proposal D - S0 [Survey Office] 26793 27978 11215 27916	1972-1987	AFIE 619/123
8/5/466/9	Rangitikei - Wanganui Catchment Board Reserves - Proposal Reserve Proposal J - SO. [Survey Office] 28172 & 28778	1974-1984	AFIE 619/123
8/5/466/10	Rangitikei - Wanganui Catchment Board Reserves - Proposal Porewa Valley Control Scheme	1976-1983	AFIE 619/123
8/5/466/11	Rangitikei - Wanganui Catchment Board Reserves - Proposal Reserve Proposal L - SO. [Survey Office] 28481 28171 28664 30334	1976-1986	AFIE 619/123
8/5/466/12	Rangitikei - Wanganui Catchment Board Reserves - Proposal - SO. [Survey Office] 30223 30224 28779 32172 32173	1979-1986	AFIE 619/123
8/5/466/13	Rangitikei - Wanganui Catchment Board Reserves - Proposal - Section 1 - Town of Tangimoana - Situated in Blk [Block] II - Sandy Survey District	1963-1983	AFIE 619/123

8/5/466/14	Rangitikei - Wanganui Catchment Board Reserves - Proposal - Northern Part of Islands 1 & 2 in Rangitikei River - Situated in Block VIII Rangitoto Survey District	1952-1985	AFIE 619/123
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### Legislative Department files

File Number	Description	Date	Archives NZ Reference
1874/118	Accounts and Papers - Schedule of Accounts and papers laid upon the table - Manawatu reserve, report by the speaker of the house of representatives on the claim of the province of Wellington in respect of the - Tracing of a plan showing native reserves on the Rangitiki-Manawatu block - scale 40 chains to an inch [SEP No. 341]	1872	AEBE 18507 LE1/1708/341
1888/193	Accounts and Papers - Public Works, Moawhango River crossing, removal of appliances at the	1888	AEBE 18507 LE1/278

### Maori Affairs Head Office files

File Number	Description	Date	Archives NZ Reference
1910/4679	Received: 24th August 1910. - From: Hone Reweti, Ohinepuhiawe. - Subject: Ohinepuhiawe Sections 140, 141. States that their road to Bulls has been closed and asks that road access be granted.	1910	ACIH 16036 MA1/1030
1926/50	Received: 18th August 1925. - From: Town Clerk, Town Board, Bulls. - Subject: Ohinepuhiawe Sections 140 and 141. Bulls Recreation Reserve or Domain. As to ownership.	1907-1931	ACIH 16036 MA1/1379
19/5/18	Kakariki Water Supply	1932-1933	ACIH 16036 MAW2459/210



21/2	Burial Ground Reserves, Reservations and School Sites - Shingle, Gravel and Sand - Royalties (etc.) - General	1933-1974	AAMK 869 W3074/731/g
21/2	Shingle, Gravel, Sand, Royalties, etc - General	1974-1978	AAVN 869 W3599/110
21/2/4	Petition 304/1936 - Ngohengohe Taera Te Motko - Rent and royalties - Kakariki Gravel Reserve	1913-1937	ACIH 16036 MA1/430
21/3/173	Ohinepuhiawe 141C Part - Maori Reservation - Section 140 and 141, Bulls - Recreation Domain, ownership of (See M.A. 1926/50)	1947-1949	ACIH 16036 MA1/442
65/16	Land Development Schemes - Reureu Development Scheme - Bring Reureu I, Section 15C2 under Part 1/1936	1933-1945	AAMK 869 W3074/986/f

#### Internal Affairs Head Office files

File Number	Description	Date	Archives NZ Reference
46/19/3	Wildlife Service - Boundaries - Re definition of Wanganui and Wellington Acclimatisation Districts - Question of Jurisdiction of Rangitikei River and Watershed	1946-1948	AAAC W3179/7
105/337	Local Bodies - Shingle works at Kakariki - Rangitikei County Council	undated	ACGO 8333 IA1/2261
170/87	Royal Family - Visit of 1949 - Opening of Rangitikei River Bridge	undated	ACGO 8333 IA1/3045
WIL 21/1/20	Environmental - Electricity Generation - Tongariro Power Scheme (including Moawhango Lake)	1977-1986	AANS W3546/27
WIL 38/2/7	Water and Soil Conservation Schemes - Flood control schemes - Rangitikei Catchment Board	1978-1983	AFIE 7536 W5683/215
WIL 38/6/7	Flood Control Scheme - Rangitikei Catchment Board	1971-1985	AANS W3546/51
WIL 40/7/17	Wildlife Management Reserves - Ngamatea Swamp - Waiouru	1974-1983	AANS W3546/58

### Wildlife Service Rotorua District Office files

File Number	Description	Date	Archives NZ Reference
9/0/9	General - Rangitikei -Wanganui Catchment and Regional Water Board	1985-1987	AFIE 5118 W5683/212

### Ministry of Agriculture and Fisheries Head Office files

File Number	Description	Date	Archives NZ Reference
71/12	Freshwater: Catchment Authorities/Regional Water Boards: Rangitikei-Wanganui Catchment Board	1978-1984	AAFZ W4617/4
72/1/1	Freshwater: River Development: Moawhango River	1977-1978	AAFZ W4617/6
W 21.4	Water Supply Schemes (RWS) - Erewhon RWS [Rural Water Supply] Scheme – Final	1977	ABGR W3673/23
W 25.4	Water Supply Schemes (RWS) - Omatane RWS [Rural Water Supply] Scheme	1980	ABGR W3673/31
W 26.1	Water Supply Schemes (RWS) - Waituna West RWS [Rural Water Supply] Scheme - Preliminary	1980	ABGR W3673/32
W 28.1	Water Supply Schemes (RWS) - Erewhon RWS [Rural Water Supply] ex nunc	1981	ABGR W3673/36
W 28.2	Water Supply Schemes (RWS) - Erewhon RWS [Rural Water Supply] ex nunc	1981	ABGR W3673/36
W 28.3	Water Supply Schemes (RWS) - Erewhon RWS [Rural Water Supply] ex nunc	1981	ABGR W3673/36
W 28.4	Water Supply Schemes (RWS) - Erewhon RWS	1977	ABGR W3673/37
W 29.6	Water Supply Schemes (RWS) - Waituna West RWS	1987	ABGR W3673/39
W 30.2	Water Supply Schemes (RWS) - Otairi RWS [Rural Water Supply] Extension	1988	ABGR W3673/40

