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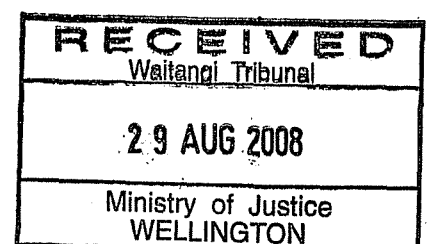
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**SOME ASPECTS OF CROWN  
INVOLVEMENT WITH WATERWAYS IN  
THE WHANGANUI INQUIRY DISTRICT**

**An overview report commissioned by Crown Forestry Rental Trust**

**David Alexander**

**August 2008**



## PREAMBLE

### DO MAORIS POSSESS FISHING RIGHTS TO BEDS OF STREAMS?

MARTON, Last Night (S.R.)—Commenting that he was hazy about the rights Maoris may have to the beds of streams, the engineer, Mr. H. Murray Reid, raised an interesting point at the monthly meeting of the Rangitikei Catchment Board today.

Recently, the board received a complaint from settlers about a blockage in the Whangaehu River at Kauangaroa. It was felt that in the event of a flood this blockage was liable to form a dam—and cause scouring of the nearby bank.

An inspection was made and the block identified as an eel trap. It was promptly removed.

Mr. L. A. Mackintosh (Whangaehu) who originally drew the board's attention to the blockage, following complaints from farmers, said at the meeting today that nobody knew who had placed the eel trap there. The Maoris disclaimed responsibility but were annoyed about its removal.

"This raises the question of what rights the Maoris may have to the beds of streams, said the engineer. "I'm a bit in the dark as to what their fishing rights are. It's a point that could be cleared up because the board might be involved in litigation some time or other."

If the trap were left there and a certain type of flood occurred, a block could form and deflect the river to a bank where scouring was already taking place.

The chairman, Mr. K. A. Williams (Marton), said that the Maoris could obtain permission to erect eel traps which would be cited in approved places.

A member: But these sites may not suit the Maoris.

The question of what fishing rights the Maoris may have had occurred to him when the trap was being removed said Mr. Mackintosh. "I was wondering if we were interfering with the rights of the Maoris, who look on eels as food," he added.

The chairman: I don't think anybody is clear as to what rights the Maoris have.

The discussion lapsed.

Wanganui Chronicle, 26 May 1950

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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 B.A. (Honours) degree in Geography, and a M.Sc. degree in Conservation. I am a full Member of the New Zealand Planning Institute.

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. 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 and East Coast claims.

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

## 1.2 Project Brief

This report was commissioned by the Crown Forestry Rental Trust as one of a series of historical research reports into events occurring in the Waitangi Tribunal's Whanganui Inquiry District. The project was subject to strict timeframes, and was structured to confine the issues to just four particular aspects of Crown involvement. The project brief sought a targeted, 'issues-based' report that would assist parties to understand the impacts of certain Crown acts and/or omissions, and local government regimes, on the Whanganui environment, and Whanganui Maori control and/or access to particular waterways and related resources.

The four matters to be examined are:

### **1.2.1 Groundwater**

- Investigate issues surrounding ownership of groundwater or artesian water supplies.
- Examine any central or local government legal/policy frameworks or licensing regimes for this resource.
- Carry out a review of past and current legislative and planning regimes, and consider any Whanganui Maori responses to these regimes documented in official records.

A separate report has been commissioned by Crown Forestry Rental Trust about the distribution of the groundwater resource in the inquiry district, the extent of abstraction, and the environmental impact of that abstraction.

### **1.2.2 Environmental Effects of the Tongariro Power Development Scheme**

- Consider documentary evidence pertaining to any downriver environmental effects of the Tongariro Power Development (TPD) scheme (in particular the Eastern Diversion) on the Whanganui River and other waterways in the Whanganui Inquiry District.
- Examine any impacts of the scheme on river levels, flora and fauna, customary fisheries, customary river usage and adjacent lands (including wahi tapu) in the Whanganui Inquiry District.
- Examine whether compensation was paid for the diversion of water for this scheme in the Whanganui district, and whether this was appropriate.

The examination of the effects of the TPD was to be within the context that Waitangi Tribunal inquiries had already been undertaken, or were underway, for the Whanganui River (insofar as the interests of Atihaunui a Paparangi were concerned) and the National Park Inquiry District, so that there was no need to duplicate what had already been addressed.

### **1.2.3 Draining of Waterways**

- Investigate circumstances surrounding the draining of certain lakes and swamps in Whanganui Inquiry District, utilising case studies, such as the draining of Lake Ngarongokahui for railways purposes.
- What consultation, if any, was carried out with tangata whenua? Was compensation paid? What, if any, environmental effects resulted from this action?

### **1.2.4 Roadworks and Geological Extractions**

- Take account of whether local government and non-governmental interventions, such as road-works or gravel, scoria or pumice extraction, impacted upon certain waterways in the Whanganui Inquiry District, for example Lake Te Ahu o te Rangi, or the Otoko and Pahihi Streams.

Each of these four topics was required to address the waterways and water resource issues identified by the Waitangi Tribunal, which have been set out in Appendix 2 to its Direction of 10 July 2007<sup>1</sup>. In particular the following issues were to be borne in mind:

- What were/are the relevant Crown legislative regimes and local government management regimes in respect of Whanganui waterways?
- Were Whanganui Maori given the opportunity to be involved in the management of Whanganui waterways? Did they ask to be involved?
- Has the Crown ensured the protection of Maori use rights over these waterways?
- What environmental impacts on the Whanganui waterways and associated environment, if any, have resulted from Crown acts and omissions and local government interventions in Whanganui?

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<sup>1</sup> WAI-903 Document #2.3.52.

Appendix 2 is a revisiting, refinement and replacement by the Tribunal of an earlier statement of issues prepared by it (Chapter 17: Waterways and Water Resources of Statement of Issues, WAI-903 Document #1.4.2).

The project brief envisages that this report will build upon (and not duplicate) the work of an earlier research report by Cathy Marr<sup>2</sup>.

### **1.3 Research Sources**

The material in this evidence is based primarily on a search of Crown records. I have worked on the basis that claimants are capable of giving their own evidence and are better placed to present evidence from Maori sources. Indeed, many claimants had already presented their evidence to the Tribunal before the research for this report was commenced. The result is that, because the Crown records are largely silent on the subject (see the next section of this Introduction), the cultural connection that Maori have for waterways is not canvassed in this evidence, even though it goes to the heart of breaches of the Treaty of Waitangi that are being claimed.

Local government as well as central government has been heavily involved in modifying and changing waterways. Shortness of time allowed for the research component of this project prevented any examination of territorial local authority records. However, it was possible to examine some of the records of the Rangitikei-Wanganui Catchment Board and Regional Water Board. I am indebted to Noeline Wevell of Manawatu-Wanganui Regional Council (Horizons Regional Council) for providing me with access to these records.

Throughout this report I have used the spelling ‘Whanganui’ for the river and the Inquiry District, and the spelling ‘Wanganui’ for the city. The spelling used in quotations is as in the original.

### **1.4 Chief Feature of the Crown’s Behaviour**

Despite this report addressing only some aspects of waterways and the relationship between the Crown and Maori, it has been possible to identify one strand of that relationship, or lack of it, that pervades the whole of the historical discussion. This is the continued absence of consideration by the Crown for Maori interests in waterways.

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<sup>2</sup> C Marr, *Crown Impacts on Customary Maori Authority over the Coast, Inland Waterways (other than the Wanganui River), and associated mahinga kai in the Whanganui Inquiry District*, June 2003. WAI-903 Document #A36.



The Treaty of Waitangi guarantees to Maori their tino rangatiratanga over their taonga. The Waitangi Tribunal has already declared that the Whanganui River is a taonga for Atihaunui a Paparangi, and waterways generally are almost certainly at the heart of what would be identified as taonga (though it is for Maori themselves to make that judgement). Yet the Crown files examined for this report, and for other briefs of evidence I have prepared on other topics and in other parts of the country, are silent about the terms “tino rangatiratanga” and “taonga”. In historical terms, the Crown has conspicuously failed to examine what the terms mean for the way it manages its own activities, for the way it undertakes its relationship with Maori, and for the recognition it gives to Maori customary interests.

The result is that Maori viewpoints about activities affecting waterways are absent from Crown records, and have to all intents and purposes largely gone underground. For a researcher, it is frustrating to examine files discussing activities over the last 150 or so years that must undoubtedly have affected Maori, and not find any mention of the effects they experienced, the pain they must have suffered, and the anger they must have felt. Yet the absence of any reference to Maori interests is in itself a statement to be made about the manner in which the Crown has acted.

By failing to tease out what its relationship with Maori has meant in the management and use of waterways, the Crown has imagined that it could act unilaterally, without consulting with Maori, without considering any need for compensation, and without giving any thought to any limitations or checks on its powers that the existence of the Treaty might impose. The lack of consideration for Maori interests became embedded in the cultural mindset of Crown officials, passed down from one generation of officials to the next.

The Crown’s approach was the benchmark adopted by local government. Because the Crown gave no consideration to Maori interests, local government organisations did not either, and were left with no points of reference for assessing their own activities. The newspaper clipping that is reproduced as the preamble to this report encapsulates this absence of regard by statutory authorities for a Maori dimension to waterways,

and the vacuum in policy thinking<sup>3</sup>. In 1950 a blockage to drainage is identified at Kauangaroa on the Whangaehu River. Under the catchment board regime established by the Crown, which places a high value on unimpeded drainage and the control of rivers, any blockage is inherently a problem, and should be dealt with. The blockage is found to be a Maori “eel trap”. The blockage is promptly removed, the local catchment board member wondering as he arranged the removal whether or not he was doing the right thing. When asking the question after the event, no one is able to give him an answer about the rights to the river held by Maori, because the Crown and the legislation are silent on the subject. The newspaper clipping is placed on a Crown district office file without any comment or investigation. It is not brought to Wellington’s attention.

The absence of a Crown policy position not only paralysed both central and local government, but also encouraged a presumptive attitude that no (or few) Maori rights to or interests in waterways existed. This attitude was bolstered by the lack of recognition of Maori rights and interests, and no mention of the Treaty, in legislation. Each statute is administered in a particular government department. If there is no legislation, then there is no Minister or official with administrative responsibility for ensuring that the Crown recognises and protects the tino rangatiratanga of Maori to their taonga. When no rights are specified in policy or legislation, there will be a tendency for those rights to become invisible, and eventually to be thought of as not existing at all. This has been the case with waterways and their resources.

There are instances where Crown attitudes to waterways have actively clashed with Maori attitudes. A case in point has been the Crown’s interest in encouraging navigation on the Whanganui River, while Maori have pursued its central place in their culture and its importance as a source of food. In that instance the Crown sought to assert its own authority, rather than seek an accommodation with Maori. A similar response might very well have been forthcoming from the Crown if Maori had actively challenged the Crown on other matters concerned with waterways. This is because the Crown has tended to develop some almost dogmatic views about the place of waterways in the life of the nation. For colonisation and settlement purposes,

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<sup>3</sup> *Wanganui Chronicle*, 26 May 1950. Copy on Works and Development Wanganui file 96/331001. Supporting Papers #382.

rivers needed to be controlled to prevent flooding and to provide smoothed waterways enabling efficient drainage. They could be harnessed for hydro-electric power generation. Their dilution capacity was a way to remove and render harmless effluent and pollution. Drainage of swamps and wetlands could provide more productive farmland.

However, active clashes, where Maori have sought to assert their tino rangatiratanga, have tended not to happen. Only with respect to the Whanganui River was there a sustained level of Maori activism, as itemised in the Tribunal's Whanganui River Report. Elsewhere in the Inquiry District, by contrast, the official Crown records examined for this evidence have not disclosed any substantive Maori comment about changes to waterways. The records discussed in this evidence comprise examples only of the widespread range, extent and timing of the changes that have occurred. It is therefore possible that they are not fully representative of the engagement that Maori has had with the Crown on the subject of waterways. What is more likely, however, is that the examples are representative, with a lack of complaint by Maori being a rational reaction to the Crown's unresponsiveness, and its marginalisation of Maori viewpoints. If this is correct, Maori did not cease to have views, but they did cease to express them to the Crown, knowing from experience how unsympathetic the Crown would be to those views.

## 2. GROUNDWATER

### 2.1 Introduction

The legal regime applying to groundwater can, for convenience, be split into four parts:

- Common law, applying from 1840 to 1968
- Underground Water Act 1953, enabling rather than mandatory legislation that could supersede common law where it was applied by Order in Council
- Water and Soil Conservation Act 1967, applying from 1968 to 1991
- Resource Management Act 1991, applying since 1991

It should be noted that geothermal steam is a superheated form of groundwater<sup>4</sup>. It has tended to be addressed differently to groundwater in statute law (eg Geothermal Steam Act 1952 and Geothermal Energy Act 1953), because rights to use geothermal steam were expropriated (vested solely in the Crown), while this did not occur at the same time with groundwater. Whether the different treatments of underground water and geothermal steam are appropriate in Treaty jurisprudence is beyond the scope of and not examined in this report. It is possible that some observations and findings by the Waitangi Tribunal in earlier reports about the ownership and management of geothermal resources are also relevant to the ownership and management of groundwater.

### 2.2 Common Law

The English common law was imported into New Zealand with the passing of the English Laws Act 1858. This Act, which applied to New Zealand the laws of England as at 14 January 1840, contained no specific qualification that English law had to be read in the context of the existence of the Treaty of Waitangi, though it did state that the laws were to be applied “so far as applicable to the circumstances of New Zealand”.

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<sup>4</sup> The Ministry of Works, administrator of both the Underground Water Act 1953 and the Geothermal Energy Act 1953, commented in 1964: “Exactly when underground water in a geothermal area becomes subject to the Geothermal Energy Act or vice versa seems to be a difficult matter, and the same water may be subject to both Acts and to two separate systems of control”. Submission 30 of Ministry of Works to Interdepartmental Committee on Water, 31 March 1964, at Section IV Paragraph 1(20)(a). Copy on Treasury Head Office file 40/754. Supporting Papers #99-151, at #114.

Boast has identified that the common law of England concerning groundwater was differentiated from the common law concerning surface waters by a Court decision in 1843<sup>5</sup>. With surface waters, riparian rights applied, meaning that a downstream riparian owner was entitled to receive waters of undiminished quantity and quality, and upstream riparian owners were therefore restricted in the degree of modification they could effect to waters and waterways. The effect of the 1843 decision was to replace this, so far as sub-surface water was concerned, with a right to capture water. Owners of the surface of the land could tap into the groundwater resource beneath their land, and were free to extract as much groundwater as they wished, whether or not the abstraction, or the effects of abstraction, extended beyond the property boundary. Prior rights or abstractions were not recognised, and the only recourse that neighbouring landowners had was to extract water themselves.

A Government committee reporting in 1947 set out the perceived defects of such a state of affairs:

- (a) Owners of land have unfettered rights to all water under their land which does not flow in defined channels;
- (b) They may abstract unlimited quantities for their own use, or for their businesses, or for sale to others;
- (c) They may allow any water not required by them to run to waste;
- (d) They, or the Crown in the course of tunnelling, may divert it or appropriate it as they please so that a neighbouring owner of land may have no underground water, or so that the neighbour's stream or well may be diminished in volume;
- (e) There is no remedy against a person who pollutes the underground supply by the deposit or discharge of substances which foul the subsoil in the vicinity of his land, unless the precise source of pollution can be proved, which is very difficult;
- (f) There is nothing to prevent the establishment of a cemetery or an industry, with objectionable industrial wastes, over water-bearing ground.<sup>6</sup>

When discussing the common law on water generally in 1963, the Solicitor General stated:

The keynote of [the common law] is “first come, first served”, everyone being anxious to protect his own position, and nobody caring about the community position. The characteristic of that original stage of development of law was

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<sup>5</sup> *Acton v Blundell* (1843) 12 M & W 324, 152 ER 1223, referred to in R Boast, A Erueti, D McPhail and NF Smith, *Maori Land Law*. LexisNexis, Wellington, Second Edition, 2004, page 268.

<sup>6</sup> Chairman, Technical Committee Hydrological Data, to Chairman Soil Conservation and Rivers Control Council, 27 September 1947. Works and Development Head Office file 28/439. Supporting Papers #152-164.

concentration on the rights of the individual; each man's right to take and use water and to protect his own rights, in contradistinction to any concern about the community as a whole. That was all right for primitive agriculture, but it is no good at all when industrial development sets in.<sup>7</sup>

The counter-position to this was that because rights of access to underground water were property rights that went with the land (including Maori-owned land) and passed with any transfer of the land, a government would tamper with these at its peril.

### **2.3 Underground Water Act 1953**

The common law survived uncontested in New Zealand for just over one hundred years. It was only in the 1940s that concerns were raised about uncontrolled abstraction of groundwater in places such as the Taieri Plains of Otago, the Heretaunga Plains of Hawke's Bay, and the Hutt Valley. The Municipal Association of New Zealand passed a remit at its 1948 annual conference that "asked for legislation to give local authorities a reasonable measure of control as to the sinking of artesian bores, the sealing of disused wells, and generally to prevent the waste of underground water"<sup>8</sup>.

The Crown agreed to the drawing up of legislation that would allow the common law to be superseded to a limited extent. An amendment to the Soil Conservation and Rivers Control Act 1941 was drafted in 1949<sup>9</sup> to enable, in instances where the groundwater resource was over-exploited (known as Water Conservation Areas), the Soil Conservation and Rivers Control Council (which had been established under legislation passed in 1941) to regulate the use of underground water resources.

The proposed legislation attracted substantial opposition from industry, in particular from operators of freezing works and cement works, who felt that their own very large abstractions might be threatened with requirements to cut back. The Bill was

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<sup>7</sup> *NZ Law and Administration in Respect of Water: Report to Cabinet by the Interdepartmental Committee on Water*, March 1965, at Paragraph 156. Supporting Papers #287-374, at #346-348

<sup>8</sup> Secretary Municipal Association of New Zealand Inc to Minister of Works, 23 June 1949. Works and Development Head Office file 28/439. Supporting Papers #166-167.

<sup>9</sup> Chairman Soil Conservation and Rivers Control Council to Minister of Works, 22 April 1949, approved by Minister, 29 April 1949. Works and Development Head Office file 28/439. Supporting Papers #165.

therefore shelved for a number of years, but the problems of over-exploitation did not go away, as was explained in a memorandum in 1950:

Underground water is being relied upon to an ever increasing extent for drinking supplies as well as for commercial purposes, and the quantities drawn off, and the possibilities of pollution, are of increasing concern. Some specific concerns are the Wellington City, Petone and Lower Hutt City all drawing artesian water from the Hutt Valley; Christchurch City drawing local artesian water; and Dunedin drawing artesian water from Taieri Plains. In the Hutt Valley the possibility of pollution is considered to be serious, while in respect of the Dunedin proposals Mosgiel has already protested that a test drawoff by the City affected water supplies at a distance of half a mile.<sup>10</sup>

In 1952 the legislation was revived as part of a Public works Amendment Bill, but Cabinet asked that it be circulated to interested bodies and organisations, to see if opposition could be forestalled. Although this intention was not successful, with negative comments received from Federated Farmers, the Manufacturing Association and the North Island Freezing Companies Association<sup>11</sup>, the Government decided to persevere<sup>12</sup>, and introduced the Underground Water Bill into Parliament in 1953. The preamble to the Bill stated that it was “to provide for the control of the tapping, use and pollution of underground water”. By this time the appointment of the Soil Conservation and Rivers Control Council to manage the resource had been dropped, at the request of the Municipal Association, in favour of the Governor General (by Order in Council) appointing the territorial local authority as an Underground Water Authority. By passing bylaws, an Underground Water Authority would be able to prevent unauthorised abstractions, set up procedures for authorising abstractions, define how abstractions could occur, and prevent waste and pollution.

The Minister of Works, when speaking to the Bill in Parliament, explained:

[Under common law] every landowner has the right to bore and take underground water indiscriminately, and that is an unrestricted right. It could have serious repercussions for industries depending on the use of water if their supply was cut off or, as has happened, if it was polluted.... It is no use

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<sup>10</sup> Commissioner of Works to Minister of Works, 6 June 1950. Works and Development Head Office file 28/439. Supporting Papers #168.

<sup>11</sup> Office Solicitor to Commissioner of Works, 7 May 1952. Works and Development Head Office file 28/439. Supporting Papers #169.

<sup>12</sup> Commissioner of Works to General Secretary Federated Farmers of NZ Inc, 28 May 1953, Commissioner of Works to Secretary NZ Manufacturers' Federation, 28 May 1953, and Commissioner of Works to Secretary North Island Freezing Companies Association, 29 May 1953. Works and Development Head Office file 28/439. Supporting Papers #170-171, 172-173, and 174-175.

having rights to bore for and take underground water if someone else, possessing a like right, can come alongside and cut off your supply.<sup>13</sup>

The Act was drawn up in and administered by the Ministry of Works. A search of that Ministry's surviving files<sup>14</sup>, and Parliamentary Debates for the year 1953, has found no record of any consultation with Maori about the introduction of the legislation, no record of any consideration of its purpose and application in the context of the Treaty of Waitangi, and only one comment by a Maori Member about the legislation during its passage through Parliament. Without referring to the Treaty or any specific rights held by Maori, Eruera Tirikatene expressed concern for the protection of the rights of individual landowners, somewhat confusing his argument with an example about the unsatisfactory legal circumstances of the Arowhenua marae that had only an informal rather than a formal arrangement with a neighbour to draw water for the marae from a bore on the neighbour's land. The Minister's response was that landowners affected by any decision of an Underground Water Authority had a right of appeal to the Magistrate's Court or the Supreme Court against the Authority's decision<sup>15</sup>.

The law relating to geothermal energy was also amended in 1953. Given that the Underground Water Act had been in development since 1948, and given that the Geothermal Energy Act 1953 was a rewriting of the Geothermal Steam Act 1952, the similar dates for legislation about groundwater and geothermal steam seem to be coincidental. However, the dramatic differences in approach between the two resources (one providing for limited management by bylaw, the other providing for vesting solely in the Crown), even though there was undoubted overlap between them, suggests a pragmatic approach by the Crown driven more by the Crown's own needs and priorities than by a desire for what was in the best interests of the resources themselves.

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<sup>13</sup> Minister of Works, 25 August 1953. *New Zealand Parliamentary Debates*, Volume 299, page 667. Supporting Papers #538.

<sup>14</sup> Works and Development Head Office file 28/439 (3 volumes). Archives New Zealand Wellington reference AAQB W4073 Box 226.

<sup>15</sup> Eruera Tirikatene, and Minister of Works, 25 August 1953. *New Zealand Parliamentary Debates*, Volume 299, pages 686-687 and 688. Supporting Papers #539 and 540.



By the mid 1960s, when the Water and Soil Conservation legislation was being prepared, Underground Water Authorities had been established in only five districts in New Zealand<sup>16</sup>. None of these districts was in the Whanganui Inquiry District, where the common law therefore still applied.

#### **2.4 Water and Soil Conservation Act 1967**

Nearly ten years after the passing of the Underground Water Act 1953 (and the Geothermal Energy Act 1953), concern for the pressures that all the water resources of New Zealand were under prompted the Crown to review the full breadth of the law applying to water, including groundwater. Another stimulus to action was that a comprehensive Water Resources Act had been passed in the United Kingdom in 1963, so that further developments of the common law from that source could no longer occur. In July 1963 Cabinet put the review in the hands of an Interdepartmental Committee headed by a former Office Solicitor for the Ministry of Works.

One of the first actions of the Committee was to circulate government departments asking them for their ideas<sup>17</sup>. The Department of Maori Affairs, upon receipt of the request, distributed it to its district offices. The district replies mostly commented about the more practical applications of water use, such as water supply to Maori communities and on development schemes, rather than addressing the legal principles surrounding water ownership. Only one comment, from the District Welfare Officer in the Wanganui district office, mentioned the Treaty of Waitangi.

The Treaty of Waitangi makes provision for the protection of rivers, lakes, etc, and due consideration must be given to the Agreement set out in the Treaty....

As I see it, the difficulties exist in the confusion that has been brought about by the variation in the articles of the Treaty of Waitangi which has allowed other enactments to encroach on properties at one time guaranteed by Queen Victoria to her Maori subjects.

If the bringing down of a comprehensive Water Act will help clarify the present situation, and so long as it does not conflict with the articles of the

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<sup>16</sup> Onehunga, Heretaunga Plains, Franklin, Hutt Valley, Rotorua.

<sup>17</sup> Chairman, Interdepartmental Committee on Water, to All Permanent Heads, undated (received 30 July 1963). Maori Affairs Head Office file 19/1/75. Supporting Papers #85-87.

Treaty of Waitangi, then I would recommend that consideration be given to the desirability of taking action to introduce a Water Act Bill for discussion.<sup>18</sup>

However, when the head office of Maori Affairs came to pool the comments from its district offices together into a single departmental submission to the Interdepartmental Committee, it omitted any reference to the Treaty. Its comments on the legal position of water were limited to remarks about the vesting of the beds of navigable rivers in the Crown, the *ad medium filum aquae* presumption, the legal status of the foreshore following the Ninety-Mile Beach case, the legislative provision for a public right of way around Lake Taupo, the vestings of Lake Rotoaira and the bed of the Arahura River in Maori, and the existence and protection of Maori fishing rights. There was nothing about the water *per se*<sup>19</sup>.

None of the 40 or so other departmental submissions to the Committee mentioned the Treaty either<sup>20</sup>. Submissions from other departments did discuss the ownership of water, but only in the context of common law, and the limited scope of statute law, applying at that time.

So far as groundwater was concerned, there was no mention in the Maori Affairs Department's submission. The Ministry of Works put forward a view that suggested that the Underground Water Act was failing to achieve its purpose, or had failed to arrest the decline that had prompted the passing of the Act:

Difficulties are already arising through excessive draw off from surface and underground sources reducing the water table and underground supplies, and in some places there is an ever-present possibility of irreversible pollution of remaining underground water by inflow of seawater to replace groundwater.<sup>21</sup>

The Interdepartmental Committee, when it reported in March 1965, identified more than 50 pieces of legislation (administered in 11 government departments) affecting

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<sup>18</sup> District Welfare Officer Wanganui to Assistant District Officer Wanganui, 20 August 1963, attached to Assistant District Officer Wanganui to Acting Secretary for Maori Affairs, 20 August 1963. Maori Affairs Head Office file 19/1/75. Supporting Papers #88-92.

<sup>19</sup> Report on Water by the Department of Maori Affairs, undated. Maori Affairs Head Office file 19/1/75. Supporting Papers #93-95.

<sup>20</sup> The submissions are collated in Treasury Head Office file 40/754. Archives New Zealand Wellington reference T1, Box 22.

<sup>21</sup> Submission by Ministry of Works, quoted in *NZ Law and Administration in Respect of Water: Report to Cabinet by the Interdepartmental Committee on Water*, March 1965, at Paragraph 39. Supporting Papers #287-374, at #307.

rights of use of water, plus more than 30 further acts referring to water more generally, together with the residue of the common law. It mentioned the Treaty of Waitangi only once, in reference to the provision in the English Laws Act 1858 that the laws of England were to apply in New Zealand “so far as applicable to the circumstances of New Zealand”:

Bearing in mind the origins of the English systems of ownership of land and water on the one hand, and on the other the Treaty of Waitangi guarantee to the Maoris of the “full, exclusive and undisturbed possession of their lands and estates, forests, fisheries and other properties”, it seems difficult to be sure exactly how far the Common Law doctrines as to river-bank boundaries, lake-side boundaries, ownership of highways and rights of passage are “applicable to the circumstances of New Zealand”.<sup>22</sup>

There was no further consideration given to the status of the Treaty in a contemporary context.

The Committee commented only briefly on groundwater and the Underground Water Act:

[When discussing conflicts in respect of water] Tapping underground sources can benefit one abstractor at the expense of the whole community. [Paragraph 50]

[When discussing the deterioration of bores] There is a very definite physical problem in respect of old bores into artesian sources, the bores deteriorating and allowing the ingress of pollutants into that supply, and the transfer of pollutants from one stratum to another according to pressures at the different levels and times. This ... is more an administrative problem. [Paragraph 54]

[On the relationship between underground and geothermal waters, and surface waters] It does not seem practicable to have, in respect of the rights to take and use underground and geothermal waters, laws that differ from those in respect of surface streams. The aim should be ultimate unified administration; but in some areas independent administration already exists and continuity is important. Uniform law can be achieved in the one statute, and uniform administration can follow as the state of readiness permits. [Paragraph 70]

[On the difficulties arising from the existing underground and geothermal legislation] The position of underground water, whether in underground streams or percolating or contained, and whether cold or hot or steam, is considered to be no different in any principle from surface water, and for successful administration should be under the same controls. Nevertheless, reorganisation on the lines proposed must take time, and in the interim the Underground Water Authorities and local authorities who now exercise

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<sup>22</sup> *NZ Law and Administration in Respect of Water: Report to Cabinet by the Interdepartmental Committee on Water*, March 1965, Paragraph 57(3). Supporting Papers #287-374, at #311.

controls should continue to do so. The Regional Water Authorities may in fact find that continuation of the functioning of those bodies in this field, subject only to control when conflicts arise, is a desirable mode of administration for indefinite continuation. For these reasons the Committee proposes that legislation should provide that the continuation of existence of Underground Water Authorities should be reviewed from time to time by the Regional and National Water Authorities, and in each case be subject to decision of the Local Government Commission, based upon efficiency of functioning. [Paragraph 111]

[On the lack of information about groundwater] There is reported to be a lack of cooperation of drilling firms with the Geological Survey, making it almost impossible to obtain logs of [bore] holes drilled. It seems that some form of coercion is necessary in the public interest to ensure that information is available as to quality and quantity of water, depths at which found, and the ground strata pierced. [Paragraph 125]<sup>23</sup>

Notwithstanding the Committee's identification of the Treaty guarantees as constraining the application of any laws, it then proceeded to recommend that a National Water Authority should be established at the apex of a new administrative structure. Its role would be to ensure

the coordination of all matters relating to water so as to ensure as far as possible that this national asset is available to meet as many demands as possible, and is used to the best advantage of both the nation and the whole of the region in which nature provides it.<sup>24</sup>

The Authority would be an umbrella agency over the existing Soil Conservation and Rivers Control Council, the existing Pollution Advisory Council, and a new Water Quality Council. There would be new Regional Water Authorities to carry on the role of existing Catchment Boards, and to administer the new functions of water conservation and water allocation, including the hearing of objections and resolution of disputes about water. Among the Regional Water Authorities' responsibilities would be:

Responsibilities now given to Underground Water Authorities (perhaps these bodies might continue for a time under some form of delegation, but no new ones to be created).<sup>25</sup>

The Committee also recommended a single Water Act to overcome the fragmentation of the law on water, to codify any of the English common law that still survived and

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<sup>23</sup> *NZ Law and Administration in Respect of Water: Report to Cabinet by the Interdepartmental Committee on Water*, March 1965. Supporting Papers #287-374.

<sup>24</sup> *NZ Law and Administration in Respect of Water: Report to Cabinet by the Interdepartmental Committee on Water*, March 1965, First Schedule, Clause A(1). Supporting Papers #287-374, at #351.

<sup>25</sup> *NZ Law and Administration in Respect of Water: Report to Cabinet by the Interdepartmental Committee on Water*, March 1965, Third Schedule, Clause 3. Supporting Papers #287-374, at #356.

applied in New Zealand, and to provide some uniformity of approach. The Underground Water Act 1953 would be included in this statutory consolidation<sup>26</sup>. In making these recommendations, there was no mention made of their relationship to or with the provisions of the Treaty.

The Interdepartmental Committee's report came to hand at the same time as a review of the Soil Conservation and Rivers Control Council was completed. This review, by the head of the Soil Conservation Service in the United States, was itself made the subject of an interdepartmental review committee. Eventually, in February 1966, all three review reports were considered by a Caucus Committee on Water Administration<sup>27</sup>, whose report was considered by Cabinet in April 1966<sup>28</sup>.

Cabinet committed the Crown to the development of a Water and Soil Conservation Act that would apply to all waters, both on and below the surface of the land<sup>29</sup>. It was envisaged that the intended Act would be developed in two stages. The first stage would be to appoint a Crown agency, the National Water and Soil Conservation Authority, to be responsible for all matters relating to water, and for the nationwide application of the new powers provided in the legislation. The second stage, to be led by the new Authority, would be the consolidation of all the statutory powers relating to water into a single statute.

Neither the Government committees that reported during 1965-1966, nor Cabinet, had addressed a fundamental issue, which was the legal foundation upon which the Crown's new powers would rest. All had rather blithely assumed that the new powers could be brought into existence, without addressing the basis upon which that would happen. The Underground Water Act in 1953 had provided for the powers it contained by authorising the drawing up of bylaws that would enable the Underground Water Authorities to insist on their permission being gained for drilling

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<sup>26</sup> *NZ Law and Administration in Respect of Water: Report to Cabinet by the Interdepartmental Committee on Water*, March 1965, Paragraphs 145-149. Supporting Papers #287-374, at #342-343.

<sup>27</sup> Report of Caucus Committee on Water Administration, undated draft. Works and Development Head Office file 28/455. Supporting Papers #176-185.

<sup>28</sup> These various reports are discussed more fully in MM Roche, *Land and Water: Water and Soil Conservation and Central Government in New Zealand, 1941-1988*. Historical Branch Department of Internal Affairs, Wellington, 1994, pages 98-104.

<sup>29</sup> Cabinet Minute CM 66/12/17, 12 April 1966. Works and Development Head Office file 28/455. Supporting Papers #186-191.

bores and abstracting underground water. The Water and Soil Conservation Bill, however, adopted a different mechanism. It started from the basis, stated in the Bill, that the right to use all water in New Zealand was vested in the Crown. Having established its own overarching right, the Crown then allowed for delegated agencies, the Regional Water Boards, to issue water rights on the Crown's behalf for the damming, diversion, taking, or use of waters, or to discharge into waters.

A bylaw represents an extension of management authority for the limited circumstance specifically defined in the legislation. A vesting on the other hand represents an assertion of authority covering a complete subject matter. It is the creation of something greater than a power of management, and more closely resembles the endowing in the Crown of a form of property. Being of a blanket nature, it therefore appears (to a layperson) to be a higher order of legal statement than a bylaw<sup>30</sup>. While allowing a bylaw might be thought of as a small step forward in describing an extension of Crown powers, a vesting seems to amount to a more substantial leap. In the context of the relationship between *kawanatanga* and *tino rangatiratanga*, the two may be similar in terms of being an extension of the Crown's authority to govern; however they seem to be very different in their degree of impact on the relationship between the Crown and Maori.

The vesting in the Crown of all rights to use or interfere with water was apparently included in the proposed legislation only at the legal drafting stage. No prior discussion of vesting has been discovered during the research for this report. To the Crown it was probably a "clean" solution that was capable of overturning all the prevailing common law presumptions in a single sentence, and providing a blank canvas on which the new reforms could be drawn up. However, there is no indication that the ramifications of this legal mechanism for the Treaty relationship were considered or addressed.

While the significance of vesting in the Crown in the context of the Treaty of Waitangi was not remarked upon at the time, the turning of the common law on its head was noticed by the European population of New Zealand. Farmers in particular

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<sup>30</sup> The status of a Crown vesting power in the context of the Treaty is a matter for submission by legal counsel.

felt that access to water was an everyday and essential part of their existence, and the Crown was usurping and threatening something they thought they had always had an absolute right to. To forestall an argument, and to acknowledge something that was deeply enshrined in longstanding common law principles, the Government agreed to the inclusion of a proviso to the vesting clause, to the effect that, notwithstanding the vesting, it would be lawful for any person to take or use natural water that was reasonably required for domestic needs, the needs of animals, and fire fighting. The effect of this was that water rights would not be required from Regional Water Boards to take water for these purposes.

The Water and Soil Conservation Bill was introduced into Parliament in 1966, and was then referred to a Select Committee for examination during the 1966-1967 recess, before returning to the House of Representatives and being passed in 1967. The Preamble explained that it was:

An Act to promote a national policy in respect of natural water, and to make better provision for the conservation, allocation, use and quality of natural water, and for promoting soil conservation and preventing damage by flood and erosion, and for promoting and controlling multiple uses of natural water and the drainage of land, and for ensuring that adequate account is taken of the needs of primary and secondary industry, water supplies of local authorities, fisheries, wildlife habitats, and all recreational uses of natural water.

Section 21(1) stated:

Except as expressly authorised by or under this Act or any other Act, the sole right to dam any river or stream, or to divert or take natural water, or discharge natural water or waste into any natural water, or to use natural water, is hereby vested in the Crown subject to the provisions of this Act:

Provided that nothing in this section shall restrict the right to take, divert or use sea water:

Provided also that it shall be lawful for any person to take or use any natural water that is reasonably required for his domestic needs and the needs of animals for which he has any responsibility and for or in connection with fire-fighting purposes.

The Act's reference to "natural water" was a term specially coined to distinguish waters in rivers and in the ground from water already captured and in pipes and tanks. For the first time the use and management of all natural water was vested in the Crown. A National Water and Soil Conservation Authority was established as an umbrella coordinating agency, with beneath it a second tier of three councils:

- The Soil Conservation and Rivers Control Council, an already existing organisation established under the Soil Conservation and Rivers Control Act 1941
- The Water Pollution Council, an already existing organisation established under the Water Pollution Act 1953
- The Water Allocation Council, a newly created organisation

Below this second tier would be a series of up to 25 Regional Water Boards, responsible for administering the legislation in the various regions. Existing Catchment Boards (established under the Soil Conservation and Rivers Control Act 1941) would also be Regional Water Boards. Where no catchment board had been established, administration would be the responsibility of the Water Allocation Council and its principal advisor, the Ministry of Works.

The Act avoided the issue of ownership of water, concentrating instead on the management of its use. Each Regional Water Board (or the Water Allocation Council) would be responsible for issuing rights to the use of water, whether by abstraction from, discharge into, or diversion of natural waters. In a continuation of common law principles established in English law to protect riparian owners, every landowner was deemed to have an automatic right to draw water for their own domestic use, to supply their own stock, and for fire fighting. Other users of water, including community water supplies and community stock watering schemes, needed a water right.

As a transitional arrangement, all existing users of natural water (other than for the domestic purposes outlined above) had to register their use with the relevant Regional Water Board by the beginning of April 1969. Existing users were defined as those who had been lawfully making use of natural water during the three-year period September 1963 to September 1966, and would under the new Act require a water right for that use.

Because it was intended that the legislation to do with water would be consolidated as a subsequent second stage, the 1967 Act, which came into force on 1 April 1968, left the Underground Water Act 1953, and underground water authorities, undisturbed.



A review of the 40 or so submissions to the Lands and Agriculture Select Committee, during its recess consideration of the Bill, plus the Parliamentary Debates, has shown no mention of or reference to the Treaty of Waitangi, or to the impact of the vesting of the sole right of control of natural water in the Crown on rights guaranteed by the Crown to Maori<sup>31</sup>. Nor did the Act itself refer to the Treaty of Waitangi.

Historian Michael Roche has commented on the events of the 1960s:

The Act was a comprehensive response to increasing pressures on and new issues relating to water resources in the 1960s. No longer was soil erosion or flood control the sum of the problem. Agricultural and industrial development in the 1960s meant that the availability, use and allocation of water was becoming a public issue. Recreational and scenic demands in the 1970s further complicated the nature of demand for water. In its timing the Act anticipated major allocation conflicts between competing users; in this respect it reflected the foresight of officials (from Ministry of Works and other departments) who had contributed to the Wakelin report, rather than being a legislative response driven by public pressure on the government.

The Act effectively replaced the riparian rights to water use, transferred from Britain in New Zealand's colonial past, by a new system whereby the Crown vested in itself the rights to use natural waters. The detail of the legislation was concerned with laying out a means whereby the Crown could grant water rights for specific uses of water. Underpinning the allocation procedures was a goal of sharing out water resources amongst users where possible. The new administrative responsibilities were to be handled by new central agencies and regional boards – hence the establishment of Regional Water Boards. At the district level the Catchment Board membership recomposed itself as a Regional Water Board, but centrally the picture was complicated and the establishment of NWASCA was intended to give oversight and coordination to the activities of the various councils brought together and created under the umbrella of the Water and Soil Conservation Act 1967.<sup>32</sup>

The Underground Water Act 1953 and the Water and Soil Conservation Act 1967 operated in tandem until 1973, when the Underground Water Act was repealed<sup>33</sup>. The ability for Regional Water Boards to make bylaws governing groundwater drilling and abstraction was added into the Water and Soil Conservation Act at that time. This

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<sup>31</sup> The submissions are on Works and Development Head Office file 28/455/5 Volume 1 (Archives NZ Wellington reference AAQB W4073 229), while a handwritten analysis of the submissions is on Works and Development Head Office file 28/455/5 Volume 2 (Archives NZ Wellington Reference AAQB W4073 229).

<sup>32</sup> MM Roche, *Land and Water: Water and Soil Conservation and Central Government in New Zealand, 1941-1988*. Historical Branch Department of Internal Affairs, Wellington, 1994, page 107.

<sup>33</sup> Part I (Sections 2-15) Water and Soil Conservation Amendment Act 1973.

made it possible for bylaws to be issued throughout New Zealand, rather than just in gazetted Underground Water Areas.

Because the Water and Soil Conservation Act 1967 made no mention of the Treaty of Waitangi, and because the Preamble to the Act (quoted above) made no mention of spiritual or cultural considerations with respect to water, a Maori viewpoint was largely excluded from consideration. It was not until the High Court's *Huakina* decision in 1987<sup>34</sup>, twenty years later, and after a change in societal thinking generated by the Waitangi Tribunal's Motunui report, that a place for a Maori viewpoint about water was legally recognised. By then, the 1967 Act was nearing the end of its period of use, and was about to be swept up in the resource management law reform process, so that there was only limited opportunity for the effects of the *Huakina* judgement to flow through into practical water management.

#### **2.4.1 Rangitikei-Wanganui Regional Water Board**

The net effect of the 1967 legislation, with respect to groundwater in the Whanganui Inquiry District, was that owners of bores and users of groundwater had not been subject to government regulation prior to April 1968, instead relying on common law rights based upon their occupation or ownership of the surface of the land. From 1968 existing bore owners, if they were community, commercial or industrial users (including farm irrigators), but not if they were tapping bores for domestic or fire fighting use or to supply drinking water for stock, had to notify their use of groundwater. Any new bores and abstractions for community, commercial or industrial use had to be approved by the issue of a water right from the Regional Water Board. Meanwhile domestic users or farmers using the water to supply their stock were now allowed by law to continue or commence their use of groundwater without interference from Regional Water Boards, as a continuation of earlier-held common law rights. Over most of the Inquiry District, the Board was the Rangitikei-Wanganui Regional Water Board, with the Taranaki Regional Water Board operating in the far western part of the District.

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<sup>34</sup> *Huakina Development Trust v Waikato Valley Authority* [1987] 2 NZLR 188. Not included in Supporting Papers.

While there were some industrial users of groundwater in Wanganui town, most bores already dug to tap into groundwater in the Whanganui Inquiry District were for domestic purposes. This meant that most bores and abstractions were not automatically notified to the Regional Water Board. Marae were caught by the requirement to notify if for community use; one marae that notified its abstraction from a bore on its property was Kauangaroa Marae in the Whangaehu Valley<sup>35</sup>.