### New Zealand Forest Service Head Office files

File Number	Description	Date	Archives NZ Reference
1/7/6/4C	Administration - Rangitiki [Rangitikei] C.B. [Catchment Board] Water Classification	1978	AANS 828 W5491/631
5/7	Rangitikei Catchment Board	1977-1985	AANQ W3797/1

### New Zealand Forest Service Palmerston North District Office files

File Number	Description	Date	Archives NZ Reference
5/1/4	Rangitikei Catchment Board - General correspondence and reports	1960-1964	AFIE 6905 W5683/147

### New Zealand Electricity Department Head Office files

File Number	Description	Date	Archives NZ Reference
10/75/1	Distribution Authorities - Mangaweka Town Council - Licences, Formation, Area of Supply, Land, Property, Buildings, Staff, Super [Superannuation] By-Laws, and Charges	1911-1920	AANU 569 W5055/123
10/75/1	Distribution Authorities - Mangaweka Town Council - Licences, Formation, Area of Supply, Land, Property, Buildings, Staff, Super [Superannuation] By-Laws, and Charges	1921-1940	AANU 569 W5055/123
10/75/1	Distribution Authorities - Mangaweka Town Council - Licences, Formation, Area of Supply, Land, Property, Buildings, Staff, Super [Superannuation] By-Laws, and Charges	1946-1966	AANU 569 W5055/123
10/90/1	Distribution Authorities - Taihape Borough Council - Licences, Formation, Area of Supply, Land, Property, Buildings, Staff, Super [Superannuation] By-Laws, and Charges	1911-1934	AANU 569 W5055/131

10/90/1	Distribution Authorities - Taihape Borough Council - Licences, Formation, Area of Supply, Land, Property, Buildings, Staff, Super [Superannuation] By-Laws, and Charges	1941-1951	AANU 569 W5055/131
10/90/1	Distribution Authorities - Taihape Borough Council - Licences, Formation, Area of Supply, Land, Property, Buildings, Staff, Super [Superannuation] By-Laws, and Charges	1940-1965	AANU 569 W5055/132

#### Department of Scientific and Industrial Research Head Office files

File Number	Description	Date	Archives NZ Reference
[51]	Rangitikei: Catchment Board	1947	ABLS W4374/9
6/32	Geological Survey - Survey of Dam Site for Marton Borough Council	1946	ABLP 7213 W4708/35
15/15/-	Rangitikei Catchment Board	1958-1960	AEKN 19619 SIRW2622/19
15/15/-	Rangitikei Catchment Board	1959-1961	AEKN 19619 SIRW2622/19
15/15/-	Rangitikei Catchment Board	1962-1973	AEKN 19619 SIRW2622/19

#### Health Department Head Office

File Number	Description	Date	Archives NZ Reference
32/39	Drainage - Sewerage - Taihape Borough	1917-1989	ABQU 632 W4452/163
32/247	Drainage - Sewerage - Marton Borough	1950-1979	ABQU 632 W4452/176
32/307	Drainage - Sewerage - Rangitikei County - Hunterville	1957-1977	ABQU 632 W4452/182
32/308	Drainage - Mangaweka Town District	1958-1975	AAFB 632 W2883/74
32/426	Drainage - Sewerage - Rangitikei County - Bulls	1973-1982	ABQU 632 W4452/198

124-10-2	Water Supply - Water Supplies - Marton Borough (125-121 attached)	1979-1987	ABQU 632 W4452/607
124-10-6	Water Supply - Water Supplies - Taihape Borough (125-18 attached)	1920-1983	ABQU 632 W4452/607
124-10-11	Water Supply - Water Supplies - Rangitikei County - Hunterville	1944-1989	ABQU 632 W4452/608
124-10-14	Water Supply - Water Supplies - Rangitikei County - Bulls (125-283 attached)	1959-1986	ABQU 632 W4452/608
125/63	Water supply - Pollution of Porewa River from Rata factory	1926	ADBZ 16163 H1/1425

### Mines Department Head Office files

File Number	Description	Date	Archives NZ Reference
12/46/302	Kakariki Sand and Shingle Company - Dragline and Crushing Plant	1955-1988	AATJ 6090 W4993/106
12/46/680	Crushing Plant and Dragline - A Hammond - Hunterville - Berry's Quarry	1957-1969	AATJ 6090 W4993/117
12/46/785	Shergold's Quarry, Taihape, Noel Byford Limited, Taihape	1959-1989	AATJ 6090 W5152/127
12/46/859	Taihape Gravel Supplies - Dragline and Crushing Plant, Utiku	1961-1970	AATJ 6090 W4993/124
12/46/1020	Shingle Licences Issued - Rangitikei Catchment Board	1968-1985	AATJ 6090 W4993/131

### Nature Conservation Council files

File Number	Description	Date	Archives NZ Reference
14/8/78	Drainage Scheme - Ngamatea Swamp, Waiouru	1978-1979	AAZU W3619/36
16/3/70	Mining - Mangaweka Domain	1970-1976	AAZU W3619/9
23/6/69	Flood Control - Porewa Stream, Simpsons Scenic Reserve	1969	AAZU W3619/7
23/6/69	Porewa Stream: Simpsons Scenic Reserve	1969	AAZU W3619/8
23/6/69	Simpsons Scenic Reserve: Control of Porewa Stream	1969	AAZU W3619/8
31/5/78	Motor Launch Regulations: Jet Boats, Rangitikei River	1978-1982	AAZU W3619/36
33/6/71	Reserves - Moawhango River	1971	AAZU W3619/10
33/6/71	Moawhango River Reserve	1971	AAZU W3619/11
33/6/84	Rangitikei River - Conservation Order	1984-1989	AAZU W3619/47

33/8/79	Refuse Tip - Taihape Sewerage Scheme	1973	AAZU W3619/39
33E/8/79	Sewage Scheme - Taihape	1979-1981	AAZU W3619/39
33E/8/79	Taihape: Sewage Scheme, Refuse Tip Site	1979-1981	AAZU W3619/39
39/4/74	Reserves - Upper Moawhango Catchment	1974-1976	AAZU W3619/22
39/4/74	Upper Moawhango Catchment Reserves	1974-1976	AAZU W3619/22
59/8/73	Lake Moawhango	1973	AAZU W3619/19
59/8/73	Fishery - Moawhango River	1973-1979	AAZU W3619/19

### New Zealand Railways files

File Number	Description	Date	Archives NZ Reference
1898/4480	Rangitikei combined bridge near Kakariki	1897-1911	ADQD 17447 R4/100
100	Kakariki Ballast Pit and Private Siding	1888-1965	AAEB W3293/1
57209	Chief Civil Engineers Office - Long Roll Drawings - Traverse of Rangitikei River below bridge 97A. Proposed sites for shingle plants for Mr G Robinson and Railways Department	1943	ABJQ W4439/15
22/2645	NZ Railway: Application by the Rangitika County Council for site for building metal crushing plant and siding to riverbed at Kakariki	1922-1982	AAEB W3438/61
403/1924	Rangitikei River Adventure Co Ltd, Hunterville - [License Files]	1981	ABIW 22949 W4019/72

### Marine Department Head Office files

File Number	Description	Date	Archives NZ Reference
1/5/10	Regulations: Acclimatisation Societies - Fielding and District. (Amalgamated with Wellington Acclimatisation Society, 10 August 1937, see 1/5/3)	1899-1937	ADOE 16612 M1/40
1/6/28	Salmon - Caught in Rangitikei River	1922-1955	ADOE 16612 M1/61
1/7/64	Mangawharariki Stream: Legality of notice board prohibiting fishing	1924	ADOE 16612 M1/74

2/10/25	Whitebait - Rangitikei River, pt 1	1927-1938	ADOE 16612 M1/153
4/2103	Rangitikei River - Removal of sand and shingle	1927-1931	ADOE 16612 M1/592

### Ministry of Transport Head Office files

File Number	Description	Date	Archives NZ Reference
43/150/10	Harbours-Rangitikei River-Sporting Activities	1975-1997	ABPL 7457/227
54/15/0	Foreshores - Removal of Sand and Shingle - Policy and General	1981-1987	AFIE 7457 W5683/217
54/19/5	Foreshores - Catchment Board Schemes - Control Scheme Number 2 - Rangitikei Catchment Board - Rangitikei River, 1966-1982	1966-1982	ABVD W4703/3
54/24/12/1	Foreshores - Wanganui-Rangitikei Electric Power Board - 11 kV [kilovolt] line - Moawhango River	1973-1974	ABVD W4703/4
54/24/12/10	Foreshores - Powerlines - Wanganui-Rangitikei EPB [Electric Power Board]- 11 kV [kilovolt] cable - Hautapu River - ESA [Electrical Supply Authority] 1737	1984	ABVD W4703/4

### Electricity Corporation Head Office files

File Number	Description	Date	Archives NZ Reference
PE 6/10/2	ECNZ [Electricity Corporation NZ] Production Engineering and Development Group Hydro Resources Rangitikei Wanganui Catchment Management	1988-1993	AEPU 7734 W5606/245
PE 6/10/6	ECNZ [Electricity Corporation NZ] Production Engineering and Development Group Rangitikei river Water Conservation Order	1990-1995	AEPU 7734 W5606/245

### Wellington Provincial Papers

File Number	Description	Date	Archives NZ Reference
7	Superintendent - General Inwards Letters and Letters from the Commissioner of Crown Lands and the General Government - J Forester and Co - 5 January 1867 - Complaining that the Rangitikei River Levy was inefficiently conducted	1867	ACIA 16195 WP3/21



## Turakina River and Mangapapa Stream Archival References

### Ministry of Works and Development Head Office files

File Number	Description	Date	Archives NZ Reference
39/453	Wanganui Road District - Mangamahoe Road and Mataiaponga Stream Bridge, Rangitikei County	1946-1958	ABKK 889 W4357/146
39/453/1	Wanganui Road District - Mangamahoe Road Turakina River Bridge at Pukerua, Rangitikei County	1947-1952	ABKK 889 W4357/146
39/622	Wanganui Road District - Rongoiti or Koeke Road and Louries Bridge, McCarty's Bridge Rangitikei County	1951-1984	ABKK 889 W4357/149
96/330000	Soil Conservation and River Control: Rangitikei Catchment Board: Turakina River Rangitikei County	1940-1975	AATE 889 W3404/42

### Ministry of Works and Development Wanganui District Office files

File Number	Description	Date	Archives NZ Reference
7/3/70	Mangamahoe Stream Bridge	1951-1960	AATC 5114 W3457/126
R 44/353	Mataiaponga Stream Bridge - Mangamahoe Road, Rangitikei County	1957-1958	AATC W3413/71
44/406	Pukeroa Bridge - Rangitikei County	1948-1952	AATC 5114 W3457/360
96/330000	Turakina River	1947-1962	AATC 5114 W3457/581
96/330250	Mangamahoe Stream	1949-1951	AATC 5114 W3457/581

## Ngaruroro River and Taruarau Stream Archival References

### Ministry of Works and Development Head Office files

File Number	Description	Date	Archives NZ Reference
39/586	Wanganui Road District - Taruarau Stream Bridge, Taihape - Napier Road, Rangitikei County	1953-1954	ABKK 889 W4357/149
92/11/41/2/2	Power Schemes Ngaruroro Catchment Areas River Development Hydrological	1956-1987	ABZK 889 W5472/55
92/11/41/4	Power Schemes Ngaruroro Catchment Areas River Development Reports	1959-1967	ABZK 889 W5472/55
A 139/01	Ngaruroro River power development - Preliminary report, 1967'	1967	ABZK 22670/68
A 139/18	Ngaruroro and Mohaka river systems - Identification of hydro-electric potential', December 1987, Hawkes Bay Electric Power Board	1987	ABZK 22670/86
A 141/01	Ngaruroro River power development - Preliminary report, 1967', Ministry of Works and Development	1967	ABZK 22670/90
A 141/01	Ngaruroro River power development - Interim report', August 1967	1967	ABZK 22670/90
A 141/01	Ngaruroro River and Taruarau river	c.1980	ABZK 22670/90
A 141/01	Ngaruroro and Mohaka river systems - Identification of hydro-electric potential', February 1988, Hawkes Bay Electric Power Board	1988	ABZK 22670/90

### Ministry of Works and Development Wanganui District Office files

File Number	Description	Date	Archives NZ Reference
44/422	Taruarau River Bridge - Rangitikei County	1949-1954	AATC 5114 W3457/361