Within the Rangitikei-Wanganui Regional Water Board district, the lower Whanganui valley was one of just two areas in which a special interest in groundwater was taken (the other area was Oroua Downs) during the Board's existence between 1968 and 1988, and during the existence of its successor the Central Districts Regional Water Board between 1989 and 1991. However, the Board does not appear to have been particularly concerned by the situation in the lower Whanganui, based on a senior officer's opinion in 1978:

The priority for the study of underground water in this area is not high on the Board's priorities, as although there is considerable use currently made of the water, there appears to be an adequate supply. As time permits it is intended to carry out investigations to determine hydraulic properties of the aquifer system.<sup>36</sup>

A scientific paper in 1892 had postulated the existence of artesian water (i.e. water rising naturally under pressure to the surface from sub-surface aquifers) under the town of Wanganui<sup>37</sup>, and the theory was proved correct when a bore put down later that year by the Wanganui Borough Council reached an aquifer<sup>38</sup>. The first modern-day scientific report on the groundwater resources of the lower Whanganui was produced by the Regional Water Board at the end of a two-year study in 1979<sup>39</sup>. For this study, an early objective had been to identify the bores that existed, given that the

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<sup>35</sup> Rangitikei-Manawatu Regional Water Board Bore Number U73, referred to in Schedule of Whangaehu Catchment Groundwater Abstractions, undated. Rangitikei-Wanganui Catchment Board and Regional Water Board file W331-470. Supporting Papers #525-527.

<sup>36</sup> Chief Engineer Rangitikei-Wanganui Catchment Board and Regional Water Board to DD Wilson, NZ Geological Survey, Christchurch, 17 March 1978. Rangitikei-Wanganui Catchment Board and Regional Water Board file WG 470. Supporting Papers #528-529.

<sup>37</sup> H Hill, 'Artesian Water Prospects at Wanganui', in *Transactions of the New Zealand Institute*, Volume 25 (1893), pages 343-347.

<sup>38</sup> H Hill, 'Artesian Wells, Wanganui, New Zealand', in *Transactions of the New Zealand Institute*, Volume 25 (1893), pages 348-350.

<sup>39</sup> NV Mark-Brown, *Report on Groundwater in the Lower Wanganui River Catchment: A Report on Investigations Carried Out by the Rangitikei-Wanganui Catchment Board from 1977-1979*, Rangitikei-Wanganui Catchment Board internal report 79/4, 1979.

legislative requirement for notification in the 1967 Act meant that the Board was not aware of bores for domestic use. The exemption for domestic abstractions provided by the Act prevented the Board from being aware of the full extent of abstraction, and denied the Board access via domestic bores to the aquifer for data collection purposes. In March 1978 the Board was aware of 120 bores in the Lower Wanganui catchment (which included Wanganui City, Kai Iwi, Upokongaro and Okoia)<sup>40</sup>. By the time the study was written up in May 1979, the Board had collected details of 235 bores in the locality, while noting:

There are undoubtedly some bores within the area remaining undetected, possible reasons for this being:

- (a) The bore being installed many years ago and there being no existing knowledge of it (it may or may not still be used).
  - (b) Bores having been covered over by building or road construction (may still be used).
  - (c) A small private use which has not come to the Water Board's attention
- Documentation of bores is a continuing task<sup>41</sup>.

The main concern of the study was the waste of artesian water as a result of lack of capping, water rising up the outside of bore casings, or water not being made full use of and being allowed to flow to waste. Of an estimated daily use of 11,374.2 cubic metres of groundwater, 4,527.5 cubic metres was artesian water, while the remainder was non-artesian (i.e. pumped). It was considered that 3,604.3 cubic metres or 80% of the artesian water was going to waste. Large users of artesian water were Wanganui Hospital and the Wanganui milk treatment station. Of the pumped flow, 4,227 cubic metres per day was being used by the Imlay freezing works<sup>42</sup>.

Elsewhere in the Whanganui Inquiry District, groundwater use notified to the Regional Water Board, or for which water rights had been issued, was predominantly

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<sup>40</sup> Chief Engineer Rangitikei-Wanganui Catchment Board and Regional Water Board to DD Wilson, NZ Geological Survey, Christchurch, 17 March 1978. Rangitikei-Wanganui Catchment Board and Regional Water Board file WG 470. Supporting Papers #528-529.

<sup>41</sup> NV Mark-Brown, *Report on Groundwater in the Lower Wanganui River Catchment: A Report on Investigations Carried Out by the Rangitikei-Wanganui Catchment Board from 1977-1979*, Rangitikei-Wanganui Catchment Board internal report 79/4, 1979, at page 1.

<sup>42</sup> NV Mark-Brown, *Report on Groundwater in the Lower Wanganui River Catchment: A Report on Investigations Carried Out by the Rangitikei-Wanganui Catchment Board from 1977-1979*, Rangitikei-Wanganui Catchment Board internal report 79/4, 1979, at page 18.

for farm irrigation. The Karioi pulp mill used an average of 1,000 cubic metres a day<sup>43</sup>.

Although provided by the legislative amendment in 1973 with the opportunity to pass bylaws regulating groundwater drilling and abstraction, the Rangitikei-Wanganui Regional Water Board never made use of the provision. The Board's Resource Manager explained in 1982:

We still rely on voluntary co-operation with well drillers and water right conditions to manage our groundwater resource. Evaluation of bores, including pump testing and interference testing, when required, is made a condition of any water right involving new bores for irrigation purposes. We have examined the need for bylaws, especially permits, but consider at this stage that our problems are minor enough to be handled without bylaws. This is of course reviewed from time to time, and bylaws may become necessary if horticultural development continues to accelerate in our district.<sup>44</sup>

## **2.5 Resource Management Act 1991**

The passing of the Resource Management Act (RMA) in 1991 saw a change in the organisation of water management. The Central Districts Catchment Board and Regional Water Board (which had amalgamated the Manawatu and the Rangitikei-Wanganui Boards in 1989) was disestablished, and in its place its responsibilities were picked up by the newly created Manawatu-Wanganui Regional Council (today also known as Horizons Regional Council).

Where between 1968 and 1991 there had been three categories of lawful use of groundwater (i.e. domestic and stock water allowed as of right, abstraction as allowed by pre-1967 existing uses notified by 1969, and abstraction as allowed by water right), the RMA sought to reduce these to two. Domestic, stock water and fire fighting use could still continue as of right (Section 14(3)), and this category was broadened to also include any other use of water that was allowed by a rule in a regional plan, but all pre-1967 existing uses were made the subject of a sunset clause, requiring that holders apply for and obtain a resource consent within ten years

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<sup>43</sup> Chief Engineer Rangitikei-Wanganui Regional Water Board to RJ Burden, Christchurch, 7 November 1980. Rangitikei-Wanganui Catchment Board and Regional Water Board file WG 470. Supporting Papers #530-531.

<sup>44</sup> Resource Manager Rangitikei-Wanganui Regional Water Board to Water Board Manager, Hauraki Regional Water Board, 28 September 1982. Rangitikei-Wanganui Catchment Board and Regional Water Board file WG 470. Supporting Papers #532.

(Section 386(3)). Water rights were renamed water permits or discharge permits, these being two of the various types of resource consent specified in the Act.

By Section 354(1) of the RMA, the vesting in the Crown of the right to use water (including groundwater), and the vesting in the Crown of the geothermal resource, were protected and continued, even though the Water and Soil Conservation Act 1967 and the Geothermal Energy Act 1953 respectively were both repealed.

The Act requires that the groundwater resource, like all other natural and physical resources encompassed by the RMA, has to be sustainably managed. Sustainable management has a lengthy and involved definition set out in Section 5 of the Act, which in summary requires management to meet community needs while protecting the resource for the future, safeguarding the functioning of the natural system, and preventing or minimising environmentally damaging effects. Management of the resource also has to recognise and provide for a number of matters deemed of national importance, as set out in Section 6, have particular regard to a number of other matters, as set out in Section 7, and take into account the principles of the Treaty of Waitangi (Section 8).

Regional councils accomplish their task as set out in Sections 5 to 8 (Part II) of the Act by:

- Setting out issues, objectives and policies in Regional Policy Statements,
- Applying those objectives and policies in Regional Plans, which include regional rules, and
- Considering and deciding on applications for resource consents, taking into account the provisions of the Act, any National Policy Statements, the Regional Policy Statement and any relevant Regional Plans.

No National Policy Statement on groundwater, or indeed on water generally, has been produced by central government. This has meant that the Crown has been silent on water policy (other than the statements in the legislation about the sustainable management of all natural resources). It has also meant that the Crown has failed to provide any leadership about the involvement and integration of Maori viewpoints

(including any consideration of taonga status). Instead it has been left to regional councils to interpret their responsibilities as best they can, having regard to case law guidance provided by the courts.

### **2.5.1 Manawatu-Wanganui Regional Council (Horizons Regional Council)**

The Manawatu-Wanganui Regional Council's Regional Policy Statement became operative in August 1998. In connection with groundwater, the Council identified three region-wide significant issues:

Issue W4 - Degraded or contaminated groundwater resources. In particular, contamination of domestic water supplies by poor effluent disposal practices.

Groundwater quality is naturally high in most of the Region. This is because groundwater is separated from the surface by impermeable layers in most areas. However waste deposited on the land surface, into landfills, or waste discharged into the ground from septic tanks in some areas can affect water quality. This is of particular concern in communities drawing water from individual bores, where there are also discharges of sewage from septic tanks to ground soakage. Septic tank effluent can contaminate groundwater, and therefore water supplies....

Issue W7 – Competing uses for surface and/or groundwater resources.

Different resource users often have competing uses for surface or groundwater resources.... Competing demands on water resources can lead to conflicts between different users....

Competing uses and adverse environmental effects can also arise when abstractions from groundwater affect surface water flows. They may also promote saline intrusion. Effects are unknown where abstractions draw from groundwater reserves where little is known about their extent or recharge availability.

Several parts of the Region have high demands for groundwater....

Issue W8 – Inefficient use of water.

... Groundwater is wasted when bores are allowed to flow continually....<sup>45</sup>

Two objectives, and six supporting policies specifically addressed groundwater:

Objective 13 – To maintain groundwater quality in the Region, and to improve groundwater quality where it is locally degraded.

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<sup>45</sup> Manawatu-Wanganui Regional Council, *Regional Policy Statement*, operative August 1998, Chapter 23, pages 127-132.

Policy 13.1 – To prevent discharges of contaminants to land or into the ground where these will have significant adverse effects on groundwater quality.

Policy 13.2 – To prevent discharges of contaminants to land or into the ground in circumstances where these may have adverse effects on groundwater used for domestic water supplies.

Policy 13.3 – To prevent disposal of hazardous waste to land or into the ground where it may contaminate groundwater.

Objective 14 – To avoid unsustainable abstractions of groundwater.

Policy 14.1 – To allow the use of groundwater provided that such use is unlikely, on its own or in combination with other uses, to have significant adverse effects.

Policy 14.2 – To ensure that the taking or use of groundwater has no significant adverse effects upon natural long term groundwater levels, and that the availability of the resource to other users or potential users is not unreasonably restricted.

Policy 14.3 – To promote the efficient use of groundwater.<sup>46</sup>

The Regional Policy Statement noted that in the Region as a whole there were approximately 800 consents to take groundwater, and that there were “probably several times more” abstractions for domestic or stockwater supplies.

Within the Regional Policy Statement was a part entitled “Te Ao Maori – He Ritenga mo nga Takoha o te Tai-ao (The Maori World – Management of Resources). This part had its own objectives and policies:

Objective 1 – To take into account the principles of Te Tiriti o Waitangi (Treaty of Waitangi).

Policy 1.1 – To actively protect the resource management interests of nga hapu and nga iwi of the Manawatu-Wanganui Region in their lands and resources.

Policy 1.2 – To recognise the tino rangatiratanga of nga hapu and nga iwi of the Manawatu-Wanganui Region, as affected by the Council’s exercise of kawanatanga, in the development of their own resources.

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<sup>46</sup> Manawatu-Wanganui Regional Council, *Regional Policy Statement*, operative August 1998, Chapter 23, pages 148-154.



Objective 2 – To provide for the participation by nga hapu and nga iwi of the Manawatu-Wanganui region in resource management planning and decision making.

Policy 2.1 – To recognise nga hapu and nga iwi of the Manawatu-Wanganui Region as Treaty (Te Tiriti o Waitangi – Treaty of Waitangi) partners in resource management and to provide for their participation in Regional Plans and resource consent decisions.

Policy 2.2 – To have regard to iwi and hapu management plans recognised by iwi authorities.

Objective 3 – To provide for the relationship of nga hapu and nga iwi of the Manawatu-Wanganui Region and their culture and traditions with their ancestral lands, water, sites, wahi tapu and other taonga.

Policy 3.1 – To promote the protection and enhancement of the “mauri” of natural and physical resources where appropriate, and its protection from inappropriate uses.

Policy 3.2 – To recognise the spiritual link nga hapu and nga iwi of the Manawatu-Wanganui Region have with their ancestral lands, water, sites, waahi tapu and other taonga, and the special relationship that implies.

Policy 3.3 – To provide for the protection of waahi tapu and waahi tupuna from inappropriate uses and effects that may compromise their tapu state, and in a way that safeguards iwi and hapu knowledge.

Policy 3.4 – To recognise and provide for the recognition of tikanga Maori and Maori customary values and practices in resource management.

Policy 3.5 – To protect resources of cultural and spiritual significance to nga hapu and nga iwi of the Manawatu-Wanganui Region, including:

- a. mahinga kai, in particular kaiawa and kaimoana;
- b. taonga raranga, taonga whatu and other resources used for traditional purposes; and
- c. recognition of harvesting for traditional purposes.

Objective 4 – To recognise iwi and hapu kaitiakitanga.

Policy 4.1 – To recognise and provide for iwi and hapu kaitiakitanga of resources and the particular role in resource management which that implies.

Policy 4.2 – To recognise the mana of nga hapu and nga iwi of the Manawatu-Wanganui Region over their resources.

Policy 4.3 – To recognise the tangata whenua status of nga hapu and nga iwi of the Manawatu-Wanganui Region over their ancestral lands, water, sites, waahi tapu and other taonga.<sup>47</sup>

There was no statement or explanation in the Regional Policy Statement relating these issues, objectives or policies specifically to particular matters concerned with groundwater.

Following on from the Regional Policy Statement, the Regional Council produced a Land and Water Regional Plan, which became operative in September 2003. This had a chapter on groundwater<sup>48</sup>. Its purpose was to introduce regional rules, and to define what matters the Council would consider when examining resource consent applications. Three issues were identified which in the Council's opinion required this approach. One was the threat of declining groundwater levels, which had been experienced with one aquifer near Palmerston North declining to a new level three metres below the previous level. The second was adverse effects arising from dammed or diverted groundwater, usually when earthworks interrupted natural patterns of drainage. The third issue was the impact of groundwater abstraction near surface waters that affected those surface waters' levels and quantities.

The rules made minor groundwater abstractions a permitted activity, though in the process they had the effect of placing limits on the general right that had been in existence since the 1967 Act to take groundwater for domestic, stockwater and fire-fighting purposes. If an abstraction for domestic or stockwater purposes was for more than 50 cubic metres per day<sup>49</sup>, or if the bore was closer than 50 metres to another bore, or if the drilling records were not provided to the Regional Council, or if any flow of artesian water was not controlled at the well-head and ran to waste, then the abstraction would be a discretionary activity, requiring Council consent. Any abstraction for any purpose that was more than minor (i.e. for more than 50 cubic metres per day) was a discretionary activity.

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<sup>47</sup> Manawatu-Wanganui Regional Council, *Regional Policy Statement*, operative August 1998, Part Four, Sections 14-20, pages 47-70.

<sup>48</sup> Manawatu-Wanganui Regional Council, *Land and Water Regional Plan*, operative September 2003, Chapter Five, pages 93-104.

<sup>49</sup> According to the plan, this equates to 0.58 litres per second.

The rules also made the use of heat or energy in groundwater a discretionary activity, although the Plan explained that “there is no recorded use of geothermal groundwater in this Region”. The rule was included for the sake of completeness.

The chapter on groundwater made no mention of the interests of (as it described them in the Regional Policy Statement) “nga hapu and nga iwi of the Manawatu-Wanganui Region”. It was as if Maori did not have any perspective about groundwater that might differ from that of the rest of the Region’s population and require particular consideration.

The Regional Plan had been completed and become operative after the Regional Council had published a State of the Environment Report in 1999. This report estimated that there were 12,000 bores in the Manawatu-Wanganui Region. Abstractions from groundwater were attractive because groundwater was less likely to be contaminated, and was less subject to seasonal variation, than surface waters. Groundwater was the predominant source of community drinking water for Wanganui City. The report examined whether there was any decline in groundwater quantity or quality. While noting a number of changes in Manawatu and Horowhenua, it found that groundwater levels in the Whanganui part of the region had generally remained static or, in the case of deep confined aquifers in Wanganui city and east of Wanganui, had risen. The groundwater abstracted in the Whanganui part of the region met drinking water quality standards<sup>50</sup>. The rules put in place by the Regional Plan can therefore be seen as precautionary in nature, to avoid any decline in quantity or quality commencing.

## **2.6 Concluding Remarks**

This evidence is concerned with providing a history of the legislative changes affecting groundwater. However, it would be remiss to avoid remarking about the effect of some of these changes. The common law imported into New Zealand from England was almost feral in its application, allowing an abstractor or user of groundwater to act largely with disregard for neighbours or for the community. If there were a contest between abstractors for a limited supply of groundwater, then the

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<sup>50</sup> Manawatu-Wanganui Regional Council, *Measures of a Changing Landscape: State of the Environment Report, Manawatu-Wanganui Region*, 1999, pages 59-64.

biggest bully would win. There was no place for a Maori viewpoint or for a Maori assertion of an interest, except by Maori becoming abstractors themselves. However, Maoridom was individualised, fractionated and marginalised by Crown authority and policy (as best exemplified by the land laws), and so was placed at an inherent disadvantage.

That disadvantage has continued since 1967. Maori were not included in the policy development leading up to the passing of the Water and Soil Conservation Act. The actions of vesting the use of water (including groundwater) solely in the Crown, and failing to explicitly state in the legislation that historic and cultural considerations had to be provided for, did not demonstrate any elements of partnership between the Crown and Maori. The provision for the principles of the Treaty of Waitangi to be taken into account, provided by Section 8 of the Resource Management Act 1991, has been criticised by the Waitangi Tribunal as inadequate in reflecting the nature of the relationship that should exist between the Crown and Maori in managing the country's natural resources.

In the administration of the rights conferred in the Crown by the vesting, no place was found for Maori to be involved in deciding on the issue of water rights. Nor has that improved in any substantive sense under the RMA, with the manner in which resource consents are issued. However, while being no worse than the Water and Soil Conservation Act, so far as Maori participation in decision making is concerned, and while Maori values of kaitiakitanga, plus the principles of the Treaty, now receive more statutory acknowledgement, the Resource Management Act may turn out to be a greater impediment to Maori interests than first thought. This is because of the case law that is evolving, most particularly a change in thinking that may be required as a result of the High Court's decision in *Aoraki Water Trust v Meridian Energy* in 2005<sup>51</sup>.

This case examined the nature and effect of permits under the RMA to take water from a lake. Because of the generic approach to natural resources taken by the RMA, the case is also applicable to the taking of water from an aquifer. An existing consent

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<sup>51</sup> *Aoraki Water Trust v Meridian Energy*, [2005] 2 NZLR 268. Not included in Supporting Papers.

holder challenged the issuing of a further consent to take water from the lake, arguing that the resource was fully allocated, and any additional consents would derogate from the rights and expectations it enjoyed under its own consent. The High Court found in favour of this argument, holding that a resource consent under the RMA contained all the elements of a property right as established in property law, and as such enjoyed a legal right of priority when the issue of further consents was considered, or when the water use or allocation policy was periodically reviewed. The Court decision has reinforced the “first come – first served” approach to the issue of consents, and provided existing consent holders with greater security and protection. It has also moved the country one step further towards the open market tradability of water permits.

The vesting of the use of water in the Crown by the 1967 Act had, up until the 2005 decision, not been thought of as the creation of a property recognisable in property law. Water rights under the 1967 Act had been thought of as a privilege rather than a right. However, if a 1967 Act water right, or a 1991 Act water permit, has as its foundation authority the vesting of the use of water in the Crown, and if a 1991 Act water permit is to be treated as a property right, then either the status of the vesting in 1967 has to be reconsidered, or the 1991 legislation has morphed the vesting into something more substantial than originally conceived.

The proper interpretation to be given to the statutory provisions, and the effect of case law, is of course more appropriately a matter for legal submission by counsel. However, the more entrenched nature of existing consents, and of any future consents once granted, could have ramifications for Maori. Because Maori are not generally the holders of existing water permits for the taking and use of groundwater, then going into the future they start from a position of inherent disadvantage. Maori are more likely to want the groundwater resource (e.g. as reflected in the flow rate and water quality of springs) to remain in a natural undisturbed state, but the high rewards to be gained by others from obtaining a water permit are likely to make the retention of natural undisturbed conditions less easy to successfully advocate for and achieve. The existence of property rights is also likely to make the Crown more cautious in negotiating with Maori any recognition of tino rangatiratanga relating to groundwater.

### 3. ENVIRONMENTAL EFFECTS OF THE TONGARIRO POWER DEVELOPMENT SCHEME

#### 3.1 Introduction

The project brief is clear that any examination of the Tongariro Power Development (TPD) Scheme has to be strictly focused on particular aspects only. This is because most of the physical construction work for the project was in the National Park Inquiry District, which is the subject of a separate inquiry, and because some impacts in the Whanganui Inquiry District, on Atihaunui a Paparangi claimants, have already been inquired into in the Tribunal's Whanganui River report of 1999. The Tribunal for this inquiry has been concerned to avoid any unnecessary overlap.

This is a straightforward matter with respect to the Eastern Diversion on the Whangaehu catchment side of Ruapehu. All of that diversion's work and impacts, except where they occur in the Rangitikei or Tongariro catchments, need to be discussed without qualification. With respect to the Western Diversion, which took water from the headwaters of the Whakapapa and Whanganui Rivers, it is less straightforward, as the rohe of some groups who are represented in the Whanganui District inquiry appear to overlap on the area in which Atihaunui a Paparangi claim an interest. My understanding is that hapu with interests along the Whanganui River above Pipiriki, and with interests in the lower reaches around Wanganui city, are involved in the district-wide inquiry process. I have deemed it appropriate, therefore, in order to avoid any gaps, to address all potential environmental impacts in the Whanganui Inquiry District. This means I only exclude impacts within the National Park Inquiry District. As the Whakapapa Intake for the TPD is located on the Whakapapa River, and that river is the boundary between the two inquiry districts, I have chosen to discuss that intake's environmental impacts in full.

I have previously examined some of the early history of the TPD in evidence I prepared for the Turangi Township inquiry<sup>52</sup>. Two comprehensive reports about the TPD generally have been prepared by Tony Walzl for the National Park District

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<sup>52</sup> D Alexander, *Turangi Township and the Public Works Act*, Evidence Presented to WAI-84 Inquiry, Document #B2.

Inquiry<sup>53</sup>. This report draws on these sources, plus some additional material discovered during my own recent researches.

### **3.2 A Brief Overview of the Power Project**

The primary purpose of the TPD is to capture and deliver additional water capacity to the Waikato River, so that the series of power stations along that river can be operated more intensively. The additional water in the Waikato catchment is achieved by transfer from the Whanganui, Whangaehu and Rangitikei catchments through tunnels and canals. The transfers and diversions enable two further power stations (at Tokaanu and Rangipo) to generate electricity.

Transfer of water from the Whanganui catchment involves the damming of the Whakapapa River and diversion of a large proportion of its flow into a tunnel that discharges into two newly created lakes (Lake Te Whai and Lake Otamangakau), both located in the headwaters of the Whanganui River. A canal connects these two lakes, which also collect additional water from the source streams of the Whanganui River. From Lake Otamangakau, the waters are carried by the Wairehu Canal across the watershed of the Whanganui catchment into Lake Rotoaira, in the Lake Taupo and Waikato catchment.

Transfer of water from the Whangaehu catchment involves the diversion of waters from a series of 22 tributaries of the Whangaehu River on the southern slopes of Mount Ruapehu into an artificial channel known as the Wahianoa Aqueduct. This aqueduct tunnels beneath the Whangaehu River itself and through the watershed between the Whangaehu and Rangitikei catchments to discharge the water into an artificial lake on the Moawhango River, a tributary of the Rangitikei River. From this lake another tunnel carries the combined waters that have been captured in the Whangaehu and Rangitikei catchments to the headwaters of the Tongariro River in the Lake Taupo and Waikato catchment. The waters of the Whangaehu River itself are not captured, because of their highly acidic nature.

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<sup>53</sup> T Walzl, *Hydro-Electricity Issues: The Tongariro Power Development Scheme*, Evidence Presented to WAI-1130 Inquiry, February 2005.

T Walzl, *Environmental Impacts of the Tongariro Power Development Scheme*, Evidence Presented to the WAI-1130 Inquiry, Document #E12, July 2006.

The environmental impact of the TPD on waterways in the Whanganui Inquiry District is, therefore, due to loss of water quantity in the Whanganui and Whangaehu Rivers and their tributaries downstream of the diversion points. A change of water quantity will, in turn, have an impact on the quality of the remaining water in the rivers, and on the nature of the beds of the rivers.

### **3.3 Authorising the TPD**

Comprehensive investigations of the project did not begin until the mid 1950s. By 1958 the investigation of the feasibility of the project was ready to move beyond an office-based analysis of available climate, water flow and topographical records, and into an examination of the suitability of particular sites from an engineering point of view. This would require entry on to private land, for which permission either had to be obtained on a case-by-case basis from landowners, or provided by invoking powers under the Public Works Act that would authorise the Crown to enter in the absence of having received landowner consent. The latter course of action was chosen. The reason given was that obtaining consent from numerous Maori landowners was too hard:

Sir Alexander Gibb and Partners [contracted by the Crown to undertake the engineering investigations] are preparing to call tenders for the construction of several automatic water-level recorders, cableways and footbridges in connection with the assessment of power in the Tongariro area....

Some of the gauging stations are sited on Maori-owned land. We fear there will be considerable delay in the finalising of the contract for the construction of the stations if we endeavour to get the owners' consent beforehand. The owners are usually numerous and even with the best good-will and intention on their part it is difficult to get consent. Such consent, moreover, must be attested by a Maori Land Court to be valid, and can be revoked at pleasure.<sup>54</sup>

Although not explicitly stated, there was probably another reason why the Ministry of Works would seek to obtain an authorisation under the Public Works Act. This was legislation administered by that Department, and therefore legislation with which it was familiar. The Ministry would have had a preference for the administratively clean ability to operate with the minimal impediments provided by the Public Works Act. The considerably more complicated process of consultation and negotiation with

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<sup>54</sup> Commissioner of Works to General Manager Electricity, 26 September 1958. Electricity Head Office file 21/75/1. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(g), Volume 6, #2698.



each landowner, although more closely reflecting the relationship between Maori and the Crown envisaged by the Treaty, would have been seen as being very much second-best. Indeed, the Commissioner of Works stated at the time:

Failing [agreement to use Public Works Act provisions] we shall have to do what we can to obtain the owners' consent even though this is not a sufficient agreement legally for what is proposed, and would need to be obtained again for whatever else we might do.<sup>55</sup>

The reference to having to obtain further consents from landowners was because the provision of the Public Works Act that would be invoked would cover both the site investigation work, and all the subsequent project construction work.

We therefore request you to seek an Order in Council under Section 311 of the Public Works Act which will permit us to enter upon any land, Maori-owned or otherwise, without prior consent while also giving us power to carry out any other investigations or to construct any works, including permanent works if necessary at a later stage.<sup>56</sup>

It would effectively be a blanket legal authorisation to both develop and construct all the TPD works.

The authorisation under Section 311 of the Public Works Act would be an Order in Council issued by the Governor General, but on the recommendation of the Minister of Electricity rather than the Minister of Works, because it was a provision applying only to electricity works. The Commissioner of Works had therefore requested the General Manager of the Electricity Department to obtain his Minister's approval. The recommendation prepared within the Electricity Department for the Minister noted that

the Order in Council is a comprehensive authority empowering the Minister to raise or lower the level or divert the waters of the rivers concerned and of any tributary lake, river or stream and so make use of the whole of the Waikato, Wanganui and Rangitikei Catchment areas for hydro-electric purposes, to construct incidental and related works such as dams, tunnels, transmission lines etc, and to sell the electrical energy generated. The [wording of the] Order in Council follows closely the wording of the Statute.<sup>57</sup>

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<sup>55</sup> Commissioner of Works to General Manager Electricity, 26 September 1958. Electricity Head Office file 21/75/1. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(g), Volume 6, #2698.

<sup>56</sup> Commissioner of Works to General Manager Electricity, 26 September 1958. Electricity Head Office file 21/75/1. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(g), Volume 6, #2698.

<sup>57</sup> Office Solicitor to General Manager, 17 October 1958. Electricity Head Office file 21/75/1. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(g), Volume 6, #2691.

The Minister supported the issue of the Order in Council, and it was proclaimed in October 1958. It authorised 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>58</sup>

The Order in Council provided all the legal authority necessary for the Crown to divert water from the Whanganui and Whangaehu catchments into the Lake Taupo and Waikato catchment.

There were some subsequent approval steps, such as the approval by the Ministry of Works of the consultant's engineering design and economic feasibility calculations in 1963, and the Cabinet's financial approval to the commencement of the TPD project in 1964, but it was the 1958 Order in Council that represented a granting of legal authority to undertake the project. There was no consultation with any iwi or hapu grouping within the Whanganui Inquiry District prior to the issue of the Order in Council. Even the consultation with Ngati Tuwharetoa prior to 1958 had been strictly limited, being confined to a single meeting with the owners of Lake Rotoaira in October 1955. At that meeting the owners, while sympathising with the Crown's proposals, chose to defer any decision on whether or not to agree to the use of their lake for power generation purposes. There was no consultation with any iwi during 1958 when the Crown, by the issue of the Order in Council, chose to activate an enabling power that it held under the Public Works Act to substantially amend the relationship between Crown rights and Maori rights to water. This absence of

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<sup>58</sup> Order in Council, 29 October 1958. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(g), Volume 6, #2690. *New Zealand Gazette* 1958 page 1463. Supporting Papers #610.

consultation was primarily because the Public Works Act 1928 did not insist or expect that the Crown would take any such step.

Since 1958 the Crown has given itself additional rights over water, when it vested in itself all rights to use and management of natural water under Section 21 Water and Soil Conservation Act 1967. However, the 1967 Act had 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<sup>59</sup>. The right to divert the waters of the Whanganui and Whangaehu catchments was such a right, with the result that the Crown was able to disregard the new provisions in the 1967 legislation as construction work continued. In being exempt from the need to obtain a water right under the 1967 Act, the Crown was also exempted from the requirements for public notification and for allowing lodging of public objections.

The 1958 Order in Council retained full legal force and effect through to 1991<sup>60</sup>. It was only the passing of the Resource Management Act 1991 that required that holders of pre-1967 rights apply within ten years to replace those rights with new time-limited water permits. It was this change of law that precipitated the hearings of the resource consent applications by Genesis Power Limited during the 1990s.

### **3.4 Lack of Consultation Prior to Construction Commencing**

Crown files are silent with respect to consultation with iwi of the Whanganui Inquiry District during the 1955-1958 period, and during the 1963-64 period, when the Government was making decisions that resulted in the construction of the TPD.

When, during 1963-64, diversion of water out of the Whanganui catchment appeared likely as a result of the proposed TPD, some local government institutions in the catchment appreciated that it would have environmental consequences. They tended to view these consequences in the context of their own operations. Thus the

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<sup>59</sup> Section 21 Water and Soil Conservation Amendment Act 1969 clarified the law on pre-1966 existing rights. Uses of natural water authorised by an Order in Council issued before April 1968, and notified to a regional water board before April 1970, were authorised under the 1967 Act, but the authorisation would cease in March 1975 if it had not been substantially exercised by that date.

<sup>60</sup> By Section 3(1)(a) Electricity Operators Act 1987 the authority given to the Minister of Electricity was transferred to the Electricity Corporation of New Zealand Limited, the new State-Owned Enterprise charged with the operation of the national electricity system.

Taumarunui Borough Council was concerned about lower flows in the river reducing the ability of its Piriaka run-of-the-river hydro scheme to generate as much electricity as before, curtailing abstraction from the river for its borough water supply, and reducing the dilution effect of its sewage and stormwater discharges into the river. The Wanganui Harbour Board was concerned about a lower river flow allowing the onshore drift of the sea to build up a more substantial bar at the river mouth, which might impede the operation of the river port. The acclimatisation movement (of which the Wildlife Branch of Department of Internal Affairs was a part) was concerned that lower flows could damage the trout fishery of the Whakapapa River. Each of these organisations promoted their concerns in newspapers circulating in the district, and in letters to the Crown<sup>61</sup>.

None of these particular concerns were necessarily a concern for iwi, though their public expression would have alerted iwi to the alterations that would arise for the Whanganui River in particular as a result of the Crown's proposals. Despite Whanganui District iwi probably being aware that the TPD would divert some Whanganui and Whangaehu waters out of those rivers, there is nothing in the Crown's records about them expressing any concern to the Crown.

The Crown, however, had been quite coy in specifying the extent of the consequences for the Whanganui District waterways. It acknowledged that there would be change, but failed to address the magnitude of the change. The engineering consultants had reported in 1962 that 22.6 cumecs<sup>62</sup> (800 cusecs<sup>63</sup>), or approximately 4% of the Whanganui's flow at the river mouth, would be diverted out of the Whanganui system; they gave as their opinion that this would have "no significant effect" on the bar at the river mouth<sup>64</sup>. In a briefing to their Minister in February 1964, Ministry of Works officials commented further. After discounting the impact of increased flows in the Waikato River, the briefing moved on to the effects of decreased flows in the Whanganui, Rangitikei and Whangaehu Rivers:

Abstraction of water from the Wanganui is more controversial. The 700 cusecs abstracted will act through a head of 1600 feet down the Waikato

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<sup>61</sup> Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 94-96.

<sup>62</sup> Cubic metres per second.

<sup>63</sup> Cubic feet per second.

<sup>64</sup> Quoted in Waitangi Tribunal, *The Whanganui River Report*, Wellington, 1999, page 236.

instead of 400 feet or so down the Wanganui, and is therefore four times as effective. However low flow at Taumarunui is affected and may be reduced to much less than half; this may affect water supply intakes, sewage outfalls, operation of the Piriaka Power Station, and effluent discharge from Veneer Factory and the Butter Factory. All these factors can be overcome, and effects at Taumarunui it is considered need not weigh very heavily in a final decision. The Council have been advised the river flows are being recorded and effects studied, and that no firm commitment will be made until they are fully acquainted with the position.

Other affected bodies are Wanganui City, Harbour Board and Scenic Board.

The reduction of flow in the lower reaches is only about 15% in low flow conditions and is unlikely to have any very noticeable effect. Sir Alexander Gibb studied effects on the Harbour Board and said they were negligible, though some extra dredging might accrue. However each of these bodies needs to be approached so their special problems can be discussed.

Abstraction of water from the Rangitikei and Whangaehu tributaries is considered to have negligible results downriver.

The report also addressed the effect on the trout fishery, looking at the scheme area as a whole rather than specifically at the Whakapapa River:

These have been discussed with the Marine Department and Internal Affairs experts since early in the scheme, and they have been and will need to be satisfied as works proceed. These Departments are thoroughly satisfied with the proposals so far planned.

[In the Tongariro River] flows will not fall below 1000 cusecs unless this would have occurred in any case.

The acid waters of the Whangaehu from the crater lake are not diverted. This also was promised in New Zealand Electricity Department evidence before Waikato River Commission of Inquiry.

Rotoaira is intended to be maintained close to natural levels....

Note: A new fishing lake, Otamangakau, will be created close to Rotoaira.

The Ministers of Internal Affairs and Marine have prepared a press statement regarding the effects of the Tongariro Scheme on fishing, saying that it will not be harmed, but it would in most cases be improved. This statement has not been released. It is good publicity and should be released to fit in with announcements regarding construction of this scheme.<sup>65</sup>

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<sup>65</sup> Commissioner of Works to Minister of Works, 6 February 1964. Works and Development Head Office file 92/11/25/2. Supporting Papers #210-213.

In another report also prepared in February 1964, when seeking the Government's approval in principle to proceed with the project, the General Manager of the Electricity Department referred to a number of "controversial aspects" of the scheme. In connection with the reductions of flow in the Whanganui River, he stated:

- (i) On Wanganui Harbour:  
The probable effect has been exhaustively investigated by the Consultants and found to be negligible.

The mean annual flow in the Lower Wanganui has been assessed at 8000 cusecs; the Western Diversion (Stage 1) involves a reduction of 706 cusecs.

- (ii) On prospects of Wanganui River Power Development [the scheme being investigated at Atene]:  
Although the abstraction of 706 cusecs will reduce the power potential of any project on the Lower Wanganui, this is worthwhile because the diverted water would be utilised through a fall of over 1600 ft in the Waikato instead of about 400 ft in the Wanganui.

The possibility of offsetting the above reduction by diverting water in the Wanganui River from the Mangawhero River is being investigated, but even if this is not done it can be stated that the diversion of water from the Upper Wanganui into the Waikato will not interfere with the prospects of the Wanganui River Development going ahead.

- (iii) On Taumarunui Water Supply and Piriaka Power Station:  
At periods of low flow in the catchment, the diversion of headwaters could considerably reduce the flow available at Taumarunui for the power station and for water supply purposes.

The frequency and magnitude of low flow reductions is still under investigation, the available record being too short at present for reliable estimates.

At Taumarunui, the mean flow is not known, but the full-load flow at the power station is only about 250 cusecs.

If there is any serious interference with the operation of the power station, alternative power supply would be available from our system, and if necessary an alternative source of water supply would be arranged. This is one of the items requiring early negotiation with the authorities concerned.<sup>66</sup>

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<sup>66</sup> General Manager Electricity to Minister of Electricity, 7 February 1964. Electricity Head Office file 21/75/1. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(g), Volume 6, #2637-2649.

In connection with reductions of flow in the Whangaehu catchment, the report to the Minister of Electricity stated:

The removal of about 120 cusecs from the tributaries will have little significance on the Whangaehu so far as any possible power scheme is concerned. Preliminary consideration has shown that any scheme for the development of the Whangaehu – Mangawhero catchment, including waters diverted from the Whakapapa and other streams, is unlikely to be economic.

Since the Whangaehu itself carries the natural pollution from the Ruapehu crater, there is no significant water life nor water supply to be affected by any slight reduction in flow.<sup>67</sup>

The General Manager's report also briefly commented on the effect of the TPD on trout fishing in the Tongariro River, in the same vein as the Ministry of Works report, but said nothing about fish-life in the Whakapapa River.

Following receipt of the report, the Minister of Electricity took the case for the commencement of the TPD to Cabinet. Cabinet gave initial approval in principle in March 1964, subject to the support of Caucus being obtained<sup>68</sup>. In a press release about the approval after receiving Caucus backing later that month, the Minister explained that the Government's approval was "subject to being satisfied that suitable arrangements can be made to preserve the interests of parties who would be adversely affected by the scheme". Of those in the Whanganui Inquiry District potentially affected by the scheme, the Minister's statement referred to a number of issues, all based on the two February 1964 reports:

Problems also arose for the people of Taumarunui, possibly affecting their power supply, their water supply and their sewage. This too must be a matter for negotiation.

The likely effect upon Wanganui Harbour of the reduction of eight to 10 per cent in the mean flow of the Wanganui was investigated by Sir Alexander Gibb and Partners, who reported that this did not pose any insoluble problem.

People interested in the tourist industry, fishermen in particular will be anxious to know the effect upon fishing resources, particularly in the Tongariro River.

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<sup>67</sup> General Manager Electricity to Minister of Electricity, 7 February 1964. Electricity Head Office file 21/75/1. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(g), Volume 6, #2637-2649.

<sup>68</sup> Secretary of the Cabinet to Minister of Electricity, 2 March 1964. Electricity Head Office file 21/75/1. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(g), Volume 6, #2634.

The proposal allows for a continued flow in the Tongariro River, which expert advisors assure us will be adequate to maintain the present excellent fishing, and the level of Lake Rotoaira will not be substantially affected.

The scheme involved the creation of several new lakes which it was hoped would contribute to the available fishing spots. Waters of the Whangaehu, which had poisonous qualities, would not be used.<sup>69</sup>

Significantly, in terms of the size of the impact, the reductions in flow at Taumarunui were not referred to in the Minister's statement. A concentration on the effect on flows at Wanganui in the public statement was clearly made to minimise the environmental consequences of the TPD on the Whanganui River.

Nor did the Crown draw attention to the almost total diversion of the Whakapapa River and the upper Whanganui tributaries. The Minister of Works had received a further briefing about this in the middle of March, being told that the combined mean annual total flow of these upper catchment streams was 735 cubic feet per second (of which the Whakapapa's flow was 513 cusecs), while the intended combined mean annual diversion would be 706 cubic feet per second (of which the Whakapapa would contribute 491 cusecs).

The difference of 29 cusecs represents floods too large to be taken by the diversion tunnels, expressed as if it had been evenly distributed over the year.

It should be noted that in order to divert a flow equivalent to a steady amount of 735 cu.ft./sec for a whole year, more than this figure must be taken on many occasions when it is available to offset the many times when the flow is much less. The tunnels are therefore designed to divert everything up to twice the mean annual flow. The result is that the river bed is dry immediately downstream of diversion for all but about 3 or 4% of the year when floods are passing. The downriver conditions gradually improve as further tributaries, which have not been diverted, join the main stream.<sup>70</sup>

The briefing to the Minister of Works in mid March also discussed the impact of low flows in the Whanganui River at Taumarunui, the effect on Wanganui Harbour Board (in which it repeated the consultants' advice), the effect on navigation on the

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<sup>69</sup> *The Dominion*, 24 March 1964. Copy on Electricity Head Office file 21/75/5. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(b), Volume 1, #524. Walzl has noted that this press release was also printed in other papers. Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 31-32.

<sup>70</sup> Commissioner of Works to Minister of Works, 16 March 1964. Works and Development Head Office file 92/12/67/1. Supporting Papers #214-216.



Whanganui River, and the diversion of 120 cusecs from “clean-water tributaries” of the Whangaehu River:

Taumarunui Borough Council: As best we can assess it, the driest weather flow in the Wanganui at Taumarunui drops to about 570 cusecs. Of this we would divert about 62%, leaving a dry weather flow of about 217 cusecs....

The Borough water supply, sewage disposal and amenities could be affected to some extent, but it seems from enquiries so far that all problems associated with them can be fairly readily met. There are other problems concerned with industries, but these also are capable of resolution. In normal flow periods, conditions would be much better. The average flow at Taumarunui is about 1,200 cusecs, but records are short and not very reliable....

Wanganui Scenic Board: Will be interested in dry weather flow and its effect on canoe-navigation and scenery. Some local deepening of the river channel to improve dry weather flow navigation may eventually be advisable.

Fishery Interests: These have been discussed at length with the Marine Department, and their requirements to maintain satisfactory fishing conditions are already incorporated in the layout.

Fishing in Roto Aira should not be detrimentally affected, and on the other hand two very good fishing lakes will be created by the two small dams on the Wanganui River.

Rangitikei and Whangaehu Rivers: It is most unlikely that diversion of the flow from these rivers will be of significant public interest, since they are soon joined by downriver tributaries which should offset the effect of diversion.

The report summarised the impacts.

At this stage of our knowledge, it seems that although the dry weather flow at Taumarunui may be reduced by about two-thirds, there will still remain sufficient flow to meet essential needs, although some modifications to intakes and outfalls may be required, and effluent from factories may have to be diverted or treated.

Navigation in the river during dry weather could be assisted by the removal of shingle barriers and by local deepening.

Wanganui harbour will be barely affected, and the effects of the high dam at Atene, if it is built, would be much more significant.

The effects downriver in the Whangaehu and Rangitikei are unlikely to be noticeable.<sup>71</sup>

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<sup>71</sup> Commissioner of Works to Minister of Works, 16 March 1964. Works and Development Head Office file 92/12/67/1. Supporting Papers #214-216.

It is clear from the information given in this and earlier briefing papers that the public statement issued by the Minister of Electricity after the Cabinet consented to the TPD going ahead was very much a sanitised version of what was known by the Crown.