### Ministry of Works and Development Napier District Office files

File Number	Description	Date	Archives NZ Reference
ME 6/11	Cableways - Kuripapango	1974-1989	ABKU W4404/21
PW 16/19	Napier-Taihape Road	1931-1963	ABKU 8108 W3748/27
PW 16/19	Ihunanga Bridge Napier-Taihape Road	1936-1949	ABKU 8108 W3748/27
PW 16/19/2	Roads Bridges etc, Napier-Taihape Road Survey	1940-1944	ABKU 8108 W3748/27
6/1/12/23104	Water and Soil: Soil Conservation - Inspection and testing of Gauging Station Cableways - Kuripaponga Gauging Station on Ngaruroro River	1965-1974	AAPA 8108 W3365/6
16/19	Roads and bridges Napier/Taihape road - Kuripapango Bridge, Willowford Bridge	1964-1974	ABNV 8108 W5133/13
92/2/1	Hydrology - Rivers - Ngaruroro	1964-1976	AAPA 8108 W3366/22
92/11/41/2	Ministry of Works and Development: Napier District Office: Hydro Electric Power Development Ngaruopo Catchment	1954-1964	AAPA 8108 W3374/122
92/11/41/2	Ministry of Works and Development: Napier District Office: Hydro Electric Power Development Ngaruopo Catchment	1967-1972	AAPA 8108 W3374/122
96/231000	Ministry of Works and Development: Napier District Office: Katoamy/Irongate Stream - Noaruroro River Flood Control	1953-1962	AAPA 8108 W3374/127
96/231000	Ministry of Works and Development: Napier District Office: General Section Noaruroro River Works	1962-1964	AAPA 8108 W3374/127

### Nature Conservation Council files

File Number	Description	Date	Archives NZ Reference
19/8/78	Power Scheme - Ngaruroro	1978	AAZU W3619/36

### New Zealand Forest Service Palmerston North District Office files

File Number	Description	Date	Archives NZ Reference
30/21/11/2	NZFS [New Zealand Forest Service] - Kaweka Forest - Proposed Hydro Scheme Ngaruroro	1978-1982	ABDT 6905 W3648/8
Unnumbered	NZFS [New Zealand Forest Service] - Napier District Office - Maps and Plans from Kaweka Forest - Ngaruroro River Watershed	1959	ABDT 6905 W3648/61
31/2/3/21	Special Reports - Kaweka Forest & Ngaruroro Catchment North of Ruahine Range	1952-1961	ABDT W3092/36
31/2/3/21	Special Reports - Kaweka Forest & Ngaruroro Catchment North of Ruahine Range	1962-1984	ABDT W3092/36

### Ministry of Transport Head Office files

File Number	Description	Date	Archives NZ Reference
54/24/12/2	Foreshores - Wanganui-Rangitikei Electric Power Board - 11 kV [kilovolt] cable - Taruarau River	1974	ABVD W4703/4
54/24/20/5	Foreshores - Wanganui-Rangitikei E.P. [Electric Power] Board - ESA 1227 [Electric Supply Application], Taruarau River	1974	AAPR W3964/10

## Oroua River and Pohangina River Archival References

### Ministry of Works and Development Head Office files

File Number	Description	Date	Archives NZ Reference
Unnumbered	Detailed soil conservation survey of portion of the watershed of the Pohangina and Oroua rivers, Pohangina County	1951	ABKK W4478/64
41/1151	Wellington Road District - Apiti - Rangiwahia (Proposed Road), Kiwitea County	1953-1979	ABKK 889 W4357/177
48/270	Rivers Improvement and Protection - Manawatu - Oroua River Board - Report re Drainage of Lands in the basin of the Oroua and Pohangina Rivers	1884-1908	ACHL 19111 W1/1224
48/270	Rivers Improvement and Protection - Manawatu - Oroua River Board	1884-1926	ACHL 19111 W1/1224
48/270	Rivers Improvement and Protection - Manawatu - Oroua River Board	1926-1927	ACHL 19111 W1/1224
48/270	Rivers Improvement and Protection - Manawatu - Oroua River Board - Flood Protection ?	1927-1929	ACHL 19111 W1/1224
49/86	Flood Damage - Flood Damage Pohangina County Council [Subsequent File 906/9A/1105/10]	1986	ABKK 889 W4357/277
64/4/2/10	Oroua Rural Water Supply Scheme. Oroua County	1978-1983	ABMH W4305/14
96/001000	Soil Conservation and River Control: Manawatu Catchment Board: Oroua River	1946-1970	AATE 889 W3404/38
96/325070	Manawatu-Oroua River District General File: Bainesse Drainage District	1954-1960	AATE 889 W3404/37
96/325082	Soil Conservation and River Control: Manawatu Catchment Board: Tributary of Oroua River	1947-1966	AATE 889 W3404/38
96/325083	Soil Conservation and River Control: Manawatu Catchment Board: Tributaries of Oroua River	1919-1977	AATE 889 W3404/38
96/325170	Soil Conservation and River Control: Manawatu Catchment Board: Pohangina-Oroua Control Scheme	1929-1972	AATE 889 W3404/38

### Ministry of Works and Development Wanganui District Office files

File Number	Description	Date	Archives NZ Reference
14/19	Flood Damage Pohangina County Council	1948-1977	AATC 5114 W3457/212
PW 23/54/38	Oroua River - Records of Flow	undated	AATC 5114 W3456/38
96/325070	Oroua Rural District	1958-1986	AATC 5114 W3457/577
96/325080	Oroua Rural District	1947-1956	AATC 5114 W3457/577
96/325080	Government Owned Buildings - Oroua River	1956-1977	AATC W3415/96
96/325080	Oroua Rural District	1967-1974	AATC 5114 W3457/577
96/325080	Oroua Rural District	1974-1982	AATC 5114 W3457/577

### Lands and Survey Head Office files

File Number	Description	Date	Archives NZ Reference
22/2274/53	Flood damage - Manawatu and Oroua Districts	1939-1961	AADS W3562/325

### Health Department Head Office files

File Number	Description	Date	Archives NZ Reference
126/2/5	Water's Classification - Manawatu River and Oroua River	1961-1973	AAFB 632 W2788/125

## Kiwitea Stream Archival References

### Ministry of Works and Development Head Office files

File Number	Description	Date	Archives NZ Reference
41/608	Local Authorities: Wellington Road District - Kiwitea Stream Bridge (Kiwitea - Tapuae Road)	1925-1967	AAQU 889 W3428/60
49/84	Flood Damage - Kiwitea County [Subsequent File 906/9A/1102/10]	1917-1986	ABKK 889 W4357/277
64/4/2/7	Kiwitea County Council. Kiwitea No.1 Rural Water Supply	1977-1980	ABMH W4305/14
64/4/2/7	Kiwitea County Council. Kiwitea No.1 Rural Water Supply	1980-1983	ABMH W4305/14
64/4/2/15	Waituna West Water Supply Scheme	1981-1987	ABMH W4305/15
74/2/16	Irrigation & Rural Water Supply Schemes - Waituna RWS [Rural Water Supply] (Kiwitea County - General)	1979-1985	AATE W3892/3

### Ministry of Works and Development Wanganui District Office files

File Number	Description	Date	Archives NZ Reference
14/16	Flood Damage Kiwitea County Council	1917-1981	AATC 5114 W3457/212
14/162	Kiwitea Stream Bridge Upper Beaconsfield	1953-1956	AATC 5114 W3457/215
14/228	Peep O'Day Bridge - Kiwitea County	1964	AATC 5114 W3457/218
74/21/8	Kiwitea Stream Improvements	1983	AATC 5114 W3457/483
96/325084	Government Owned Buildings - Kiwitea Stream, Stoney Creek, Ruae Stream	1948-1971	AATC W3415/96
L 02/012	Local Authorities - Roading - Local Authorities Kiwitea County - Flood Damage	1982-1989	AEWC 22601 W5653/5
PW 14/71	Kiwitea Bridge - Kiwitea County	1910-1926	AATC 5114 W3456/34

**Lands and Survey Wellington District files**

<b>File Number</b>	<b>Description</b>	<b>Date</b>	<b>Archives NZ Reference</b>
13/211	Rangiwahai [Rangiwahia] Water Forest Reserve	1924-1957	AFIE 619/143



### Horizons Regional Council (and predecessors) files

File Number	Description	Date	Archives Reference
14/2	Flock House (and Rangitikei River Control Scheme)	1948-1962	HRC 00042:3
6/12	Flock House Drainage	1946	HRC 00042:2
11/7	Folly Stream	1948-1950	HRC 00042:3
6/1	Hautapu River - Taihape Borough Council	1951-1952	HRC 00042:2
3/5	Kakariki – Rangitikei County Council – Rangitikei River	1945-1950	HRC 00042:1
8/4	Metal Licences	1957-1958	HRC 00042:2
8/5	Metal Licences	1956-1957	HRC 00042:2
22/3	Metal Licences 1958/59	1958-1959	HRC 00042:5
22/2	Metal Licences 1959/60	1959-1960	HRC 00042:5
22/1	Metal Licences 1960/61	1960-1961	HRC 00042:5
19/18	Porewa Stream	1948-1950	HRC 00042:4
14/1	Rangitikei River Control Scheme	1949-1952	HRC 00042:3
5/11	Rangitikei River – Kakariki Sand and Gravel	1945	HRC 00042:2
4/7	Rangitikei River – Makowhai Stream Mouth	1948-1950	HRC 00042:1
5/15	Rangitikei River – Ohinepuhiawe Blocks	1945	HRC 00042:2
4/14	Rangitikei River – Old Bulls Bridge	1949	HRC 00042:1
22/5	Timber in river beds, legal opinion	1950-1952	HRC 00042:5
22/13	Vesting of watercourses	1945-1948	HRC 00042:5
20/6	Waionuru, Headwaters, Moawhango and Rangitikei	1946-1950	HRC 00042:4
E7/C	Gravel Permits - Assorted	1978-1988	HRC 00048:40
E7/R	Metal Licences – Rangitikei River	1961-1967	HRC 00048:41
E7/4	Rangitikei River - General	1969-1984	HRC 00048:43
327/000/H	Rangitikei River - Channel Efficiency	1983-1986	HRC 00050:11
327/RS/CON Pt 1	Rangitikei River Consolidation Scheme	1983-1985	HRC 00050:3
327/RS/CON Pt	Rangitikei River Consolidation Scheme	1986-1989	HRC 00050:3

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327/RS/A Pt 3	Rangitikei River Control Scheme – Bulls - Sea	1959-1963	HRC 00050:3
327/RS/B	Rangitikei River Control scheme – Bulls to Kakariki	1959-1964	HRC 00050:3
327/RS/C	Rangitikei River Control Scheme – Kakariki Bridge - Rewa	1959-1964	HRC 00050:3
327/RS/A Pt 1	Rangitikei River Control Scheme – Parewanui Drains 1 & 2	1953-1961	HRC 00050:3
327/RS/A Pt 2	Rangitikei River Control Scheme – Parewanui Drains 3 & 4	1955-1959	HRC 00050:3
327/RS2/H	Rangitikei River – Flood Damage	1974-1979	HRC 00050:8
327/RMP/G	Rangitikei River – Gravel Resources	1979-1982	HRC 00050:3
327/000/C Pt 3	Rangitikei River – Kakariki - Vinegar Hill	1961-1988	HRC 00050:10
327/RMP	Rangitikei River – Management Plan	1978-1982	HRC 00050:3
327/RS2/OC	Rangitikei River – Okanagan Diversion known as the Okanagan Cut	1966-1973	HRC 00050:10
327/RS2/A Pt 7	Rangitikei River – Okanagan Rock Protection	1973-1977	HRC 00050:5
327/RS2/OS	Rangitikei River – Okanagan Stopbank	1965-1968	HRC 00050:10
327/RS2/A Pt 1	Rangitikei River – Parewanui Drains	1965-1989	HRC 00050:4
327/RS2/A Pt 5	Rangitikei River – Parewanui Stopbank (Temporary)	1967-1972	HRC 00050:4
327/RS/F	Rangitikei River Scheme	1958-1963	HRC 00050:4
327/RS2/B Pt 9	Rangitikei River Scheme 2 – Bulls Bridge Collapse	1968-1985	HRC 00050:5
327/RS2/B Pt 2	Rangitikei River Scheme 2 – Bulls Bridge - Collapse & Works	1972-1974	HRC 00050:5
327/RS2/B Pt 5	Rangitikei River Scheme 2 – Bulls Bridge – Kakariki Bridge & Bulls Reserve	1964-1973	HRC 00050:5
327/RS2/B Pt 7	Rangitikei River Scheme 2 – Bulls Bridge – Kakariki Bridge & Bulls Reserve	1975-1979	HRC 00050:5
327/RS2/B Pt 6	Rangitikei River Scheme 2 – Bulls Bridge – Kakariki & Bulls Reserve	1973-1974	HRC 00050:5
327/RS2/B Pt 8	Rangitikei River Scheme 2 – Bulls to Kakariki Bridge	1979-1987	HRC 00050:6
327/RS1/B	Rangitikei River Scheme – Bulls to Kakariki	1952-1953	HRC 00050:4
327/RS/G Pt 2	Rangitikei River Scheme - General	1959-1974	HRC 00050:4
327/RS2/G Pt 1	Rangitikei River Scheme - General	1964-1967	HRC 00050:7
327/RS2/G Pt 2	Rangitikei River Scheme - General	1967-1972	HRC 00050:7
327/RS2/G Pt 3	Rangitikei River Scheme - General	1974-1979	HRC 00050:7
327/RS2/G Pt 4	Rangitikei River Scheme – General	1976-1981	HRC 00050:7
327/RS2/G Pt 5	Rangitikei River Scheme - General	1981-1989	HRC 00050:7