Thus, in February and March 1964, the Crown held the view that the most significant impact that would arise from diversion of waters from the Whanganui and Whangaehu Rivers was on the infrastructure of the Taumarunui Borough Council. In May 1964 Ministry of Works officials visited the town. Their report on their visit started with a statement about the loss of water in the river:

The western diversion of the Tongariro scheme involves taking water from the Whakapapa and Wanganui Rivers in particular to increase flows down the Waikato system. This in short will result in the known low flows at Taumarunui of between 600 and 700 cusecs dropping to something of the order of 220 cusecs or about one third.

Discussing the water supply, they could see no difficulties in terms of quantity abstracted or the quality of the water, though the level of the intake might need to be lowered:

The only major water supply served from the river is that for the Taumarunui Borough from an intake near the Matapuna Bridge. Peak drawoffs in the summer are of the order of 0.7 m.g.d. [million gallons per day] and quantity-wise there should be no problem. Similarly treatment should present no problems – the plant is an orthodox complete type with coagulation filtration and chlorination. The only problem which may occur after diversion is the pump intake at the river. During the visit the Wanganui River at the intake was flowing at something in excess of 700 cusecs, and the suction head was just over 18ft. What the suction head will be at low flows after diversion is conjecture at the present time, but it will certainly be greater. However, it may not be excessive, and could well be within the capacity of the pumps. This is a matter that will have to be left until the occasion arises. If trouble does arise, the solutions may be either (a) river works to maintain a satisfactory water level, or (b) lowering the pump level to decrease the suction head.

The tone of this discussion suggests that, in May 1964, Ministry of Works knew how much less water would be in the river, but did not know how much this reduced flow would lower the level of the river. This would mean that they also did not know what the impact of the reduced flows would be on navigability and boating.

With respect to sewage disposal, they identified a situation that was marginal or below standard already, implying that any reduction in flows in the river would make matters worse:

The Taumarunui Borough has just commenced constructing a primary sewage treatment plant which will ultimately serve the whole of the borough. It is located on the south side of the river opposite the town, and it is proposed to discharge the effluent into the south branch of the Wanganui River. This is a small bypass of the main river, and on the day of the visit was flowing at something like 15 cusecs and certainly not more than 20 cusecs. The Borough is required to carry out work from time to time to see that water does flow down this branch at times of low flow. It is not clear why the Borough was allowed to discharge into this bypass, and even neglecting diversions the venture would seem to be hazardous. However, the plant is due for completion next year and remedial action may have to be undertaken after that even for existing flows. A likely solution is the extension of the outfall to the main stream below the Ongarue confluence. This would entail about 1000 ft of extra piping. Higher degrees of treatment are not called for in this location.

The officials recorded that the river was used for swimming, “but the river is of a riffle-pool type and these facilities should still exist at the low flows”. Upstream of Taumarunui at Piriaka was a butter factory and an abattoir. The butter factory discharged only wash water in the river and “no problems are expected here”. The abattoir discharged waste directly into the river, and “as this pollution source is above the [borough] water intake it will need to be kept in mind in the future”. Overall, in terms of the impact of the TPD on Taumarunui, changes to water quality were likely to be the most significant feature:

It [is] suggested that a change in water quality would occur – this being due to the cleaner waters of the mountain being diverted, and leaving the more polluted lower waters to form the bulk of the flow. This may or may not be true, but the only way of verifying it is by actual measurement.

A water quality measuring programme would therefore be instituted<sup>72</sup>.

While in Taumarunui the Ministry officials met with the Borough Council, and discovered “some apprehension in the borough over the intended diversions and their effect”. If the anguished outbursts of the Council in the local media and in letters to Government Ministers<sup>73</sup>, which prompted the officials’ visit in the first place, are to be believed, this was very much an under-statement. The officials’ report of the meeting noted:

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<sup>72</sup> Report on May 12-14 1964 Visit to Taumarunui, 21 May 1964. Works and Development Taumarunui Residency file 19/10/1. Supporting Papers #486-487.

<sup>73</sup> Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 95-99.

It was agreed that due to the uncertainty of the end result, it would be better to wait and see the final result.<sup>74</sup>

Curiously, the impact on the Borough Council's hydro-electric power station at Piriaka was not mentioned in the report. It is possible that it was discussed in another memorandum that has not been located during the research for this evidence.

The figure that most seemed to galvanise the Borough Council at the meeting it held with the officials was that low flows would drop to 217 cusecs, or one-third of natural flows. It would seem that until this meeting, the figure, provided to the Minister of Works in March 1964, had not been made public. This low flow figure was also referred to by the Council, in a public statement after the meeting, and in a letter to the Prime Minister, as "normal summer flow"<sup>75</sup>. That two-thirds of the flow would be diverted became the measure that was continually quoted by opponents of the scheme from then on. Meanwhile, at the river mouth at Wanganui, the average flow of 9,000 cusecs would be reduced by 700 cusecs<sup>76</sup>.

The Commissioner of Works, when reporting back to the Minister of Works on the visit by officials to Taumarunui, was at pains to put the 217 cusecs figure in some better perspective, and yet again to downplay the impact:

[The Borough Council] were, however, rather shocked at the minimum low flow estimate for the Wanganui, which was 217 cusecs for perhaps one month in 10 years. This is a statistical figure which must be very close to the minimum possible. The actual recorded minimum is 260 cusecs, but years of record are not yet long enough to give a positive figure. It is probable the minimum figure got too much emphasis; the mean figure would be 500 or 600 cusecs.

Just what a flow of 217 cusecs will actually look like is difficult to assess. The Wanganui River as seen with a flow of about 1000 cusecs consists of natural gravel bars and deep pools, and it may not look very different when the flow reduces to 217 cusecs. The value of such a change cannot be assessed in money; it is a matter of aesthetics and civic pride. The position can be

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<sup>74</sup> Report on May 12-14 1964 Visit to Taumarunui, 21 May 1964. Works and Development Taumarunui Residency file 19/10/1. Supporting Papers #486-487.

<sup>75</sup> *Daily News* (Taranaki), 23 May 1964, and other newspapers. Copies on Electricity Head Office file 21/75/5. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(b), Volume 1, #439-445.

<sup>76</sup> *Wanganui Chronicle*, 12 June 1964. Copy on Electricity Head Office file 21/75/5. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(b), Volume 1, #430.

alleviated by letting water spill into old channels, but this cannot be promised in advance and needs investigation into economics of wasting water. As has been said before, after one generation, standards by which the matter will be judged will have changed in any case.<sup>77</sup>

The Government's announcement in March 1964 that it was proceeding with the scheme did not at first attract any criticism beyond that centred on Taumarunui and circulating locally. It was only when artist and fisher Peter McIntyre, owner of a bach at Kakahi, published his view, in a Wellington newspaper in June 1964, that the value of natural assets destroyed far outweighed the benefits from the scheme, and that the scheme would have a major effect on the trout fisheries of the Tongariro, Whakapapa and Wanganui Rivers, that widespread protest developed, with the mobilisation of a "Hands Off Tongariro" movement<sup>78</sup>.

The Taumarunui Borough Council also became very vociferous during the months after the May 1964 visit. It took from the meeting with Works officials that the Ministry would be prepared to compensate the Council for its losses, or for any work it had to do, but that it was unprepared to consider any other alternatives. It was appalled that a low flow of as little as 217 cusecs might eventuate, and that the Whakapapa River might run virtually dry in summer. It wrote to Government that there should be a minimum flow of 540 cusecs at Taumarunui, with any diversion ceasing to prevent the flow falling below that amount<sup>79</sup>.

The local Member of Parliament for Waimarino, at the Council's request, brought the matter up during the Address in Reply debate in Parliament at the end of June 1964. His speech was a reflection and statement of the concern felt by the European population of the district, but many features of that concern would probably also have been shared by Maori as well.

I ... raise a matter that deeply affects my own electorate, namely the Tongariro power development scheme, and in particular that portion of the scheme that relates to the diversion of the headwaters of the Wanganui River into Lake Taupo. This scheme has been approved by the Government in principle, subject to satisfactory arrangements for compensation being negotiated with

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<sup>77</sup> Commissioner of Works to Minister of Works, 21 May 1964. Works and Development Head Office file 92/12/67/1. Supporting Papers #217.

<sup>78</sup> Covered in detail in Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 32-38.

<sup>79</sup> Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 95-98.

the local bodies and other organisations and interests affected. I may say at once that this fact and the scheme are a source of great concern to a very large number of people in Taumarunui and the surrounding district. I have already stressed this to the Ministers concerned, and I want again to bring to the notice of the Government and of this House the views of what I believe to be the bulk of the citizens of Taumarunui. As I have said their feelings are feelings of great concern. It is true that there are some citizens in Taumarunui and some residents in the district who welcome the scheme. They take the view that the fact that some tens of millions of pounds will be spent in the surrounding area may lead to some benefit and to substantial development in the area, but it is my distinct impression that those holding that view are a small minority of the residents of the borough and the district, and that the great majority of Taumarunui residents are very much concerned indeed about this scheme. Now, as honourable members will know, the scheme was that that portion of the Tongariro development scheme that affects the Wanganui River will decapitate the river and divert into Lake Taupo a sufficient quantity of water that at present flows down the Wanganui River valley to reduce in times of normal flow or reasonably dry weather the size of the Wanganui River at Taumarunui by approximately two-thirds. This, as I have said, greatly worries the people of Taumarunui.

Perhaps the first and most fundamental reason for their concern is that they feel that this, not quite destruction but great impairment of the river on which their town has been built, is an attack on their heritage and on their fundamental rights. Taumarunui has grown up at the meeting place where the Ongarue Stream flows into the Wanganui River. But the importance of withdrawing from the Wanganui River an amount equivalent to about two-thirds of the normal flow can be envisaged if we illustrate it by reference to some other town. Let us suppose that, in the interests not of the local community but of the nation as a whole, it was decided to take two-thirds of the normal flow out of the River Avon in Christchurch. It would not be difficult to imagine the sort of reaction there would be in Christchurch and the feelings of the citizens of that city. If one can imagine how Christchurch city would feel, then we can understand how the people of Taumarunui feel at the threat of their river, the river their town has been built on, being reduced by as much as two-thirds of its normal flow. They feel, as I have said, that this scheme threatens to rob them of their heritage.

The second of a number of reasons that I shall mention why the scheme causes great and understandable concern in Taumarunui is that it is a marked threat to the tourist potential of the district. There is at present in Taumarunui a rapidly growing demand for jet boat trips on the Wanganui River, using Taumarunui as a base. The river scenery that is to be enjoyed on the Wanganui River moving south from Taumarunui is very fine indeed, and one would not be exaggerating to say it is in the history of New Zealand one of the famed tourist assets of our country. The future of this promising infant industry, jet boat services on the Wanganui River, will be seriously threatened if the flow of the river at Taumarunui is reduced by two-thirds. It is, of course, intended that there will be compensation for losses caused by the scheme, but the

computation of compensation for damage to an industry that is just commencing would be extremely difficult.

The third reason that causes great concern to the people of Taumarunui arises from the borough water supply. The water supply at present is taken from the Wanganui River, but as the river flows now, it is largely made up at Taumarunui of mountain-fed streams, and it is those that are to be cut off or decapitated and diverted into Lake Taupo. The result will be that what is left of the river flowing into Taumarunui will tend, to a much larger extent, to be the run-off from farmlands. Naturally, the amount of impurity, the amount of silt in the remaining water, will increase as compared with that in the clear mountain-fed streams to be cut off; and this will entail a substantial modification of the water treatment plant of the town. This in turn will entail considerable extra capital outlay and a permanent increase in the annual operating cost in terms both of labour and of chemicals used.

The next cause of concern arises from the sewerage scheme of the town. There is right now being constructed at Taumarunui an extensive new sewerage [sic] treatment plant. I visited the plant under construction in the company of the mayor just a week or two ago, but if the hydro scheme is gone on with in its present shape, and the threatened amount of water is taken from the Wanganui River above Taumarunui, then the outflow from the sewerage plant would be on to what will become a dry river bed. The river divides in various places, and one of the divided portions is at Taumarunui, and it is stated that one of the channels would become a dry river bed if the total flow of the river were reduced to the figure that is envisaged. To overcome the difficulty it will be necessary to construct between one-half and three-quarters of a mile of piping, and additional pumping plant. It is a most unwelcome upset to the design of the new sewerage disposal scheme.

The fifth matter that concerns the people of Taumarunui as a result of the proposed decapitation of the Wanganui River, and the one of perhaps greatest economic importance to them, is the threatened loss of their hydro-electric power plant. In the early days of domestic supply of electricity, the people of Taumarunui showed great courage and vision when over 40 years ago they planned and carried out a hydro scheme of their own at Piriaka, just a few miles up the Wanganui River from the town, at a stage in the development of Taumarunui when I understand there was still manuka growing in the main street. This courage and vision has been rewarded by having down through the years a most profitable power plant, but that plant, renewals and modernisation of which are already being planned, is now threatened with, if not extinction, such a great reduction in its effectiveness as to be very seriously impaired. The prospect of loss of most of the water at present feeding and supplying the hydro-power plant of Taumarunui is made all the more irksome and infuriating when one bears in mind that as recently as February 1963, I understand, a licence was renewed for the use of the 500 cusecs of water for the next 21 years. The reduced flow that may well result from the proposed scheme will mean about 200 cusecs being available instead of 500 cusecs for which a licence was granted as recently as a little more than

one year ago. The possible loss of the power plant is viewed with considerable concern by the administration of the Taumarunui borough.

Sixthly, a point that may seem a small one, the suitability of the water and the availability of swimming holes in it, will be impaired if two-thirds of the volume of the river is diverted. To young people who are accustomed to swimming and learning to swim in the river, its impairment or destruction even for this purpose should not be taken too lightly. Under this development scheme we are interfering with the heritage of a group of people, and even though the loss of swimming facilities may seem much less important than a number of other points, it should not, I suggest, be pooh-poohed or disparaged in any way.

The last of the points I would mention is the one relating to flooding. It is a curious anomaly of the scheme, when seen through the eyes of a resident in Taumarunui, that in times of normal flow, in times of dry weather, the amount of water in the river will be greatly reduced just when the water is wanted, but that in times of flooding, when the water is not wanted, the whole of it will be poured down the old Wanganui River channel. The reason is not difficult to seek. We know what great trouble has been caused in the Waikato valley as a result of flooding there. In times of very heavy rain, effort will be made to avoid pouring more water into Lake Taupo and the Waikato River valley. The method adopted will be to pour it down their own old channel, the head-waters of the Wanganui River, just at a time when it is not wanted. At that part of the river the degree of flooding and the rate of rise in the level in times of heavy rain is quite staggering and are far above what most residents on rivers are accustomed to.

The people of Taumarunui view this whole matter in a way that they hope will not be regarded as unreasonable. The present normal flow is well over 700 cusecs. I am informed that they consider that, if they are left with an assured flow of 540 cusecs, then despite the disadvantages they would accept with good grace the misfortune with which they would be faced, but if they are threatened with having their water reduced in times of normal or dry flow to a mere 200 cusecs, then they think they would be subject to a great disability and injustice that could only be remedied in part in compensation and money. I do ask the Government to give earnest consideration to the possibility of assuring the people of Taumarunui that they will have not less than 540 cusecs flowing down the river which they rightly regard as their heritage.<sup>80</sup>

In July a coordinating committee of parties opposed to the diversion was formed in Taumarunui. Organisations represented on the committee were the local Acclimatisation Society, Federated Farmers, the Taumarunui Chamber of Commerce,

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<sup>80</sup> Mr Jack, 24 June 1964. *New Zealand Parliamentary Debates*, Volume 338, pages 278-280. Supporting Papers #541-542.



the local Rotary club, Taumarunui Borough Council, Taumarunui County Council, and the New Zealand Jet Boat Association<sup>81</sup>.

At the end of July 1964 the Ministers of Electricity, Works and Internal Affairs held a public meeting in Taumarunui, to try and mollify the strong opposition that had emerged. While they were committed to the scheme going ahead, and were not prepared to set a minimum flow of 540 cusecs, as sought by the Borough Council, they made a number of commitments on behalf of the Government:

- Compensation would be paid to the Borough Council for additional costs regarding water supply and sewage treatment.
- The Wanganui River would be “sealed off” at Piriaka to ensure the maximum amount of water was available for power generation there. The phrase “sealed off” was not explained, though it is believed to refer to an intention to divert the full flow of the Wanganui River through the power station, and not allow any flow to bypass the power station around the Piriaka Loop.
- Sealing of the Tokaanu to Taumarunui highway would be accelerated.
- The Government would investigate what was necessary to ensure that jet-boating operations could continue.
- Sufficient water would be released down the Whakapapa River to avoid any death of fish caused by a lack of flow.
- “Any other matters which could develop through the diversion of the Wanganui and Whakapapa Rivers” would be looked at.<sup>82</sup>

It was only at the public meeting that the Minister of Electricity countered the Borough Council’s figures about the reduced flows in the river at Taumarunui. While the Council was correct about low flow reductions, he said, the reduction of normal

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<sup>81</sup> Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 99-100.

<sup>82</sup> Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, page 101. *New Zealand Herald*, 27 July 1964, and other newspapers. Copies on Electricity Head Office file 21/75/5. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130, Doc #E12(b), Volume 1, #275-281.

K Chapple, *The Rape of the Wanganui River: One of New Zealand’s Most Misguided Engineering Projects*. C&S Publications, Taumarunui, 1987, page 16.

flow (i.e. of the average of flows throughout the year) was from 1700-1800 cusecs to 700-800 cusecs<sup>83</sup>. The Government had not used these figures before then.

There were apparently further commitments made by the Government at a meeting between Federated Farmers' members and the Minister of Electricity during the Minister's visit to Taumarunui. He promised that compensation would be given to farmers genuinely affected by the scheme, though this promise may have been no more than was already provided for under the Public Works Act. He also stated that "the scheme would not in any way affect the fishing in the Whanganui River"<sup>84</sup>.

While there were numerous expressions of concern and opposition from European members of the Waimarino, Taumarunui and Whanganui communities, no specifically Maori voice was raised against the Western Diversion of the TPD from within those communities. That is not say that Maori were not concerned. However, as the Waitangi Tribunal noted consistently throughout its Whanganui River Report, the primary focus of their concern over the years was with the lack of recognition of their tino rangatiratanga over the river. While that issue was unresolved, they often declined to engage with the Crown and other local agencies, because that would be seen as acknowledging the right of the Crown and Crown-authorized agencies to be involved and make decisions about the river. This difference of approach, resulting in two parties talking past each other, was nowhere more apparent than in the only reaction by Whanganui Maori during 1964 identified in the Tribunal report and by Walzl. At the Taumarunui meeting in July 1964 attended by the three Ministers, Hikaia Amohia apparently stood and reiterated the right to tino rangatiratanga over the river, asking why the permission of Whanganui Maori to take water from their river had not been sought. He was silenced by the chairperson of the meeting, seemingly on the grounds that the tangata whenua claim to the river was not the kaupapa of the public meeting<sup>85</sup>. The Ministers present did not heed the call for

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<sup>83</sup> *New Zealand Herald*, 27 July 1964. Copy on Electricity Head Office file 21/75/5. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(b), Volume 1, #275-276.

<sup>84</sup> Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, page 103. *Taumarunui Press*, 4 August 1964. Copy on Electricity Head Office file 21/75/5. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(b), Volume 1, #273.

<sup>85</sup> Waitangi Tribunal, *Whanganui River Report*, 1999, page 238.

Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 101-103.

permission, or even for consultation, as the Crown made no approach of any kind to Whanganui Maori about the TPD after the meeting.

The decision to definitely go ahead with construction of the TPD was made by Cabinet in September 1964. The Government had waited until it had received the views of the Nature Conservation Council about the TPD scheme generally. By a majority decision the Council offered “no objection”, provided “every effort is made to preserve the recreational value of the Tongariro River”. The Council had no reservations about the impact of the Western Diversion on the Whakapapa and Whanganui Rivers, much to the dissatisfaction of those who had protested against the TPD<sup>86</sup>.

To summarise the environmental impacts of the Western Diversion as perceived by the Crown during 1964, at the time that approval for construction of the TPD was being given, the Diversion would capture some 700 cusecs of water from the headwaters of the Whanganui and Whakapapa Rivers. The impact would be most substantial immediately below the intakes, because up to double the mean annual flow would be diverted, but by the time the Whanganui River reached the sea, the amount of water that would have been diverted represented between 8% and 15% of the river’s flow, resulting in an insignificant impact on the running of the river mouth port. The effect on navigability by jet-boats between Taumarunui and the sea was unknown. There would be an impact, the severity of which was unknown, on fishing in the Whakapapa and Whanganui rivers (thought of solely in terms of trout fishing), though this would be counter-balanced by the creation of fishing opportunities at the new Lake Otamangakau. Existing uses of the river at Taumarunui would be affected to a greater or lesser degree. The power station at Piriaka would not be able to generate as much electricity, the intake to the town’s water supply would be affected, and the sewage discharge, which was already poorly designed, would be able to operate even less effectively. All three problems could be overcome by monetary compensation to pay for improvements to the structural works, or to recognise that electricity had to be purchased from elsewhere. Water quality would almost inevitably be reduced because the cleanest water in the river was being diverted, and

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<sup>86</sup> Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 37-38.

the discharges from farmland and of sewage and industrial waste would not be able to rely on the dilution factor of the river to the same extent as before the diversion.

Notable during the 1964 debate was the minimal discussion about the Whakapapa River, even though this was the river perhaps most affected by the TPD. Young refers to it as “the sacrificial stream” of the TPD<sup>87</sup>. Most discussion was instead about the Whanganui River from Piriaka downstream. The Whakapapa and the other upper Whanganui tributaries rising on the flanks of Mounts Tongariro and Ngauruhoe, were all generally recognised as trout fisheries, though their status in this regard was overshadowed by the more well-known and popular fisheries on the rivers flowing into Lake Taupo. With much of the focus in 1964 on those other rivers, the effect on trout fishing of the loss of water in the Western Diversion rivers was only poorly addressed. In addition, the channelling of environmental concerns about the rivers affected by the Western Diversion into the context of the trout fishery tended to ignore wider environmental impacts, such as the effect on the benthic fauna generally, and on other wildlife such as blue duck.

While little was being said about the Whakapapa River publicly, there were some efforts made within Government departments to reconcile the TPD water takes with fisheries concerns. The consultants responsible for developing the TPD scheme had thought that 10 to 15 cusecs of water remaining in the river below the water intake would be sufficient to maintain a flow between pools. In 1965 the Electricity Department agreed with the Department of Internal Affairs (Wildlife Branch) that flows would be set that would ensure a water temperature safe for fish. In 1973 (see below), this was converted into an authorised figure of 20 cusecs<sup>88</sup>.

The discussion above has gone into some detail about the public reaction to the Western Diversion, and the Crown’s response to that public reaction. In contrast, the Eastern Diversion from the Whangaehu tributaries never generated any friction at all. The intake sites and the riverbeds immediately downstream were all generally within the Karioi State Forest, a Crown-controlled altered landscape of pine trees, while the

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<sup>87</sup> D Young, *Woven by Water: Histories of the Whanganui River*. Huia Publishers, Wellington, 1998, page 248.

<sup>88</sup> Waitangi Tribunal, *The Whanganui River Report*, Wellington, 1999, page 237.

rivers that would lose their flow contained a sparse fauna and were not much visited by fishers. Concerns in relation to the Eastern Diversion were all in connection with the Moawhango catchment (outside the Whanganui Inquiry District boundary) rather than with the Whangaehu catchment.

In general, it can be said of the 1964 decision-making period that the Government under-informed itself about the environmental impacts. The information was available about the changes in the flow regime, particularly about a sudden drop in flows after flood flows, and about the lesser amount of water flowing down the river during the majority of the time when flows were not either flood or low. The Government was poorly served by its officials, who failed to pass that information on to the decision-makers, or where they passed it on did so with commentary that minimised the environmental impact. However, even if fuller information had been passed to the decision-makers, it is unlikely that the decisions would have been different, as generating electricity was at the forefront of Cabinet's mind. The Crown was not prepared to forego the benefits to the country of keeping up with rising electricity demand for the sake of avoiding or mitigating the impact on the Whanganui River.

### **3.5 After the Commissioning of the Western Diversion**

Water was first taken for the Western Diversion of the TPD in 1971, and the amount taken was progressively increased as more intakes on the various upper Whanganui tributaries were brought into operation during 1972. By the beginning of 1973 the changes that the Diversion brought to the Whanganui River and its tributaries had become apparent. The outcry from the public was immediate.

The main focus of public concern was with the trout fishery, and this concentrated on the Whakapapa River, which tended to be more accessible than the upper reaches of the Whanganui River itself or the Mangatepopo River. The amount of water allowed to flow down the river below the TPD intake had disrupted the river, turning it into a series of pools. There the temperatures rose during the summer, starving the fish of oxygen, and causing a number to die. The Nature Conservation Council wrote to the Minister of Lands following an inspection of the Whakapapa:

This discloses that the Whakapapa River is dry except for odd large pools for a distance of about 4 miles [below the diversion]. A slight flow did not preclude walking the riverbed in shoes. As a result of the low flows the river at Kakahi is less than half its normal width and more than 2 [feet] below normal height, and the colour of the water at this point tends to indicate changes in quality, etc. Stock have access across and down and up the dried river beds.<sup>89</sup>

The newly-elected Labour Government was highly embarrassed. The Ministers of Works and Electricity made public statements assuring that the commitments made by Government in 1964 would be honoured, and instructed their officials to quickly come up with some answers. The officials embarked on a series of tests of various flow rates that would be allowed to continue down the Whakapapa River, to see what effect each rate had on fish life. When the tests were completed, the decision was made to ensure a flow of 15 to 20 cusecs<sup>90</sup>.

The lower flows also disclosed problems for jet boats at Taumarunui. Even before the TPD, the river between Cherry Grove (confluence of the Whanganui and Ongarue Rivers) and the Te Maire bridge was problematic, the problems becoming more acute because of the rising popularity of jet boating:

In recent years jet boating has increased, and more use has been made of the 8 mile river reach between Cherry Grove launching ramp and Te Maire bridge. This is a difficult part of the river and because no maintenance has been done, will require quite a lot of work, including snag clearing and blasting to deepen and confine shallow rapids.

The lowest natural flow at Te Maire was in 1970 – 650 cusecs, which had the western diversion been operative would have reduced it to 450 cusecs. Navigation with jet boats, without diversion, is hazardous in the upper reaches, and diversion will make this more so. Therefore it seems probable that the future will require channel preparation and maintenance expenditure....

In October 1973, with the Western Diversion taking the maximum permitted flow, the flow at Piriaka was 400 cusecs. Winter 1973 rainfalls were low, and it could be, in the absence of any substantial rainfalls, that the low flows in 1974 will be lower than those for 1970.<sup>91</sup>

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<sup>89</sup> Secretary Nature Conservation Council to Minister of Lands, 18 December 1972. Works and Development Head Office file 96/333000. Supporting Papers #248-249.

<sup>90</sup> Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 105-111.

<sup>91</sup> District Commissioner of Works Wanganui to Commissioner of Works, 16 November 1973. Works and Development Head Office file 96/333000. Supporting Papers #250-251.

The Acting Resident Engineer for the Ministry of Works in Taumarunui interviewed the Wanganui River Scenic Board's Honorary Ranger, Jock Erceg, who had extensive jet boating experience on the Whanganui. The Board had requested, and Erceg supported, that three rapids<sup>92</sup> in the river downstream from Taumarunui should be cleared of snags. Erceg considered that the snag clearing at the rapids was required anyway, irrespective of the TPD diversions, because the decrease in water depths caused by the TPD would not have made any appreciable difference to the difficulties of navigation. However, Erceg did not support additional channel clearing elsewhere on the river, believing that the extra effort would have to be so extensive as to be futile<sup>93</sup>.

The outcry about the Western Diversion during 1973 was the greater for the belief by the public that it had been proved right. Officials in the Ministry of Works and the Electricity Department, with their single-minded focus on electricity generation, had in 1964 generally denied, minimised and downplayed concerns about the impact on the environment expressed by residents of Waimarino, Taumarunui and Whanganui. Those residents considered they had been treated shabbily during 1964, and they were determined that the Crown would take their concerns more seriously during 1973 and subsequently. However, the Crown held all the cards. It held the legal authority to divert issued in 1958. The water intakes were already in place, and the water was already being diverted. It held a virtual monopoly on the water engineering experts and the fisheries scientists. In short, the Crown held the power to make whatever decision best suited its overall interests, without fear of being legally challenged or having its decision reviewed. Those overall interests, as they always had been, were first and foremost concerned with the generation and supply of electricity. Local concerns and interests were subordinate to what the Crown regarded as that national imperative.

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<sup>92</sup> No 84 Ruangarehu, No 26 Omaka, and No 16 Te Autetii, according to Engineering Officer to Resident Engineer Taumarunui, 5 February 1974, attached to District Commissioner of Works Wanganui to Commissioner of Works, 13 December 1974. Works and Development Head Office file 96/333000. Supporting Papers #257-260.

<sup>93</sup> Acting Resident Engineer Taumarunui to District Commissioner of Works Wanganui, 1 March 1974, attached to District Commissioner of Works Wanganui to Commissioner of Works, 15 March 1974. Works and Development Head Office file 96/333000. Supporting Papers #252-254.

During the second half of January 1974 the amount of water diverted by the Western Diversion had to be reduced to about 300 cusecs, in order to ensure that there was sufficient flow in the river at Piriaka. This reduction was in order to meet the Crown's commitment to Taumarunui Borough Council's hydro power station<sup>94</sup>. At the time of this reduced diversion, the Resident Engineer at Taumarunui commented:

The low state of the river has been apparent to all for several weeks. There appears to be every chance now that the low levels will be taken for granted by the public in general. Apart, possibly, from one or two disappointed jet-boat operators, my impression this year is that the public as a whole is enjoying the safer and warmer bathing conditions, as well as better access along the river banks for fishing, etc. (In spite of predictions, the fishing is possibly better now than it ever was).<sup>95</sup>

The reference to bathing probably refers to the river at Taumarunui. The Resident Engineer did not state which stretches of the river he was speaking of when referring to better fishing.

### **3.6 Changes to the Western Diversion since 1973**

The 1958 authority to divert waters continued to provide the legal basis upon which the Crown operated the TPD. However, in 1973 an omission in the implementation of the 1958 authority was identified. Under Section 21(2A) of the Water and Soil Conservation Act 1967 the lawful nature of pre-1968 authorities, diversions and uses of water was allowed to continue, provided that the diversions and uses were notified to the regional water board or (where no regional water board existed) the Water Allocation Council. The 1958 authority was notified to the Waikato Valley Authority and the Rangitikei Regional Water Board, thereby covering the TPD operations associated with the rivers and streams flowing into Lake Taupo, and with the Eastern Diversion. However, there was no notification of the authority to the Water Allocation Council, which in the absence of a regional water board was the agency managing the waters of the Whanganui catchment. It was necessary to pass special legislation in 1973 to authorise the prior and continuing operation of the TPD in the Whanganui catchment. Section 31 of the Water and Soil Conservation Amendment Act 1973 validated the 1958 authority across all the catchments named in it, with

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<sup>94</sup> Engineering Officer to Resident Engineer Taumarunui, 5 February 1974, attached to District Commissioner of Works Wanganui to Commissioner of Works, 13 December 1974. Works and Development Head Office file 96/333000. Supporting Papers #257-260.

<sup>95</sup> Resident Engineer Taumarunui to District Commissioner of Works Wanganui, 5 February 1974, attached to District Commissioner of Works Wanganui to Commissioner of Works, 13 December 1974. Works and Development Head Office file 96/333000. Supporting Papers #257-260.



respect to all dammings, diversions, takings, discharges and use of water for the TPD scheme that had been undertaken before March 1975.

In March 1972 the Whanganui River catchment was incorporated into a regional water board area, and the Rangitikei Board was renamed the Rangitikei-Wanganui Catchment Board and Regional Water Board.

Although the 1958 authority to divert waters placed no conditions on the Western Diversion, the Crown did accept certain limits within which it would operate. The decision in 1973 to provide a residual flow in the Whakapapa River below the intake of 15 to 20 cusecs (which was subsequently modified by being raised slightly to 0.6 cumecs) was one such limitation. The Electricity Department also agreed with the Department of Internal Affairs (Wildlife Service) to provide additional releases in the Whakapapa when necessary to ensure that the water temperature at Kakahi would not exceed 23 degrees Celsius. A further commitment was made with Taumarunui Borough Council that an absolute minimum flow of 261 cusecs (7.4 cumecs) would be provided at Piriaka, and that compensation would be paid for loss of generating capacity if the flow at Piriaka dropped below a desirable minimum of 335 cusecs (9.9 cumecs)<sup>96</sup>.

The operating procedures that the Crown voluntarily imposed on itself remained in force from 1973 to 1983. In 1977 the New Zealand Canoeing Association applied to the Water Resources Council for it to set minimum flow rates<sup>97</sup> in the Whanganui River. The application was referred to the Rangitikei-Wanganui Regional Water Board<sup>98</sup>, which commissioned a resource inventory report<sup>99</sup>, undertook some

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<sup>96</sup> Tonkin and Taylor, *Water Resources of the Wanganui River*. Rangitikei-Wanganui Regional Water Board internal report 78/4, 1978, page 22.

K Chapple, *The Rape of the Wanganui River: One of New Zealand's Most Misguided Engineering Projects*. C&S Publications, Taumarunui, 1987, pages 21-22.

<sup>97</sup> As allowed for by Section 14(3)(o) Water and Soil Conservation Act 1967.

<sup>98</sup> Director of Water and Soil Conservation to Secretary Rangitikei-Wanganui Catchment Board, 16 December 1977, attached as Appendix 1 to Report by Chief Engineer on Wanganui River Water Management Planning to Rangitikei-Wanganui Catchment Board, 23 May 1979. Works and Development Wanganui file 96/333000. Supporting Papers #447-454, at #453.

<sup>99</sup> Tonkin and Taylor, *Water Resources of the Wanganui River*. Rangitikei-Wanganui Regional Water Board internal report 78/4, 1978.

preliminary water management planning work<sup>100</sup>, and appointed commissioners to hold hearings during 1981. The hearing panel's decision, issued in 1982 and adopted by the Regional Water Board that year, and by the National Water and Soil Conservation Authority in November 1983, was that the flow in the Whanganui River at Te Maire, just downstream from Taumarunui, should not be less than 22 cumecs during the summer months (1 December to 14 February) and over each Easter weekend, and not less than 16 cumecs for the rest of the year. There was no right of appeal against the National Authority's decision.

The minimum flow regime established by the National Water and Soil Conservation Authority in 1983 was for the five-year period up to October 1988, at the end of which time it had to be reviewed. A new round of hearings was organised by the Rangitikei-Wanganui Regional Water Board in 1988. The hearings tribunal decided that minimum flow levels should be established for some of the tributaries upstream of Taumarunui. The TPD water intake on the upper Whanganui River should be closed (described in the decision as the minimum flow on the upper Whanganui River being 100% of the natural flow), and the flow in the Whakapapa River at a footbridge recording site below the diversion intake should be not less than 8.5 cumecs during the summer season (1 December to 30 April), and not less than 4.2 cumecs for the rest of the year. It calculated from flow records that these measures would ensure that flows in the Whanganui River below Taumarunui would be adequate for river navigation, and that there was therefore no need to set a minimum flow at Te Maire. The hearings tribunal's recommendation was accepted by the Regional Water Board<sup>101</sup>.

This decision was not put into effect, because it was appealed to the Planning Tribunal. The Tribunal cancelled the Regional Water Board's decision, and substituted its own decision, which set the flow at Te Maire during an extended summer season (1 December to 31 May) at not less than 29 cumecs (or the natural flow if lower), and the flow at the Whakapapa footbridge at not less than 3 cumecs (or

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<sup>100</sup> Report by Chief Engineer on Wanganui River Water Management Planning to Rangitikei-Wanganui Catchment Board, 23 May 1979. Works and Development Wanganui file 96/333000. Supporting Papers #447-454.

<sup>101</sup> With the abolition of the National Water and Soil Conservation Authority by the Water and Soil Conservation Amendment Act 1988, the minimum flow decision was one for the Rangitikei-Wanganui Regional Water Board to make.

the natural flow if lower). There was no minimum flow set on the upper Whanganui River. No finite term was set, though the Tribunal made it clear to the Regional Council that “it should review the regime after about 10 years in any event”<sup>102</sup>. There were appeals to the High Court against the Planning Tribunal’s decision, but they were not allowed. The regime determined by the Planning Tribunal came into effect at the beginning of September 1992 with respect to the Whakapapa River, and at the beginning of February 1993 with respect to the Whanganui River.

The flow regime established by the Planning Tribunal continued through the 1990s. By the Resource Management Act 1991, the 1958 authority and other pre-1966 rights and authorities were given a fixed term of 10 further years. Anyone wishing to continue to operate water takes, diversions and discharges allowed by those rights and authorities after October 2001 had to make a resource consent application. The set of applications for the continued operation of the TPD scheme as a whole was made by Genesis Power Limited<sup>103</sup>, and was heard in 2000. The decision given by the regional councils in 2001 retained the minimum flow of 3 cumecs below the Whakapapa intake, and the minimum flow regime established for Te Maire by the Planning Tribunal with effect from 1993. In addition minimum flows of 0.5 cumecs below the Mangatepopo intake and 0.3 cumecs below the Whanganui River intake were set. The decision of the Manawatu-Wanganui Regional Council with respect to the Western Diversion consents was appealed to the Environment Court by a number of Whanganui Maori organisations. In a decision announced in May 2004, the Court upheld the minimum flow rates for the Western Diversion, though the term of the various consents granted to Genesis Power Limited was reduced from 35 years to 10 years. The reduction in term was a recognition that there had been insufficient dialogue between the power generator and Whanganui Maori, and that the

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<sup>102</sup> *Electricity Corporation of NZ Ltd & Whanganui River Maori Trust Board v Manawatu-Wanganui Regional Council*, Decision W70/90 of the Planning Tribunal, 29 October 1990, at pages 192-193. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 6.

<sup>103</sup> The electricity industry reforms of the 1990s, with respect to electricity generation, had first created the privatised Contact Energy, and then split up the remainder of the Electricity Corporation of NZ Ltd State-Owned Enterprise into three enterprises, Genesis Power, Mighty River Power, and Meridian Energy. The whole of the TPD had become the property of Genesis Power Ltd.

requirement for a fresh application in ten years time would encourage both parties to come to “a meeting of the minds” during the intervening period<sup>104</sup>.

This brief for this project requires that the evidence focuses on the environmental impacts of the TPD, rather than address in any detail of the legal manoeuvrings over flow regimes and water permits. The history of these various hearings processes and resulting decisions has been fully covered in evidence to the National Park Inquiry by Walzl<sup>105</sup>, and in commentary form by Young<sup>106</sup>. However, the inquiry process resulted in a considerable amount of evidence about the environmental impacts, and these are drawn on below to describe the impacts that the Western Diversion has had. In addition the various inquiries and consents have meant that there have been four different management regimes affecting the Whanganui River since the TPD was commissioned, specifically 1973 to 1983, 1983 to 1992, 1992 to 2004, and since 2004, each successive regime being slightly more limiting as to how the TPD could be operated. Which regime is applicable when discussing the various impacts below is identified as appropriate.

### **3.7 Changes Downstream of the Western Diversion**

#### **3.7.1 Changes of Flow**

The area of land in the valleys above the Western Diversion intakes is approximately 320 square kilometres<sup>107</sup>. As the Whanganui catchment as a whole has an area of approximately 7,120 square kilometres, this means that the TPD captures the waters

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<sup>104</sup> *Ngati Rangi Trust and Others v Manawatu-Wanganui Regional Council*, Decision 067/2004 of the Environment Court, 18 May 2004, Paragraph 475. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12(s), Volume 18.

<sup>105</sup> Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 112-208.

<sup>106</sup> D Young, *Woven by Water: Histories from the Whanganui River*. Huia Publishers, Wellington, 1998, pages 249-256.

<sup>107</sup> The catchment areas of the individual streams above each intake, and the mean annual flows at each intake, are;

Whakapapa River - 176 square kilometres, 15.3 cumecs

Okupata Stream – area not stated, 0.5 cumecs

Taurewa Stream – area not stated, 0.3 cumecs

Tawhitikuri Stream – area not stated, 0.2 cumecs

Mangatepopo – 25.6 square kilometres, 2.0 cumecs

Whanganui River – 35 square kilometres, 1.6 cumecs

Otamangakau Stream – 23 square kilometres, 0.6 cumecs

Other streams draining into Otamangakau Lake – 23 square kilometres, flow not stated.

Genesis Power Limited, *TPD Assessment of Environmental Effects*, July 2000, pages 247-248. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(l), Volume 11.

of about 4.5% of the catchment. The intakes were designed to be capable of capturing double the mean annual flow<sup>108</sup>, though the practical upper limit on diversion is set by the 40-42 cumecs capacity of the Wairehu Canal transporting water out of the catchment and into Lake Rotoaira. The intakes are therefore capable of capturing all the flow most of the time, though not during flood flows, when water will spill over the structure and flow downstream.

The result is that flows in the waterways below the diversions are artificially depressed for most of the year, as increases in flow are captured by the diversion intakes, and they remain at low volumes for longer periods of the year while the intakes operate as intended. It is only during flood flows that the waterways come near to attaining their natural condition, these flood flows being preceded by a rapid increase in volumes as the rivers rise from their unnaturally low levels, and being followed by a rapid decrease in volumes as the diversion intakes capture most of the flow below the double-of-the-mean volumes.

Deliberate spilling/release of water by the TPD operator into the riverbed below occurs only at the Whakapapa intake and occasionally at the Otamangakau Lake outlet. At the Whakapapa intake, the spilled water flow rate was 15-20 cusecs (0.42-0.56 cumecs) between 1972 and 1992, and has been 3 cumecs since 1992. Release of water through a valve in the Otamangakau Dam occurs when it is necessary at times of low flow in order to meet the requirement for a minimum flow at Te Maire.

Between 1975 and 1977, during the initial period when no minimum flow levels had been mandated, the TPD diversions took 84% of the total available mean flow in all the headwaters streams, including the Whakapapa<sup>109</sup>. Downstream the effect progressively reduced. Calculations made in 1978 showed that the reduction of mean flow at Piriaka was 45%, at Te Maire it was 22%, and at Paetawa (near Wanganui) it was 8%<sup>110</sup>.

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<sup>108</sup> For instance the design flow capacity of the Whakapapa intake is 35 cumecs.

<sup>109</sup> Of the total diverted, 65% came from the Whakapapa River, and 35% came from the combined upper Whanganui River and its tributaries.

<sup>110</sup> Tonkin and Taylor, *Water Resources of the Wanganui River*. Rangitikei-Wanganui Regional Water Board internal report 78/4, 1978, pages 54-55.

Reductions in the flows of water in the Whakapapa have been dramatic. From a pre-TPD low flow rate (based on a 7-day average) of 8.27 cumecs at the Whakapapa footbridge site just below the intake, the reduction of flow (during the 1973 to 1992 period) was 93% to 0.56 cumecs. The mean flow rate was reduced by 82%<sup>111</sup>. Since 1992, with a minimum flow rate set, the amount of water at the Whakapapa footbridge site represents a 65% reduction on pre-TPD low flows, and a 67% reduction on pre-TPD mean flows, while the reduction at flood flows has been just 13%<sup>112</sup>.

The waters of the Whakapapa and upper Whanganui meet at Kakahi, then flow down past Piriaka, Taumarunui and Te Maire. Te Maire is 58 kilometres downstream of the Whakapapa intake, and water takes approximately 20 hours to travel that distance, though at flood flows this can be cut to about 5 hours. At Piriaka the mean flow reduction has been 48% (1973-1992) and 40% (since 1992), while low flow reduction has been 55% (1973-1992) and 45% (since 1992). At Te Maire the mean flow reduction has been 26% (1973-1992) and 20% (since 1992), while low flow reduction has been 43% (1973-1992) and 10% (since 1992)<sup>113</sup>.