327/RS2/C	Rangitikei River Scheme – Kakariki Bridge to Rewa	1974-1983	HRC 00050:6
327/RS2/LP Pt 2	Rangitikei River Scheme – Land Purchase	1976-1978	HRC 00050:8
327/RS2/LP Pt 11	Rangitikei River Scheme – Land Purchase – Bulls - Makowhai	1982-1987	HRC 00050:9
327/RS2/LP Pt 12	Rangitikei River Scheme – Land Purchase – General	1977-1979	HRC 00050:9
327/RS2/LP Pt 14	Rangitikei River Scheme – Land Purchase / Lease etc	1965-1986	HRC 00050:10
327/RS2/LP Pt 10	Rangitikei River Scheme – Land Purchase – Maori Affairs	1987	HRC 00050:9
327/RS2/LP Pt 7	Rangitikei River Scheme – Land Purchase – Tangimoana	1965-1967	HRC 00050:9
327/RS2/LP Pt 8	Rangitikei River Scheme – Land Purchase – Tangimoana	1968-1974	HRC 00050:9
327/RS2/LP Pt 9	Rangitikei River Scheme – Land Purchase – Tangimoana	1974-1988	HRC 00050:9
327/RS2/LP Pt 1	Rangitikei River Scheme – Okanagan - Flock House Land Purchase	1967-1976	HRC 00050:8
327/RS2/LP Pt 3	Rangitikei River Scheme – Okanagan - Flock House Land Purchase	1978-1980	HRC 00050:8
327/RS2/LP Pt 4	Rangitikei River Scheme – Okanagan - Flock House Land Purchase	1980-1981	HRC 00050:8
327/RS2/LP Pt 5	Rangitikei River Scheme – Okanagan - Flock House Land Purchase	1982-1984	HRC 00050:8
327/RS2/LP Pt 6	Rangitikei River Scheme – Okanagan - Flock House Land Purchase	1984-1988	HRC 00050:8
327/RS2/LP Pt 13	Rangitikei River Scheme – Parewanui Stopbank - Land Purchase	1971-1980	HRC 00050:9

327/RS2/A Pt 3	Rangitikei River Scheme – Sea to Bulls	1964-1973	HRC 00050:4
327/RS2/TS	Rangitikei River Scheme – Tangimoana Stopbank	1965-1972	HRC 00050:10
327/042 Pt 2	Reservoir Stream – Marton Borough	1974-1982	HRC 00050:15
327/080	Ruamahanga Stream - General	1961-1975	HRC 00050:19

### **Rangitikei District Council (and predecessors) files**

Archives Reference = Series Number/Series Description/Box Number

<b>File Number</b>	<b>Description</b>	<b>Date</b>	<b>Archives Reference</b>
3/B/9	Bridge - Kuripapango - Over Ngaruroro River	1925-1927	RDC00046 1.8/1/33
3/B/11	Bridge - Rangitikei at Bulls	1924-1925	RDC00046 1.8/1/36
3/B/13	Bridge over Rangitikei River at Erewhon	1923-1925	RDC00046 1.8/1/37
2/B/9	Bridge over Rangitikei River at Mangaweka	1923	RDC00046 1.8/1/38
3/B/10	Bridge - Rangitikei at Matawhero	1923-1925	RDC00046 1.8/1/39
2/B/12	Bridges - Upper Kawhatau and Hikurangi	1918-1924	RDC00046 1.8/1/41
2/B/11	Bridge Upper Kawhatau approaches to Warrant etc	1924	RDC00046 1.8/1/42
1/C/6	Contamination of Tutaenui Stream at Bulls (Dairy Factory)	1920	RDC00046 1.8/1/62
1/F/3	Flood Damages	1918	RDC00046 1.8/2/35
1/K/1	Kakariki Combined Road and Railway Bridge	1921	RDC00046 1.8/3/21
2/O/10	Otaihape Stream Bridge in Taihape Borough	1920-1927	RDC00046 1.8/5/40
2/O/11	Otara Bridge	1922	RDC00046 1.8/6/3
3/P/6	Potaka Mrs, Royalty on Metal, Utiku	1923-1924	RDC00046 1.8/6/16
-	Rangitikei Bridge at Erewhon	1923	RDC00046 1.8/6/44
-	Rangitikei River Bridge at Onepuhi	1921	RDC00046 1.8/6/45
1/R/5	Rangitikei River Stopbank and McKelvies	1920	RDC00046 1.8/6/46
3/R/23	Rubbish Depositing in River near Bulls Bridge	1924	RDC00046 1.8/7/15
1/T/10	Tutaenui Stream Overflow	1921	RDC00046 1.8/7/71
3/V/3	Vinegar Hill Bridge	1924-1927	RDC00046 1.8/8/5

-	Flood Damage	1935-1939	RDC00064 1.10/1/12
-	Kakariki Ballast Pit-Depots & Others	1922-1936	RDC00064 1.10/1/18
-	Kuripapanga Bridge Repairs	1925-1927	RDC00064 1.10/2/3
-	Main Highways, Bulls Bridge	1925-1928	RDC00064 1.10/2/7
-	Onepuhi Bridge	1930-1934	RDC00064 1.10/4/16
-	Rangitikei River Bridge at Vinegar Hill	1915-1935	RDC00064 1.10/5/5
-	Rangitikei River Bridge Bulls	1925-1929	RDC00064 1.10/5/6
-	Rangitikei River Bridge Bulls	1928-1935	RDC00064 1.10/5/7
-	Rangitikei River Bridge, Bulls-Protective Works	1928-1932	RDC00064 1.10/5/8
-	Rangitikei River Onepuhi Bridge	1914-1920	RDC00064 1.10/5/9
-	Tutaenui Stream Bridge - Tricker's Road - Bulls	1931-1933	RDC00064 1.10/6/9
-	Utiku Ballast Plant	1935-1936	RDC00064 1.10/6/11
1A	Kakariki Ballast Pit-General	1927-1932	RDC00048 1.11/1
2A	Kakariki Ballast Pit –Correspondence	1934-1936	RDC00048 1.11/1
2A	Kakariki Ballast Pit -Correspondence	1930-1949	RDC00048 1.11/1
10A	Kakariki Ballast Pit-Depots & Others	1930	RDC00048 1.11/2
18B	Utiku Metal Pit	1931-1933	RDC00048 1.11/3
18B	Utiku Metal Pit	1931-1936	RDC00048 1.11/3
20C	Tutaenui Stream-Marton	1933	RDC00048 1.11/3
2/1/1	Main Highways-Bridges-Bulls Bridge Protective Works	1936-1941	RDC00049 1.12/3
2/1/2	Main Highways - Bridges Onepuhi Bridge Protective works	1935-1945	RDC00049 1.12/3
2/1/6	Main Highways Bridges - Rangitikei River Bridge at Onepuhi	1946-1947	RDC00049 1.12/3
3/2/2	County Bridges Pourewa and Maungaraupi Stream Bridges	1936-1938	RDC00049 1.12/5
3/2/5	County Bridges Tutaenui Stream Bridge at Crofton	1939-1942	RDC00049 1.12/5
3/2/6	County Bridges Mangapapa Stream Bridge Pukemapou Road Mataroa	1940-1941	RDC00049 1.12/5
3/2/8	County Bridges Hautawa Stream Bridge Turakina Valley Road., Otairi, Hunterville	1940-1947	RDC00049 1.12/5
3/2/10	County Bridges - Mataiaponga Stream Bridge - Pohonui	1946	RDC00049 1.12/5
5/1/4	Lower Rangitikei Water Supply-Misc Matters	1938-1942	RDC00049 1.12/7

5/1/10	Flood Damage	1937-1944	RDC00049 1.12/8
7/2	Kakariki Crushing Plant-General	1936	RDC00049 1.12/8
7/2A	Kakariki Crushing Plant-General	1937	RDC00049 1.12/8
7/2B	Kakariki Crushing Plant-General	1938	RDC00049 1.12/8
7/2C	Kakariki Crushing Plant-General	1939-1940	RDC00049 1.12/9
7/2D	Kakariki Crushing Plant-General	1941-1942	RDC00049 1.12/9
7/2E	Kakariki Crushing Plant-General	1942-1943	RDC00049 1.12/9
7/2F	Kakariki Crushing Plant-General	1944	RDC00049 1.12/9
7/2G	Kakariki Crushing Plant-General	1945-1949	RDC00049 1.12/9
7/3	Utiku Crushing Plant-General	1936-1949	RDC00049 1.12/10
7/3/1	Utiku Crushing Plant -Water Supply	1936-1941	RDC00049 1.12/10
8/1/6A	Rangitikei Catchment Board-Misc Matters	1945-1947	RDC00049 1.12/12
8/1/29	Rangitikei River Diversion at Kakariki	1944-1948	RDC00049 1.12/16
B/1/4	Bridges Moawhango at Taoroa	1946-1952	RDC00065 1.13/4
B/2/24	Bridges - Mokai	1960-1962	RDC00065 1.13/4
C/3/1	Crushing Plants Kakariki Plants	1959-1969	RDC00065 1.13/9
C/3/1	Kakariki Plant	1971-1979	RDC00065 1.13/10
C/3/1/1	Crushing Plants Kakariki General	1966-1975	RDC00065 1.13/10
C/3/1/1	Crushing Plants Kakariki General	1976-1979	RDC00065 1.13/10
C/3/1/2	Crushing Plants Kakariki Protective Works	1944-1959	RDC00065 1.13/10
C/3/1/2	Crushing Plants Kakariki Protective Works	1957-1971	RDC00065 1.13/10
C/3/2	Crushing Plant-Original Plant Utiku	1944-1966	RDC00065 1.13/10
L/2/4/1	Porewa Valley Control Scheme	1963-1975	RDC00065 1.13/16
L/2/4/2	Water and Soil Conservation	1967-1979	RDC00065 1.13/16
L/2/4/3	Tutaenui Stream Flood Control Scheme	1975-1979	RDC00065 1.13/16
R/2/3/4	Maori Trustee Royalty Claims	1968-1977	RDC00065 1.13/32
-	Bridges (Specific): Agnews 1957-1959, Aldworth 1985-1986, Amon 1959-1961, Bald Hill 1959-1960, Blundell 1956-1961, Bradley 1964, Brandon Hall 1956-1966, Bruce 1982, Chirnside 1957-1986, Colenso 1965-1966, Colliers	1956-1986	RDC00069 1.15/2/1

	1957-1960, Collins 1984-1985		
-	Bridges (Specific): Concrete Ford 1958-1960, Dry Gorge 1956-1959, Erewhon 1968-1981, Gordon 1984, Greens 1976-1980, Healy's 1968-1973, Hereford 1957-1960	1956-1984	RDC00069 1.15/2/2
-	Bridges (Specific): Hintz-Mickleson 1956-1986, Jacobsens 1961-1965, Kakakino 1983-1984, Kakariki 1961-1981	1956-1986	RDC00069 1.15/2/3
-	Bridges (Specific): Knights 1960-1979, Koitiata 1960-1968, Leedstown 1959, Lilburns 1957-1959	1960-1979	RDC00069 1.15/2/5
-	Bridges (Specific): Makirikiri 1985, Mangahowhi-Galpins 1948-1955, Mangaohane 1976-1979, Mangarere 1980-1985, Mataiaponga 1956-1958, Mataroa 1959-1961, Moawhango 1950-1956	1957-1979	RDC00069 1.15/3/1
-	Bridges (Specific): McDonells-Kaimatawai 1956-1958, McKinnons 1964-1981, McLeays 1970-1972	1956-1981	RDC00069 1.15/3/2
-	Bridges (Specific): Mokai 1961-1966, Mt Curl 1983, O'Callaghans 1985-1986, O'Keefes 1958-1959, Okirae 1959-1964, Omatane 1987-1988, Onepuhi 1947-1976	1947-1988	RDC00069 1.15/3/3
-	Bridges (Specific): Otaihape 1951-1955, Otara 1980, Otiwhiti 1965, Otupae 1947-1949, Papakai 1956-1961, Papanui 1984-1986, Paulins 1976-1984	1951-1986	RDC00069 1.15/4/1
-	Bridges (Specific): Public Trust 1961-1963, Pukemaupo 1961-1965, Puketoi 1978-1984, Pungatua 1957-1970	1961-1984	RDC00069 1.15/4/2
-	Bridges (Specific): Putorino 1982-1983, Rangitira 1985, Santoft 1985-1986, Schultz 1961-1967, Silverhope 1958, Somersal 1957-1958, Sutherlands 1973-1977, Taruarau 1949-1984, ToeToe 1980-1984	1957-1986	RDC00069 1.15/4/2
-	Bridges (Specific): Totmans 1958-1960, Trickers 1951-1967, Twin Bridge 1971-1977, Vinegar Hill 1973-1977, Weekes 1957-1986, West Road 1957-1965, Williams 1965-1966	1951-1986	RDC00069 1.15/5/1
-	Erewhon Rural Water Scheme: "On Farm" Works 1978 to 1987, Newsletters, Maori Land Negotiations and Water Rights and Special Orders	1978-1987	RDC00069 1.15/17/1
-	Erewhon Rural Water Scheme: General Data 1975-1978	1975-1978	RDC00069 1.15/17/2