The hearings tribunal in 1988 recorded:

The diversion of water from the upper part of the catchment has its greatest effect under low flow conditions. The upper catchment acts as a reservoir, due to snow and groundwater storage, with a greater or more persistent base flow than tributaries from the western catchments. Flow duration analysis shows that the flow is, on average, less than the pre-diversion 7-day low flow for an extra 160 days a year at Piriaka, and for an extra 73 days a year at Te Maire.<sup>114</sup>

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<sup>111</sup> *Wanganui River Minimum Flow Review: Report and Recommendations of the Tribunal*, 20 September 1988. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 88/8, page 4. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 1.

<sup>112</sup> Genesis Power Limited, *TPD Assessment of Environmental Effects*, July 2000, pages 249-255. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(l), Volume 11.

<sup>113</sup> *Wanganui River Minimum Flow Review: Report and Recommendations of the Tribunal*, 20 September 1988. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 88/8, page 4. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 1.

Genesis Power Limited, *TPD Assessment of Environmental Effects*, July 2000, pages 249-255. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(l), Volume 11.

<sup>114</sup> *Wanganui River Minimum Flow Review: Report and Recommendations of the Tribunal*, 20 September 1988. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 88/8, page 4. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 1.

The effect of the TPD is felt with decreasing intensity right down the Whanganui River. By the time the river has reached Paetawa, in the lower reaches of the Whanganui River, flows are 90% of pre-TPD flows at times of low flow, 93% at times of mean flow, and 99% at times of flood flow<sup>115</sup>.

The Manawatu-Wanganui Regional Council reported in 1999, with respect to the minimum flow regime established in 1992-93:

The natural flow of the Whakapapa River has never been known to fall below 3 m<sup>3</sup>/s [cumecs]. Natural summer low flow is usually near 8 m<sup>3</sup>/s. The natural flow of the Whanganui River at Te Maire often falls below 29 m<sup>3</sup>/s during summer. To meet the minimum flow [provisions, operators of the Tongariro Power development Scheme must occasionally cease all diversion and abstraction. In this way, briefly during most summers, the Whanganui River headwaters return to their natural state.<sup>116</sup>

### **3.7.2 Impact on Sedimentation**

The changes in flow affected the amount of sediment transported by the river, and also where it tended to accumulate. The waterways above the TPD intakes are steep, rocky and erosion prone, so that the rivers carry significant amounts of material. Each intake, and the two lakes in the upper Whanganui catchment, traps sediment and prevents it proceeding downstream. It has been calculated that the amount of sediment load in the Whakapapa River at the footbridge has been reduced by 34%, and in the Whanganui River at Te Maire has been reduced by 9%, from pre-TPD volumes<sup>117</sup>.

In the Whakapapa River, sand gets drawn off into the diversion, thereby increasing the proportion of finer sediments. These finer particles are reported to have a

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<sup>115</sup> Genesis Power Limited, *TPD Assessment of Environmental Effects*, July 2000, pages 249-255. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(I), Volume 11.

<sup>116</sup> Manawatu-Wanganui Regional Council, *Measures of a Changing Landscape: State of the Environment Report, Manawatu-Wanganui Region*, 1999, page 50.

<sup>117</sup> Genesis Power Limited, *TPD Assessment of Environmental Effects*, July 2000, page 256. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(I), Volume 11.

cementing effect (due to inter-particle cohesion) on the riverbed below the diversion, which can affect fish and benthic fauna habitat<sup>118</sup>.

While flood peaks, during which sediment movement is greatest, were little changed, the rapid reduction of river flows to a low level after a flood have meant that higher flows that could continue the movement of sediment started during a flood do not occur. There was evidence of sediment build-up in the Piriaka to Taumarunui stretch of the river.

No mention was located in the reports examined in connection with gravel extraction (see separate section of this report) about a change of circumstances in the Whanganui River in the Taumarunui locality following the commencement of the TPD operation. Lower flows may have made gravel resources in the riverbed more accessible.

The hearings tribunal in 1988 reported on some changes to the bed of the river downstream of Taumarunui, caused by drying out when parts are exposed above a lower water level:

Sandstone / mudstone ledges exist for approximately 33km of the 46 km between Taumarunui and the Ohura confluence.... As discharge and water level drop below pre-diversion levels, there is an increase in the exposure of the ledges, causing an increase in their rate of erosion.

In addition, the hearings tribunal was told that “silt is replacing sand between the stones in the riverbed downstream from Taumarunui, making them difficult to move”<sup>119</sup>. The slowing of the erosion of the papa ledges was given by the Planning Tribunal as one of its reasons for the raising of the minimum summer flow at Te Maire from 22 cumecs to 29 cumecs<sup>120</sup>.

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<sup>118</sup> *Wanganui River Minimum Flow Review: Report and Recommendations of the Tribunal*, 20 September 1988. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 88/8, page 4. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 1.

<sup>119</sup> *Wanganui River Minimum Flow Review: Report and Recommendations of the Tribunal*, 20 September 1988. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 88/8, page 4. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 1.

<sup>120</sup> *Electricity Corporation of NZ Ltd & Whanganui River Maori Trust Board v Manawatu-Wanganui Regional Council*, Decision W70/90 of Planning Tribunal, 29 October 1990, at page 190. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 6.



The biggest source of suspended sediment in rivers flowing through papa country is bank erosion and runoff from hillsides<sup>121</sup>. Farming practices and other types of land management will therefore have had a greater impact on suspended sediment rates than the TPD.

### 3.7.3 Impact on Water Quality

A report in 1978 commented:

Although no pre-diversion data are available for a quantitative assessment, diverting 45% of the mean flow available at Piriaka to the TPD undoubtedly had the effect of reducing water quality between Piriaka and Te Maire. Higher temperatures and associated lower dissolved oxygen concentration could be expected as a direct consequence of the diversions. The reduction in dilution volumes would indicate that increased nutrient and bacterial levels have occurred throughout the river system, and especially in the area immediately downstream of the Piriaka abattoirs and the Taumarunui sewage outfall.<sup>122</sup>

As the Whanganui River comes out of the forested catchments of the Whakapapa and other upper tributaries into the cleared and developed country around Kakahi, Piriaka and Taumarunui, it picks up nutrient and bacterial pollution from general runoff and from specific point sources such as the town's sewage discharge<sup>123</sup>. At Taumarunui the Whanganui River is joined by the Ongarue River which, because of its more developed catchment, carries a higher faecal coliform bacteria load. Some 800 metres downstream of the confluence is the discharge point for the town's sewage treatment plant. This was a poorly performing operation (with a slightly different discharge site) when inspected by Ministry of Works officials in 1964. It was still discharging a high faecal coliform bacteria load during the 1970s and 1980s. The consequence of the combined discharges from general runoff and point sources was that during that period the river did not meet standards for contact recreational use (i.e. swimming).

With most farmed catchments, faecal coliform bacteria numbers generally increase in rivers after heavy rainfall, and it is then that the highest counts are recorded. Below

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<sup>121</sup> *Wanganui River Minimum Flow Review Public Discussion Paper*, December 1987. Rangitikei-Wanganui Catchment Board and Regional Water Board Report 88/11, page 14. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 1.

<sup>122</sup> Tonkin and Taylor, *Water Resources of the Wanganui River*, Rangitikei-Wanganui Regional Water Board internal report 78/4, 1978, page 113.

<sup>123</sup> By 1987 the Taumarunui sewage treatment plant was the only major discharger of wastes to the river, other major point sources such as the Piriaka abattoir having closed down.

the sewage discharge site, however, the highest counts have tended to be at low water rather than high water levels, because of the decreased dilution capacity of the river at these times<sup>124</sup>. The operation of the TPD, reducing flows to low levels for longer periods than occurred naturally in the past, would have increased the time that water quality was at its bleakest.

#### **3.7.4 Impact on River Fauna**

The upper reaches of the Whanganui River, including the Whakapapa, are populated by rainbow trout. Brown trout tend to be more in the main stem of the river, and are not found above the Whakapapa intake. Eel populations are progressively smaller moving up the mountain streams, as compared to the less rapidly-flowing waterway below Kakahi and Piriaka. Although the TPD has not changed the occurrence of the various fish species, there has been an impact on fish numbers, particularly for trout. Because of lower flows in the Whakapapa River, the amount of instream habitat for adult rainbow trout has been reduced by 70%, and for adult brown trout has been reduced by 20%<sup>125</sup>. Because habitat for juvenile and fingerling trout has not altered significantly, this would mean that the post-TPD habitat has favoured small-sized trout, but not larger-sized adults. It would also mean that brown trout have gained a habitat advantage over rainbow trout.

The lesser variation in flows in the Whakapapa, with flows close to the minimum required flow for most of the year, has meant that the conditions favour some benthic algae and invertebrates, but not others. There has been a reduction in number and type of these life forms<sup>126</sup>. When there was no minimum flow (i.e. before 1992), conditions were worse. The hearing tribunal in 1988 recorded the observations of two local recreational fishers:

[The first fisher] considered that pre-diversion the Whakapapa was a world class fishery, whereas now what had been deep clear pools with 6-7 large fish

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<sup>124</sup> CR Fowles, *Taumarunui Borough Council Sewage Disposal (Water Right Application 89/920): Background and Technical Aspects*, Central Districts Regional Water Board internal report 89/4, 1989.

<sup>125</sup> Genesis Power Limited, *TPD Assessment of Environmental Effects*, July 2000, pages 270-277. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(l), Volume 11.

<sup>126</sup> *Wanganui River Minimum Flow Review: Report and Recommendations of the Tribunal*, 20 September 1988. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 88/8, page 5. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 1.

in them are filled with shingle and slimy rocks. The river bed is exposed and is a mass of rocks with only a trickle of water.

[The second fisher] regarded the Whakapapa fishery as considerably downgraded. During most of the fishing season the river is high in algal build-up which makes it almost impossible to fish except in a few deep pools. The algal growth makes negotiating the river bed dangerous, and clogs fishing lures.<sup>127</sup>

Further downstream, in the mainstem of the Whanganui River, the changing flow pattern has affected customary eel and lamprey fishing. After a flood there is a quick drop in flows, as the naturally slow decline in flows is captured by the TPD intakes. This has disrupted the behaviour of the eels and lampreys, and made their capture at the weirs less predictable<sup>128</sup>. Eel feeding habitat has been affected where the bed of the river has changed from shingle to finer sediments; shingle contains higher numbers of invertebrates on which eels feed.

The numbers of other fish species in the mainstem, such as bullies, smelt, whitebait, and populations of kakahi (freshwater mussels), were all reported to have declined<sup>129</sup>. However, a difficulty when analysing such declines is how much can be attributed to changes precipitated by to the TPD diversions, and how much to other changes in conditions in the catchment generally, such as land clearance, runoff from farmland, swamp drainage, etc.

The Planning Tribunal, reporting in 1990, was persuaded by the evidence presented to it that the TPD was responsible in part for a decline in indigenous fish numbers in the Whanganui River below Taumarunui, because lower flows resulted in lower river levels (which exposed holes in the river banks occupied by eels and freshwater mussels), higher water temperatures (which reduced available oxygen supply), and

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<sup>127</sup> *Wanganui River Minimum Flow Review: Report and Recommendations of the Tribunal*, 20 September 1988. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 88/8, page 10. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 1.

<sup>128</sup> *Wanganui River Minimum Flow Review: Report and Recommendations of the Tribunal*, 20 September 1988. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 88/8, pages 8-9. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 1.

<sup>129</sup> *Wanganui River Minimum Flow Review: Report and Recommendations of the Tribunal*, 20 September 1988. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 88/8, page 8. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 1.

reduced capacity to dilute the effects of pollutants. Other contributors responsible for lower numbers were changes in catchment condition, such as deforestation and farming up to the river banks. The Tribunal concluded that it was more likely than not that a higher minimum flow in the Whanganui River than the 22 cumecs required at Te Maire in 1982 would contribute to an improvement in the indigenous fishery<sup>130</sup>. The benefit to the indigenous fishery was given as one of the reasons for the increase in the minimum summer season flow from 22 cumecs to 29 cumecs<sup>131</sup>.

Similar evidence about a decline in the habitat for eels and freshwater mussels was given to the Environment Court in 2003<sup>132</sup>, indicating that the minimum summer flow of 29 cumecs had not fully remedied the deterioration.

The fast-flowing mountain streams are prime habitat for blue duck. This was noted by the Nature Conservation Council as early as 1972<sup>133</sup>. Blue duck, by feeding on the phytoplankton and invertebrates in the rivers, are at the top of the food chain, and are therefore an indicator of the environmental health of the microfauna in a river. On the Whakapapa River, blue duck are found generally upstream of Owhango. The population size and density was not surveyed before the TPD operation commenced. Prior to 1992, when the operation provided a minimum flow of 0.6 cumecs below the intake, blue duck densities were 0.7 – 0.8 breeding pairs per kilometre. Since 1992, when the minimum flow has been raised to 3 cumecs, surveys have recorded 1.0 – 1.3 pairs per kilometre<sup>134</sup>.

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<sup>130</sup> *Electricity Corporation of NZ Ltd & Whanganui River Maori Trust Board v Manawatu-Wanganui Regional Council*, Decision W70/90 of Planning Tribunal, 29 October 1990, at pages 120-121. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 6.

<sup>131</sup> *Electricity Corporation of NZ Ltd & Whanganui River Maori Trust Board v Manawatu-Wanganui Regional Council*, Decision W70/90 of Planning Tribunal, 29 October 1990, at page 190. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 6.

<sup>132</sup> Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 198-205.

<sup>133</sup> Secretary Nature Conservation Council to Minister of Lands, 18 December 1972. Works and Development Head Office file 96/333000. Supporting Papers #248-249. Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 107-108.

<sup>134</sup> Genesis Power Limited, *TPD Assessment of Environmental Effects*, July 2000, pages 278-282. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(l), Volume 11.

### 3.7.5 Impact on Navigation

The effect of lower river levels on navigation was the main reason why a minimum flow was set at Te Maire in 1982. Without such a minimum flow, the river could become unusable to jet boats at Taumarunui. During the 1970s the Ministry of Works and Development had investigated the establishment of a regulated datum against which various river levels suitable for navigation could be measured. However, this was not a suitable management mechanism, because the 1967 Act allowed for minimum river flows to be established, but not for minimum river levels to be set<sup>135</sup>. The Regional Water Board reported to the National Water and Soil Conservation Authority in March 1983 that:

The issues involved [in the first minimum flows hearing in 1982] reduced to the consideration of the reasonable flow requirement for canoeing and jet boating on the River below Taumarunui, balanced against the value for power generating purposes of the water that might have to be released from the Tongariro Power Development intakes.<sup>136</sup>

This was the reason why the minimum flow was to be measured at Te Maire rather than immediately below the diversion intakes. Between Taumarunui and the Retaruke River confluence, it was estimated at the time of the first minimum flows hearing that the mean annual flow had been reduced by the TPD by 20%.

The low flows in the river before a minimum flow at Te Maire was established in 1983 had affected the use of jet boats and other powered craft around Taumarunui.

Jock Erceg recollected:

Downriver below Taumarunui, after water diversion by the New Zealand Electricity Department (NZED), boating became difficult and sometimes dangerous. With the lowering of the water levels, rocks and other problems surfaced. NZED agreed to help out by providing money for a launching ramp and upgrading of the access; this it was hoped would be sited below the first few difficult miles and, if possible, the site would provide some land suitable for a camp site. River users could prepare for their journey downstream, avoiding the few treacherous miles above.<sup>137</sup>

The location chosen was at Ohinepa or Ohinepane near Aukopae, a site of former gravel extraction known locally as Ewarts or Hewletts Metal Pit, about 12 kilometres

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<sup>135</sup> Report by Chief Engineer on Wanganui River Water Management Planning to Rangitikei-Wanganui Catchment Board, 23 May 1979. Works and Development Wanganui file 96/333000. Supporting Papers #447-454.

<sup>136</sup> Report by Chief Technical Officer Rangitikei-Wanganui Regional Water Board, 31 March 1983, in Appendix to *Wanganui River Minimum Flow Review Public Discussion Paper*, December 1987. Rangitikei-Wanganui Catchment Board and Regional Water Board Report 88/11.

<sup>137</sup> J Erceg, 'A Pivotal Period of Development: the 1950s to the 1970s', in AP Bates and P Thomson (ed), *Whanganui River Memories*. Heritage Press Ltd, Auckland, 1999, pages 77-78.

downstream from Taumarunui. The distance downstream from the town is an indication of the extent of the problems for navigation that the TPD created.

Erceg's statement that the ramp was funded by NZED, while correct, hides the fact that this was by no means a certainty, and that the Ministry of Works and Development approached NZED cap-in-hand. The Ministry was responsible for maintaining the channel for boating, that responsibility having passed to it when the Wanganui River Trust was abolished in 1940, and it was undertaking irregular work on that task. The clearing of snags in the three rapids in 1974, referred to earlier in this report, was carried out by the Ministry using its own funds. The Resident Engineer at Taumarunui commented at that time:

There appears to be no case for approaching NZED for contribution towards remedial works. For one thing, it would be difficult to prove that the clearing would have been unnecessary if the 300 cusecs had not been diverted, and for another, a contribution now could set an undesirable precedent.<sup>138</sup>

When the boat ramp proposal emerged during 1975, the District Commissioner of Works wrote to the Commissioner of Works:

As you are aware, for some considerable time the Wanganui River Scenic Board, and more latterly Wanganui River Jet Tours Ltd, have been concerned about the effects of partial diversion of the headwaters of the Wanganui River as part of the Tongariro Power Development Scheme. After diversion, a coincidental series of very low flows occurred, which caused further pressure and representations to be made concerning the needs and responsibilities to maintain navigability for jet boating and other recreational needs....

You will perhaps recall your offer to approach NZED for finance for purposes of constructing a launching ramp at a suitable location. Such an undertaking was to have been on a finite basis, and preferably in the Te Maire area....

I therefore would be grateful if you would approach the NZED for their approval in principle to finance the proposed ramp on a finite basis, this being subject to satisfactory negotiation with the county and scenic board on matters of land tenure.<sup>139</sup>

The Ministry of Works and Development then approached NZED.

[The boat ramp] is sponsored by the WR Scenic Board, and you will see that we have offered to approach your Department for funds. The Board is

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<sup>138</sup> Resident Engineer Taumarunui to District Commissioner of Works Wanganui, 5 February 1974, attached to District Commissioner of Works Wanganui to Commissioner of Works, 13 December 1974. Works and Development Head Office file 96/333000. Supporting Papers #257-260.

<sup>139</sup> District Commissioner of Works Wanganui to Commissioner of Works, 24 September 1975. Works and Development Head Office file 96/333000. Supporting Papers #271-274.

concerned with boating matters on the river, and is taking a very reasonable attitude about the changed conditions thereon, due to diverted flows and the effects on boating. The Board has noted that it has no compensation agreements with the Crown, and feels that it is not associated with e.g. the Taumarunui Borough agreement (which includes a section on river navigability). Nevertheless the Crown undertakings given publicly included reference to such matters, and in view of the Board's very cooperative attitude we consider the money would be being well spent from an overall P/R point of view.<sup>140</sup>

The resulting approval to the funding of the boat ramp given by the Minister of Electricity was conditional on the local authority agreeing to accept responsibility for the ramp's future maintenance, and also presenting a plan to the Catchment Board for "provision of a permanent access and amenities"<sup>141</sup>

Even when a minimum summer flow of 22 cumecs operated at Te Maire between 1983 and 1992, operators of canoes still experienced difficulty, while operators of jet boats found the river "challenging"<sup>142</sup>. It was these continued difficulties with navigation that, in part, prompted the Planning Tribunal to set a minimum summer flow level of 29 cumecs in 1990<sup>143</sup>. This increased flow was based upon evidence from a Department of Conservation witness that 29 cumecs would provide a channel with a depth of 400 mm<sup>144</sup>.

A nationwide recreational boating, canoeing and rafting use survey conducted by the NZ Canoeing Association and published by the National Water and Soil Conservation Organisation in 1981 described conditions on the Upper Whanganui (above Taumarunui), the Whakapapa, and the stretch of the Whanganui River between Taumarunui and the Retaruke River. Of the Upper Whanganui, it stated:

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<sup>140</sup> Commissioner of Works to JW Malcolmson, New Zealand Electricity Department, 10 October 1975. Works and Development Head Office file 96/333000. Supporting Papers #275-276.

<sup>141</sup> Minister of Electricity to Secretary Wanganui River Scenic Board, 28 November 1975. Works and Development Head Office file 96/333000. Supporting Papers #277-278.

<sup>142</sup> *Wanganui River Minimum Flow Review: Report and Recommendations of the Tribunal*, 20 September 1988. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 88/8, pages 11-12. Also Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 1.

<sup>143</sup> *Electricity Corporation of NZ Ltd & Whanganui River Maori Trust Board v Manawatu-Wanganui Regional Council*, Decision W70/90 of Planning Tribunal, 29 October 1990, at pages 189-190. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 6.

<sup>144</sup> *Electricity Corporation of NZ Ltd & Whanganui River Maori Trust Board v Manawatu-Wanganui Regional Council*, Decision W70/90 of Planning Tribunal, 29 October 1990, at pages 129-131. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(k), Volume 10, Document No. 6.

Before the hydro scheme in the upper catchment drew off water from this river, jet boats could often navigate the lower end of this river section....

The greatest loss as a result of the hydro scheme is the lack of water at lower levels, so that the river above Taumarunui is sometimes canoed but sees little other recreational use, where once it was rafted and jet boated over a shingle and stony bed that was uncommon in this area of soft mudstone....

After emerging from the bush the Wanganui joins the Whakapapa and flows through open farmland in a steep shingle bed that provides exciting rapids with high flow.

Of the Whakapapa River, the survey reported:

Now a little too shallow for the larger dinghies and inflatable rafts. The river once provided an exceptionally exciting trip for experienced boaters....

Before the hydro scheme drew off water from the river, the Whakapapa was well known among canoeists as offering some of the most difficult and exciting white water in the country. Now, however, the river is seldom used as the rapids are far too shallow and stony. Only under exceptionally high flows is the river able to offer the type of water it once did.

Below Taumarunui,

Jet boats often navigate the whole river from Wanganui to Taumarunui, except during the summer months when the upper river is very low. Before the hydro scheme in the upper catchment reduced the water flow, jet boats could get to Taumarunui all year round.<sup>145</sup>

It was the decline in the quality of the river for canoeing that prompted the New Zealand Canoeing Association to take the lead and request in 1978 that minimum flows be set for the Whanganui.

The Whakapapa has had virtually nothing to offer canoeists since the TPD operation commenced, and the residual flow regime made little difference. One of the authors of the 1981 survey referred to above, writing in 1989, described the Whakapapa as having been “decimated” for canoeists by the TPD.

Water is released from time to time to boost the residual flow down the old riverbed.... A flow of 20 cumecs is required for enjoyable paddling. It may

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<sup>145</sup> GD & JH Egarr, *New Zealand Recreational River Survey: Part II, North Island Rivers*. National Water and Soil Conservation Organisation for NZ Canoeing Association, Water and Soil Miscellaneous Publication No 14, 1981, pages 44-45.



be possible to run the river at levels as low as 12 cumecs, although this would be an extended rock-dodge.<sup>146</sup>

### **3.7.6 Impact on Riparian Lands**

Because flows were reduced, there has been no flooding of riparian lands. There is no record in the literature of wetlands being drained to a greater extent than previously.

Because the Whakapapa River ran dry in many places after the water intake started operating in 1972, the river was no longer a barrier to movement of animals. The Nature Conservation Council, in a report in 1972, referred to the ability of wild goats to cross the river into the Taurewa State Forest (i.e. to move from the Whanganui Inquiry District to the National Park Inquiry District)<sup>147</sup>. In 1977 Ministry of Works accepted a claim for compensation from the Maori Trustee on behalf of the Maori owners of the Taurewa Development Scheme that the river was no longer a barrier to stock, and further that, if a fence was erected to overcome that problem, then stock would no longer have access to stock water. The Crown agreed to fence the riverbank and provide an alternative stock water supply. This Maori land is on the true right bank of the Whakapapa River and therefore in the National Park Inquiry District; the detail of the compensation arrangements is not covered by this report<sup>148</sup>. Land adjoining the Whakapapa River in the Whanganui Inquiry District on the true left bank was part of the Waimarino Block, which had passed into Crown ownership in the nineteenth century.

### **3.7.7 Impact on the Landscape**

This is a problematic issue to address. European landscape evaluators (usually landscape architects) will tend to view the landscape as an amalgam of component parts. Thus at the Whakapapa intake, before the TPD arrived, they would have noted the forested hillsides with a steep rocky riverbed containing a mixture of whitewater rapids interspersed by deeper water pools. They would have commented on the wilderness characteristics of the valley. The TPD then introduced human elements of

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<sup>146</sup> G Egarr, *New Zealand's North Island Rivers: A Guide for Canoeists and Rafters*. David Bateman, Auckland, 1989, page 79.

<sup>147</sup> Secretary Nature Conservation Council to Minister of Lands, 18 December 1972. Works and Development Head Office file 96/333000. Supporting Papers #248-249. Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12, pages 107-108.

<sup>148</sup> The relevant Works and Development Wanganui file is 92/25/0/2 (held by Land Information New Zealand).

an access road and a concrete weir structure. Downstream a rushing river was replaced by a less vibrant “trickle” of water between languid pools. Once beyond Kakahi the river was characterised more frequently throughout the year by a lower level. European evaluators would also have noted how nature would adapt over the years to the new water levels (i.e. vegetation coming down to the new water’s edge), and how people’s perceptions would adjust accordingly to the new reality.

Maori may not necessarily view the landscape in the same way. To them the landscape includes not only the physical components, but also the sense of place, and the stories that go with the place. There is a cultural and traditional component to the way they view a landscape. In that context the knowledge of the dislocation to the natural realm wrought by the TPD may transcend all other matters. The intake may not just be the beheading of a river, it may also be a sacrilegious wounding of a taonga.

It is for Maori witnesses to the Tribunal hearings to articulate what the decisions to undertake the TPD, and the ongoing operations of the scheme, mean to them. While their views on the impact on the landscape and environment may be different to the views expressed by Europeans, they are no less valid.

In the context of this evidence, it can be stated that the Crown failed to obtain permission, or consent, or approval, from the tangata whenua for the changes that the TPD wrought to the Whanganui River system generally. There are mechanisms available in the Maori world whereby, if a taonga or a sacred object or place is affected, what would otherwise be tapu can by consent of the tangata whenua become noa. The Crown made no effort to request the use of these mechanisms, nor even to discuss the possibility of their use with the tangata whenua.

### **3.8 After the Commissioning of the Eastern Diversion (Wahianoa Aqueduct)**

The Wahianoa Aqueduct was commissioned in 1979. It connects intakes on 22 tributaries of the Whangaehu River, and transports the water from those tributaries eastwards out of the Whanganui Inquiry District, and across the watershed into the Moawhango catchment, part of the wider Rangitikei catchment. Each intake was

designed to capture one and a half times the mean flow in the stream<sup>149</sup>, so effectively was intended to capture all of the water in those streams except during the few periods of high or flood flow. The 22 tributaries join to become six streams that enter the Whangaehu River.

The aqueduct passes beneath the Whangaehu River itself, and does not capture any of its flows. This is because the Whangaehu drains the crater lake on Ruapehu, and on the occasions that occurs it contains highly acidic water, which would corrode concrete and steel structures, and would harm the Tongariro fishery. However, because it drains the higher slopes of Ruapehu, and because past lahars have deposited large amounts of volcanic material there, the Whangaehu waters are at all times naturally more acidic than other rivers. The tributaries that are tapped by the Wahianoa Aqueduct rise at differing altitudes on the slopes of Ruapehu, and are subject to differing levels of acidity because of that, though these levels are not as acidic as the Whangaehu River itself.

The aqueduct has a potential maximum capacity of 8.7 cumecs. However, the tributaries are able to supply this amount only when in flood. The average (long term mean) flow in the aqueduct, after tapping water from all intakes, is 3.4 cumecs<sup>150</sup>.

Unlike the Western Diversion, the Whangaehu tributaries have not been subject to minimum flow requirements below the intakes. There were no minimum flow hearings during the 1980s. The takings of water relied on the authorisation issued by the 1958 proclamation through to October 2001, when the authorisation expired as a consequence of the 10-year sunset clause set out in Section 386(3) Resource Management Act 1991. Prior to that deadline, Genesis Power Limited applied for water permits to allow the takings to continue. The applications for the Whangaehu tributaries takings were heard together with the applications for all other resource consents for the operation of the whole of the TPD, during 2001. The Manawatu-Wanganui Regional Council granted the applications, without requiring any minimum flows below the intakes. The Council's decision was appealed to the Environment

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<sup>149</sup> Apart from the intake on the Wahianoa River, designed to capture double the mean annual flow.

<sup>150</sup> Genesis Power Limited, *TPD Assessment of Environmental Effects*, July 2000, pages 60-65. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(I), Volume 11.

Court by Ngati Rangi, and in 2004 the Court confirmed the issue of the permits, although, as with the Western Diversion consents, it reduced the term of the permits from 35 years to 10 years. The reduction in term was a recognition that there had been insufficient dialogue between the power generator and Ngati Rangi, and that the requirement for a fresh application in ten years time would encourage both parties to come to “a meeting of the minds” during the intervening period<sup>151</sup>. The detail of the consent hearings and evidence has been covered in Walzl’s report<sup>152</sup>.

### **3.9 Changes Downstream of the Eastern Diversion (Wahianoa Aqueduct)**

#### **3.9.1 Changes of Flow**

Flows in the tributaries below the intakes have changed markedly. They run dry immediately below the intakes for most of the year<sup>153</sup>, before starting to pick up groundwater, sub-surface and surface drainage. A combined total of 27 kilometres of waterway in these 22 tributaries have little or significantly reduced flow. The flow rates of the tributaries are not measured on a regular basis. Instead the continuous measurement sites are on the Whangaehu River itself. At the Tokiahuru confluence, just above where the waters from the Tokiahuru Stream (i.e. four of the 22 tributaries) enter, the effect of the takings from the other 18 streams reduces the mean annual flow in the Whangaehu by 36%. Further downstream at Karioi, some kilometres below where all the tributaries have entered the main river, there has been a reduction of 20% in the mean flow of the Whangaehu since the TPD started operating<sup>154</sup>. This reduction is consistent with expectations; analysis of likely flows prior to the commissioning of the Aqueduct had predicted a reduction in the mean flow of 21.5% at Karioi<sup>155</sup>. The same analysis had predicted a reduction of flow of 51% at Tangiwai, dropping to a reduction of 8.6% at Kauangaroa (below the confluence with the Mangawhero River).

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<sup>151</sup> *Ngati Rangi Trust and Others v Manawatu-Wanganui Regional Council*, Decision 067/2004 of the Environment Court, 18 May 2004, Paragraph 475. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12(s), Volume 18.

<sup>152</sup> Walzl, *Environmental Impacts of the TPD Scheme*, 2006, WAI-1130 Doc #E12.

<sup>153</sup> It was predicted prior to the diversion that water would flow over the aqueduct intakes only 10% of the time. PC Wells and CR Fowles, *Water Resources of the Whangaehu River*, November 1980. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 80/3, page 42.

<sup>154</sup> Genesis Power Limited, *TPD Assessment of Environmental Effects*, 2000, pages 141 and 323. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(I), Volume 11.

<sup>155</sup> PC Wells and CR Fowles, *Water Resources of the Whangaehu River*, November 1980. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 80/3, page 40.

Any analysis of downstream flows has to factor in the impact of another abstraction from the Tokiahuru Stream (below the Wahianoa Aqueduct intake), by the Karioi pulp mill. This removes about 3% of the mean flow and about 6% of the low flow from that stream.

### **3.9.2 Impact on Sedimentation**

The tributaries did not carry high quantities of sediment in their natural state. The introduction of intake structures and water drawoff has had only a local effect on sediments in each tributary stream. Rocks and gravel become trapped by the intake, and have to be removed. The debris is taken out of the river system and stored on dry land; it is sometimes then used for surfacing of forest roads. Lower flows below the intakes are less capable of moving sediment than the pre-TPD flows.

Within the Whangaehu catchment, much larger sediment issues arise when the crater lake overflows, or when there are lahars in the valley. These extreme sediment events are not altered by the TPD operation.

### **3.9.3 Impact on Water Quality**

The impact of the TPD is particularly about the effect on the acidity of the Whangaehu River as a result of lower flows of less acidic water from the tributaries. This impact depends on whether or not the outlet of the crater lake is flowing into the headwaters of the Whangaehu River. When the lake outlet is flowing, the rate of flow in the Whangaehu is so much greater than the flow in the tributaries, and the acidity of the Whangaehu waters is so severe, that the less acidic waters from the tributaries make no appreciable difference. The whole river down to the sea is compromised, with virtually total loss of biological life in the main stem. In April 1975, before the Wahianoa Aqueduct was commissioned, there was an overflow of lahar material from the crater lake. Testing of water samples at Tangiwai and Kauangaroa showed pH values of 1.9 and 3.6 respectively<sup>156</sup>.

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<sup>156</sup> CM Fowles, *Rangitikei-Wanganui Regional Water Board Involvement with Aspects of the Eastern Diversion of the Tongariro Power Development Scheme*, Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 77/1, page 9.

When the lake outlet is not flowing, there is a distinct seasonal pattern to water quality in the Whangaehu. During winter and early spring, acidity levels are lower, because there is little runoff from the higher altitudes on the mountain while snow and ice lies on the ground. With the snow melt, and the exposure of volcanic material, there is a sharp rise in acidity. Within that seasonal pattern, however, “a comparison of pre- and post-diversion water quality in the Whangaehu River for a limited number of events indicates that water quality improves at a point further downstream than it did pre-TPD, due to reduced dilution”<sup>157</sup>. However, the changes appeared to be only slight.

On the tributary streams, the waters below the intakes have generally retained the same chemical characteristics as before the TPD operation.

### **3.9.4 Impact on River Fauna**

The Whangaehu catchment generally is a tough environment for fish life, because of the acidic waters, and the disruptions that occur when there are lahar or severe acid water events. Populations of fish and invertebrates in tributaries tapped by the Wahianoa Aqueduct may not be wiped out when the main stem is affected by a severe event, though the conditions in those tributaries draining the mountain do not appear to be conducive to high populations in the first place. In 1964 the streams that would be affected by the TPD were considered so unattractive to fish life that a survey then commented that no fish life was known to occur. Since the TPD operation commenced, the running dry of certain lengths of the tributaries has obviously affected fish life, although some fauna have survived. More intensive surveys than that conducted in 1964 have located a few rainbow and brown trout. No eels or native fish were located in these surveys, though some koura (freshwater crayfish) were found<sup>158</sup>.

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<sup>157</sup> Genesis Power Limited, *TPD Assessment of Environmental Effects*, July 2000, page 164. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(I), Volume 11.

<sup>158</sup> Genesis Power Limited, *TPD Assessment of Environmental Effects*, July 2000, pages 183-184. Supporting Papers to Walzl, *Environmental Impacts of the TPD Scheme*, WAI-1130 Doc #E12(I), Volume 11.

### 3.9.5 Impact on Riparian Lands

Riparian landowners have tended to take less advantage of their proximity to the Whangaehu River, because of its acidic waters and its unpredictability. It is not generally relied upon for water for farm stock to the same extent as other rivers.

The river has, however, traditionally been a boundary between farms, and was deep enough to act as a barrier to stock movement. With the reduction in flows following the TPD operation, this was no longer so to the same extent. Some European farmers in the Karioi district were compensated for the loss of the river as a barrier, with the Ministry of Works agreeing to pay for the erection of fences along riverbanks.

Further downstream, the Ministry was less generous. In 1982 a solicitor lodged claims for compensation from four farmers in the middle reaches of the river, for loss of a stock-proof boundary, and loss of quality of river water for watering stock. Three of the farms were exclusively European-owned, while one was a combination of European freehold<sup>159</sup> and Maori freehold land<sup>160</sup>, with the Maori land leased to the European farmer by the Maori Trustee. The claim for that farm was therefore lodged in part on behalf of the Maori Trustee, as the legal owner of the Maori land under a Section 438 trust<sup>161</sup>. The immediate response of the Crown was to identify reasons why the four claims should be declined. One of the first reasons identified was to challenge the status of the solicitor who had made the claims, on the grounds that he had a conflict of interest, because he also held the position of Crown Solicitor in Wanganui. Another reason was that the claims had been received out of time. Seeking to throw out the claims on these preliminary matters, even before their substance was addressed, is an indication of the strength of the Crown's reluctance to pay compensation.

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<sup>159</sup> Lots 1 and 2 DP 13291, formerly Otumauma A, Part Otumauma C2, and Part Section 4 Block VIII Ngamatea Survey District (all Certificate of Title WN536/68); and Otumauma C1 (all Certificate of Title WN736/23).

<sup>160</sup> Otumauma B Block (all Certificate of Title WN447/226).

<sup>161</sup> Claim by Robin Gillies Polson and the Maori Trustee, 7 July 1982. Works and Development Head Office file 92/12/67/6/44. Supporting Papers #218-227.

The other three claims are on Works and Development Head Office files 92/12/67/6/42, 92/12/67/6/43, and 92/12/67/6/45.

Turning to the nature of the specific claim with which the Maori Trustee was involved, Ministry officials noted that the farm was some 60 kilometres downstream from the aqueduct. Even so, the Ministry had visited the farm at the time of commissioning of the aqueduct in 1979 to discuss in principle the payment of compensation if this was found to be valid.

A land inspection was made under the landowner's guidance. The nature of the particular country and river boundary was appreciated, with Mr Polson pointing out the difficult terrain for stock fencing. He did not attempt to substantiate a necessity for an alternative stock barrier fence in anticipation of a depreciated river flow, nor was the land purchase officer able to identify any probable situations where stock would leave the lower paddocks by way of the river bed....

On an earlier visit [when the owner was absent, the] resident farm manager was spoken to, who volunteered information about working of the farm. "Stock do cross the river, now, frequently. The Whangaehu is not relied on for watering".

[On a helicopter inspection flight] the two land purchase officers observing were not able to record any stock crossing or travelling the river bed, although cattle and sheep were sighted in adjoining river paddocks.

Sheep have been seen drinking from the river at a position higher upstream than the claimant's property. In that particular circumstance, since diversion the landowner concerned has made no suggestion of stock loss or adverse effects, as it is obvious the river flow velocity is still sufficient and similar in variation as previous to deter stock travel in the river bed....

An independent individual met by the land purchase officer and known to be a competent farm worker, contractor, and recently qualified as a construction safety supervisor, is recorded as stating:

1. He had worked for Mr Polson on his 'Te Tui' Whangaehu farm at various times.
2. He had made attempts to cross the Whangaehu River at the farm, but had had to retreat as he was fearful of its treacherous nature.
3. He found his horse to be apprehensive about entering the river bed.
4. He did not know of any extraordinary stock migrating through the river bed.
5. He could not differentiate between before and after execution of the diversion work.

Ground sighting combined with scrutiny of the aerial photography covering the claimant's land shows the river bank land to have several areas where stock could not approach the river. Sections which do allow stock to approach the water are such that either the flow or the rocky base could be naturally unattractive to hoofed animals to traverse.



The aerial photograph shows many dams and stock watering provisions on the property established before diversion date. This form of stock watering provision is characteristic in this type of country, and extension of such facilities could not be considered as detrimental over that already existing.

The Whangaehu River having its source at the crater lake of Ruapehu has always been recognised as a water flow of a dubious nature with infinite variations, seasonal or otherwise, as to its quality. After tributary diversion, it cannot be denied in principle that poor quality water must be less potable if further fresh water were diverted from it.

However, in practical effects the Whangaehu has continued its natural variations, and visual inspections can determine no accurate resolution.

The report concluded:

The claimant does not identify a specific loss sustained at diversion time, which would have undoubtedly shown up, as was experienced immediately below the diversion structures at Tangiwai and on the Karioi plain, if any detrimental effect was present. There are sufficient secondary tributaries, with the larger Tokiohura [sic] upstream of the claimant's land complementing the Whangaehu, to minimise the diversion to a point where true recognition of the effect is undeterminable....

No practical identified injury which would warrant compensation is known to have been suffered on construction of the public work which took place some three or more years ago.

The statement of claim as submitted is seen as within the realms of fantasy....

[The claim] does not sustain sufficient merit for acceptance by the Crown, and is therefore to be rejected in its entirety.<sup>162</sup>

Presumably the rejection of the claim was notified to the claimant's solicitor. However, the Head Office file examined about this claim does not contain any indication about any subsequent negotiations. On a request being made for the Wanganui District Office file<sup>163</sup>, LINZ was unable to discover the file.

### **3.9.6 Impact on the Landscape**

Similar comments to those made about the Western Diversion can be made about the Eastern Diversion. With the Eastern Diversion, the differences in possible approach

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<sup>162</sup> Senior Land Purchase Officer Wanganui to District Commissioner of Works Wanganui, 30 August 1982, attached to District Commissioner of Works Wanganui to Commissioner of Works, 23 September 1982. Works and Development Head Office file 92/12/67/6/44. Supporting Papers #228-238.

<sup>163</sup> Wanganui District Office file 92/25/0/8/1/20.

between Europeans and Maori are perhaps more pronounced. The TPD structures are located in an altered exotic forest environment, rather than in a native forest environment with wilderness characteristics. The Whangaehu River generally has fewer attractive qualities, because of its acidic nature. These elements would tend to make the impact of the TPD on the landscape less severe, as viewed by Europeans, though the offence to Maori might be no different in degree to the offence caused by the Western Diversion. It is for tangata whenua to articulate their cultural and traditional concerns.

### **3.10 Concluding Remarks**

As far as possible the above discussion has tried to stay focussed on environmental impacts that can be attributed to the TPD scheme. This has not always been easily achieved, because each of the inquiries (for minimum flows or for resource consents) has heard a great deal of argument about whether any particular environmental change has been caused by the TPD or by some other factor. These other factors include changes to the catchment (such as land development, deforestation, exotic afforestation, or more intensive use of the river banks), drier than usual years, overfishing, and contributions from other tributary catchments to the sediment load. In most cases the other factors have been introduced by scientists called as witnesses for the electricity generator.

Other causes of environmental change do need to be mentioned, as they have also had an effect on the waterways downstream of the TPD. However, unfortunately these factors have often been introduced into the debate in an unhelpful and obfuscatory manner, seemingly intended to confuse rather than enlighten. The expert witnesses who mention them have not been prepared to go the extra step of designing research projects that can measure the differing contributions of the various factors, let alone actually conduct such research.

Nevertheless, the introduction of these alternative causes has had its desired effect. Tribunals and Courts have been prepared to give the electricity generator the benefit of the doubt, because the responsibility for a particular environmental change cannot be sheeted home with sufficient scientific rigour to the TPD, and because the objectors to the TPD diversions, who have included Maori groups, have not been able

to come up with solid evidence of a scientific nature in support of their claims that the TPD is the cause of the changes.

The environmental changes attributable to the TPD (and discussed above) having occurred, there has been a general unwillingness to “turn back the clock” and restore the river systems to their pre-TPD state. Rather than avoiding or remedying effects, the emphasis has gone into mitigation, to “smooth” off the “sharper edges”. The minimum flow in the Whakapapa River, and the two settings of minimum flow in the Whanganui downstream of Taumarunui, the second flow in 1992 at a higher volume than the first in 1983, have undoubtedly reduced the overall environmental impact of the TPD.

The degree to which Maori have been appeased by these consent conditions is for them to say. However, there does seem to be some further movement towards meeting Maori expectations that could be made. The Environment Court in 2003 tellingly reduced the period of the currently held consents from 35 years to 10 years because no real relationship of any substance had been developed between the generator (Genesis Power Limited) and tangata whenua. It considered that something approximating a steady state had not yet emerged to justify a lengthy consent period, and wished to leave open the opportunity for changes to the consents that it was granting once tangata whenua had become more fully engaged. The Court in effect threw down a challenge to both the generator and tangata whenua to get together and discuss, in far more depth than had occurred to then, what common ground they could find.