-	Erewhon Rural Water Scheme: General Data 1979-1987	1979-1987	RDC00069 1.15/17/3
-	Erewhon Rural Water Scheme-Deeds and Entry Grants	1978-1987	RDC00069 1.15/17/4
-	Erewhon Water Scheme: Subsidy Claims 1977-1984	1977-1984	RDC00069 1.15/18/1
-	Huntermville Rural Water Supply: Design and Administration 1980-1986	1980-1986	RDC00069 1.15/18/3
-	Huntermville Rural Water Supply: Pipeline Construction/ Materials 1984-1987, Intake Construction / Water Quality 1984-1987, Disputes Data, Newsletters, Connections, Questionnaire	1984-1987	RDC00069 1.15/19/2
-	Huntermville Rural Water Supply: Vinegar Hill Domain 1987, General Data 1980-1987, Subsidies and Claims 1981-1988	1980-1987	RDC00069 1.15/20/2
K05/0001	Kakariki RWCB	1981-1983	RDC00079 1.14/21
K05/0003	Kakariki Crushing Plants	1978	RDC00079 1.14/21
K05/0003	Kakariki Crushing Plants	1980	RDC00079 1.14/21
K05/0003	Kakariki Crushing Plants	1981-1982	RDC00079 1.14/21
K05/0003	Kakariki Crushing Plants	1981-1983	RDC00079 1.14/21
K05/0003	Kakariki Crushing Plants	1984-1985	RDC00079 1.14/21
K05/0003	Kakariki Crushing Plants	1986-1987	RDC00079 1.14/21
M20/0003	Materials Metal pits Maori Trustee Royalty Claims	1981	RDC00079 1.14/21
M20/0003	Materials Metal pits Maori Trustee Royalty Claims	1981-1982	RDC00079 1.14/21
M20/0003	Materials Metal pits Maori Trustee Royalty Claims	1984-1985	RDC00079 1.14/21
M20/0003	Materials Metal pits Maori Trustee Royalty Claims	1986-1987	RDC00079 1.14/21
R65/0001	Rivers Rangitikei	1982	RDC00079 1.14/26
R65/0001	Rivers Rangitikei	1984-1985	RDC00079 1.14/26
W10/0030	Erewhon & Omatane Rural Water Scheme	1986-1987	RDC00079 1.14/40
-	Taihape Borough Council Minutes of the Electric, light & waterworks committee	1913-1922	RDC00025/1
-	Taihape Borough Council Minutes of the Electric, light & waterworks committee	1922-1933	RDC00025/2
-	Taihape Borough Council Minutes of the Electric, light & waterworks committee	1934-1939	RDC00025/3



### Manawatu District Council (and predecessors) files

	Bridges: Pourangaki, Upper Kawhatau Road	1958	MDC 00010:2:2b/32
	Bridges: Rangitikei - Onepuhi	1945-1965	MDC 00010:2:2b/3
	Bridges: Rangitikei River – Mangarere Road	1945-1965	MDC 00010:2:2b/12
	Bridges: Twin Bridges Hikurangi/Upper Kawhatau	1945-1965	MDC 00010:2:2b/26
	Bridges: Wilsons, Upper Kawhatau Road		MDC 00010:2:2b/30
	Kiwitea No.2 (Waituna West) Water Supply Scheme – Engineering & Technical	1980-1982	MDC 00010:33:19p/2
	Kiwitea No.2 (Waituna West) Water Supply Scheme – Engineering & Technical	1981-1985	MDC 00010:33:19p/2
	Kiwitea No.2 (Waituna West) Water Supply Scheme – Waituna, Miscellaneous	1980-1983	MDC 00010:33:19p/0
	Kiwitea No.3 (Kawhatau) Water Supply Scheme	1975-1982	MDC 00010:33:19r/0
	Main Highways No.377, Rewa Bridge	1948-1963	MDC 00010:20:13/3/5
	Soil Conservation and River Control, Mangawharariki Dam	1973-1978	MDC 00010:34:20d/6
	State Highway 54, Rangitikei River Bridge	1970-1985	MDC 00010:35:20g/0/5
	Catchment Boards - Rangitikei	1943-1965	MDC 00024:3:7
	Catchment Boards – Rangitikei	1968-1971	MDC 00024:3:8
	Catchment Boards - Rangitikei	1958-1971	MDC 00024:3:9
	Catchment Boards – Rangitikei metal royalties	1969-1971	MDC 00024:3:10
	Catchment Boards – Rangitikei Wanganui	1974-1976	MDC 00024:3:11
	Catchment Boards – Rangitikei Wanganui	1975-1981	MDC 00024:3:12
	Catchment Boards – Rangitikei Wanganui	1976-1977	MDC 00024:3:13
	Catchment Boards – Rangitikei Wanganui	1978-1980	MDC 00024:3:14
	Catchment Boards – Rangitikei Wanganui	1982-1985	MDC 00024:3:15
	Catchment Boards – Rangitikei-Wanganui	1971-1981	MDC 00024:9:18

	Catchment Boards – Rangitikei-Wanganui – General / Subsidy Claims / Rangitikei River Conservation order / Shingle extraction / water rights	1985-1988	MDC 00024:51:9
	Catchment Boards – Rangitikei Wanganui – Gravel Extraction	1979	MDC 00024:3:16
	Catchment Boards – Rangitikei Wanganui – Gravel Extraction	1979-1980	MDC 00024:3:17
	Catchment Boards – Rangitikei Wanganui – Gravel Licences	1964-1981	MDC 00024:3:18