## 4. DRAINING OF WATERWAYS

### 4.1 Introduction

The Tongariro Power Development Scheme, discussed in the previous chapter of this evidence, is just one example of a post-colonisation change to a Whanganui District waterway. The manner in which the Scheme transferred water out of one catchment and into another places it at one extreme in terms of the magnitude of the change, and is a reflection of the capacity of the engineering technology available, and the capital resources that the State could mobilise for the sake of a single project.

Other Crown projects, and private projects supported by the Crown, have also changed the waterways, whether they be rivers, lakes or wetlands. Projects to improve navigation, control floods, and encourage drainage have all been carried out or funded by the Crown, and represent changes to waterways away from their natural state. Some of these schemes have had a major, long-term and well-remembered impact, while others are perhaps more insidious. A small straightening of a river channel here, the removal of an impediment to free flow of water there, can cumulatively amount to a substantial change, though the legacy may not be so readily apparent as nature heals earthworks scars, and general development of the countryside through which the waterway travels adds to the overall change of character of the locality.

Every change to a waterway impacts on the mauri of the waterway. It is for Maori witnesses to the Tribunal to articulate what their relationship to the waterways means to them. Despite the signing of the Treaty in 1840, the Crown has generally failed to understand that relationship, and accommodate it in the manner in which it has itself interacted with waterways. The Crown has usually not wanted to have impediments thrown in its way to changing waterways for what were often single-issue purposes, preferring a free hand to react to circumstances as they arise.

Maori in the Whanganui Inquiry District have collectively identified a large number of changes to waterways. They have presented evidence about these, using them as examples to highlight the Crown's actions and omissions that are of concern to them.

This evidence relies on research of the Crown's records to identify its own examples of the Crown's often thoughtless changes to waterways. Where possible, the examples in this evidence match with the examples given by Maori. However, that has not always been possible. The limited amount of time for the research meant that it was not possible to look in the Crown's records for information about every example provided by Maori; and when a search was made about a specific case, information was not always able to be located. The result is that this evidence refers to other instances where the Crown has countenanced changes, which are not backed up by commentary by Maori witnesses. These examples still add to the overall picture that is presented, of a Crown that has consistently failed to identify any obligations towards Maori with respect to waterways and, as a consequence, has consistently ignored any Maori viewpoint or input.

The examples examined are:

- The development of a navigable waterway along the Whanganui River as far upstream as Taumarunui
- The draining of Lake Ngarongokahui, in the Taringamotu Valley
- Early works to protect Taumarunui township from river erosion
- River diversions at Taringamotu, Manunui and Winter's Island (Taumarunui)
- Lake Kaitoke
- Drainage schemes under the Soil Conservation and Rivers Control Act 1941
- Diversions of water for hydro-electric power schemes (other than the TPD)

This chapter looks only at some of the physical changes to waterways that have occurred historically. Changes resulting from gravel extraction and roadworks are covered in the next chapter. Changes to the quality of the waters in the waterways, and pollution matters, were beyond the scope of this project.

## **4.2 Some Legal Considerations**

Within a wider context that the Crown generally did not want to be fettered by impediments to do as it wished with waterways, whenever the need arose, it nevertheless did have to make some laws affecting waterways as the colonial development of the country grew progressively more complex.

A Maori dimension to waterways was squeezed out of consideration at an early stage. The adoption of the *ad medium filum aquae* presumption from English common law meant that waterways were, from the beginning, viewed in the context of the ownership of the adjoining riparian land. Any presumption that Maori retained any residual interest in the waterway after the riparian land had passed out of Maori ownership was therefore never considered. Even where Maori retained riparian ownership, that was no safeguard for the protection of Maori rights to a waterway, because the Crown considered that other imperatives also had to be provided for. Waterways were access routes into the hinterland, were sources of minerals such as gold, and were a means to float timber out of the forests. Even before the creation of sole rights to waterways, such as the vesting of the beds of navigable rivers in the Crown in 1903, the Crown and the European community perceived waterways as a common good that could be made use of as required for the development of the colony.

Outside of those riverbeds vested in the Crown by statute, the legal status of waterways might be definable by law, but was generally rather obscure and somewhat open to interpretation. On land tenure maps, a riverbed would often be the strip of water-covered land bounded on either side by dry land whose status and ownership was very clear-cut, because that dry land was held in a legal title. Titles were not, however, usually issued for riverbeds or lakebeds. Rather than seek to overcome the obscurity, the Crown and the European community tended to ignore any legal considerations, and do whatever was needed. It was almost as if riverbeds existed in a legal semi-vacuum. If a piece of riverbed was taken for a public work under the Public Works Act, there was usually no effort made to define its ownership in order to arrange the payment of compensation.

The absence of recognition of a Maori dimension to waterways, and the poorly defined legal status of waterways, was used to advantage by the Crown following the passing of the Soil Conservation and Rivers Control Act 1941. As the name of the Act implies, this had as one of its foci the active manipulation of waterways so that they could best serve the development needs of the surrounding land. Preventing flood damage became a national priority. The Act set up a self-perpetuating

organisation within the Ministry of Works that allowed the development of a whole new stream of Crown activity, with subsidies made available to riparian owners and local communities for channel widening and straightening, and removal of barriers to quick drainage of water. The legal status of the waterway was generally not a matter that was inquired into prior to approving a subsidy payment.

### **4.3 Developing the Whanganui River as a Navigable Waterway**

This matter has been referred to in the Waitangi Tribunal's 1999 Whanganui River Report. That report discussed navigation works over the whole length of the river as far upstream as Taumarunui. Coverage of the subject in this evidence has been requested by Tamahaki claimants, whose rohe (as I understand it) overlaps in part with that of Atihaunui a Paparangi. My researches have focussed on the stretch of the river upstream of Pipiriki.

The Waitangi Tribunal's Report demonstrates that the Crown was well aware, prior to the mid 1890s when it turned its attention to the river above Pipiriki, of the Maori concern, even anger, at the manner in which it swept aside pa tuna (eel weirs), dynamited rapids, and erected training groynes in pursuit of easier navigation for riverboats up the Whanganui. The permission of Maori for these works was not sought; indeed, much of the work was carried out in the face of active opposition by Maori. Yet the Crown persevered with the project, making no attempt to alter its methods of operation. The work was undertaken by the Public Works Department, until the Wanganui River Trust was established by legislation in 1891. The Trust then continued the task upstream to Taumarunui. In addition, the Department of Lands and Survey was involved during the late 1890s in channel clearing works on the Tangarakau River.

The legal status of the riverbed, and its ownership, was not viewed by the Crown as a constraint on the work to be done to improve navigation on the Whanganui River. The vesting of the beds of navigable rivers in the Crown did not occur until 1903, with the passing of Section 14 Coal Mines Amendment Act. Before then, the Wanganui River Trust had cleared a route for riverboats approximately as far upstream as the confluence of the Whanganui and the Ohura Rivers. All of the work

was undertaken on the premise that the river was a water-borne public highway, the improvement of which would benefit both Maori and European citizens.

The first assessment of the work required upstream of Pipiriki was made in 1885, when the District Engineer of the Public Works Department at Wanganui travelled down the river from Taumarunui to Wanganui. His report noted that the river was a well-defined channel enclosed by stable banks for all but the first eight miles south of Taumarunui; in this first stretch “the character of the river is not so favourable”, because it was “of a more open character, and consequently more spread in the channels”, so that “this portion will be more difficult, and take more work to improve it”. At each rapid, he reported on what needed to be done, using phrases such as “snags to move”, “large stones to move”, “some rocks to blast”, “stones to take out of channel”, and “large boulders to clear out”<sup>164</sup>. Just what standard of waterway he was aiming to achieve is not clear; given that for some rapids he did not identify any work required, he may have been providing for shallower-draft vessels than were subsequently provided for.

During the years up to 1895 the Public Works Department and the Wanganui River Trust concentrated on the waterway between Wanganui and Pipiriki. A riverboat service was provided between these two towns, and the aim was to provide a more secure channel that could ensure greater reliability of service. During 1893-1894, the works undertaken in the cleared channel meant that the steamer could reach Pipiriki with 20 inches less water depth in the river than previously<sup>165</sup>. During the 1894-1895 financial year, the River Trust first looked at the stretch of river between Pipiriki and Manganui o te Ao confluence, a distance of about seven miles, and assessed what works would be necessary at each of the rapids<sup>166</sup>. In 1895-1896 the first works on this stretch were begun, and immediately ran into problems with the Maori residents of the district:

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<sup>164</sup> District Engineer Wanganui to Engineer in Chief, 11 December 1885. *Appendices to the Journals of the House of Representatives* (AJHR), 1886, D-1, Appendix H, Enclosure 4. Supporting Papers #543-552.

<sup>165</sup> Report by Alexander Hatrick, undated. *Appendices to the Journals of the House of Representatives* (AJHR), 1894, C-1, page 80. Supporting Papers #553.

<sup>166</sup> Annual Report of Wanganui River Trust for year ending 31 March 1895. *Appendices to the Journals of the House of Representatives* (AJHR), 1895, C-1, pages 112-114, at page 113. Supporting Papers #554-556, at #555.



An amount of £250 was appropriated by the Trust for work as far as the Manganuioteao, with a view of improving the rapids so far as to admit of navigation when the river was somewhat above the summer level, as it was obvious that this small sum could not do more. This would, it was expected, admit of frequent trips being made when the river was not too low, and the work of improving further would be considered at a future time. A contract for the amount of £180 was let for a portion of this work.

The Natives interfered with the contractor on his commencing work at Te-au-te-mutu Rapid, and two of the Police Force again went up, and the obstruction practically ceased after a short time. The thanks of the Trust are due to the officer in charge of the police at Wanganui for his prompt aid in this matter. These obstructions, however, cause loss of valuable time at a period when the river is favourable for work. It has always been the desire of the Trust in carrying out necessary works to avoid, as far as is consistent with the prosecution of works to improve the navigation, any action that might seem likely to create prejudice against the works among the Natives, and also to consider their interests as far as possible.

... This contract dealt with works on the following rapids: Upper Ngapora Rapid, a small rapid below that rapid, Mangaea Rapid, Ruahinetoro Rapid, Haratira Rapid, Te-au-tapu Rapid, and Te-au-te-mutu Rapid.<sup>167</sup>

In his book *Rapids and Riverboats on the Wanganui River*, Campbell has added to this report about the Maori protest:

... upon commencing work at Te Au te Mutu (now Te Autemutu) rapid, the Maori refused to allow [the contractor] to proceed, and damaged part of the work completed. A sergeant and Police constable were sent up and the Maori desisted, but stated that they intended putting in eel weirs in every possible place.

In view of this development, Hatrick wrote to AD Willis MHR requesting that the matter be brought under the notice of the Premier. However, Willis telegraphed to “King Dick” [Richard Seddon] with a recommendation that the matter be left in the hands of the Police for the present. The obstruction ceased after a time – but the question of Maori rights on the river was to result in much litigation at a later date.<sup>168</sup>

The next stretch of river to be tackled was between the Manganui o Te Ao and the Tangarakau confluences, a length of 19 miles. In January 1896 a Lands and Survey Department surveyor reported on a trip from Pipiriki to Putikituna, some 13 miles up

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<sup>167</sup> Annual Report of Wanganui River Trust for year ending 31 March 1896. *Appendices to the Journals of the House of Representatives* (AJHR), 1896, C-1, pages 114-116, at page 115. Supporting Papers #557-559, at #558.

<sup>168</sup> RD Campbell, *Rapids and Riverboats on the Wanganui River*. Wanganui Newspapers Ltd, Wanganui, 1990, page 67.

the Tangarakau River. He remarked about the rapids between Pipiriki and the Tangarakau confluence:

There are forty-two rapids, caused chiefly by snags; but of these only three are of much consequence, and two only present much difficulty. These three are within the first seven miles above Pipiriki, and will have to be improved before steamers can trade beyond that point. Were these improved, there would be no difficulty in ordinary flood time in the “Wairere” steamer reaching Tangarakau, but snags would have to be removed from many other rapids before the river would be available, when at its lowest summer level, for navigation.

It was the rapids in the stretch between Pipiriki and Manganui o te Ao that most impeded further navigation upstream. The stretch above Manganui o te Ao as far as the Ohura River confluence was much easier to navigate, and the cost of works there was said to be “trifling compared with the enormous area of land benefited”. Improvements on the Tangarakau River that would be necessary to provide for a shallow draft vessel to reach Putikituna were the removal of snags, described as timber and landslips<sup>169</sup>.

Of the three difficult rapids referred to by the Lands and Survey surveyor, the District Engineer’s report in 1885 had stated:

Rapid No. 172: Autapu – very swift run against left bank, with curve to right; a difficult rapid....

Rapid No. 173: Te-Au-Tumutu – swift run; slight curve to right; some snags to move; stream on left shingle bank; large stones on right....

Rapid No. 174: Paparua (being the second rapid of that name) – swift run; eel pa, but passage to right of eel pa; some rocks to move at lower end. This rapid curves to left, and runs against right bank.<sup>170</sup>

The Trust Board’s annual report for 1896-1897 recorded reduced progress, because the low water levels required for the work to be carried out did not eventuate when unusually wet weather intervened that summer. The work that had been programmed, but was only partially completed, included clearing the channel and building training walls between Pipiriki and the Manganui o te Ao confluence, and snagging between the Manganui o te Ao and Tieke:

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<sup>169</sup> The Navigation of Tangarakau River. *Appendices to the Journals of the House of Representatives* (AJHR), 1896, C-1, pages 116-118. Supporting Papers #559-561.

<sup>170</sup> District Engineer Wanganui to Engineer in Chief, 11 December 1885. *Appendices to the Journals of the House of Representatives* (AJHR), 1886, D-1, Appendix H, Enclosure 4, page viii. Supporting Papers #543-552, at #550.

The portion of the work requiring very low river, such as blasting papa reefs on the bottom and sides of channels, and blasting and removing rocks, etc, has had to be left till next season, when this is intended to be the work first undertaken as soon as the river is low enough.<sup>171</sup>

The following year's annual report described the delayed blasting work carried out at the rapids:

At Paparua Rapid, besides clearing out boulders and snags, an extensive papa reef in the channel has been lowered. This work had to be done under water, in a rapid current. The reef had to be broken up by blasting with dynamite and powder, and the loosened rock picked up and loaded into the punt and removed, involving necessarily tedious work, several times interrupted by partial rises of the river. The extent of reef lowered was 240 ft long by 40 ft wide.

A similar work was done at Autapu Rapid, about three miles higher up the river, on a papa ledge or reef 90 ft long and 20 ft wide, on the left bank of the river, so as to widen the channel; the blasting being done under water and in a rapid current.

At Upper Ngaroro Rapid, at Mangaio Rapid, at Aratira and at Ruahinetoro Rapids, a large number of rocks and large boulders under water were broken up by blasting, and removed out of the channels. Many snags and accumulations of imbedded drift-timber were also removed in this distance of six miles above Pipiriki.

In the portion of river higher up, between this and the twenty-two miles above Pipiriki [four miles below the Tangarakau confluence at Whakataka Rapids], the work was chiefly removing snags and timber out of the channels, but many rocks and boulders were also blasted and removed.<sup>172</sup>

The Trust had not completed all the work that was needed between Pipiriki and Tieke. More work was done in 1898-99<sup>173</sup>, and the 1899-1900 annual report showed that further blasting and clearing had been done during that financial year.

The principal work during the year has been between Pipiriki and the Tangarakau junction.

A portion of the papa reef on the Lower Paparua Rapid, just above Pipiriki, has been blasted and removed to widen the channel here; also snags lodged in

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<sup>171</sup> Annual Report of Wanganui River Trust for year ended 31 March 1897. *Appendices to the Journals of the House of Representatives* (AJHR), 1897, C-1, pages 121-123, at page 121. Supporting Papers #562-564, at #562.

<sup>172</sup> Annual Report of Wanganui River Trust for year ended 31 March 1898. *Appendices to the Journals of the House of Representatives* (AJHR), 1898, C-1, pages 119-121, at page 120. Supporting Papers #565-568, at #566.

<sup>173</sup> Annual Report of Wanganui River Trust for year ended 31 March 1899. *Appendices to the Journals of the House of Representatives* (AJHR), 1899, C-1, pages 129-132. Supporting Papers #569-573.

some of the rapids above this removed; and at Mangaio Rapid the channel widened by blasting and removing a large rock and some boulders on the right bank. A very large inbedded rata snag was also taken out here, 50 ft long and 7 ft diameter, requiring two punts to lift it.

A large amount of work has been done on the Upper Ngaroro Rapid, putting in guiding-walls and dredging and taking boulders out of channel. A training wall was put in at the rapid just below the Manganui-o-te-ao junction.

At Arawhata Rapid a new channel was opened up on the left bank and boulders taken out, and the channel on right bank blocked, so as to turn more water into new channel.

At Puahue Rapid a training-wall was put in to confine water to channel. A papa reef was blasted out and removed from channel at Tieke.

Four hundred and fifty lineal feet of training-walls were put in this year in the part of river referred to above Pipiriki.

The portion of the river Pipiriki to Tangarakau Junction is now good for summer levels for steamers of the "Ohura" class when a small addition is made to wall at Ngaroro, and training-walls completed at Otaiko and Opopo Rapids, and from the channels being now cleared is also safe for the large steamers when the water is 1 ft to 2 ft above summer level.<sup>174</sup>

Snag clearing had commenced on the Whanganui above the Tangarakau confluence. As with the river further downstream, little sensitivity was exhibited towards Maori interests. In discussing Reperepe Rapid, the Trust noted that:

Amongst the snags to be cleared here is a large totara, long thought to be a "taniwha", which the Natives employed in the punts will not touch.<sup>175</sup>

In the Tangarakau River itself, work had been generally confined to snag clearing and the development of what was described as a canoe channel (to distinguish it from a light-draft steamer channel). Up until 1900 the Tangarakau work was undertaken by the Department of Lands and Survey, because it was considered an adjunct to that department's subdivision and settlement of the Taumatamahoe Block. From 1900 the Tangarakau work was taken over and undertaken by the Wanganui River Trust. An assessment was made that year of the amount of work required to bring the

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<sup>174</sup> Annual Report of Wanganui River Trust for year ended 31 March 1900. *Appendices to the Journals of the House of Representatives* (AJHR), 1900, C-1, pages 134-141, at page 134. Supporting Papers #574-581 and 583-586, at #574.

<sup>175</sup> Annual Report of Wanganui River Trust for year ended 31 March 1899. *Appendices to the Journals of the House of Representatives* (AJHR), 1899, C-1, pages 129-132, at page 130. Supporting Papers #569-573, at #570.

Tangarakau up to a standard suitable for light-draft steamers at times of low water. This assessment identified 45 rapids between Putikituna and the confluence with the Whanganui; it also recorded one pa tuna just below Pohuepapa kainga<sup>176</sup>. The upgrading of the channel proceeded during the following three years<sup>177</sup>. In 1903 further snagging of the river was carried out upstream of Putikituna, as far as Kohuratahi.

After 1901 the annual reports of the Wanganui River Trust were no longer published in the *Appendices to the Journals of the House of Representatives*. The further work undertaken by the Trust over the next decade or so has not been investigated for this evidence. However, in a report in 1913 the River Trust catalogued some of the work it had done on the Whanganui River. This report is strong on the training walls it had constructed, but probably underestimates the extent of blasting of papa rock shelves and deepening of channels through rapids. It makes only brief mention of the removal of snag timber from the watercourse. Working downstream from Taumarunui to Pipiriki, it noted the following structures where structures had been installed by the River Trust (the numbers of the rapids correspond to a referencing system that was adopted in the late 1890s and maintained for consistency after that):

- No. 1 Ngahuinga - Shingle and wire-net walls from right and left banks.
- No. 2 Pungahuru No. 1 - Shingle and wire-net walls from right and left banks.
- No. 3 Pungahuru No. 2 - Shingle and wire-net walls from right and left banks.
- No. 4 Rurumakatea - ... Shingle and wire-net wall left bank.
- No. 5 Turangahoru - Shingle and wire-net walls from right and left boulder-point on the right bank.
- No. 7 Tunakotikoti No. 1 - ... Stone wall from left bank.
- No. 8 Tunakotikoti No. 2 - ... Stone wall from left bank.
- No. 9 Pokongaruru - ... Shingle and wire-net walls from both banks.
- No. 10 Paehou - ... A large quantity of boulders have been blasted and removed from this rapid, as also from [Nos.] 11 to 13.
- No. 14 Towhenua - Shingle and wire-net wall right bank. A large quantity of the papa reef has been blasted and removed from this rapid.
- No. 15 Rakauwhakamatuku - Stone wall from right bank, and wire-net and shingle wall from left bank. A papa reef has been removed from channel. Wall required between Nos. 15 and 16 from right bank.
- No. 16 Tauteti - ... Two shingle and wire-net walls from left bank, and one from right bank. A large quantity of boulders have been blasted and removed from a point on the right bank. This has been one of the most troublesome

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<sup>176</sup> Report on Tangarakau River, 25 April 1900. *Appendices to the Journals of the House of Representatives* (AJHR), 1900, C-1, pages 141-144. Supporting Papers #581-582 and 587-588.

<sup>177</sup> Annual Report of Wanganui River Trust for year ended 31 March 1901. *Appendices to the Journals of the House of Representatives* (AJHR), 1901, C-1, page 117. Supporting Papers #589.

places on the river, and has cost much time and money. It may yet be necessary to remove the boulder-point on the right bank....

No. 17 Porokurangi - ... Shingle and wire-net wall from right bank. A large number of boulders have been blasted out and removed from the channel from Tauteti on to the next rapid below (Wairere). Wall required from left bank.

No. 18 Wairere - ... Shingle and wire-net wall from right bank.

No. 19 Pataaia - ... Shingle and wire-net walls from both banks.

No. 20 Raparua - ... Shingle and wire-net walls from both banks.

No. 22 Hikamutu - ... Shingle and wire-net walls from both banks.

No. 23 Titakataka - ... Shingle and wire-net walls from both banks.

No. 24 Tehoroaporoaki - ... Shingle and wire-net wall right bank. Large boulders have been blasted and removed from channel above and below; wall required from left bank.

No. 26 Omaka - ... Shingle and wire-net wall on left bank.

No. 27 Auhauoa No. 1 - ... Wall of shingle and wire netting from right bank. A large number of boulders have been blasted and removed.

No. 28 Auhauoa No. 2 - Similar to No. 1.

No. 29 Kohatupiko - ... A quantity of large boulders have been blasted and removed. Reach. A quantity of boulders have been removed by blasting.

No. 30 Te Onepoto - ... Boulders have been blasted and removed; ... stones to remove.

No. 31 Manawanawa - ... Boulders removed; some more should come out.

No. 32 Te Whakarae - ... A portion of the papa reef on the right bank has been cut off to widen the channel.

No. 33 Pouwhakamaru - ... Boulders have been removed; two shingle and wire-net walls from right bank, and one from left bank.

No. 38 Te-rua-a-te-namu No. 1 - ... Stones have been cleared from channel.

No. 43 Marekura No. 1 - ... Small papa reef in channel has been cut out.

No. 45 Otunui - ... Shingle and wire-net wall right bank.

No. 48 Te-mihi-a-te-haururu No. 1 - Some papa reefs have been removed.

No. 55 Pohue - ... Stones have been cleared from channel.

No. 56 Taurakawau - ... [In reach below] boulders have been removed from mid-channel.

No. 57 Toka-ata-atua - ... some papa has been removed from the channel.

No. 61 Paparua - ... A very considerable quantity of papa ledge on right bank has been removed to widen the channel, and boulders taken out of the channel.... This channel was previously almost impassable in low river, but is now an easy and excellent passage.

No. 65 Koiro - ... Shingle and wire-net wall left bank.

No. 66 Owata - ... A training-wall left bank.

No. 67 Arataua - ... Channel cleared of boulders.

No. 69 Otutekawa - ... Wall from left bank.

No. 71 Te Ohu - ... Boulders have been removed.

No. 75 He Repu - ... Training-wall of shingle and wire net from right bank requires repairs.

No. 84 Ruangarahu - ... Shingle and wire-net wall left bank.

No. 91 Kahuitara - ... Shingle and wire-net wall left bank.

No. 93 Ohuraite - ... Stones have been removed. Stone wall right bank, shingle and net wall left bank.

No. 100 Waikukutea - ... Shingle and wire-net walls from both banks.

No. 101 Otahapa - ... Shingle and wire-net wall from right bank.

No. 104 Makomako - ... Shingle and wire-net walls from both banks require repairs.

No. 105 Whakatara - ... Shingle and wire-net wall from left bank.

No. 108 Otahua - ... Stone wall right bank, shingle and wire-net wall left bank.

No. 119 Wairingia - ... Stones have been cleared from channel.... Channel has been cleared of boulders.

No. 122 Horowhenua - ... A training-wall urgently required; the material is on the ground, and the wall will be constructed next working season.

No. 128 Tarepokiore - There has been a large landslip formerly on the left bank.... A large quantity of the cliff on the right bank has been removed, and also the point on the left bank below. In flood-time this was previously a dangerous place, as a whirlpool existed. This has been minimised by the works effected, and the channel is now a fairly good one in conditions of water other than in high flood. A further quantity of stone might be removed with advantage. It is interesting to note that within the memory of an old Native it is reported that when the slip came down from the left bank at this place years ago it completely blocked the river.

No. 129 Tahereaka - ... It is noteworthy that at one time an immense nest of snags existed here and at the foot of Tarepokiore. These two places were a menace to navigation, even for canoes, in the earlier history of the work.

No. 131 Matapihi - ... Boulders have been removed here.

No. 135 Ohineika - ... Stone walls from both banks.

No. 149 Oपुरaha - ... There is a stone wall on right bank.

No. 157 Kauwaewhare - Stone training-wall from left bank.

No. 180 Otaiko - Stone walls from right and left banks.

No. 183 Ramanui - Stone wall right bank.

No. 184 Omaika - Stone wall from right bank.

No. 185 Puahue - Stone wall from right bank.

No. 187 Matariwa - Stone wall from right bank.

No. 189 Ngaporo (upper) - Stone wall right bank, shingle and wire-net wall left bank, as also between here and next rapid (190). This has always been a difficult place to navigate in any conditions of river. The works effected at different times have resulted in a fair channel.

No. 192 Ruahinetoro - Stone wall right bank.

No. 194 Autapu - Stone wall from right bank.

No. 195 Te Aute Mutu - Stone wall from right bank.

No. 196 Paparoa (upper) and No. 197 Paparoa (lower) - A very large quantity of papa reef has been blasted and removed from these two rapids on the left bank.<sup>178</sup>

The Crown, by establishing and funding the Wanganui River Trust, made significant changes to the Whanganui River between Pipiriki and Taumarunui. There was one

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<sup>178</sup> Schedule Showing Numbers, Names, and Descriptions of Rapids and Shallows, also Training-Walls Constructed and Required, attached to Annual Report of Wanganui River Trust for year ended 31 March 1913. *Appendices to the Journals of the House of Representatives* (AJHR), 1913, C-15, pages 2-10. Supporting Papers #590-598.

recorded instance of active opposition by Maori to this work, in 1896. Thereafter, no Maori opposition was recorded in the River Trust's annual reports. That, however, does not mean that the objections had somehow evaporated. Maori had a strong spiritual as well as practical connection to the river. Changes to the river could probably have been accommodated, provided that the correct protocols were observed. Maori may have welcomed the clearing of timber snags. However, the blasting of papa shelves and the alteration of the character of rapids by deepening the channel and channelling the direction of the water flow using training walls and groynes, were more substantial changes. Even without actually destroying pa tuna, their operation and effectiveness could have been affected by the River Trust's works. What the Crown was doing was an assault on a taonga of Whanganui River Maori.

Attempts at active opposition below Pipiriki had not been countenanced by the Crown, which had sent in police to threaten arrest. The same procedure was adopted by the Crown in the one known instance above Pipiriki. The Crown was showing its absolute determination that changes to improve navigation would not be hindered by whatever views Maori might have about them. There comes a point, when faced with the sustained imposition of Crown authority, that little can be gained by continuing to express opposition. The opposition then goes underground, festering away and not being resolved. The later emergence of legal challenges to the Crown's authority on the Whanganui shows that this was the case.

The Wanganui River Trust continued in existence until 1940, when it was abolished by Section 28 Reserves and Other Lands Disposal Act 1940. By that special legislation the responsibility for clearing and maintaining the channel in the river for boats passed to the Minister of Public Works, thereby bringing it back under direct Crown control<sup>179</sup>. Riverboats were still operating, to service the by-then struggling settlements along the river, though in general terms the abolition of a specialist agency represented a downgrade of government support. There was no standing annual budget for river works, and instead any works were carried out by intermittent special grants. For instance the Soil Conservation and Rivers Control Council

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<sup>179</sup> The responsibility was expressed in permissive terms ("the Minister ... may from time to time do all things necessary" and "may exercise all or any powers and authorities formerly conferred on the Trust"), rather than as a Crown obligation.



allocated £150 for clearing the channel at Piako Rapid (also known as Opiaka Rapid and as Middle Ngaporo Rapid) in 1948, though this was seen as an interim measure pending negotiations with the Marine Department, the department responsible for navigation matters generally, to determine which department would continue to fund Whanganui River works<sup>180</sup>. The Marine Department eventually contributed half the cost<sup>181</sup>. A further £150 was granted for works at the same rapid in 1951<sup>182</sup>.

An inspection in 1951 revealed the extent to which navigability had deteriorated, as well as remarking on the extent to which the Whanganui Valley had become depopulated:

During cloudbursts, which are common in this area, even the smallest stream can carry immense quantities of timber and debris. It often happens that such debris forms a dam, and piles up until the dam breaks and the pent-up mass of timber etc is carried headlong through the gorges on the flood waters and discharged into the river. This type of thing causes large deposits of timber and shingle to form in the main river bed on the downstream side of the tributary, partially blocking the main river channel.

The inspection report continued that removing the timber snags would provide the greatest benefit towards improving the channel for navigation, even though that would be a costly exercise. It also needed to be conceived as a continuous maintenance exercise rather than as an occasional project. After this work as a first stage, training walls would need to be reinstated. Beyond that, the inspection report advanced the suggestion of locks at the rapids with the greatest drops in height, and even contemplated high dams and associated hydro-electric power generation<sup>183</sup>. While the engineer writing the report acknowledged that this was veering into the realms of fantasy, the very fact that it was mentioned demonstrated the extent to which the Crown, at that time, felt that it had an unbridled ability to make changes to the river.

Ministry of Works and Development continued funding navigation maintenance works up until 1975. The funding provided for the clearing of snags at three rapids in

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<sup>180</sup> Marine Engineer to Secretary for Marine, 22 December 1948, and Chairman Soil Conservation and Rivers Control Council to Secretary for Marine, 8 February 1949. Works and Development Head Office file 96/333000. Supporting Papers #239 and 240.

<sup>181</sup> Secretary for Marine to Chairman Soil Conservation and Rivers Control Council, 1 March 1949. Works and Development Head Office file 96/333000. Supporting Papers #241.

<sup>182</sup> District Commissioner of Works Wanganui to Commissioner of Works, 10 October 1951. Works and Development Head Office file 96/333000. Supporting Papers #247.

<sup>183</sup> District Commissioner of Works Wanganui to Commissioner of Works, 23 July 1951. Works and Development Head Office file 96/333000. Supporting Papers #242-246.

1974 has been discussed in the earlier section of this evidence concerned with the effects of the TPD Western Diversion from 1972-73 onwards. Just prior to that work a 1973 report noted:

In 1960 for instance considerable clearing was carried out upstream as far as the Te Maire bridge. Since then, however, maintenance has been confined to the lower reaches and to shingle extraction areas at Taumarunui.<sup>184</sup>

However, the commissioning of the Western Diversion prompted a review of the Ministry's involvement, based around responsibility for funding of works.

Some formula in reasonably specific terms is required to determine when works are necessary as a result of normal river changes etc, and when these works are more directly attributable to the Tongariro diversion, i.e. to determine when finance should be provided through Vote: Works and when it should be through Electricity [Department]....

Future control and management of clearing operations. Should this now be placed in the hands of the Rangitikei/Wanganui Catchment Board? Obviously there is no point in delegating the authority if the Board is not willing to do the job, but it is thought desirable to place total river management in the Board's hands, and every encouragement to this end should be given.<sup>185</sup>

A significant issue for the Ministry was that Wanganui River works were being funded 100% by the Crown when, under other circumstances applying over most of the rest of the country, they would be part-funded only through the grant of a Crown subsidy to top up local funds raised through catchment boards. The likelihood was that reduced flows in the river as a result of the TPD would encourage additional demands for more channel clearing works, a pressure (and consequence of the TPD) that the Ministry was anxious to avoid.

The Rangitikei-Wanganui Catchment Board was alive to the potential disadvantages for local ratepayers, declaring that there was "no possibility of financing this work on the normal subsidy plus local share basis", and that it would need to be funded by grant from the Soil Conservation and Rivers Control Council, plus possibly from the New Zealand Electricity Department "where effectiveness has been reduced by headwater diversion". In other respects, however, the Catchment Board considered that more local control of activities on the river would benefit the river and its users.

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<sup>184</sup> District Commissioner of Works Wanganui to Commissioner of Works, 16 November 1973. Works and Development Head Office file 96/333000. Supporting Papers #250-251.

<sup>185</sup> Commissioner of Works to District Commissioner of Works Wanganui, 29 March 1974. Works and Development Head Office file 96/333000. Supporting Papers #255-256.

It noted that, as a Catchment Board, it already exercised catchment functions in Wanganui County, while in Taumarunui County the catchment functions were exercised by the Soil Conservation and Rivers Control, which would need to delegate its authority. The Board also considered that management of shingle extraction (see a separate part of this evidence) was an integral part of river management, and that the issuing and administration of shingle licences would also need to be transferred from the Ministry to the Board<sup>186</sup>.

A meeting of affected agencies was held in Wanganui in July 1975 to consider the proposed transfer of responsibility. It included government departments, local authorities, the Wanganui River Scenic Board, the NZ Jet Boat Association and the NZ Canoeing Association. R Metekingi, a member of the Scenic Board, was recorded as representing “Maori Incorporations and River Scenic Board”. No other Maori representatives were present. In the minutes Metekingi is recorded as stating:

Mr Mete-Kingi represented the Maori Incorporations, and said the Maori Incorporations operate in the King Country and inherit the river itself, and for many years he has represented the Atihau Tribes in the area. He stated the river belonged to them, but he admits we have to talk about administration of the river also, plus the Whangaehu and Turakina. The Maori people had been actively associated with the Scenic Board from its inception, and there is need for cooperation between the various bodies. He said the Maoris take metal in the vicinity of Moutoa Island, and will continue to do so no matter what the Ministry of Works or the Catchment Board would say, but they are ready to talk to anybody at any time.

The meeting agreed that greater coordination of responsibilities and activities would be beneficial, and that the Catchment Board was well placed to achieve this, subject to some further discussion with the Scenic Board over respective responsibilities<sup>187</sup>.

Discussions continued for a further year before agreement was reached. The Catchment Board agreed to take over “the responsibility for arranging and directing maintenance work activity”, subject to grant funding from the Soil Conservation and Rivers Control Council. Because the only income obtainable from the river was royalties from shingle licences, “it is impossible to see how any local contribution

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<sup>186</sup> Staff Report to Rangitikei-Wanganui Catchment Board, June 1975, attached to Chief Engineer Rangitikei-Wanganui Catchment Board to District Commissioner of Works Wanganui, 1 July 1975. Works and Development Head Office file 96/333000. Supporting Papers #261-264.

<sup>187</sup> Notes of Meeting, 30 July 1975. Works and Development Head Office file 96/333000. Supporting Papers #265-270.

could be raised from local interests”, apart possibly from nominal contributions from recreational and jet boating commercial interests<sup>188</sup>. The transfer of responsibility for maintenance of navigation (and for shingle licensing) took effect from 1 April 1977<sup>189</sup>. Unlike some earlier understandings of the situation held by the Board, the Catchment Board from that date was acting only as agent of the Ministry carrying out the responsibilities given to the Ministry by the 1940 legislation abolishing the River Trust; it was not having its catchment management responsibilities under the Soil Conservation and Rivers Control Act 1941 extended across a wider territorial area. However, the limited nature of the change of administration is indicated by the Ministry offering only \$5000 towards the costs of the first year’s channel maintenance works<sup>190</sup>. This enabled clearance work at only two rapids<sup>191</sup>.

What happened to the Ministry of Works and Development’s responsibilities for channel maintenance under the 1940 legislation when the Ministry was abolished in 1988 has not been researched. It is possible that the responsibility transferred to the Ministry for the Environment, or alternatively that it passed to the MWD Residual Management Unit. The agent undertaking that responsibility probably continued to be the Catchment Board. The Crown responsibility for channel maintenance, that had been set out in Section 28 Reserves and Other Lands Disposal Act 1940, ceased with the repeal of that Section by Section 362 and Schedule 8 of the Resource Management Act 1991. Under that Act, all management responsibilities towards the Whanganui River channel were passed to the new Manawatu-Wanganui Regional Council.

#### **4.4 Lake Ngarongokahui**

The brief for this project specifically identified as one of the topics to be researched, and as one of the potential case studies, “the draining of Lake Ngarongokahui for

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<sup>188</sup> Chief Engineer Rangitikei-Wanganui Catchment Board to District Commissioner of Works Wanganui, 28 June 1976, attached to District Commissioner of Works Wanganui to Commissioner of Works, 19 July 1976. Works and Development Head Office file 96/333000. Supporting Papers #279-282.

<sup>189</sup> District Commissioner of Works Wanganui to Commissioner of Works, 19 July 1976. Works and Development Head Office file 96/333000. Supporting Papers #279-282.

<sup>190</sup> District Commissioner of Works Wanganui to Chief Executive Officer Rangitikei-Wanganui Catchment Board, 5 May 1977. Works and Development Head Office file 96/333000. Supporting Papers #283-284.

<sup>191</sup> Chief Engineer Rangitikei-Wanganui Catchment Board to District Commissioner of Works Wanganui, 22 February 1978. Works and Development Head Office file 96/333000. Supporting Papers #285-286.

railway purposes”. However, the research has turned up only a very limited amount of information.

Lake Ngarongokahui was located in the lower Taringamotu valley. It was apparently a narrow lake or wetland occupying a side valley on the southern side<sup>192</sup>. The Taringamotu Valley Road crosses the side valley in between the start of the Valley Road at Taumarunui High School and the long straight that runs alongside the Taumarunui Aerodrome<sup>193</sup>. The route of the Taringamutu<sup>194</sup> Totara Company’s timber tramway crosses the side valley downstream of the road<sup>195</sup>.

The lake is located in the Ohura South block, and more specifically in the Ohura South A4 block. The original survey plan for Ohura South block does not record the lake, which is not surprising as the survey was primarily designed to record the outer boundary features of the block, and was less concerned with internal features in the block<sup>196</sup>.

Ohura South A4 was acquired by the Crown, and was declared Crown Land in 1901<sup>197</sup>. The detail about the Crown’s acquisition of this block, and whether it was aware of the wetland’s existence during the acquisition negotiations, has not been researched for this evidence.

Only after the Crown’s acquisition of the block was the timber company’s tramway built across the Crown Land. Permission for the route chosen was given by the Chief Surveyor, and as at February 1908 the base formation of the line had been completed, though the sleepers and tracks had not yet been laid<sup>198</sup>.

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<sup>192</sup> Tame Tuwhangai (Ngati Urunumia), personal communication, 31 July 2008.

<sup>193</sup> More specifically, the road crosses the side valley between the Simmons Road turnoff and the Shaw Road turnoff.

<sup>194</sup> The registered company name spells the valley as Taringamutu, while the officially recognised geographic name for the valley is Taringamotu.

<sup>195</sup> The coordinates for the tramway bridge, as it crosses the waterway, on [www.maps.google.co.nz](http://www.maps.google.co.nz), are “-38.855584, +175.246975”.

<sup>196</sup> South Auckland plan ML 6114. Not included in Supporting Papers.

<sup>197</sup> *New Zealand Gazette* 1901 page 1752. Not included in Supporting Papers.

<sup>198</sup> Assistant Road Engineer Te Kuiti to Chief Engineer of Roads, 14 February 1908. Works and Development Head Office file 26/246. Not included in Supporting Papers.

The first survey plan of the Crown Land, completed in October 1905, shows the location of Lake Ngarongokahui as a long narrow “Raupo Swamp” beneath a terrace and extending from a bridge on the Taringamotu Valley Road<sup>199</sup> upstream almost to the Taumarunui Aerodrome straight<sup>200</sup>. The tramway is not shown on this plan.

The next plan of the locality is a plan of subdivision for the Crown Land, surveyed in January 1916<sup>201</sup>. This is strictly a survey plan, and does not record any internal topographical features; the raupo swamp is not recorded. The line of the tramway downstream of the road, where it crosses the side valley in which Lake Ngarongokahui was located, is shown.

Today the site of the raupo swamp is farmland. The research for this evidence has been unable to identify when the wetland was drained, and has been unable to confirm that it was as a direct result of the timber company’s tramway. However, it seems almost certain that the draining of the wetland was undertaken with the knowledge and consent of the Crown, after it had become Crown-owned. If that was indeed the case, the Crown would not have sought the consent of the former Maori owners, believing that as a result of its purchase it held all rights to the land, and that there were no residual rights remaining with the former owners.

#### **4.5 River Control Works to Prevent Bank Erosion at Taumarunui**

The vacuum created when there is no person or organisation to speak up for the intrinsic values of rivers is most dramatically demonstrated in urban situations. On the one hand there are people and local authorities that have made a heavy investment in property, buildings and infrastructure, while on the other is a river with no advocates and few legal protections. If, in these circumstances, the river tries to push out of the confines defined for it, somewhat artificially, by legal title boundaries, the human reaction will be to want to push back and exert control using engineering solutions.

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<sup>199</sup> The bridge being referred to is on an old line of the road. The coordinates for this old road bridge as it crosses the waterway, on [www.maps.google.co.nz](http://www.maps.google.co.nz), are “-38.855901, +175.248756”.

<sup>200</sup> South Auckland plan SO 13525. Supporting Papers #534.

<sup>201</sup> South Auckland plan SO 19354. Supporting Papers #535.

The Taumarunui Native Township was established on the bank of the Whanganui River. When the river during flood threatened to erode the riverbank and encroach on the township, the immediate reaction was to put in river protection works. The Public Works Department went ahead with the work, without regard for the existence of any interests, legal or otherwise, in the river itself. Over the years from 1906, a series of structures were erected.

In 1917 legislation was passed to validate those works. Section 129 Reserves and Other Lands Disposal and Public Bodies Empowering Act 1917 stated:

Whereas certain river-works have been undertaken by the Minister of Public Works for the purpose of protecting certain Native and other lands at Taumarunui from erosion by the Wanganui River: And whereas the cost of those works is being advanced by the Waikato-Maniapoto District Maori Land Board: And whereas it is desired to validate the undertaking of the works by the Minister of Public Works as aforesaid, and to authorize the completion of those works, and also to validate the payments made in respect thereof by the Waikato-Maniapoto Maori Land Board, and to authorize further advances in respect of the works aforesaid: Be it therefore enacted as follows:

(1) All works heretofore undertaken and performed by the Minister of Public Works, his officers and servants, in respect of river-protection works in the Wanganui River, for the protection of lands within the Borough of Taumarunui, or in the vicinity thereof, are hereby declared to have been validly undertaken, and may be completed by the said Minister in accordance with the scheme thereof.

Subsections (2) to (4) then authorised the spending of monies on the protection project.

The legislation was required because the works were being built in part on the Maori-owned land, and while the legal owner, the District Maori Land Board, had given permission, it had apparently overstepped its legal powers as delegated to it by the Crown when passing its establishing legislation. They were also being built on the legal riverbed, though any lack of permission to do so does not seem to have been the motivation for the validating legislation. However, the broad terminology used in the validating legislation authorised any protection works constructed on the riverbed, and also validated all protection works constructed before 1917.

#### **4.6 River Diversions at Taringamotu, Manunui and Winter's Island**

The Crown's blindness to Maori interests in rivers, or indeed to any other in-river interests, was apparent with other schemes to change the course of rivers in the first half of the twentieth century. Where the law had not identified any organisation or individual who had a property right in the river or in the riverbed, the Crown did not feel any obligation to obtain permission or discuss the proposed change.

In 1915, Maori in the Taringamotu Valley sent a petition to Sir Maui Pomare asking that an old road, which provided a more direct access route to Taringamotu Railway Station on the Main Trunk Line, should be retained now that a new public road, following a less useful line so far as they were concerned, had been constructed<sup>202</sup>. The Resident Engineer at Taumarunui noted that the old track crossed the Taringamotu Stream three times, because of its meandering nature, and suggested that a route directly alongside the Taringamotu Timber Company's tramway would be preferable<sup>203</sup>. He later had to acknowledge that along part of the route this would not be practicable, because the tramway was located on a narrow ledge cut into a pumice cliff<sup>204</sup>. However, his new intended route still involved one crossing of the Taringamotu Stream, prompting the Engineer in Chief to ask whether it might not be more convenient for the stream, which flowed in a meander hard up against a cliff face, to be diverted so that space was created between the foot of the cliff and the stream, along which the road could be laid out. This would take the proposed new road, without having to cross the stream, to the Taumarunui to Te Kuiti highway, and the ford over the stream on that highway could then be used to enable local residents to reach the railway station<sup>205</sup>. The diversion would effectively cut off the meander. The Resident Engineer agreed, and came up with a proposed layout for the river diversion and the road<sup>206</sup>, which was approved<sup>207</sup>. There was no suggestion in this

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<sup>202</sup> Pita Matena and 23 Others, Taringamotu, to Dr Pomare, 13 September 1915. Works and Development Head Office file 39/19. Supporting Papers #192-194.

<sup>203</sup> Resident Engineer Taumarunui to Engineer in Chief, 15 December 1915. Works and Development Head Office file 39/19. Supporting Papers #195-197.

<sup>204</sup> Engineer in Chief to Resident Engineer Taumarunui, 10 January 1916, and Resident Engineer Taumarunui to Engineer in Chief, 1 February 1916. Works and Development Head Office file 39/19. Supporting Papers #198 and 199.

<sup>205</sup> Engineer in Chief to Resident Engineer Taumarunui, 9 February 1916. Works and Development Head Office file 39/19. Supporting Papers #200.

<sup>206</sup> Resident Engineer Taumarunui to Engineer in Chief, 15 March 1916. Works and Development Head Office file 39/19. Supporting Papers #201-203.



approval process that the Crown had to refer what was proposed for the river to anyone else. As it happens, despite the proposed diversion of the river being surveyed to identify what land was required, and despite the land being taken under the Public Works Act<sup>208</sup>, the diversion never proceeded. However, the approach adopted by the Crown demonstrates that, if the stream diversion channel had been dug, it would have proceeded with the work without giving any thought for the impact on the stream.

A diversion that did get constructed was at Manunui in the late 1940s. It was prompted by the Whanganui River flowing towards and eroding its southern bank. At this point the land had been subdivided into residential sections, and the section owners appealed to the Manunui Town Board to protect their properties from erosion. The Town Board argued in 1946 that, rather than armouring the riverbank with rock walling, a diversion cut should be dug.

As you know, the river has formed a large bend and many acres of land have been washed away. It is felt that before very long the river will alter its course and may flood the whole of the area right through to the Manunui Domain....

As suggested on many occasions, the position could be remedied by the opening of a cut on the east side of the Wanganui River, and thus diverting the flow of the river from the Manunui side. Strong representations were made during the War years to have this cut opened up, and the area was inspected by Ministers of the Crown and engineers from your department. It is felt that now that hostilities have ceased, your Department may view the suggested work in a more favourable light...<sup>209</sup>

Engineering investigations showed that cutting a diversion channel to take the normal flow of the river would be cheaper than rock protection of the riverbank<sup>210</sup>. The cut would be made through Maori freehold land (Ohura South M2A block) on the northern true right bank of the river, and would cause part of that block to end up as a severance on the true left side of the river. In these circumstances it was necessary

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<sup>207</sup> Engineer in Chief to Minister of Public Works, 21 March 1916, approved 25 March 1916. Works and Development Head Office file 39/19. Supporting Papers #204.

<sup>208</sup> South Auckland plans SO 19529 and SO 21266. *New Zealand Gazette* 1921 page 190. Not included in Supporting Papers.

The land taken was on the northern side of the Taringamotu River, i.e. in Te Rohe Potae Inquiry District.

<sup>209</sup> Town Clerk Manunui Town Board to Resident Road Engineer Taumarunui, 2 October 1946, attached to Resident Road Engineer Taumarunui to District Engineer Hamilton, 9 October 1946. Works and Development Wanganui file 96/333001. Supporting Papers #455-456.

<sup>210</sup> Resident Road Engineer Taumarunui to District Engineer Hamilton, 11 March 1947. Works and Development Wanganui file 96/333001. Supporting Papers #457-458.

that both the land excavated for the cut and the severance should be acquired by the Crown. The Railways Department, which had already taken some three acres of the same Maori-owned block in 1944 for a ballast pit under the Public Works Act<sup>211</sup>, was approached about purchasing the severance once it had been acquired by the Public Works Department. However, it declined, and the cost of purchase was accepted by the Soil Conservation and Rivers Control Council as a cost of the diversion works it was funding<sup>212</sup>.

The cut was made in 1948. Although it is possible that the sole Maori owner of the affected block was contacted before the cut was constructed, this would only have been about the use of the private land for the cut, it not having been taken under the Public Works Act prior to construction. Any consultation would not have been about the merits or otherwise for the river of a change in its course. However, there is no reference on the district office file of the Ministry of Works<sup>213</sup> to any approach to or consultation with either the Maori landowners who were particularly affected by the use of their land for the cut, or the local iwi or hapu collectively. The Soil Conservation and Rivers Control Council would have felt that it had sufficient legislative authority to proceed without needing to consult with anyone else. The site of the new channel, and the portion severed from the remainder on the north bank of the river by the new channel, a total area of 31½ acres, was taken under the Public Works Act in 1952<sup>214</sup>.

Another artificial cut was made at Taumarunui in 1949 to channel the Whanganui River away from the north bank at the western end of Taumarunui town. The river was eroding into the bank between Victory Bridge and Cherry Grove, caused by the river splitting into two narrow channels separated by an island known as Winter's Island; the channels did not have sufficient capacity to take flood flows, and the river in searching for a way around the constriction was veering towards the north bank. It

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<sup>211</sup> South Auckland plan SO 32452. *New Zealand Gazette* 1944 page 1276. Not included in Supporting Papers.

<sup>212</sup> Chairman Soil Conservation and Rivers Control Council to District Engineer Hamilton, 6 February 1948. Works and Development Wanganui file 96/333001. Supporting Papers #462.

<sup>213</sup> Works and Development Wanganui file 96/333001.

<sup>214</sup> South Auckland plan SO 35424. Intention to Take – *New Zealand Gazette* 1951 page 1679. Taken – *New Zealand Gazette* 1952 page 394. Supporting Papers #537, 607 and 608.

was eroding Maori-owned land “of low value”, threatening a Maori burial ground, and a large domain and playing area had been “rendered useless by overflow”<sup>215</sup>.

It would be an expensive job to provide rip-rap rock protection to cover the whole of the damage to the right bank, and there is no doubt that further damage would be likely to occur during the next high flood if the debris and growth on the upstream end of Winter’s Island is not removed.<sup>216</sup>

The proposed solution was a new cut to take the normal flow of the river, which would pass through the upstream northern side of Winter’s Island. The affected land on the island was deemed to be Crown Land, which was “useless for farming purposes and should be made a scenic reserve”, because of the presence of manuka and second-growth totara<sup>217</sup>. In 1948 the Soil Conservation and Rivers Control Council approved a £3:£1 subsidy on clearing the ground for and bulldozing a pilot cut through the upstream portion of the island, estimated to cost £500, i.e. the Council would provide £375 subsidy if the Taumarunui Borough Council would provide £125 local contribution<sup>218</sup>. Digging the cut large enough to take the full normal flow of the river would have cost far more, and the Borough Council was unable to fund a more substantial local contribution.

Once the pilot cut had been made during 1949, a shingle extraction contractor offered to site his dragline at Winter’s Island so that by removal of shingle the cut would be widened and deepened. His offer was made on the condition that he would not pay any royalties for the shingle<sup>219</sup>. This offer was attractive to the Ministry, because Winter’s Island was a natural settling point for shingle moving down the Whanganui River, and extraction by a contractor would remove the shingle at no cost to it.

Winters Island, with its big area of deposited metal, has probably been caused by the swift-flowing Wanganui River, which carries coarse metal, meeting the slow-flowing Ongaruhe River, which carries fine metal. The times of high floods in the two rivers at the river junction do not always coincide, with the

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<sup>215</sup> Chairman Soil Conservation and Rivers Control Council to Director General of Lands, 7 February 1950. Works and Development Wanganui file 96/333001. Supporting Papers #465-466.

<sup>216</sup> Resident Road Engineer Taumarunui to Town Clerk Taumarunui Borough Council, 14 March 1947, attached to Resident Road Engineer Taumarunui to District Engineer Hamilton, undated (received 10 April 1947). Works and Development Wanganui file 96/333001. Supporting Papers #459-460.

<sup>217</sup> Chairman Soil Conservation and Rivers Control Council to District Engineer Wanganui, 1 December 1947. Works and Development Wanganui file 96/333001. Supporting Papers #461.

<sup>218</sup> Chairman Soil Conservation and Rivers Control Council to District Engineer Wanganui, 6 February 1948. Works and Development Wanganui file 96/333001. Supporting Papers #462.

<sup>219</sup> Engineer Taumarunui to District Engineer Wanganui, 2 December 1949. Works and Development Wanganui file 96/333001. Supporting Papers #463.

result that the Wanganui River metal is deposited near the Ongaruhe River and again near Victory Bridge. This deposition may be likened to the delta formation at river mouths.<sup>220</sup>

However, the question of royalties was a matter for the Lands and Survey Department, because the portion of the new and widened cut that had formerly been part of Winter's Island was Crown Land, and because the bed of the Whanganui River was (as the bed of a navigable river) also deemed to be Crown Land. The Department was asked if it would waive royalties<sup>221</sup>. Whether or not approval was given is not known. However, the extraction that was proposed was to fulfil a contract put out for tender by the Railways Department, and no royalty was being charged for shingle extracted for Crown or local authority needs. This meant the Crown was able to both obtain the shingle it required, and deepen and widen the channel to take the waters of the river away from Taumarunui township. Maori were not consulted about this, because the Crown believed it owned the land and riverbed from which the shingle was being taken.

The shingle extraction at Winter's Island continued right through the 1950s. A reference to the diversion cut was located in the magazine *Roll Back the Years*:

After the short-lived motor cycle experience came the river metal extraction firm of Bullock and Co. Their contract, which appears to have started during the early 1950s, was to cut a new channel from Victory Bridge, through the top of Winters Island in more or less a straight line to the junction of the rivers.

Bullocks started from the Victory Bridge end and bypassed the old river channels flowing round each side of Winters Island. Old photographs show the left channel flowing parallel with the Hikumutu Road (below Sunshine) and the right channel cutting in close to the Maori cemetery next to the Ngapuwaiwaha Marae.

By the time the 1958 flood had arrived, Bullocks had cut a new road into Cherry Grove, and were using a fixed "drag-scraper" to extract metal from the Wanganui River immediately above the junction.

A 30 or 40 foot pole was erected near the present information centre to carry the wire ropes for the drag-scraper. The anchors for these ropes were fixed to Winters Island.

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<sup>220</sup> District Engineer to Chairman Soil Conservation and Rivers Control Council, 9 December 1949. Works and Development Wanganui file 96/333001. Supporting Papers #464.

<sup>221</sup> Chairman Soil Conservation and Rivers Control Council to Director General of Lands, 7 February 1950. Works and Development Wanganui file 96/333001. Supporting Papers #465-466.

The deep and narrow channels cut by the scraper were at right angles to the flow of the river.<sup>222</sup>

Besides the diversion cuts at Manunui and Winter's Island, there was also apparently an artificial cut at the mouth of the Pungapunga Stream, upstream of Manunui on the true right bank, which left the original streambed as dry land. Details have not been researched for this report<sup>223</sup>.

An indication of the Crown's engineering-oriented attitude towards the Whanganui River at Taumarunui can be gained from a memorandum in 1965. A small grant of £200 was made by the Soil Conservation and Rivers Control Council towards minor works that would in its opinion improve the waterway, and the memorandum set out how the money should be spent:

This money is to be used for improving channel efficiency, not for carrying out any specific bank protection or other work of direct benefit to riparian landowners. Such jobs should be financed in the normal way by subsidy and local contribution.

The operations of the various shingle contractors have effected considerable improvements in the five miles or so of river in the vicinity of Taumarunui, but the full value of their work cannot be realised without other small jobs being done. These may be removal of exposed logs, bulldozing of correct channel alignment, removal of deposits unsuitable for sale as shingle, etc.<sup>224</sup>

#### **4.7 Lake Kaitoke**<sup>225</sup>

Lake Kaitoke was included in one of the reserves to be retained by Maori agreed as part of the Wanganui Purchase. The lake was still in Maori ownership in 1917, when a title was issued<sup>226</sup>. This title shows that the lakeshore was the boundary of the reserve, with Maori owning riparian land only at the western end of the lake.

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<sup>222</sup> 'River Metal Extraction' [at Cherry Grove], in *Roll Back the Years*, Volume 2 Number 37, June / July 1983, page 442.

<sup>223</sup> This may have been surveyed on South Auckland plan SO 43218, and may involve a taking under the Public Works Act for river control purposes in 1967 (New Zealand Gazette 1967 pages 774 and 1030 – not included in Supporting Papers).

<sup>224</sup> Commissioner of Works to District Commissioner of Works Wanganui, 3 February 1965. Works and Development Wanganui file 96/333001. Supporting Papers #474.

<sup>225</sup> Some of the events discussed in this section have already been addressed in C Marr, *Crown Impacts on Customary Maori Authority over the Coast, Inland Waterways (other than the Whanganui River) and Associated Mahinga Kai in the Whanganui Inquiry District*, June 2003, WAI-903 Document #A36, pages 222-224.

<sup>226</sup> Wellington Certificate of Title WN251/139. Copy attached to Director General of Lands to Secretary for Internal Affairs, 5 October 1972. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #7-10.

Subsequently, much of the dry land in the reserve was sold, but Maori retained (and continue to retain today) title to a one-chain strip along the lake edge at the western end, and to the lake itself<sup>227</sup>. The land around the rest of the lake was included in the Wanganui Purchase, and was subdivided by the Crown for occupation by farming settlers. These settlers owned the land down to the water's edge on the northern side of the lake. On the southern side of the lake the Crown laid off a one-chain strip which it reserved from sale, and which it retains in its ownership today (as land held for conservation purposes under Section 62 Conservation Act 1987). At the eastern end, a formed public road passed close to the lake edge; the narrow strip between the road and the lake was (and is) a part of the conservation purposes land.

As one of the coastal Wanganui lakes, Kaitoke was important to Maori for the customary foods it could supply, principally eels, but also fish and (probably) moulting ducks. The circumstances of the lake, with most of the lake edge a boundary between Maori and European-owned land, and with the lake seen as a natural food resource by Maori while the surrounding land was seen as a farming resource by Europeans, cries out for some cooperative management to ensure that conflict between the various interested parties does not arise. But historically that has not been the case. The Crown's approach to drainage of the lake and its surrounds is one example of a number of unilateral actions that were carried out without consultation with the Maori owners.

Before discussing drainage matters, with which the Crown became involved from 1950 onwards, it is useful to first consider an earlier event that might have seen an ongoing partnership between the Crown and Maori develop, but which failed to do so. This was the declaration of Lake Kaitoke as a wildlife sanctuary in 1914.

For the European population, the lake has held different values to those appreciated by its Maori owners. The Wanganui Acclimatisation Society viewed its value in terms of wildfowl, but more specifically as a breeding area that could ensure a healthy population of game for shooting elsewhere in the district. In April 1914 the Society urged the Government to declare the lake a no-shooting sanctuary for native and

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<sup>227</sup> Wellington plan DP 24068. Not included in Supporting Papers. The riparian strip is Lot 2 on this plan.

imported game. This request came after “all the property owners surrounding the lake” signed a petition seeking the sanctuary status<sup>228</sup>. Whether the “property owners surrounding the lake” included the Maori owners of the land at the western end, and of the lake itself, is not known, as the petition was not forwarded to the Government and has therefore not been held among Crown records. There is some subsequent evidence that at least one of the Maori owners supported the sanctuary (see below), but no evidence that all the owners, or a meeting of owners, did so. The Department of Internal Affairs, to whom the Society wrote, made no effort to ascertain the ownership of the lake or the views of the owners. Instead it proceeded to immediately implement the Society’s request<sup>229</sup>. The sanctuary that was created in April 1914 covered the lake and a ten-chain (200 metre) strip around it<sup>230</sup>.

If the sanctuary had been created after discussion with the Maori owners of the lake, and with their collective agreement, then its existence would have represented a form of contract, almost akin to a local treaty, that the Crown and Maori would work together for a particular purpose. It would have been a binding relationship, until the two parties collectively agreed that it could be revoked or altered. However, that was not the case.

Within one month of the notification that the lake had been declared a sanctuary, the Society’s Secretary wrote to the Government:

I think it advisable the following facts should be put before the Minister. Walter Hipango Williams (Waata Wirimu Hipango), a Native, advised the Society he was the owner of the Kaitoke Lake, and wished it declared a Sanctuary. When my advertisement appeared [in a local newspaper to advertise that the sanctuary had been declared], a Native named Nepia Tauri came to me and declared he was part-owner, and objected to the Proclamation, and he claims the right to give permission to shoot over the Lake – as he says that it is his own property. If this Native has the right he claims, my Society do not wish to debar the Whites from shooting. Could you ascertain if Nepia Tauri or any other Native besides Waata Wirimu Hipango owns the lake, if not my Society ask that the Proclamation be confirmed by a notice under the

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<sup>228</sup> Honorary Secretary Wanganui Acclimatisation Society to Under Secretary for Internal Affairs, 6 April 1914. Internal Affairs Head Office file 46/29/82. Supporting Papers #1.

<sup>229</sup> Under Secretary for Internal Affairs to Minister of Internal Affairs, 21 April 1914, approved by Minister 24 April 1914. Internal Affairs Head Office file 46/29/82. Supporting Papers #2.

<sup>230</sup> *New Zealand Gazette* 1914 page 1588. Supporting Papers #599.

Authority of the Governor, and it is suggested it should include the Westmere and Virginia Lakes as well as the Kaitoke.<sup>231</sup>

The Department of Internal Affairs asked the Native Department for its views on the ownership of the lake, and was told that the answer could be obtained from the Registrar of the Native Land Court in Wanganui. However, neither department made any effort to contact the Registrar itself, believing that was a task for the Acclimatisation Society to undertake<sup>232</sup>. Meanwhile, the title issued in 1917 recorded that the Kaitoke Reserve had four owners:

Wikitoria Keepa	116 shares
Waata Wiremu Hipango	106 shares
Ripeka Te Tauri	122 shares
Te Hira Matiu	20 shares
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	364 shares <sup>233</sup>

These four owners were treated as the sole individual owners in law; whether they held responsibilities as trustees to a wider iwi or hapu membership is not known. Nepia Tauri's relationship to Ripeka Te Tauri is not known.

A further lack of consideration by the Crown for the Maori ownership of the lake occurred in 1917. One of the European settlers whose property adjoined the lake wrote to the Under Secretary for Internal Affairs complaining about trespass on his land by shooters. Apparently the sanctuary status was being ignored locally, with Maori granting Europeans permission to shoot game on the lake. He asked:

With reference to the Treaty of Waitangi and the rights of Maoris using certain lakes for fishing and shooting, would you be good enough to inform me if the Kaitoke Lake comes under the above category.<sup>234</sup>

The Under Secretary replied that, as a sanctuary, "no imported or native game should be taken or killed within such area"<sup>235</sup>. He then referred the question of fishing rights to the Marine Department.

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<sup>231</sup> Secretary Wanganui Acclimatisation Society to Under Secretary for Justice [sic], 8 May 1914. Internal Affairs Head Office file 46/29/82. Supporting Papers #3. Westmere and Virginia Lakes were proclaimed sanctuaries in September 1914 (*New Zealand Gazette* 1914 page 3563 – not included in Supporting Papers); the status and history of these lakes has not been researched for this report.

<sup>232</sup> File note to Mr Newton, 2 June 1914. Internal Affairs Head Office file 46/29/82. Supporting Papers #4.

<sup>233</sup> Wellington Certificate of Title WN251/139. Copy attached to Director General of Lands to Secretary for Internal Affairs, 5 October 1972. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #7-10.

<sup>234</sup> R Hughes, Wanganui, to Under Secretary for Internal Affairs, 18 May 1917. Internal Affairs Head Office file 46/29/82. Supporting Papers #5.



The Secretary for Marine advised his Minister:

It would appear, from the fact that this lake and an area of ten chains surrounding it have been declared to be a sanctuary under the Animals Protection Act, and that no imported or native game should be taken or killed within such area, that the Maoris have not the right which they claim under the Treaty of Waitangi to fish in it and to shoot game thereon.

He recommended that a legal opinion be sought from the Solicitor General<sup>236</sup>.

The Solicitor General, without being in full possession of the facts about ownership of the lake, because he was relying only on the information contained on the file, replied:

With respect to game, Natives have no exemption from the provisions of the Animals Protection Act. As to fish, I am unable in the absence of any evidence as to the title of this lake to advise whether Natives have a right to fish therein or not. In any case it would be inexpedient at the present time to express any opinion as to Native fishery rights, since the whole question as to the rights of Natives over the waters of New Zealand is likely to come shortly before the Courts for definite determination in respect of claims made by the Natives to Lake Rotorua and other waters.<sup>237</sup>

Despite this opinion not stating that fishing in Lake Kaitoke was illegal, the Secretary for Marine decided to apply some bluff. He recommended to his Minister, and the Minister of Marine agreed, that

no proceedings be taken against the Natives at present, but that they be cautioned by the Police that they must discontinue taking fish from this lake otherwise the question of instituting a prosecution will have to be considered.<sup>238</sup>

The Collector of Customs at Wanganui was then instructed to arrange for the Police to issue the caution<sup>239</sup>.

The ignoring of the lake's Maori ownership by the Department of Internal Affairs was repeated in 1925, 1929 and 1957, when the Proclamation declaring the lake to be a

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<sup>235</sup> Under Secretary for Internal Affairs to R Hughes, Wanganui, 23 May 1917. Internal Affairs Head Office file 46/29/82. Supporting Papers #6.

<sup>236</sup> Secretary for Marine to Minister of Marine, 7 June 1917, approved by Minister 8 June 1917, on cover sheet to file 2/12/145. Marine Head Office file 2/12/145. Supporting Papers #98.

<sup>237</sup> Solicitor General to Secretary for Marine, 14 June 1917. Marine Head Office file 2/12/145. Supporting Papers #96.

<sup>238</sup> Secretary for Marine to Minister of Marine, 27 June 1917, approved by Minister 19 June 1917, on Solicitor General to Secretary for Marine, 14 June 1917. Marine Head Office file 2/12/145. Supporting Papers #96.

<sup>239</sup> Secretary for Marine to Collector of Customs Wanganui, 27 June 1917. Marine Head Office file 2/12/145. Supporting Papers #97.

sanctuary was reissued<sup>240</sup>. The last-mentioned occasion was a Proclamation notifying that Lake Kaitoke was a wildlife refuge, the change of name from sanctuary to refuge having arisen with the passing of the Wildlife Act 1953. This meant that there had been no contact made by the Crown with the Maori owners throughout the period 1914 to 1950, when the drainage works to prevent flooding of surrounding riparian land became an issue.

By 1950 the Soil Conservation and Rivers Control Council had established a pattern of subsidising the cost of local drainage and flood control works, resulting in numerous requests for that funding. The first such request made with respect to Lake Kaitoke was made in March 1950, when four European settlers wrote to the Minister of Works. They explained that the County Council had spent some £20 or £30 annually on cleaning out the outlet from the lake in order to keep the water level low enough so that it did not flood surrounding land, but that was not sufficient, and more comprehensive works to widen the outlet were needed. Up to fifty acres of land was subject to flooding, and the road running close to the eastern edge of the lake was repeatedly washed out<sup>241</sup>.

The District Engineer reported on the situation:

The catchment area of the water feeding into Kaitoke Lake is 7600 acres, of which the Kaitoke Stream drains 3200 acres and the Wiritoa Stream 4400 acres.

The outlet of the lake shows two channels. First a natural channel, of which the first 30 or 40 chains is a non-flowing swampy area fouled with weeping willows. At the point where this channel shows signs of flow, it is joined by a side channel which has been excavated in a straight line to the lake, presumably to act as a new artificial outlet, but it has not been dug deep enough or wide enough for that purpose. At present it is overgrown with blackberry.

Below the junction of these two outlets, the channel is badly fouled with blackberry.

The land through which the Kaitoke Stream flows is Maori land leased to Mr A Donald....

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<sup>240</sup> *New Zealand Gazette* 1925 pages 989-997 at page 996, 1929 pages 445-454 at page 452, and 1957 page 469. Supporting Papers #604-605, 606, and 609.

<sup>241</sup> Chairman Soil Conservation and Rivers Control Council to District Engineer Wanganui, 9 March 1950. Works and Development Wanganui file 96/332000. Supporting Papers #407-408.

While I am in favour of opening up the outlet channel sufficiently to let surplus flood waters away (but not sufficiently to lower the normal water level of the lake), I consider that it is a matter for the County Council to decide.<sup>242</sup>

Apparently the artificial outlet had been cut by the Wanganui County Council in 1937, according to one of the settlers who had sought relief:

Owing to the then serious flooding, a gang of some twenty unemployed men was engaged to clear the outlet drain, and, when nearing the small lake, the County Engineer decided that, rather than clear the drain through two willow sections to connect with the Kaitoke Lake, a new drain should be cut through the sand. This drain was duly completed and the old drain which had served for perhaps a century was filled in with tons of earth. It was soon realised by the settlers at this end that the new drain was a failure, but it remained the only outlet for about eight years, until the position became desperate. I then approached the Council to have something done to relieve the position and no other labour being available worked with one of the Council employees for six weeks opening up the old drain again, and cleaning the major part of the whole outlet. The work gave immediate relief and reduced the flooding.<sup>243</sup>

Perhaps because of the unsatisfactory and only temporary nature of previous flood relief measures at the outlet, plus a reluctance to spend public funds on a matter that would only be of private benefit to the settlers, the County Council's reaction was to avoid tampering with the outlet drain, and instead focus its efforts on avoiding flooding of the public road, by raising the road's height above the surrounding land. The local settlers did not appreciate this attitude, and asked the Council to reconsider<sup>244</sup>, but it declined to act. The settlers then reapproached the Minister of Works<sup>245</sup>.

In investigating the matter in order to enable the Minister to reply to the letter sent to him, local Ministry of Works' officials identified that the lake was Maori-owned, and wrote to the Aotea District Maori Land Board.

To enable me to place the proposal before the Soil Conservation and Rivers Control Council, would you please let me have your views on the lowering of

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<sup>242</sup> District Engineer Wanganui to Chairman Soil Conservation and Rivers Control Council, 1 June 1950. Works and Development Wanganui file 96/332000. Supporting Papers #409.

<sup>243</sup> D Blackmore, Wanganui, to District Engineer Wanganui, 19 August 1950. Works and Development Wanganui file 96/332000. Supporting Papers #410-414.

<sup>244</sup> D Blackmore and 5 Others, Wanganui to Chairman and Councillors Wanganui County Council, 23 August 1950. Works and Development Wanganui file 96/332000. Supporting Papers #415-417.

<sup>245</sup> G Brickley and 3 Others, Wanganui, to Minister of Public Works, 14 November 1950. Works and Development Wanganui file 96/332000. Supporting Papers #418-420.

the water level in the lake, and any other information that would be of value to the Council. Is the boundary of the lake defined by survey? Would the owners of the lake contribute towards the cost of the construction and maintenance of the drain? Have they previously contributed to such work?

No doubt the farmers abutting the lake would be interested in some lowering of the water level, particularly where the lake boundary is not fenced. Is the land abutting the lake Maori-owned?<sup>246</sup>

The District Maori Land Board's Registrar replied that neither the Board nor the Department of Maori Affairs had any control over the lake, and the questions should be put to the owners themselves. However, he then proceeded to ignore his own advice and offer his opinions about what the views of the owners might be:

The Kaitoke Lake is well known to the Wanganui Tribe as one of the finest eel fishing lakes in the district, and the lake has been for years the main source of eel supply to the Maori population of Wanganui City and Putiki settlement, and is still extensively fished today.

It is not considered that there would be any objection by the Maori owners to the clearing and widening of the outlet to allow of the quicker run off of flood waters, but they certainly would object, and would I think be justified in doing so, if the proposal is to allow the lowering of the lake level, and provide the farmers abutting with more grazing land, and at the same time reduce or spoil the source of food supply to the Maoris.

In the circumstances, it will be appreciated that the Maori owners would hardly be prepared to contribute to a scheme from which they on the face of it will derive no benefit, and from which they may suffer hardship. The main owners of the lake are Hori Kingi Hipango and the Tauri family.<sup>247</sup>

On the strength of this response, and without approaching the Maori owners, the Minister of Works provided a reply to the settlers. He reiterated the Registrar's advice, stating that "it is not considered that there would be any objection by the Maori owners to the clearing and widening of the outlet", and adding that "they certainly would object" to any lowering of the lake level. He then pronounced his own view as Minister, that "under the circumstances there can be no objection" to clearing and widening the outlet, and also clearing and widening the culverts under the public road. Finally he repeated his earlier advice that it was for the County

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<sup>246</sup> District Engineer Wanganui to Registrar Aotea District Maori Land Board, 1 December 1950. Works and Development Wanganui file 96/332000. Supporting Papers #421.

<sup>247</sup> Registrar Aotea District Maori Land Board to District Engineer Wanganui, 8 January 1951. Works and Development Wanganui file 96/332000. Supporting Papers #422.

Council to prepare proposals and approach the Government for financial assistance<sup>248</sup>.

The Minister wrote to the Wanganui County Council to the same effect.

If your Council, as the Controlling Authority for all watercourses within the County, could initiate proposals for the clearing and widening of the lake outlet and the existing culverts, I should be very pleased, as it is a shame to see good farming land deteriorating solely due to willow and blackberry growth in the watercourses which provide drainage to these lands.

I can assure you any such waterway improvement proposals would receive sympathetic treatment by the Soil Conservation and Rivers Control Council.<sup>249</sup>

The County Council, however, was unmoved. It replied that it had already spent County funds on the raising of the height of the public road, and that it considered the clearing of the outlet to be a matter affecting private lands. It offered to review the matter in 12 months time<sup>250</sup>. The following year, the Council sprayed the blackberry at the outlet, but otherwise took no further action<sup>251</sup>.

In May 1954 the Soil Conservation and Rivers Control Council agreed to provide a £2 subsidy for every £1 contributed locally for cutting and spraying willows at the lake outlet, work that had an estimated total cost of £160<sup>252</sup>. But the settlers saw this as only a temporary solution, and petitioned the Minister of Works again in February and April 1955, proposing that a bulldozer be employed to dig through two necks (or sand ridges) on either side of the outlet stream that narrowed its width. They commented in their petition on the Maori rights to the lake:

It has never been asked that the outlet be deepened, but simply widened.

The Natives are not concerned, because we cannot injure them by a quicker get-away of flood water; in any case, over the past nineteen years not more

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<sup>248</sup> Minister of Works to D Blackmore, Wanganui, undated, attached to Chairman Soil Conservation and Rivers Control Council to District Engineer Wanganui, 22 February 1951. Works and Development Wanganui file 96/332000. Supporting Papers #423-425.

<sup>249</sup> Minister of Works to Chairman Wanganui County Council, undated, attached to Chairman Soil Conservation and Rivers Control Council to District Engineer Wanganui, 22 February 1951. Works and Development Wanganui file 96/332000. Supporting Papers #423-425.

<sup>250</sup> Chairman Soil Conservation and Rivers Control Council to District Engineer Wanganui, 28 March 1951, on Minister of Works to County Clerk Wanganui County Council, undated. Works and Development Wanganui file 96/332000. Supporting Papers #426.

<sup>251</sup> County Engineer Wanganui County Council to District Commissioner of Works Wanganui, 18 July 1952. Works and Development Wanganui file 96/332000. Supporting Papers #427.

<sup>252</sup> Commissioner of Works to District Commissioner of Works Wanganui, 18 May 1954. Works and Development Wanganui file 96/332000. Supporting Papers #428.

than three or four Maoris have been seen fishing eels in a twelve-months period.<sup>253</sup>

The Crown response was that it was a matter for the Wanganui County Council, rather than the settlers, to approach the Soil Conservation and Rivers Control Council with a scheme of work prepared and costed by an engineer. This put the onus on the County Council to resolve how any local contribution would be funded (whether from County funds or from the settlers themselves), if a subsidy were to be made available<sup>254</sup>.

It was not until the following year that the County Council applied for a subsidy for work at the outlet.

The work proposed is to bulldoze the outlet wider, this being practicable down to within a foot of water level, and will double the width of the outlet. This is estimated to cost £160. The work should then cease, until the effectiveness of this is seen under flood conditions, as it may be sufficient. If not, £80 has been allowed for using a dragline to widen the outlet below the level a bulldozer can work.

The economic benefits are increase of pasture surrounding the lake, as sour ground can be sweetened and grassed, and also the elimination of flooding of a nearby market garden where a proposal has already been put up for clearing the stream nearby which feeds the lake.<sup>255</sup>

The Resident Engineer of the Ministry of Works supported the proposal:

The Council's proposals are not well prepared, nor complete. However, the work they propose, being merely cleaning out of the lake outlet, does not warrant an elaborate proposal. The present outlet is very restricted, and any work done there should be of considerable benefit to the areas which become flooded.

I therefore recommend that approval be sought from the Soil Conservation and Rivers Control Council for the Council's proposal, and that a £2:£1 subsidy be granted on the estimated cost of £240.<sup>256</sup>

A subsidy was approved, but at a rate of £3:£2 (i.e. £3 of Crown money contributed for every £2 raised locally)<sup>257</sup>. In reaching this decision, no Crown official made any

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<sup>253</sup> Commissioner of Works to District Commissioner of Works Wanganui, 13 May 1955. Works and Development Wanganui file 96/332000. Supporting Papers #429-430.

<sup>254</sup> District Commissioner of Works Wanganui to Commissioner of Works, 23 May 1955, and Minister of Works to RE Jack MP, 14 June 1955. Works and Development Wanganui file 96/332000. Supporting Papers #431-432 and 433.

<sup>255</sup> County Engineer Wanganui County Council to Resident Engineer Wanganui, 29 May 1956. Works and Development Wanganui file 96/332000. Supporting Papers #434.

<sup>256</sup> Resident Engineer Wanganui to District Commissioner of Works Wanganui, 4 October 1956. Works and Development Wanganui file 96/332000. Supporting Papers #435.

effort to contact the Maori owners of the lake and seek their views, nor was the Wanganui County Council required to obtain the owners' consent.

The bulldozing that was carried out in 1956-57 must have achieved its purpose, as no further requests for drainage assistance were made until 1970. That year the Wanganui County Council applied again.

As this outlet is on sand country, the work requires to be done at intervals, and is now again in urgent need of renewal. The lake, which is a wildlife sanctuary, has risen in level over the past years and numerous complaints are received from 5 or 6 ratepayers whose properties adjoin the lake. With the prolonged dry weather, the level is below normal and this would be an excellent opportunity to carry out the work.<sup>258</sup>

The Resident Engineer supported a subsidy<sup>259</sup>, but the District Commissioner of Works did not agree<sup>260</sup>, because it would not be in line with Soil Conservation and Rivers Control Council policy circulars. The District Commissioner's view was supported by the Commissioner of Works, whose letter articulated the policy:

The Soil Conservation and Rivers Control Council has generally followed a policy of subsidising works only where adequate provision has been or will be made for future maintenance. Where there is no rating district, this requirement is usually met by the catchment authority or other responsible body executing a suitable agreement with the contributing paries. Any maintenance works required are then either carried out by the affected parties or the local authority at the landowner's expense. Such works are not eligible for subsidy.

This policy is aimed at:

- (1) achieving larger more comprehensive and therefore more efficient capital works;
- (2) the setting up of rating districts to ensure local financial responsibility for continuing maintenance, which may then be subsidised; and
- (3) a better standard of maintenance overall.

It would seem that maintenance agreements are either not made or not enforced in the case of the 1956/7 Kaitoke Lake outlet works, resulting in the beneficial effects of the work now being entirely lost. If this is a fair statement of the current position, it is not reasonable to expect [Soil Conservation and

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<sup>257</sup> Commissioner of Works to District Commissioner of Works Wanganui, 23 November 1956. Works and Development Wanganui file 96/332000. Supporting Papers #436.

<sup>258</sup> County Engineer Wanganui County Council to Resident Engineer Wanganui, 7 April 1970, attached to Resident Engineer Wanganui to District Commissioner of Works Wanganui, 10 April 1970. Works and Development Wanganui file 96/332000. Supporting Papers #437-438.

<sup>259</sup> Resident Engineer Wanganui to District Commissioner of Works Wanganui, 10 April 1970. Works and Development Wanganui file 96/332000. Supporting Papers #437-438.

<sup>260</sup> District Commissioner of Works Wanganui to Commissioner of Works, 23 April 1970. Works and Development Wanganui file 96/332000. Supporting Papers #439-440.

Rivers Control] Council funds to be made available again for this work. Your stand with the County Council is therefore fully supported.<sup>261</sup>

However, further correspondence disclosed that the 1956-57 works had been on the outlet stream downstream of the lake outlet, while the proposed works would be to clear vegetation growth at the outlet itself<sup>262</sup>. This prompted a reconsideration of the proposal, the District Commissioner writing:

We now feel more favourably towards this application for assistance. There are mitigating circumstances for recommending this application as the Wanganui County are being indirectly penalised by not coming within Catchment Board or Commission control. If there were such control, this work would automatically be approved as stream clearing. The Wanganui County have been very much in favour of establishing Catchment Control, and we feel a sympathetic attitude is justified in this case.<sup>263</sup>

A 2:1 subsidy was then approved, “subject to the County making a satisfactory agreement for future maintenance”<sup>264</sup>. In a repeat of the 1956 situation, no effort had been made to consult with the lake’s Maori owners, or to require the County Council to obtain the owners’ consent.

The reference in the letter from the Wanganui County Council in 1970 to the lake being a wildlife refuge is the only such mention of the lake’s refuge status on the drainage and flood control files of the Ministry of Works and Development. A similar silence was also apparent on the Wildlife Service’s files for Lake Kaitoke, which do not mention that the lake outlet was widened and flooding was controlled. The Crown’s compartmentalisation of its responsibilities among various administering agencies made it very easy for the left hand to not know what the right hand was doing.

Before concluding this case study on Lake Kaitoke, it is pertinent, in describing the totality of the Crown’s engagement, or lack of same, with the Maori owners to comment on two further matters that appear on the Wildlife Service’s files. The first

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<sup>261</sup> Commissioner of Works to District Commissioner of Works Wanganui, 12 May 1970. Works and Development Wanganui file 96/332000. Supporting Papers #441.

<sup>262</sup> County Engineer Wanganui County Council to Resident Engineer Wanganui, 5 June 1970, attached to Resident Engineer Wanganui to District Commissioner of Works Wanganui, 9 June 1970. Works and Development Wanganui file 96/332000. Supporting Papers #442-444.

<sup>263</sup> District Commissioner of Works Wanganui to Commissioner of Works, 16 June 1970. Works and Development Wanganui file 96/332000. Supporting Papers #445.

<sup>264</sup> Telex Commissioner of Works to District Commissioner of Works Wanganui, 2 July 1970. Works and Development Wanganui file 96/332000. Supporting Papers #446.



concerns an attempt at contact with the Maori owners in 1973 in connection with the refuge, this being the only such attempt during the period between 1914 and 1987<sup>265</sup>. The second concerns commercial eel fishing in 1979.

In the early 1970s Wildlife Service investigated an amendment to the boundaries of the wildlife refuge. Because the refuge status applied to all land within ten chains (200 metres) of the edge of the lake, this included a portion on the other side of the formed public road at the eastern end of the lake<sup>266</sup>. Being on the other side of the road from the rest of the refuge was an anomaly, and the Service proposed that it be excluded from the refuge. However, the Wildlife Act 1953 required that any boundary adjustment to a refuge required the consent of every landowner or occupier of land within the refuge.

In October 1972 the Service obtained a list of all owners of land within the refuge from the Department of Lands and Survey<sup>267</sup>. This list had included in it the information that the owner of the lake and the one-chain strip at the western end was “the Maori Trustee as agent for Maori owners”. However, inquiry of the Maori Affairs Department<sup>268</sup> disclosed that the Maori Trustee was not involved, and that contact with the owners to obtain their consent would need to involve the calling of a meeting of owners<sup>269</sup>. A list of owners was obtained, which showed that there were 83 owners as at August 1961, plus a number of successions since then. All shareholdings were small, except for one. The Estate of Waata Wiremu Hipango held 222 of the 364 shares in the block<sup>270</sup>. Comparison with the title issued in 1917 would indicate that Waata had succeeded to the shares of Wikitoria Keepa.

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<sup>265</sup> Since 1987 the wildlife refuge status has been administered in the Department of Conservation, but that department’s files have not been examined during the research for this report.

<sup>266</sup> Plan of Kaitoke Lake Wildlife Refuge, attached to Director General of Lands to Secretary for Internal Affairs, 5 October 1972. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #7-10.

<sup>267</sup> Director General of Lands to Secretary for Internal Affairs, 5 October 1972. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #7-10.

<sup>268</sup> Secretary for Internal Affairs to Secretary for Maori and Island Affairs, 15 December 1972. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #11.

<sup>269</sup> Maori Trustee to Secretary for Internal Affairs, 17 January 1973. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #12-14.

<sup>270</sup> Secretary for Maori Affairs to Secretary for Internal Affairs, 2 March 1973. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #18-21.

If the agreement of the majority shareholder could be obtained, then in practical terms the need to call a meeting of all the owners would be obviated. So the trustees of the Estate, two Wanganui solicitors, were written to<sup>271</sup>. They replied:

The successor of Waata Wiremu Hipango is Mr H.K. Hipango, and we act for him.

Mr Hipango instructs us that he consents to the proposals set out in your letter [i.e. exclusion of the land east of the public road from the refuge]. Should you wish to give him formal notice, his address is [Street number and name], Putiki, Wanganui.<sup>272</sup>

The Secretary for Internal Affairs advised that “I do not think it is necessary for me to contact Mr Hipango direct”<sup>273</sup>.

On the basis of the reply from the trustees, no further effort was made to contact any other owners of the lake, either individually or collectively. It took the remainder of the 1970s to obtain the written consents of the European riparian owners. At the end of that process, the enthusiasm and commitment for adjusting the refuge boundaries had waned, and the adjustment was never implemented. The indirect contact with Hori Kingi Hipango in 1973 was the only approach ever made by the Crown in connection with the wildlife sanctuary and refuge between 1914 and 1987.

Wildlife Service’s involvement with commercial eel fishing on Lake Kaitoke came about in 1979, when an eel fisher, who was licensed by the Ministry of Agriculture and Fisheries, applied for permission to take eels from the lake. He explained that he had approached the Wanganui Acclimatisation Society, who had no objection<sup>274</sup>.

Apparently this was not the first involvement the Acclimatisation Society had with eel fishing on the lake. In 1973, in response to an inquiry as to whether commercial eeling was taking place<sup>275</sup>, it had advised Wildlife Service:

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<sup>271</sup> Secretary for Internal Affairs to Treadwell Gordon & Co, Barristers and Solicitors, Wanganui, 14 March 1973. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #22.

<sup>272</sup> Treadwell Gordon & Co, Barristers and Solicitors, Wanganui, to Secretary for Internal Affairs, 14 May 1973. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #23.

<sup>273</sup> Secretary for Internal Affairs to Treadwell Gordon & Co, Barristers and Solicitors, Wanganui, 22 May 1973. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #24.

<sup>274</sup> AF Preater, New Plymouth, to Secretary for Internal Affairs, undated. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #25.

<sup>275</sup> Secretary for Internal Affairs to Secretary Wanganui Acclimatisation Society, 23 January 1973. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #15-16.

Whilst it may be that the persons engaged in the eeling activities may not have secured formal approval, they had made enquiries of the writer and ascertained what conditions had been required of the previous operators. The current situation does not appear to warrant any alarm from the observations of our honorary ranger, whose farm runs down to the lake, and there is general opinion that the operations have more beneficial result, because of eel removal, than any decrease that may result from the mild disturbance factor. It is our intention to request that they suspend operations over the shooting season, so that birds do not move to waters where shooting is permissible.<sup>276</sup>

The 1979 request resulted in an authorisation being issued under Section 14 Wildlife Act 1953, for the fishing of eels commercially, for the period June to August 1979 and November 1979 to April 1980<sup>277</sup>. The consent was issued without regard for the lake's Maori ownership, and without consultation with the Maori owners.

Not surprisingly, there was a reaction to what the Crown had done. Even before the consent could be actioned, the Wanganui County Council wrote to Wildlife Service about

the strong objections raised by the Council, and by local Maori people who have been traditional fishers in the lake.

I understand that previous fishing authorities issued by the Department have resulted in eel stocks being depleted to the point where the remaining fish are of insignificant size and barely satisfactory for processing.

In view of the traditional use of the lake by the Maori people, and the reduced size of the remaining fish, the Council asks that the authority given to Mr Preater be cancelled, and no further authorities be issued for a period of two years.<sup>278</sup>

The Acclimatisation Society also wrote to the Service, advising that since receiving a copy of the authorisation, it had been "awaiting local reactions as we are aware that strong objections existed in some quarters". Having seen the County Council's objections it wished to state its support for the cancellation of the authorisation, adding:

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<sup>276</sup> Secretary Wanganui Acclimatisation Society to Secretary for Internal Affairs, 13 February 1973. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #17.

<sup>277</sup> Secretary for Internal Affairs to AF Preator [sic], New Plymouth, 15 May 1979, and Authority to Fish for Eels Commercially in a Wildlife Refuge, 28 May 1979. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #26 and 27.

<sup>278</sup> County Clerk Wanganui County Council to Secretary for Internal Affairs, 7 June 1979. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #28.

It may also be appropriate to add that eeling activities by Preator [sic] could well have the end result which had to be endured by a previous operator – i.e. the mysterious disappearance of all his underwater equipment.<sup>279</sup>

Wildlife Service was obliged to do some back-tracking, and explain that the authority it issued was limited in its extent and did not overturn the need to also obtain the consent of the owners of the lake. The holder of the authority was told:

[The authority] recognises in the course of your fishing activities a likely disturbance factor, and some danger of accidental capture, to wildlife living in the refuge. Without such an authority, should the wildlife be affected an offence would be committed.

The authority issued is not meant to constitute a licence to fish, or confer a right of access onto or over the lake, the bed and margins of which are in private ownership. While refuge status is declared over Lake Kaitoke, this status does not in any way affect its private tenure, or remove the owners from their lawful right of control. The purpose of the status is to protect wildlife.

When the authority to fish was issued, it was accepted that you would be doing so with the permission, both to enter and to fish, of the property owners. However, it appears this is not the case and as you will be aware, my Department has come under criticism for issuing an authority against the wishes of the land owners.<sup>280</sup>

The fisher was also told that “under the circumstances” the authority that had been issued to him was being revoked, as the Service was “obliged to correct the situation”.

No apology was issued by Wildlife Service to the lake’s Maori owners. Even though the incident exposed a complete lack of communication between the owners and the Crown, this was not enough to encourage Wildlife Service to make contact with the owners in the subsequent years up until its disbandment (and incorporation into the Department of Conservation) in 1987.

#### **4.8 Crown Subsidies for Drainage and Flood Control Schemes**

With the passing of the Soil Conservation and Rivers Control Act 1941, and the establishment of the Soil Conservation and Rivers Control Council, opportunities were provided for a more widespread Crown involvement with waterways. Previously the Crown had shown a willingness to become involved where a

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<sup>279</sup> Secretary Wanganui Acclimatisation Society to Secretary for Internal Affairs, 8 June 1979. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #29.

<sup>280</sup> Secretary for Internal Affairs to AF Preator [sic], New Plymouth, 1 October 1979. Internal Affairs Head Office file WIL 34/24/2. Supporting Papers #30-31.

community was threatened by the flooding of a river, or erosion of a river's banks. Under the new Council there was also a willingness to support individual landowners who felt equally threatened. The provision of subsidies opened up the possibility for every kilometre of waterway in the country, and every wetland, to being affected in one way or another. No place was provided in the procedures established by the Council for Maori to have a say.

The Council operated in the regions through Catchment Boards or Catchment Commissions. Where no Catchment Board had been established, the local service was provided by Ministry of Works district offices and residency offices. The latter was the case in the Whanganui catchment. A Catchment Board was established in the Rangitikei catchment to the east, and a Catchment Commission was established in the Taranaki region to the west, but the Ministry was the agent for the Soil Conservation and Rivers Control Council for the area in between. There was thus direct Crown involvement at both the local and the national level.

The files of the Council and the Ministry show a standard procedure. An individual landowner, usually a farmer, or a group of individual landowners for whom the County Council might operate would make an application. Often the County Engineer would prepare the application in a format that would suit the Crown officials' thinking. The application would identify the problem, the proposed solution, the works required to implement the solution, and the cost of the works. The local Ministry office would add its recommendation, and forward it to Wellington, where the Council would decide what rate of subsidy it was prepared to offer. Later, decisions on smaller proposals were delegated to the district office of the Ministry, working within a budgeted amount provided by the Council.

While they varied, the proposals the Council received followed some general patterns. Some would be for clearing of vegetation along waterways so that the flow of water was not impeded; this particularly applied where willows grew along the waterway. Others would be to build stopbanks to prevent flood flows overtopping river banks and flooding productive farmland. Others again might involve diversions, such as that at Mananui discussed in the previous section.

Those waterways that were prone to flooding were the most likely to generate applications for Crown financial support, while waterways that were well confined between papa banks were least likely to be affected. A number of applications were for the Mangateitei Stream that passed through Ohakune town, and with other streams traversed the valuable lands around Ohakune with horticultural-quality soils. In 1947 support was sought for bank strengthening in the town:

The Mangateitei Stream adjacent to the shopping area of Ohakune is the northern boundary of an area of native bush that is a scenic feature of the town. The fall in the water surface, under normal stream conditions, from the concrete wall at the roadside above the band rotunda to Burns Street Bridge, is 37 feet in 45 chains, i.e. at the rate of 66 feet per mile. Under flood conditions there will be very high velocity and power to erode, and cutoffs would aggravate the trouble.

Metal beds are forming in the stream bed, concentrating water pressure on the outer banks of the curves, undermining trees, and eroding the road reserve and adjacent land. Some of these gravel beds have been removed by bulldozer, but the result is temporary as they reform in one to two years.

In the 45 chains length of stream, 12 chains of eroding bank requires protection, including relocation of stream bed curvature at one bend, and protection of the right bank above Burns Street Bridge. Three feet diameter volcanic stone is available within easy reach, and it is proposed to use this, placing one row of stones at the foot of the eroding face.<sup>281</sup>

A subsidy rate of £3:£1 was sought, even though this was a higher than normal rate<sup>282</sup>, and was approved<sup>283</sup>. There was no consideration given for the ecology and environment of the stream itself.

In 1957 two applications for subsidy were received for streams in the rural area just outside Ohakune. The first involved “the reconstruction or excavation of some 30 chains of stream channel along the length of a swampy flat” to eliminate surface ponding and improve drainage by developing a well defined channel<sup>284</sup>. Two farmers through whose land the stream would run would benefit from the drainage work. A

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<sup>281</sup> HR Farquhar, Engineer, Palmerston North, to Chairman Rangitikei Catchment Board, 25 March 1947, attached to Clerk Rangitikei Catchment Board to Resident Engineer Wanganui, 2 May 1947. Works and Development Wanganui file 96/331160. Supporting Papers #383-384.

<sup>282</sup> Clerk Rangitikei Catchment Board to Resident Engineer Wanganui, 2 May 1947. Works and Development Wanganui file 96/331160. Supporting Papers #383-384.

<sup>283</sup> Chairman Soil Conservation and Rivers Control Council to Resident Engineer Wanganui, 11 July 1947. Works and Development Wanganui file 96/331160. Supporting Papers #385.

<sup>284</sup> JA Cranston, Ohakune, to Resident Engineer Wanganui, 3 May 1957. Works and Development Wanganui file 96/331160. Supporting Papers #386-388.

£1:£1 subsidy was approved<sup>285</sup>. The second application was for “a stream clearance work typical of many in the Raetihi – Ohakune area”. Four farmers, two of them Maori, would benefit, when the stream was cleared.

The stream will directly benefit an area of 31 acres of swampy farm land, enable a further 12 acres of swamp to be drained, and indirectly benefit an area of 57 acres of flat pasture land through improved local drainage.<sup>286</sup>  
A £1:£1 subsidy was approved<sup>287</sup>.

Another example during 1957 was the improvement of a natural water channel that was a tributary of the Orautoha Stream near Raetihi.

Area of the valley flat affected by the stream is approximately 40 acres. The existing stream channel meanders extensively, and is almost completely obstructed by debris, logs, silt, etc, resulting in very wet conditions during the winter period, over most of the valley flat.

Proposal: It is proposed to clear and reconstruct the length of channel indicated, so that:

- (a) Actual surface ponding and flooding is eliminated, on other than very infrequent occasions.
- (b) An adequate drainage channel is provided so that follow-up drainage work may be carried out.
- (c) The stock hazard present in the existing channel is removed.

Benefits: These are largely as set out above. Under present conditions, most of the valley flat of 40 acres is so wet in the winter period as to be practically useless, for up to six months of the year. The situation cannot be remedied without channel improvements to the stream, nor can the necessary follow-up drainage be carried out.

In addition, the present state of the stream is causing substantial stock losses when animals become trapped, either in deceptive pools or in swampy areas.

Cash benefits can be assessed as being equivalent to an increase in carrying capacity of (say) two ewes per acre in the valley flat of 40 acres....

There are also other factors such as ease of stock crossings in the valley, better grazing facilities, the values of which are more difficult to assess, and the reduction of stock losses.<sup>288</sup>

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<sup>285</sup> Resident Engineer Wanganui to District Commissioner of Works Wanganui, 23 May 1957, Commissioner of Works to District Commissioner of Works Wanganui, 29 July 1957, and Resident Engineer Wanganui to Engineer Rangitikei Catchment Board, 12 August 1957. Works and Development Wanganui file 96/331160. Supporting Papers #389, 390, and 391.

<sup>286</sup> Engineer Rangitikei Catchment Board to Resident Engineer Wanganui, 9 December 1957, attached to Resident Engineer Wanganui to District Commissioner of Works Wanganui, 18 December 1957. Works and Development Wanganui file 96/331160. Supporting Papers #392-396.

<sup>287</sup> District Commissioner of Works Wanganui to Engineer Rangitikei Catchment Board, 15 January 1958. Works and Development Wanganui file 96/331160. Supporting Papers #397.

Audit Department approval was needed for this application to proceed, because the applicant was a member of the Catchment Board, and any application was required to have the support of the Catchment Board<sup>289</sup>. A £1:£1 subsidy was approved<sup>290</sup>.

In 1963 a more comprehensive scheme of drainage and flood control was prepared for a valley south-east of Raetihi. The stream running through this valley was known variously as the Mangahowhi Stream or Pakihi Drain, the drain being so named after extensive channel straightening work was carried out as an unemployment relief scheme in the 1930s.

The straightening of the stream has provided some relief from flooding, and provided drainage for much of the valley floor for a time, but farm development has proceeded at a rapid rate during the last 20 years, and runoff has become swifter, so that flooding is again a severe problem.

With the frequent flash floods has come bed scour and bank erosion. Farm lands are flooded annually, and so is the County Road. The road is also threatened by scour in several places. Several farmers are keen to complete the drainage of low lying areas of flat which at present provide considerable pondage, and this will further worsen the position downstream if allowed to proceed without control.

The proposed solution was the construction of two flood detention dams at the head of the valley, which would control runoff from the hills in flood conditions, and “improvement” of the drain by regrading it, and widening and deepening it to increase its capacity<sup>291</sup>. Subsidies were approved at rates of £3:£1 for the detentions dams, and £1:£1 for the stream improvements and drainage works<sup>292</sup>. As with all the other applications for subsidy discussed in this section, benefits were seen in terms of more intensive use of farmland, reduced losses of stock in drains and swamps, and protection for the public road, while costs were expressed in purely monetary construction-cost terms. The cost to the environment, or the changes to the

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<sup>288</sup> HP Manson, Raetihi, to Resident Engineer Wanganui, 24 March 1957. Works and Development Wanganui file 96/333317. Supporting Papers #481.

<sup>289</sup> Resident Engineer Wanganui to District Commissioner of Works Wanganui, 23 May 1957, Commissioner of Works to District Commissioner of Works Wanganui, 10 June 1957, and Engineer Rangitikei Catchment Board to Resident Engineer Wanganui, 6 September 1957. Works and Development Wanganui file 96/333317. Supporting Papers #482, 483, and 484.

<sup>290</sup> District Commissioner of Works Wanganui to Engineer Rangitikei Catchment Board, 20 September 1957. Works and Development Wanganui file 96/333317. Supporting Papers #485.

<sup>291</sup> Chief Engineer Rangitikei Catchment Board to Resident Engineer Wanganui, 2 December 1963, attached to Resident Engineer Wanganui to District Commissioner of Works Wanganui, 11 December 1963. Works and Development Wanganui file 331160. Supporting Papers #398-404.

<sup>292</sup> Secretary Soil Conservation and Rivers Control Council to Chief Engineer Rangitikei Catchment Board, 20 December 1963. Works and Development Wanganui file 96/331160. Supporting Papers #405-406.



waterways (both on-site and downstream) that Maori might have thought of as a cost, were not a consideration.

Drainage subsidies were not confined to waterways. They did not need to be for big schemes, and they did not need to be for community benefit. They could be whatever was required to drain waterlogged farmland. One small example, insignificant when considered on its own but still representative of a larger trend, was a proposal to construct a drain through “heavy swamp” on private farmland near Fordell. The objects of the proposal were described as:

To provide an adequate channel to contain the runoff from 240 acres of steep hilly catchment (the present channel is adequate for low flow only and, with any fresh, overflows on to the surrounding flat land, making it continually wet), and provide drainage for approximately 24 acres of heavy swamp by both direct drainage and interception of excessive seepage flow from the foot of the 12ft high western bank.<sup>293</sup>

The drain would benefit the farming operations of two private individuals, providing additional farmland (formerly swamp) and increased stock carrying capacity. A £1:£1 subsidy was approved<sup>294</sup>. When the drain was completed, the cost of the work was greater than expected, and an additional subsidy payment was approved. The application for the additional money explained:

This extra expenditure was incurred in the cutting and blasting through of a number of full sized logs found lying across the route, 5 to 6 feet below ground, but above design bed level. Buried timber was expected, but not the quantity actually encountered.

The extra cost involved in clearing the timber was unavoidable without lowering the standard of drainage to be provided, and this was considered to be out of the question in a swamp as deep and soft as this one was.<sup>295</sup>

Such farmland improvements were occurring all the time, mostly as a result of European settlers’ own efforts. The incremental impact on the landscape, and the downstream impact on the flow regimes in the rivers, of these widespread changes to drainage, and loss of wetlands, was substantial. The issue with the Soil Conservation

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<sup>293</sup> Chief Engineer Rangitikei Catchment Board to Resident Engineer Wanganui, 12 April 1961, attached to Resident Engineer Wanganui to District Commissioner of Works Wanganui, 30 May 1961. Works and Development Wanganui file 96/331000. Supporting Papers #378-380.

<sup>294</sup> Resident Engineer Wanganui to Chief Engineer Rangitikei Catchment Board, 30 May 1961, attached to Resident Engineer Wanganui to District Commissioner of Works Wanganui, 30 May 1961. Works and Development Wanganui file 96/331000. Supporting Papers #378-380.

<sup>295</sup> Chief Engineer Rangitikei Catchment Board to Resident Engineer Wanganui, 14 September 1962. Works and Development Wanganui file 96/331000. Supporting Papers #381.

and Rivers Control Council subsidies was the active involvement of the Crown in the process, its generally unquestioning support for the changes to the landscape and environment, and its lack of consideration for the views of Maori or for the existence of any Maori interest in the matter.

#### **4.9 Hydro-Electric Power Schemes**

The Tongariro Power Development Scheme has already been discussed, and the hydro-electric investigations on the lower Whanganui were not included in the brief for this project. However, there are at least two other hydro-electric projects in the Inquiry District. In addition, there have been a number of region-wide reviews of hydro-electric potential.

The Crown in passing the Water-power Act 1903 vested in itself the sole right to carry out hydro-electric schemes in New Zealand. Section 2 stated:

Subject to any rights lawfully held, the sole right to use water in lakes, falls, rivers or streams for the purpose of generating or storing electricity or other power shall vest in His Majesty.

This was in order to ensure that sites with hydro-electric potential were used to best benefit, rather than being 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<sup>296</sup>.

At Piriaka, on the Whanganui River upstream of Taumarunui, is a small hydro scheme that came into operation in 1924. The Crown licensed the Taumarunui Borough Council to use water from the Whanganui River for electricity generation in 1921<sup>297</sup>. This is what is generally described as a run-of-the-river scheme, in that it

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<sup>296</sup> Rental amounts were initially set on a case-by-case basis, and included in the individual licences that were issued. In 1934 a standardised rental regime was adopted and set out in Regulations (The Water-power Regulations 1934 – *New Zealand Gazette* 1934 pages 2029-2032 – not included in Supporting Papers).

<sup>297</sup> *New Zealand Gazette* 1921 pages 535-536. Supporting Papers #602-603. The licence was for a term of 42 years, and was renewed for terms of 21 years in 1963 (*New Zealand Gazette* 1963 pages 180-182 – Supporting Papers #613-615) and 1984 (*New Zealand Gazette* 1984 page 1176 – Supporting Papers #620). A rental of one shilling per annum per kilowatt of maximum output was imposed by the 1921 licence.

draws off some of the river water through a channel feeding directly into the powerhouse (i.e. there is no water storage capacity above the powerhouse). Below the powerhouse the water is discharged straight back into the river. The stretch of river bypassed by the water that flows through the powerhouse is 1.4 kilometres long and is known locally as the Piriaka Loop. Today the power station can produce about 1 megawatt of electricity, as a result of a doubling of capacity in 1971 when a second set of turbines was installed<sup>298</sup>. The increase in generation capacity was authorised by the Crown in 1973<sup>299</sup>. Up to 22 cumecs of water is diverted through the power station.

On the Orautoha Stream is another small power station originally built in 1917 to supply Raetihi Borough with electricity. The Crown licensed it that same year<sup>300</sup>. The station collects water from the Makotuku, Makara, Makaraiti and Mangaone Streams, all tributaries of the Mangawhero River, and diverts it out of the Whangaehu catchment and into the Whanganui catchment. Such mixing of waters between catchments is usually regarded by Maori as grossly inappropriate. The water is led into an artificial holding pond, before passing through the powerhouse and discharging into the Orautoha, a tributary of the Manganui o te Ao River<sup>301</sup>. The Water Conservation Order for the Manganui o te Ao specifically provides for the continued operation of the power station<sup>302</sup>.

The files concerned with the Crown's licensing of these two stations were examined during the research for this report<sup>303</sup>. There was no reference to any consultations,

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Special legislation (Section 145 Reserves and Other Lands Disposal and Public Bodies Empowering Act 1922) was also passed to allow the power scheme to occupy a riparian road reserve.

<sup>298</sup> Tonkin and Taylor, *Water Resources of the Whanganui River*. Rangitikei-Wanganui Regional Water Board internal report 78/4, 1978.

<sup>299</sup> *New Zealand Gazette* 1973 page 896. Supporting Papers #617.

<sup>300</sup> *New Zealand Gazette* 1917 pages 1017-1018. Supporting Papers #600-601. The licence was for a term of 42 years, and was renewed for terms of 21 years in 1959 (*New Zealand Gazette* 1959 pages 167-168 – Supporting Papers #611-612) and 1980 (*New Zealand Gazette* 1981 page 2331 – Supporting Papers #618). A rental of one peppercorn per annum “if demanded” was imposed by the 1917 licence.

<sup>301</sup> PC Wells and CR Fowles, *Water Resources of the Whangaehu River*, November 1980. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 80/3, 1980, page 10.

<sup>302</sup> National Water Conservation (Manganuioteao River) Order 1989, Clause 2, definition of “normal flow”. Published as Statutory Regulation SR 1989/52.

<sup>303</sup> Piriaka – Electricity Corporation of NZ file 10/91/1 (7 Volumes). Held at Archives New Zealand, Wellington (reference AANU 569 W5055 132, and AATJ 569 W4897 1167).

Orautoha – Electricity Corporation of NZ file 10/84/1 (5 Volumes). Held at Archives New Zealand, Wellington (reference AANU 569 W5055 128).

with Maori or anyone else, prior to the issue of the licences. Having vested the sole right in itself, the Crown apparently considered that it did not need to consult anyone, because it did not consider that any other interests existed.

In the absence of a national transmission network, the early years of the twentieth century were a period of local initiatives by local communities to meet their own needs. However, from the 1930s through to the 1970s was a period of centralised planning, long-distance transmission, and large-scale hydro-power construction. The Waikato River power schemes were followed by the TPD Scheme, the Upper Waitaki schemes, and finally the Clyde Dam on the Clutha River. Towards the end of that period, the focus returned to smaller-scale local hydro schemes. Regional surveys of hydro-power potential were commissioned by the Crown, and local Electric Power Boards conducted their own investigations. Two reports for the Rangitikei-Wanganui Regional Water Board produced in the late 1970s, *Water Resources of the Wanganui River*<sup>304</sup>, and *Water Resources of the Whangaehu River*<sup>305</sup>, are products of their time in that they devote 12 pages and 4 pages respectively to potential hydro-electric developments on those rivers.

The Wanganui-Rangitikei Electric Power Board looked closely at a power scheme on the Manganui o te Ao River. Its investigations only ceased in 1988 when a water conservation order was granted for the river that limited takes and discharges of river water so severely that the scheme would have been prevented from operation. The King Country Electric Power Board looked at a scheme in the Karioi district in the Whangaehu catchment. It received a generation licence from the Crown<sup>306</sup>, and also obtained water rights for the taking of water from some streams, but not others. The failure to obtain all the water that was needed obliged the Board to abandon its proposal.

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<sup>304</sup> Tonkin and Taylor, *Water Resources of the Wanganui River*. Rangitikei-Wanganui Regional Water Board internal report 78/4, 1978, pages 15-26.

<sup>305</sup> PC Wells and CR Fowles, *Water Resources of the Whangaehu River*. Rangitikei-Wanganui Catchment Board and Regional Water Board internal report 80/3, 1980, pages 10-13.

<sup>306</sup> *New Zealand Gazette* 1971 page 1242. Supporting Papers #616.

During this period of investigations for local hydro-electricity generation, there was no requirement by the Crown that tangata whenua be consulted, nor any encouragement by the Crown for this to happen.

#### **4.10 Concluding Remarks**

By examining only a few individual examples of the Crown's involvement with physical changes to waterways, this section cannot be comprehensive in its coverage of the topic. Nevertheless, it is clear from those examples that have been examined that the Crown has in the past adopted a consistent attitude that changes to the natural environment of waterways were inevitable, and indeed necessary, for the economic and social development of New Zealand. Just as it was seen that the native forest cover had to be removed so that farms could be developed, so too did waterways have to be altered to better serve the purposes of land settlement and development. This approach continued into the 1967-1991 era of the Water and Soil Conservation Act, with its philosophy of multiple-use development, and has only been partially amended under the sustainable management philosophy of the Resource Management Act.

While Maori may have a basic empathy with retaining waterways in a natural undisturbed state, they are not necessarily averse to change to the natural environment in the community interest. However, examining what this might mean, and whether it might have produced a different type or style of development with a different end-result, has never been able to be explored in any detail, because the Crown has almost completely excluded Maori viewpoints from consideration. Until the last twenty or so years, there was no opportunity provided for Maori to have a say. In legal terms, waterways were de-linked from the surrounding land, and subjected to different provisions that treated them in isolation. Additionally, different codes of management and administration for different uses of water and waterways applied. This piecemeal approach meant that it was almost impossible for Maori to advocate a holistic approach to a waterway.

A more basic reality, however, was that Maori were given little chance to advocate anything. Decisions were made by the Crown, without consultation with Maori, because the Crown believed it knew best what a local community needed. Complaints against the blasting of a rapid above Pipiriki in 1895 were treated as a

reactionary obstruction of development, and were stifled by calling in the police. At Taringamotu in 1915 the local Maori community asked for a direct access route from their papakainga to the local railway station. It is unlikely that they would have thought that such a request would lead to a Crown proposal to divert the river so that a road could be developed on the riverbed beneath a bluff, and they were certainly never asked if that was what they would agree to. Requests for river diversions and the draining of wetlands from local European settlers were treated as mainstream opinions that the Crown itself shared, and were approved without the seeking of any other opinions. By the unilateral approach adopted by the Crown in its treatment of waterways, Maori were left without a platform from which to promote their own customary viewpoints or to assert their own rights.

## **5. ROADWORKS AND GEOLOGICAL EXTRACTIONS**

### **5.1 Introduction**

As roads have been constructed throughout the district, they have had to cross waterways, or, because of the topography of the land, they have had to be built closely alongside waterways. In doing so, they can have an impact on the waterways. This chapter looks at a few instances where there has been a direct impact.

However, the greater part of this chapter is concerned with a less direct impact that roading, and railways, have had on waterways. Every road required to be metalled, while every railway needed a ballast foundation, and for that gravel and shingle supplies were needed. In the era of the horse and cart, such heavy materials could not be transported long distances, and local sources had to be found. The gravels and shingles of the riverbeds, already pre-sorted to a certain extent by water, were a local source that was frequently used. Other extractions of gravel and shingle occurred close to waterways, so that the water could be used for gravel washing, and the wash water could then be discharged back into the waterways.

### **5.2 The Parapara Road**

State Highway 4, the Parapara Road between Raetihi and Wanganui, follows the Mangawhero River for much of its length. The nature of the country forced the road close to the river in places, and also required it to cross the tributaries on the true left bank feeding into the Mangawhero. These side streams are deeply incised into the papa. Extensive earthworks have been required, often not once but many times because of the eroding nature of the papa faces.

When the first upgrading of the road was undertaken in the 1920s and 1930s, a novel means was found to enable the road to cross the many steep-sided and narrow tributary valleys. A tunnel would be cut through the papa that comprised the side of the tributary valley, and the tributary stream would be diverted through the tunnel beneath the road formation. The tunnel would then discharge the water into the Mangawhero.

[Frank Hermans, Public Works Department roading engineer] played a major role in work on the Parapara Road over the next 25 years [from 1920], until

his retirement in 1945. Because of his tunnelling experience in papa country during the Main Trunk Railway line construction, Frank Hermans replaced several relatively short bridges and culverts on tributary streams by diverting the streams through tunnels, or water drives as they were known, and building the roads over the dry stream beds that resulted.

Some of the drives are still functioning successfully 70 years later with virtually no maintenance.<sup>307</sup>

Digging out the tunnels was summer-time work, carried out under contract by experienced miners such as the partnership of Cleveland and McKenzie.

The tunnelling work was all done with pick, shovel, wheelbarrow and explosives. They built a number of under-road tunnels throughout the Wanganui area.

Their first tunnel in the Parapara was at the 14 Mile (22.5 km) Peg on the Parapara Road, diverting the Huripari Stream, a little north of the Parihau Road junction. The 11 Parapara tunnels were built through papa (mudstone) rock. They would first put through a pilot drive beneath the road at the spot chosen. On longer tunnels they used rail-mounted skips to remove the spoil, but generally the creek they were diverting was dammed-up and sent periodically through the pilot drive to clean out the rubble and save a lot of labour....

The tunnels were usually oval-shaped for strength. There was one at the Taukoro Stream, and there were two water drives at the bottom of Lakes Hill and one at Otoko, which was later replaced with a concrete culvert. Another near Hylands was known as Whisky corner, after an accident with a whisky truck, and another was called Racecourse, near the Pamoana boundary. There was also a tunnel near Cave and Wicksteeds, one at McLeans, and one on the Field's Track near Collier's Bridge.<sup>308</sup>

A search of Crown records for this evidence has failed to find any mention of the tunnels, so it is not possible to add to the brief mentions in the local history quoted above<sup>309</sup>. It is not known whether there was any consultation with local Maori about the work. There is one recollection in the local history from a European road worker's daughter that, with one exception, "the local Maori road workers were

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<sup>307</sup> R Annabell with M Donald, *The Heart of the Parapara and Field's Track*, Parapara – Field's Track Historical Society Inc, Wanganui, 2002, page 58.

<sup>308</sup> R Annabell with M Donald, *The Heart of the Parapara and Field's Track*, Parapara – Field's Track Historical Society Inc, Wanganui, 2002, page 67.

<sup>309</sup> The search of Crown records also failed to find any relevant mentions of the Otoko Stream, the Pahihi Stream, or Lake Te Ahu o Te Rangi, all in the Otoko Pa locality of the Parapara Road, and all referred to as potential case studies in the project brief.



reluctant to go into the tunnels”<sup>310</sup>, though that is not necessarily an expression of opposition to the existence of the tunnels. However, the tunnels, which would have been constructed solely with their purpose of allowing road-making in mind, are likely to be a barrier to migrating fish and other species that relied on the tributary streams. Freshwater crayfish (koura) populations may have become isolated as a result. The tunnels may have caused other impacts with implications for the Maori residents of the Mangawhero Valley.

The proximity of the road to the Mangawhero River had consequences for the river itself whenever construction or the clearing of landslips resulted in rock and earth dropping into the river. On one occasion, the Wanganui Acclimatisation Society complained about papa clay and spoil ending up in the river from road works along the banks. The response was dismissive:

In the latter half of October [1955], there was a heavy rainfall accompanied by very extensive slipping of much of the Mangawhero River Catchment. One big slip across the highway carried many thousands of yards of clay directly into the river. In clearing this slip many yards additional were pushed into the river; it sometimes does happen that the only reasonable way of clearing slips from the road is by pushing the slips directly into the river.

The desirability of avoiding dumping excavated materials into the river will continue to be borne in mind. So far, materials put into the river by our works have been so small in comparison with materials put in by heavy rainfalls that it is doubted if they are of any consequence.<sup>311</sup>

Lakes Hill on the Parapara Road is so named because the road overlooks some small lakes. These provide an example of another consequence of public roads for Maori-owned water bodies. The development of the Parapara Road at the beginning of the twentieth century (then known as part of Fields Track) prompted an approach to the Crown by HE Field himself about the purchase of the lakes and their surrounds as a possible scenic reserve. This was shortly after the passing of the Scenery Preservation Act 1903, and the appointment of Scenery Preservation Commissioners to recommend areas that would be worth acquiring as or declaring to be scenic reserves.

On Sunday Mr JB Williams spoke of three lakes in the Mangawhero Valley as worth purchase, but he called them the ‘Otoko’ lakes, from the Maori kainga

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<sup>310</sup> R Annabell with M Donald, *The Heart of the Parapara and Field's Track*, Parapara – Field's Track Historical Society Inc, Wanganui, 2002, page 64.

<sup>311</sup> Commissioner of Works to Secretary for Marine, 14 February 1956. Works and Development Head Office file 70/8/28/1. Supporting Papers #209.

just this side of them, while their proper name is 'Mataora'. The road into the interior, known as my 'track', after passing Otoko, rises for about a quarter of a mile to a saddle, through which there is a small through cutting, and on going through this the three little lakes are seen just below. They form a triangle, and in the centre there is a conical mound on which are the remains of an old fortified pa.... The lakes are situated in the Nga-puke-whakapu block, which was purchased by the Government several years ago, but so far as I know has not yet been cut up for sale or lease. There should be therefore no difficulty in securing the lakes with an area of bush surrounding them.<sup>312</sup>

A tenure map showed that the Crown-owned land formed a wedge shape tailing off at a narrow frontage to the Mangawhero River. The straight boundary lines of the Crown land cut through the eastern-most of the three lakes, making half of it Crown-owned. The other half of the eastern-most lake, and the other two lakes, were still Maori-owned<sup>313</sup>. Declaring the lakes to be a scenic reserve was not as straightforward a matter as Field suggested, and nothing was done at that time to take his suggestion further.

Further recommendations that the lakes become a scenic reserve were made in 1907, 1914<sup>314</sup> and 1916<sup>315</sup>. The Scenery Preservation Board was in favour<sup>316</sup>, but the Minister of Lands was not prepared to approve the expenditure necessary to acquire some 85 acres of Maori-owned land under lease to a local European farmer<sup>317</sup>. There was one further expression of interest in acquiring the lakes, in 1934<sup>318</sup>. By this stage the Crown-purchased land and part of the Maori land had been purchased by the European farmer, and he held a lease over another portion of Maori-owned land. Because he was in the middle of a separate argument with the Department of Lands

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<sup>312</sup> HE Field, Aramoho, to SP Smith, Scenery Preservation Commissioner, 28 September 1904. Lands and Survey Head Office file 4/12. Supporting Papers #32.

<sup>313</sup> Plan of Otoko Lakes, completed 1 October 1904. Lands and Survey Head Office file 4/12. Supporting Papers #33.

<sup>314</sup> Honorary Secretary Wanganui Chamber of Commerce to Under Secretary of Lands, 9 April 1914, and Commissioner of Crown Lands Wellington to Under Secretary of Lands, 12 June 1914. Lands and Survey Head Office file 4/12. Supporting Papers #34-35 and 36-37.

<sup>315</sup> Notes of 13 January 1916 Meeting, 18 January 1916, and Commissioner of Crown Lands Wellington to Under Secretary of Lands, 2 February 1916. Lands and Survey Head Office file 4/12. Supporting Papers #39 and 40.

<sup>316</sup> Extract of Minutes of Scenery Preservation Board, 14 July 1914 and 16 August 1916. Lands and Survey Head Office file 4/12. Supporting Papers #38 and 43.

<sup>317</sup> Under Secretary of Lands to Minister of Lands, 5 February 1916, and Minister of Lands to RW Smith MP, 14 February 1916. Lands and Survey Head Office file 4/12. Supporting Papers #41 and 42.

<sup>318</sup> Surveyor General to Under Secretary of Lands, 15 March 1934. Lands and Survey Head Office file 4/12. Supporting Papers #44-45.

and Survey, it was not considered politic to approach him about him selling some of his freehold land and releasing some of his leased land<sup>319</sup>.

At no stage during any of these repeated reviews of the suitability of the lakes for scenic reserve status did the Crown consult with the Maori owners, or seek their permission. Just as they were never asked about the location of the road through their lands, they were never approached about how the Crown might protect their lakes. The only protection mechanism conceived by the Crown was to take over sole responsibility for the lakes by acquiring them; no consideration was given to seeking some type of protection partnership that recognised a continuing Maori involvement.

### **5.3 Gravel Extraction from the Whanganui River at Taumarunui**

Gravel extraction out of the Whanganui riverbed has been a significant activity at Taumarunui for many years. As early as 1915 there were questions about the legality of the practice.

Section 14 of the Coal Mines Amendment Act 1903 vested the beds of navigable rivers in the Crown, and declared that the minerals in the beds of those rivers were the absolute property of the Crown<sup>320</sup>. Ever since the passing of that legislation, the Crown has consistently regarded itself as being the legal owner of the bed of the Whanganui River up as far as the confluence with the Ongarue River, and a short distance up the Ongarue to the Taumarunui wharf. There was no consultation with Maori about this expropriation of riverbeds and their minerals. Section 165 of the Land Act 1948 made provision for licences to be issued for the winning of gravel from Crown-owned lands, including riverbeds. Just what was navigable and what was Crown-owned was a grey area; there was no counter-weight to any Crown claims to ownership.

In 1915 Taumarunui Borough Council complained that gravel extraction from the riverbed between the Matapuna bridge and the Ongarue confluence (i.e. fronting

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<sup>319</sup> Under Secretary of Lands to Commissioner of Crown Lands Wellington, 20 March 1934, and Commissioner of Crown Lands Wellington to Under Secretary of Lands, 25 June 1934 and 27 November 1935. Lands and Survey Head Office file 4/12. Supporting Papers #46, 47, and 48.

<sup>320</sup> This section survives today as Section 354 Resource Management Act 1991, which preserves Section 261 Coal Mines Act 1979.

Taumarunui town upstream of the Ongarue confluence) was causing bank erosion and threatening town land. The Council asked that control of the river fronting the Borough should be vested in it. The Resident Engineer at Taumarunui provided a report:

The Town Clerk, Taumarunui, in his protest referred partly to the action of this Department in taking gravel from River bed at Matapuna last year. It was brought under my notice in time that if more gravel were taken at this particular spot, it would become a source of danger, and so the taking of gravel here was stopped. No damage was done here by floods in July, and no erosion has taken place, and I think there is little reason to fear any.

The Town Clerk advises me that the Natives and public generally have taken gravel from the River at the back of the Township, and that in one case erosion was set up a year or so ago, but at present no danger exists.

The request of the Taumarunui Borough that the taking of gravel from the river bed be under control of a local governing authority is reasonable, as although it is my opinion that damage hitherto done is small, future action may conceivably cause damage in a larger degree....

Although it is the Maori Land Board that should be most concerned as it is their property that suffers, yet the Borough is taking an interest. I suggest that the control of the river between Matapuna Bridge and Ongarue Junction be placed in the hands of the Borough, with the exception that the Public Works Department be free to get gravel at any place authorised by the Resident Engineer, provided that the Borough is notified of intention, and that the Borough have no authority to charge royalty for any gravel used in any Public Work or for works done by the County Council.<sup>321</sup>

The investigations undertaken by the Auckland district office of the Lands and Survey Department in response to this request indicate that at that time it viewed the ownership of the Whanganui riverbed upstream of the Ongarue confluence as being subject to the *ad medium filum aquae* presumption, whereby riparian landowners were presumed to have rights to a riverbed to the centre of the river. It noted that the relevant riparian land block was Ohura South G4, most of which had been set aside as a Native Township, and was in 1915 vested in the Waikato-Maniapoto District Maori Land Board. Some 39 acres of the block at the Ongarue confluence was still ordinary Maori land controlled by the owners. The President of the Maori Land Board had been consulted, and he “informs me that he would have no objection to the river being

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<sup>321</sup> Resident Engineer Taumarunui to Engineer in Chief, 5 November 1915, attached to Under Secretary for Lands to Commissioner of Crown Lands Auckland, 17 November 1915. Lands and Survey Hamilton file 8/268. Supporting Papers #54-57.

vested in the Borough Council". The investigation also noted that the southern (true left) bank of the Whanganui was in the Wellington Land District, so that the title situation about that side of the river would have to be searched in the Wellington district office<sup>322</sup>.

Further correspondence on Crown files about the application for vesting has not been located. So far as is known, the vesting did not proceed.

An earlier section of this report has already identified that a portion of the Whanganui riverbed and associated riparian land upstream of Matapuna bridge, opposite Manunui, was taken for a Railways ballast pit under the Public Works Act in 1944. The bracketing of the taking of the riverbed with the taking of the riparian land supports the contention that the *ad medium filum aquae* presumption was seen to apply in that situation at that time.

However, this was also the period when the Soil Conservation and Rivers Control Council, and its local agent the Ministry of Works, was operating with virtual impunity in riverbeds, showing little regard for the legal status of the riverbed. There appear to have been no limits placed by the Ministry of Works on its own shingle extraction activities. Shingle extraction served two purposes, in that it cleared river channels and reduced the potential for flooding, as well as providing a source of roading and other material that was already partially sorted and, in some parts of the country, was otherwise scarce. The 1950s were a period of substantial shingle extraction at Taumarunui, with the Railways Department issuing large contracts for the supply of track ballast material. One contract in 1950 was for the supply of 75,000 cubic yards over a three-year period<sup>323</sup>. Another contract in 1952 was for the supply of 30,000 cubic yards per year over five years<sup>324</sup>. It was awarded to B Bullock and Sons Ltd, who enlarged the Winter's Island diversion cut discussed earlier in this evidence. In 1958 the District Commissioner of Works reported:

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<sup>322</sup> Mr Knight to Mr Beudely, 15 December 1915, and Commissioner of Crown Lands Auckland to Under Secretary for Lands, 16 December 1915. Lands and Survey Hamilton file 8/268. Supporting Papers #58 and 59.

<sup>323</sup> Chairman Soil Conservation and Rivers Control Council to Director General of Lands, 7 February 1950. Works and Development Wanganui file 96/333001. Supporting Papers #465-466.

<sup>324</sup> Chairman Soil Conservation and Rivers Control Council to CR Kelland, Taumarunui, 7 January 1952. Works and Development Wanganui file 96/333001. Supporting Papers #467.

The New Zealand Railways require 30,000 cubic yards of ballast from Taumarunui each year, and would like to step up the output to 50,000 cubic yards so as to distribute the Taumarunui ballast further northwards. To get these quantities of ballast, it will be necessary to remove 40,000 cubic yards or 70,000 [sic] cubic yards of material from the river. The quantities are so big that it is of importance to New Zealand Railways to keep the unit rate as low as possible, and they are likewise big enough to have an appreciable influence on the regime of the river.

By this time the Winter's Island diversion cut site was no longer capable of supplying large quantities, as the bed of the river had been lowered so much that the foundations of the Victory Bridge would be at risk if it was lowered any further<sup>325</sup>.

Because the shingle was required for another government department, the Ministry of Works was motivated to accommodate the requests. It identified three other sites that could supply the shingle, these being opposite the Manunui Domain (between the Manunui diversion cut and the Matapuna combined road and railway bridge), opposite the Esplanade and Taupo Road stopbank, and about half a mile above the Victory Bridge.

In part the Ministry was assisted in its accumulation of authority by the Department of Lands and Survey. The Department had the power under Section 165 Land Act 1948 to issue licences for the removal of gravel and shingle from Crown-owned riverbeds. Yet despite the Whanganui River bed above the Ongarue confluence not necessarily being a Crown-owned riverbed, Lands and Survey had issued licences for shingle removal from that stretch of the river. An example was a licence issued in 1955 for the area opposite the Manunui Domain, which had not been used as much as the Ministry of Works would have liked<sup>326</sup>. In 1960 the Ministry expressed concern about two different departments being involved in controlling the same activity, and it was suggested that sole administration of shingle licences at Taumarunui be placed in the hands of the Resident Engineer at the Taumarunui Residency office of the Ministry:

Exercise of control over the moving of shingle from the Wanganui River in the vicinity of Taumarunui is important because big quantities of shingle are being removed, and while removal from some places is expected to be

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<sup>325</sup> District Commissioner of Works Wanganui to Commissioner of Works, 27 June 1958. Works and Development Wanganui file 96/333001. Supporting Papers #468-470.

<sup>326</sup> District Commissioner of Works Wanganui to Commissioner of Works, 27 June 1958. Works and Development Wanganui file 96/333001. Supporting Papers #468-470.

beneficial to the regime of the river, uncontrolled removal could lead to bed or bank erosion in places where it might become most harmful.

Permits to remove shingle are issued by the Lands and Survey Department and, by arrangement with them and with you, the Ministry at Taumarunui supervises the way in which deposits are worked.

Because the confluence of the Whanganui and Ongarue is the boundary between the three land districts of South Auckland, Wellington and Taranaki, this required negotiation with three different district offices of Lands and Survey, at Hamilton, Wellington and New Plymouth, and resulted in three slightly different management regimes<sup>327</sup>.

The approval of the Commissioners of Crown Lands for South Auckland and Wellington was given in February 1961 to the transfer of control to the Ministry of Works of all licences issued by the Department of Lands and Survey:

I have now received authority to offer you full control over that portion of the Wanganui River between the confluence of the Wanganui and Ongarue Rivers and a point one mile below the Matapuna Railway Bridge.

This will include all licences granted either by the Commissioner of Crown Lands Hamilton or myself. It is envisaged that you will have full authority to negotiate any future shingle licences in this area, and to take over control of the existing licences.

The existing licences in this area have been granted to B Bullock and Co Ltd, Taumarunui Borough Council, Spencer and Smith Limited, and John F Smythe Limited. If you are agreeable to take control, this will include the supervision of working, and checking to ensure that these operators either supply local authority and Government requirements, or pay royalty on all shingle supplied to private purchasers.<sup>328</sup>

The offer was accepted.

The proposal put forward is most satisfactory from our point of view, and will enable the removal of shingle from the river to be controlled so that the removal will lead to a long term benefit to the regime of the river. I think, too, that those removing shingle benefit also, in having only one authority with whom to deal.<sup>329</sup>

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<sup>327</sup> District Commissioner of Works Wanganui to Commissioner of Works, 6 October 1960. Works and Development Wanganui file 96/333001. Supporting Papers #471.

<sup>328</sup> Assistant Commissioner of Crown Lands Wellington to District Commissioner of Works Wanganui, 6 February 1961. Works and Development Wanganui file 96/333001. Supporting Papers #472.

<sup>329</sup> District Commissioner of Works Wanganui to Commissioner of Crown Lands Wellington, 9 March 1961. Works and Development Wanganui file 96/333001. Supporting Papers #473.

The Commissioner of Crown Lands for Taranaki then gave his approval in November 1961:

I am in full agreement with the suggestion as made in your memorandum of 31 October 1961 that the full control of gravel removal be under the direction of the Resident Engineer at Taumarunui, as has been arranged for parts of the Wanganui River in the Wellington and South Auckland Districts. This control will apply to that portion of the Wanganui River in the Taranaki Land District, and fronting that part of Block II Piopioatea West Survey District between confluence with the Ongarue Stream and the extension of the northern boundary of Section 6 Block II Piopioatea West Survey District (Scenic Reserve). Please note that at this point the centre line of the Wanganui River constitutes the boundary between Taranaki and Wellington Land Districts.<sup>330</sup>

The references in this memorandum to portions of the Piopioatea West Survey District were designed to cover a situation that had arisen during the mid 1950s when a transport company named Weymouth and Sons sought to re-open an old gravel extraction site just off River Road. The shingle deposit lay in the riverbed, and a crusher plant was to be erected alongside on dry land, though the dry land was a part of the legal riverbed. The site required access across Crown Land to the public road. The Crown satisfied itself that the ownership of the shingle and the crusher site lay with the Crown, because it was on the navigable riverbed<sup>331</sup>, though the inclusion of the dry land crusher site on land said to be the bed of a navigable river seems to be potentially challengeable at law. Depending on its liability to inundation, the dry land might potentially be accretion to the adjoining land, which, in that case, was an unformed riparian road reserve.

In 1967 the Ministry of Works was obliged to defend its operations on the Whanganui River from an attempt by Taumarunui Borough Council to have the control of shingle extraction handed over to local authorities. The Council argued that the transport of shingle was causing damage to roads and streets, and that the royalties from shingle extraction should go towards road repairs. The Ministry countered that shingle extraction was not all about money, but rather was about managing the river so that it operated as efficiently as possible. It told the Department of Lands and Survey, to whom the Borough Council had made its request:

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<sup>330</sup> Commissioner of Crown Lands New Plymouth to District Commissioner of Works Wanganui, 13 November 1961. Works and Development Wanganui file 6/49/0. Supporting Papers #377.

<sup>331</sup> Chief Surveyor New Plymouth to District Commissioner of Works Wanganui, 24 December 1956. Works and Development Wanganui file 6/49/0. Supporting Papers #375-376.



At the present time your Department issues the licences for metal removal from the river on the recommendation of the Resident Engineer, Ministry of Works, Taumarunui. This officer acts in the same capacity as a Catchment Authority engineer would if the region was covered by such an authority. When making his recommendations he is concerned only with controlling properly the river channel, and is not concerned with the revenue derived from this source. This is as it should be.

The Ministry of Works also argued that it could take a holistic approach towards the efficiency of the river, while a local authority might be concerned only with a limited length of one bank<sup>332</sup>. The Borough Council's request was later turned down.

Each authority issued to the Ministry of Works or the various Catchment Boards around the country to control gravel extraction was apparently slightly different, and in 1968 the Department of Lands and Survey sought to provide a more standardised and generic form of approval. In a circular to all district offices, it instructed that blanket licences with a standard set of conditions should be issued to catchment authorities. Among the conditions was one that "the licensee indemnify the Crown against any claims of ownership by riparian owners"<sup>333</sup>. The Soil Conservation and Rivers Control Council had clearly been involved in setting up the new procedure. It circulated catchment authorities with the news, adding:

The Soil Conservation and Rivers Control Council attaches great importance to the granting of shingle licences in such a way as to achieve the maximum benefit to channel efficiency. This is cheap and effective, but depends on close and intelligent supervision of the operations by catchment authorities.<sup>334</sup>

The catchment authority operating in the Whanganui catchment was the Ministry of Works, because no catchment board had ever been appointed for that district. The Water and Soil Conservation Act 1967 resulted in the Rangitikei Regional Water Board being appointed to oversee water utilisation in the Whanganui catchment, but catchment board functions under the Soil Conservation and Rivers Control Act 1941 were not included. In implementing the general circular, special provision was made for the Whanganui River at Taumarunui:

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<sup>332</sup> Commissioner of Works to Director General of Lands, 5 May 1967, attached to Commissioner of Works to District Commissioner of Works Wanganui, 11 May 1967. Works and Development Wanganui file 96/333001. Supporting Papers #475-477.

<sup>333</sup> Administration Circular 1968/2, Director General of Lands to All Commissioners of Crown Lands, 29 January 1968. Lands and Survey Hamilton file 3/2636. Supporting Papers #49-50.

<sup>334</sup> Circular No. 1968/7, Secretary Soil Conservation and Rivers Control Council to All Catchment Authorities, 8 April 1968. Lands and Survey Hamilton file 3/2636. Supporting Papers #51-53.

The Land Settlement Board has ... approved your Department taking over the administration of all future applications and existing licences, and for you to receive and retain royalties. The length of river over which licences are to be controlled extends from a mile below the confluence of the Wanganui and Ongarue Rivers, up to a point 200 yards below the Taumarunui Borough Council's hydro electric power generators at Piriaka.

As the Wanganui River is navigable, the Minister of Marine's consent to the granting of the authority to your Department to issue licences under the Land Act has been obtained pursuant to Section 146A(4) of the Harbours Act 1950.<sup>335</sup>

The unwritten implication in this authorisation is that the Whanganui River upstream as far as Piriaka was navigable, and the riverbed was therefore vested in the Crown. This was consistent with the Crown's practice for many years, but was at odds with its earlier-stated attitudes of 1915 and 1944. When there were royalties to be gained, the Crown seems to have adopted a more flexible policy on the definition of a navigable riverbed.

Catchment Board functions in the upper Whanganui catchment were not added to the Rangitikei Board's responsibilities until Taumarunui County and Borough were added to its catchment district in 1977. The newly-named Rangitikei-Wanganui Catchment Board and Regional Water Board, which took over the Ministry of Works and Development's catchment duties, had the already-in-place attitude of the Ministry as its guide, plus the absolute authority provided by the 1967 Act's vesting of right to control water use as background to its own responsibilities; the legal status of riverbeds was not a significant factor in its eyes. Nevertheless, the Board did correspond with the Department of Lands and Survey about having the Ministry of Works' blanket Land Act licences transferred to itself. New blanket licences were readily issued by the Department<sup>336</sup>. This continued the presumption adopted by the Crown that the riverbed and riverbed minerals at Taumarunui were Crown-owned.

Among the licences transferred to Catchment Board control in 1977 was the Weymouths site just below the confluence of the Whanganui and Ongarue Rivers,

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<sup>335</sup> Director General of Lands to Commissioner of Works, 8 March 1968, attached to Commissioner of Works to District Commissioner of Works Wanganui, 14 March 1968. Works and Development Wanganui file 96/333001. Supporting Papers #478-480.

<sup>336</sup> Commissioner of Crown Lands Wellington to Chief Engineer Rangitikei-Wanganui Catchment Board, 17 March 1977. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7. Supporting Papers #491-492.

referred to earlier in this section. Other extraction sites on the Whanganui were at localities known locally as Hewetts and Saddlers, with licences issued to the Taumarunui County Council<sup>337</sup>.

Under Catchment Board administration during the years 1977 to 1991, licences were renewed and new licences issued. However, the Board found that it had stepped into an emotionally charged situation. The relatively free availability of licences under the Ministry of Works and Development's former policy had allowed the resource to be used to capacity, even as environmental objections to further shingle extraction increased. The Board was left with little room to manoeuvre. Its 1982 annual report commented on the situation:

Since 1980 the Board has been advising extractors that supplies of riverine gravels in the upper Wanganui catchment are finite. A further meeting of interested parties was held in Taumarunui in December 1981, when those present were reminded of the Board's policy on gravel extraction, and of the limited gravel resource that was available. The site investigations of a contractor who proposed to take a large quantity of gravel from Kakahi, and the subsequent reporting of the application in the local press, resulted in an expression of local objection on environmental grounds to any gravel extraction from the upper Wanganui River. Twelve objections, a lengthy submission and a petition were received by the Board. The application in question was declined in terms of existing Board policy, but to take account of local concerns, the Board resolved to [publicly notify and] call for submissions on any future applications to extract gravel from the Wanganui River or its tributaries upstream of Mahoe Road.<sup>338</sup>

Another commentary by the Catchment Board was provided in 1987:

In the past, the beds of the Ongarue River, and the Wanganui River in the vicinity of Taumarunui, were dredged to depletion. In the case of the Wanganui River, the riverbed was lowered by some 3-4 metres as a result<sup>339</sup>. Little was left at the time the Catchment Board assumed responsibility for controlling gravel extraction, and it declined to allow anything further, other than minor extraction. The residents of Kakahi raised concerns as to the impact of allowing gravel extraction to extend further upstream and made representation to the Board opposing any such development.

In response to that the Board decided as a matter of policy to advertise for public submission any application for gravel extraction above Taumarunui. In

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<sup>337</sup> Current Metal Licences, 1978/79. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7. Supporting Papers #493-494.

<sup>338</sup> Annual Report of Rangitikei-Wanganui Catchment Board and Regional Water Board for the year ending 31 March 1982, page 5. Supporting Papers #533.

<sup>339</sup> This is probably a reference to shingle extraction for the Winter's Island diversion cut.

any event the Board has discouraged anything other than minor extraction, and only in those circumstances where there is clearly a benefit in terms of river channel maintenance. As a consequence, out-of-river berm gravel deposits are now being used as the prime source of stone aggregates for the upper River area....

The movement of river bed gravels is very slow and natural replacement can be regarded as negligible. The deposits have taken millennia to accumulate, and from a resource management point of view can only be treated as a non-renewable finite resource.<sup>340</sup>

In another commentary on its policy, written in 1986, the Board's Chief Technical Officer stated:

This Board has a long-standing policy of restricting riverine gravel extraction to beach areas above normal summer level. At the time the policy was put in place, its purpose was to counter the adverse effects on river channels of concentrated extraction at localised points by draglines and slacklines. It was intended to spread extraction over longer lengths of river channels.

The effect of eliminating wet extraction has of course, also removed the impact of entrained sediment, produced by that form of extraction, and the other impacts on fish and aquatic life.

For that reason, fishery interests have been very supportive of the policy.

Even though the policy was not originally adopted for water quality or fishery protection reasons, we have been quite happy to take credit for what is now described by fishery interests as an enlightened policy.<sup>341</sup>

What the Catchment Board described in 1987 as "out-of-river berm" deposits is a description of gravel deposits on dry land adjacent to rivers. While attractive to extractors, they still needed to be sorted and cleaned. This was done by washing with water, the consequence of this being discharge of the waste water into settling ponds and ultimately into the river. An example of a washing plant was that operated by Weymouths at its site (referred to earlier in this evidence) on the true right bank below Taumarunui. When the Catchment Board developed standards for discharges from washing plants in 1983, it described the operation at Weymouths:

Two forms of waste were discharged from this extraction plant's operations into the Wanganui River some 1.4 km downstream from the Wanganui – Ongarue Rivers' confluence. The crusher washings entered a small pond

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<sup>340</sup> *Wanganui River Minimum Flow Review: Public Discussion Paper*, December 1987. Rangitikei-Wanganui Catchment Board and Regional Water Board Report 88/11, page 15.

<sup>341</sup> Chief Technical Officer to Water Resources Manager Southland Catchment Board, 9 April 1986. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7. Supporting Papers #490.

before joining with “Builders mix” (aggregate sand) washings, and discharging to the river via an open gravel channel (Fig. 7). Marked discolouration of the receiving waters occurred for some 0.5 km below the discharge point.

The size of the settlement ponds were inadequate for the load they were being asked to process, so that the volume of suspended solids discharged to the river was high. In fact, the volume was higher than the water right issued in December 1975 allowed.

The existing water right was cancelled after three years, and a new right granted in August 1979. The suspended solids limit for the effluent was relaxed to 750 mg/litre, after taking into account the river dilution available (low flow dilution ratio of 1 part to 712 parts river flow), and difficulty of waste settlement encountered at this plant.<sup>342</sup>

Whanganui Maori were not involved in the discussions about the setting of quality standards.

Since the passing of the Resource Management Act 1991, management of the shingle resource has been undertaken by the Manawatu-Wanganui Regional Council. To put the upper Whanganui shingle resource in some regional perspective, during the period 1992 to 1998, extraction from waterways in the Whanganui River catchment as a whole totalled 31,022 cubic metres, while during that same period extraction from waterways in the Whangaehu catchment was 68,490 cubic metres, and from waterways in the Rangitikei catchment was 1,001,008 cubic metres<sup>343</sup>. This is an indication of the near-exhaustion of the resource in the upper Whanganui.

The Council's *Regional Plan for Beds of Rivers and Lakes and Associated Activities*, approved in 2001, has set a maximum sustainable volume of fluvial gravel that can be extracted, from the river between Pipiriki and the confluence of the Whanganui and Whakapapa Rivers, at just 4,000 cubic metres a year. This compares with an annual sustainable volume of 200,000 cubic metres in the lower Rangitikei River downstream of Mangarere Bridge, 8,000 cubic metres in the Whangaehu River, and larger volumes available in other rivers in the region<sup>344</sup>.

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<sup>342</sup> Rangitikei-Wanganui Regional Water Board, *The Establishment of Effluent Standards for the Discharge of Metal Extraction Wastes into Natural Water*, October 1983. Rangitikei –Wanganui Catchment Board and Regional Water Board internal report 83/10.

<sup>343</sup> Manawatu-Wanganui Regional Council, *Measures of a Changing Landscape: State of the Environment Report, Manawatu-Wanganui Region*, 1999, page 41.

<sup>344</sup> *Regional Plan for Beds of Rivers and Lakes and Associated Activities*. Manawatu-Wanganui Regional Council, 2001, Schedule 2, pages 190-191.

The following subsections will address just two of the licences that were issued for extraction from the Whanganui River bed, because both were the subject of Maori involvement. That involvement can most properly be seen as attempts by Maori to reassert their tino rangatiratanga over the riverbed. One of the extractions, at Manunui, was above the Ongarue confluence (i.e. where it is likely that the ad medium filum aquae presumption applied) while the other, at Tawata, was below the confluence (i.e. where the bed was claimed by the Crown as its property because the river was navigable).

### **5.3.1 Old Riverbed at Manunui**

In 1980 Wilkins and Davies applied for and received a licence to take gravel from the riverbed at Manunui. The gravel had built up at the downstream end of the diversion cut constructed in 1948 (see earlier section), presumably because of a change of channel gradient at this point. The company proposed that its crusher be established on dry land alongside what was part of the old riverbed that had been cut off by the diversion. The Lands and Survey Department was involved with this old riverbed because it had taken over responsibility for the severance area also taken in 1952 with the land for the diversion cut itself<sup>345</sup>. It had included the severance and the dry riverbed, but not the Railways ballast pit site, in a licence to occupy issued to an adjoining Manunui owner. Wilkins and Davies negotiated with the licensee for its crusher to use part of his licence area, and then sought Lands and Survey approval for this<sup>346</sup>. The Department had no objection, and the crusher started operating.

In late 1982 the Lands and Survey licensee advised that he had been approached by Hikaia Amohia, whom he described as “a Maori chap representing Maori land rights”, wanting to use some of the licence area “for the purpose of cropping etc, to employ people without jobs”, and also to crush and sell riverbed metal. Amohia had

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<sup>345</sup> The land had been declared to be no longer required for the purpose for which it was taken, and had been declared Crown Land (*New Zealand Gazette* 1982 page 268 -Supporting Papers #619). The change of status to Crown Land also applied to the land taken for the diversion cut. This was just before the Public Works Act 1981 came into force on 1 April 1982, requiring any surplus land to be offered back to its former owner.

<sup>346</sup> Quarries Division Manager, Wilkins and Davies Construction Company Limited, to Commissioner of Crown Lands Hamilton, 30 October 1980. Lands and Survey Hamilton file LG 660. Supporting Papers #60-61.

apparently said to him that “it belongs to the Maoris and they can move in regardless”<sup>347</sup>. The licensee was told in reply that “you have a legal right to occupy the Crown land”, which was “land acquired from Maori owners by the Ministry of Works and Development”, but since then declared to be Crown Land<sup>348</sup>.

Amohia also telephoned the Lands and Survey office in Hamilton. The official he spoke to recorded that he spoke about:

... an extremely complicated series of complaints and grievances about the treatment of the Maoris in Taumarunui and in relation to the bed of the Wanganui river....

I was given the history of the Wanganui river in relation to the Treaty of Waitangi and a Supreme Court decision (I think), which confirmed the ownership of the bed of the river in Maori ownership. I do not have the details of this, but I was told what Mr Amohia thinks of the resident ranger in Taumarunui, the Wellington-based National Parks and Reserves Board, [and] Wilkins and Davies, and none of the comments were complimentary.

I became totally confused by the conversation, and in an attempt to escape promised Mr Amohia that someone would come and talk to him....

I do not believe, frankly, that it will be possible to resolve the very long list of complaints, but the exercise may be successfully concluded by simply visiting and talking to the gentleman. That may even involve advising precisely who is responsible for what and who he should approach. It seems also that the Wanganui Catchment Board (if that is the name of it) has caused some concern by giving a gravel licence which the Maoris, I think, suggest is for metal owned by them.

As can be gleaned from [another case] (Okahukura School Site), Mr Amohia has a glue-like quality in his persistence, and I do not believe that we can ignore this approach to me....<sup>349</sup>

The following month, another officer visited Taumarunui, and met Amohia and Titi Tihu. The memorandum about the meeting is quoted in some detail below, because Amohia was not someone known for writing down his views. With a European writing them down, his views may not be clearly and accurately expressed, but they are the closest that can be got to how Amohia was thinking:

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<sup>347</sup> AJ Pattison, Manunui, to Commissioner of Crown Lands Hamilton, 1 November 1982. Lands and Survey Hamilton file LG 660. Supporting Papers #62-63.

<sup>348</sup> Commissioner of Crown Lands Hamilton to AJ Pattison, Manunui, 8 November 1982. Lands and Survey Hamilton file LG 660. Supporting Papers #64.

<sup>349</sup> Note for File by Assistant Commissioner of Crown Lands Hamilton, 23 November 1982. Lands and Survey Hamilton file LG 660. Supporting Papers #65.

The meeting was fairly long and rambling, but the main thrust of their argument, or the main concern, was the treatment of Maoris relative to Maori land and the ownership of the bed of the Wanganui River, and what this means in the light of the current situation of the Maoris in Taumarunui in this present day. Mr Amohia was concerned that decisions are made about metal extraction and the future of the riverbed land when in fact it is his belief and the belief of his tribe that the land itself in many cases belongs to the Maoris, and they do not really recognise the European methods of determining ownership.

He said they just want the riverbed left alone, and their view is that there is sufficient metal resources on land under private ownership, and Maori land apart from the riverbed, that should alleviate the problem of exploiting the river and thus destroying the mana of his people which is closely associated with the riverbed.

His view is that both the Maori people and the Crown are being exploited here, for he seems to accept the principle that the Crown owns the riverbed, but that spiritually the Maoris also own it, in that companies winning metal from the river are not paying to his knowledge any royalties to either the Crown or the Maoris. He suggested in fact they should be doing this. Royalty monies should then be split, and with the share that the Maoris would get from this, they would be able to put adjoining land in the Taumarunui area into production with the aid of the modern PEP schemes, and he was talking about such things as citrus, kiwifruit and other horticultural crops.

He is concerned that there is insufficient work for local people in the Taumarunui area, and that many young Maoris are not getting a fair chance at learning how to work, and learning skills that will help them in their careers in the future.

He said that the current situation relating to gravel extraction and use of the river generally, also by jet boats etc, is in total contradiction to the Treaty of Waitangi which granted the Maoris these rights, or the rights to the ownership and the enjoyment of their own lands, rights which he claims are currently being violated by the Crown and others at this time. He said that Maori customs and customary views are being totally ignored in the context of everything that is happening in and around the Wanganui River. However, the main thrust of this particular argument was that the Maoris do not want metal extracted from the river; they are prepared to make other areas of Maori-owned land available for metal extraction....

He said I should go out and see where Wilkins and Davys [sic] are extracting metal to see if I could determine who should be getting paid the royalty for this. He said, so far as he knew, royalty was not being paid to anybody. He said certainly not the Crown, and certainly not the Maoris.

[After referring to jet boat operators not telling the truth about sacred places, and trespassing on Maori-owned land] he said that in this and other matters, some Maori people wanted to get violent and use force, and lock gates and this



sort of thing, but he is very much against this, as ... the way of his people has been peace for a hundred years now, and that he certainly doesn't want any violence.

He wants engineers to come and inspect the areas where gravel is being won from the river, together with the Maori people. He believes that there are many other areas where extraction could take place, without involving extraction from the water and the actual riverbed itself....

Mr Amohia said that the Rangitaiki [sic] Wanganui Catchment Board was issuing licences for people to win metal from the river and they were not at any stage consulting with the local Maoris. There is a lot of knowledge about river conditions....

[Referring to the Crown lease of the severance and riverbed at Manunui] Mr Amohia said that he had some doubts about the legality of the lease to Patterson [sic], and in fact the Crown's right to lease this land in any case. They would be prepared to lease it off the Crown as one authority of the right hand leasing to its left hand, as in reality they were really part-owners of this land in any case....

The Maoris take the view that the metal extraction activities of Wilkins and Davys [sic] are wrong, in that the metal belongs to the Crown and the Maoris, but where do the monies go? Certainly, so far as they are aware, no royalties are paid, or if they are paid the Crown and the Maoris do not receive any of it.

Mr Amohia said that the chain strip of land that was acquired as part of the Coal Mines Act of 1924 [sic] should be utilised for horticulture for young people.... He mentioned in particular an area at Winters Island where school leavers could be employed. He mentioned that in this area the lessee, presumably this land is leased from the Crown, was willing to give up his lease to the Maori people for this purpose, provided that they would purchase this man's freehold, and Mr Amohia said that his Marae was prepared to do just that, and would the Commissioner please come down and talk to him about it.

He then said that the Weymouth Quarries had paid no royalty on metal won from the river and Maori land for over fifty years, and if the Crown didn't want royalty monies, well, the Maoris did; not for the individual benefit but rather for the benefit of the young people in setting up work schemes and guaranteeing continued employment. In other words, they would like to receive a royalty for metal won from the river to develop horticultural land....

We then went on a tour of all the areas discussed, and Mr Amohia and Titi Tihu pointed out many of these areas to me, and were quite vociferous in their opinion that the Maoris had been cheated of much of this land, and that it was time something was done about it, particularly as the old chap [Titi Tihu] only now had two more years left to go, to complete this mission of his.

I am sorry for the long rambling discourse, but I have included to show the force of feeling that is being expressed, but to summarise the main points:

1. Horticulture. The Maoris wish to have land made available one way or the other for horticulture, so that the young people can be taught skills in horticulture and they have already made some arrangements with Labour Department for the financing of this through the PEP Scheme.
2. Metal extraction from the riverbed itself should be stopped, as it was wrong to do this, and in fact the extracting of metal from the bed in a sense was extracting their history, as historically the land under the water belonged to them.
3. If metal extraction was stopped in the riverbed, the Maoris would be prepared to make tribal land available for the extraction of metal. This of course would then ensure that they would receive some royalty for this metal extraction.
4. If metal extraction from the river was not to cease, then they believed substantial royalty should be paid for the metal, and the Crown and the Maoris should receive this royalty 50/50.
5. Mr Amohia is insistent that the Commissioner or Commissioners should come and inspect for themselves the areas in question, and to try to clarify points that he raised at this meeting today....<sup>350</sup>

There was at least one further meeting held with Hikaia Amohia in early 1983. In April 1983 he was written to so that proposals for the severance area and old riverbed at Manunui could be explained to him.

The Rangitikei-Wanganui Catchment Board has a requirement that an area of land along the bank of the present course of the river be set apart for Soil Conservation and River Control purposes, and as yet the amount of land required has not been accurately defined.

It is therefore the intention of the Department, once the licence to occupy has expired [on 30 June 1983] and the land required by the Catchment Board has been ascertained, to enter into negotiations with the owners of Ohura South M2A1 Block for the sale to them of the portion of Ohura South M2A Block, the boundaries of which are very roughly shown on the sketch plan marked B<sup>351</sup>.

This action is in line with Government policy as outlined in the Public Works Act 1981, where land acquired for a public work and no longer required for the purpose for which it was taken has to be offered back to the descendants or successors in title of the persons from whom it was taken, provided of course it is not required for an 'essential work' as defined in that Act.

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<sup>350</sup> Note for File by District Ranger Hamilton, 16 December 1982. Lands and Survey Hamilton file LG 660. Supporting Papers #66-71.

<sup>351</sup> This was the severance area only, and did not include any of the old riverbed. This was being retained by the Crown while awaiting a Government decision on a petition sent in by Maori about the return of the bed of the Whanganui River. Note for File by Divisional Draughting Officer Maori Division Hamilton, 8 April 1983. Lands and Survey Hamilton file LG 660. Supporting Papers #75-76.

The area required by the Catchment Board for Soil Conservation and River Control purposes is an essential work, and until they advise the area required I cannot be more specific as to the boundaries and area of the remaining land that will be available for returning.<sup>352</sup>

The Catchment Board's desire for the riparian strip had not actually been a requirement. Rather it was message from the Ministry of Works and Development that the Catchment Board was interested in obtaining the strip. This message had been sent in June 1981, and nearly two years had elapsed without it being actioned. At the same time as writing to Amohia, the matter was resurrected and the Catchment Board was asked to specify what area it was interested in<sup>353</sup>. No reply was ever received from the Catchment Board.

Because the licence to occupy was not being renewed on expiry, Wilkins and Davies were told that they would be unable to continue to occupy some 5 acres of the licence area for their crusher plant after the end of June 1983<sup>354</sup>. The company protested that they would be severely disadvantaged by this, and proposed negotiating with the Catchment Board so that they could continue to occupy part of the land that would be transferred to the Board<sup>355</sup>. The Department agreed<sup>356</sup>.

The Catchment Board replied to the Department explaining that it wished the whole of the severance area to be set apart as a reserve for Soil Conservation and River Control purposes. In November 1983 the Department was obliged to write to Amohia that, as this was an "essential work" under the Public Works Act, "the Board's requirement overrides any claim by the former owners to the return of the land".

I am sorry this decision does not favour the former owners, however there is little if anything anyone can do about it as the land was declared Crown Land on the understanding that the whole or any part required by the Board would be reserved.

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<sup>352</sup> Commissioner of Crown Lands Hamilton to Hikaia Amohia, Manunui, 7 April 1983. Lands and Survey Hamilton file LG 660. Supporting Papers #72.

<sup>353</sup> Commissioner of Crown Lands Hamilton to Chief Executive Officer Rangitikei-Wanganui Catchment Board, 8 April 1983. Lands and Survey Hamilton file LG 660. Supporting Papers #73-74.

<sup>354</sup> Commissioner of Crown Lands Hamilton to Quarries Division Manager Wilkins and Davies Construction Limited, 13 April 1983. Lands and Survey Hamilton file LG 660. Supporting Papers #77.

<sup>355</sup> Engineer Wilkins and Davies Construction Co Ltd to Commissioner of Crown Lands Hamilton, 2 August 1983. Lands and Survey Hamilton file LG 660. Supporting Papers #78.

<sup>356</sup> Commissioner of Crown Lands Hamilton to Quarries Division Wilkins and Davies Construction Co Ltd, 26 August 1983. Lands and Survey Hamilton file LG 660. Supporting Papers #79-80.

I understand that the Board plans to establish a nursery on part of the area. This could be an opportunity for some of the unemployed in your area to find an outdoor job.<sup>357</sup>

Amohia's response, reported to the Department by Taumarunui County Council in September 1984, was to set up his own metal extraction plant at Manunui. He had also failed to obtain planning consent, as well as failing to obtain any approval from the Department of Lands and Survey. The Assistant County Clerk stated:

The issue of his right to occupy and extract metal is somewhat obscure.

Mr Amohia contends he holds a customary right to the old river bed and an interest in the minerals in Part Ohura M2A.<sup>358</sup>

The legal status of the riverbed and of the mineral rights, as Lands and Survey understood it, was explained to the Council:

I can appreciate the difficulty you are having, and advise that I consider the 'ad medium filum' rule applies in respect of this portion of the river. From further downstream in the vicinity of the Borough boundary, down to Wanganui it is widely accepted that the River is navigable and therefore Crown Land because of the application of Section 261/1979 Coal Mines Act. The customary title that Mr Amohia refers to does not, I'm afraid, exist, although I am familiar with the claims of historical and emotional associations with the waters of the river.

If it was found that the Coal Mines Act could have applied to this portion of the river, then of course this portion of the bed would also be Crown Land.

In respect of the mineral rights, they remained with the owners at the time of the taking by Gaz 1952 p.394 for Soil Conservation and River Control Purposes, because of Sec 19/1928 Public Works Act, which was the legislation effective at that time.<sup>359</sup>

Based on this explanation, the Lands and Survey Department seemed to have reverted to views held in 1915 and 1944. These views call into question the Crown's authority to have licensed shingle extraction at Manunui from about the 1950s onwards.

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<sup>357</sup> Commissioner of Crown Lands Hamilton to Hikaia Amohia, Manunui, 25 November 1983. Lands and Survey Hamilton file LG 660. Supporting Papers #81.

<sup>358</sup> Assistant County Clerk Taumarunui County Council to Chief Surveyor Hamilton, 20 September 1984. Lands and Survey Hamilton file LG 660. Supporting Papers #82.

<sup>359</sup> Chief Surveyor Hamilton to County Clerk Taumarunui County Council, 3 October 1984. Lands and Survey Hamilton file LG 660. Supporting Papers #83.

Although not recorded on the Crown file, the County Council sought to stop the gravel extraction because planning consent for the activity had not been granted. In a Catchment Board report, it is stated:

Recently the Taumarunui County Council put a court injunction on Mr Amohia operating at Manunui. The charge was that Mr Amohia was in breach of the district scheme and operating without a planning consent.

The case was overturned in a second hearing on the grounds that Mr Amohia could not be directly linked with the operations that were taking place at Manunui, although it was agreed that the operations there were in breach of the district scheme.

After the first hearing, it was decided that all operations should stop at Manunui (17 October 1984). It was soon after this that the plant was moved down to Tawata [discussed in the next subsection].<sup>360</sup>

Apart from one letter to Amohia in March 1985 responding to a telephone conversation he had with the Hamilton office, which explained to him that he would have to address his queries to the Wellington office<sup>361</sup>, there is no further correspondence about the Maori claims to the land on the Crown file.

### **5.3.2 Tawata**

The second case of Maori involvement occurred in 1984 at Tawata, downstream of the Ongarue confluence, where the Crown regarded the riverbed as Crown-owned because the river was navigable. Taumarunui County Council was authorised by the Catchment Board to extract 500 cubic metres of gravel from the riverbed at Tawata during the year prior to the end of March 1984. In November 1983, the Council asked for the amount to be taken to be increased to 2000 cubic metres, explaining:

The original figure of 500 [cubic] metres of metal was chosen because this is the amount of metal utilised per annum on the roads within the vicinity of the extraction site.

It will be necessary to form road access to the site and to employ machinery to extract and stock pile the metal.

Because of the capital cost of the extraction process, we wish to extract a greater quantity of metal and to store this for future years.

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<sup>360</sup> Report by Water and Soil Officer Taumarunui, 18 November 1984. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7/W. Supporting Papers #497-501.

<sup>361</sup> Commissioner of Crown Lands Hamilton to H Amohia, Taumarunui, 19 March 1985. Lands and Survey Hamilton file LG 660. Supporting Papers #84.

An inspection of the site reveals that there will be at least 2000 cubic metres of metal available.<sup>362</sup>

Permission was apparently given to increase the amount in its licence to 2000 cubic metres.

In November 1984, it came to the Board's attention that Hikaia Amohia was responsible for further extraction of gravel from the river at Tawata. He was written to and told that, if this was the case, he should stop as no licence had been issued to him<sup>363</sup>. Just five days later the concern had escalated, so far as the Board was concerned, and it sought legal advice for the issuing of an injunction to stop Amohia. This was because a site visit had been made to the operation at Tawata.

The visiting officer reported that the digger and truck that was doing the work had recently moved from the old riverbed site at Manunui, when work there had been stopped by the injunction served on Amohia by the County Council (see previous example above). Apparently Amohia and his son were acting for the Wanganui River Trust, which had the contract from the County Council to extract and crush the metal in accordance with its licence granted in 1983. However, that licence had expired and not been renewed. Amohia's son explained to the officer who visited Tawata that:

The river belongs to the Maori people, according to the Crown, but that the government had taken the land underneath it under the Coal and Mining Act. According to K Amohia, the river had been divided down the centre, each half belonging to the tribe that owns the land bordering it. As Mr J Titi owned one side, and K Amohia's wife the other, they had the right to the river.<sup>364</sup>

When writing to the Catchment Board's solicitor requesting legal advice about the serving of an injunction, the Chief Executive Officer expressed the Board's view:

Last year Mr Amohia extracted metal from this source, but it was essentially under licence issued by the Board to the Taumarunui County.

The Taumarunui County Council have subsequently withdrawn its permission to Mr Amohia to extract metal on their behalf, and he is apparently in breach of the Board's bylaws and the dispensation held by the Board from the Land

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<sup>362</sup> County Engineer Taumarunui County Council to Chief Executive Officer Rangitikei-Wanganui Catchment Board, 1 November 1983. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7/W. Supporting Papers #495.

<sup>363</sup> Resources Manager to H Amohia, Taumarunui, 16 November 1984. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7/W. Supporting Papers #496.

<sup>364</sup> Report by Water and Soil Officer Taumarunui, 18 November 1984. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7/W. Supporting Papers #497-501.

Settlement Board to issue gravel extraction licences for the Wanganui River Catchment. The Land Settlement Board has its authority under the Coal Mines Act [sic].

Mr Amohia's avowed intention is to achieve a confrontation with the Board over this issue, and to date we have tended to ignore him. However the Board cannot continue to ignore this transgression in fairness to other licensees and the users of the Wanganui River generally.<sup>365</sup>

The solicitor, in reply, set out the extensive litigation concerning ownership of the river, summarising that history as being that the riverbed was Crown Land by virtue of the Coal Mines Act, while in the absence of that Act it would have been owned initially by Maori. The passing of riparian lands through the Native Land Court title-granting process meant that the Maori ownership of the river would have been defined in accordance with the *ad medium filum aquae* presumption, if the Coal Mines Act had not intervened.

As such Crown Land, the administration of the land is vested in the Commissioner of Crown Lands, and in our view the general authority from the Commissioner, as set out in his letter to you dated 17 March 1977, is sufficient for your Board to administer the extraction of gravel.

The extraction of metal by Mr Amohia without such a licence is in clear breach of the Bylaw, a copy of which you sent us. Such actions on his part would justify a prosecution for breach, provided sufficient evidence was available to prove the breach.<sup>366</sup>

Just eight days after this letter was sent, a licence was issued to the Wanganui River Reserve Trust for the extraction of 2000 cubic metres of gravel at Tawata<sup>367</sup>. The file is generally silent about how this happened, noting only:

Matter dealt with as a separate agenda item at 6/12/84 Board meeting. Application for licence subsequently received. Licence delivered by hand to H Amohia at Taumarunui by Mr Roach 11/12/84.<sup>368</sup>

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<sup>365</sup> Chief Executive Officer to Treadwell, Gordon and Co, Barristers and Solicitors, Wanganui, 21 November 1984. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7/W. Supporting Papers #502-503.

<sup>366</sup> Treadwell, Gordon and Co, Barristers and Solicitors, Wanganui, to Chief Executive Officer, 4 December 1984. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7/W. Supporting Papers #504-506.

<sup>367</sup> Temporary Licence No. 84/66.0, 10 December 1984. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7/W. Supporting Papers #508-509.

<sup>368</sup> File note, undated, on Report by Water and Soil Officer Taumarunui, 27 November 1984. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7/W. Supporting Papers #507.

Although not stated, the implication is that some fast, possibly political-level, footwork averted a crisis in the relationship between Amohia and the Board. A subsequent note that “the usual requirement for payment of a royalty of \$1.10 per cubic metre was, in this instance, waived by the Board”<sup>369</sup>, points to the compromises that may have been made by both sides. The Reserve Trust’s licence was specially typed up, because it differed from the template for the standard licence<sup>370</sup>.

#### **5.4 Gravel Extraction from the Bed of the Taringamotu River**

The Taringamotu River had long been recognised as providing gravel supplies for the local district. A survey plan dated 1927 marks out a series of land parcels along the river to be taken under the Public Works Act for “gravel beds”<sup>371</sup>. The background to the intention of the Crown to appropriate parts of the riverbed and riparian land was not researched during this project, because of time constraints. The intention was for an unknown reason not followed through, as the land was not taken.

The river was continually exploited for gravel supplies. Generally the amounts removed were small, though the regularity with which the resource was exploited meant that there was a cumulative decline in quantities available. In 1980 the Catchment Board signalled that the Whanganui River had almost reached the limits of its resource, and this put additional pressure on the Taringamotu resource. By 1985, the Taringamotu gravels had reached the same state as the Whanganui gravels, and the Board resolved to issue no further licences until the amount of the resource and its effect on the river channel had been assessed.

The assessment was undertaken during the 1985-86 summer, when the lower 30 kilometres of the river were assessed; further up the river there were access problems making gravel extraction impractical. One purpose of the assessment was to see whether the beds of gravel that accumulated in the main channel of the river forced

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<sup>369</sup> Resources Manager to Takarangi, Hipango and Tauri, Administrative Consultants, Wanganui, 10 June 1985. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7/W. Supporting Papers #510.

<sup>370</sup> Template for “Licence to Remove Gravel from Watercourse: Wanganui River and Catchments”, attached to Resources Manager to JM Harris, Te Kuiti, 13 June 1986. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7/W. Supporting Papers #514-520.

<sup>371</sup> South Auckland plan SO 24610. Supporting Papers #536.

The Crown file for this proposed taking is probably Works and Development Head Office file 54/266 Volume 1 (Archives Wellington reference ABKK 889 W4357 451).



the river to alter its channel around the beds, and in the process caused erosion to the river banks. Fifty-one places where the banks were eroding were identified, many caused by accumulating gravel beds redirecting the flows in the river, with others caused by log jams, including fallen willows and poplars. The various beds of gravel contained approximately 27,000 cubic metres of material spread over 81 separate sites. The largest quantity available at any one site was 2,300 cubic metres, and many beds were too small for extraction to be viable. However, the amount of beneficial extraction, where it would reduce or prevent bank erosion, was approximately 10,700 cubic metres.

At sites where gravel has been extracted in the past, there has been some replenishment, although not to such an extent that extraction at the previous scale can take place. I anticipate that replenishment of these sites will continue so long as gravel from the banks is entering the channel as a result of bank erosion.<sup>372</sup>

There was no approach made to tangata whenua for their views as part of the assessment. Landowners were contacted, some of whom may have been Maori, though this was not stated, with their views being sought only in connection with their own lands. The Water and Soil Officer reported:

Most farmers in the upper reaches of the Taringamotu River were opposed to any metal extraction being carried out. However, the attitude of farmers in the middle and lower reaches were more interested in metal extraction being carried out. One of the farmers spoken to, while being anti-authority, would like some clearing work to be done to the river channel and was happy to pay a contribution to the work carried out.<sup>373</sup>

The Catchment Board had received applications for five extractions for the 1986-87 summer, four of which were from Taumarunui County Council. The total quantity of gravel sought was 5,800 cubic metres, but in the light of the assessment the Board was recommended to approve a total of only 3,800 cubic metres<sup>374</sup>.

To indicate how circumstances could quickly change, the assessment in February 1986 identified 360 cubic metres of gravel available for extraction at a site known as

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<sup>372</sup> Extract from Report to the Board for March 1986 Meeting. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7. Supporting Papers #488-489.

<sup>373</sup> Report by Water and Soil Officer Taumarunui, 25 February 1986. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7/W. Supporting Papers #511-513.

<sup>374</sup> Extract from Report to the Board for March 1986 Meeting. Rangitikei-Wanganui Catchment Board and Regional Water Board file E7. Supporting Papers #488-489.

Filleuls, opposite a sawdust dump downstream of the aerodrome. However, an inspection in November 1986 calculated 2,000 cubic metres available for extraction at this site<sup>375</sup>.

### **5.5 Gravel Extraction from Mangawhero Catchment Rivers**

The districts of Ohakune and Raetihi had their own demand for gravel and metal. The rivers, or the terraces alongside riverbeds, were the favoured source for material. As with other districts, the Crown files about gravel extraction are completely silent about any Maori interest in the rivers.

A Ministry of Works report about metal extraction by Ohakune Borough Council in 1963 is very matter-of-fact about working in the riverbeds, apparently regarding it as normal procedure:

A ¼ cubic yard Priestman dragline was working in the Mangawhero River adjacent to the crusher, and Mr Strain advised that from this source about 300 cubic yards per year are obtained....

Mr Strain took us to another point on the Mangawhero River that had been worked some years ago, but little more than 100 cubic yards would be available, with no guarantee that it be replaced by a flood. He stated that there were possibly three other places along the river in the same category....

We next visited the Mangateitei Stream close to Mangateitei Road, about six miles from Ohakune. The metal deposits here are shallow beds in the river bed itself stretching out over approximately half a mile, and estimated by Mr Strain to total about 10,000 cubic yards. Access would be for about ¼ mile through private property along a formed track to the remains of an old crusher, thought to have been a private venture, and thence along the river bed itself....

I discussed metal deposits in Ohakune area with Mr Simons, Engineer to the Rangitikei Catchment Board. He is of the opinion that both the Mangawhero and the Mangateitei have carried out a process of degrading, and have now reached more or less stable beds with practically no metal flow. He thinks it unlikely that metal removed from the beds of these streams would be replenished, except over a long period. He does not know of other deposits in the Borough of pit metal similar to the pit the Borough is now working. Both Mr Simon and the previous Engineer to the Catchment Board have warned the Borough that when the present pit is finished, no other supplies close at hand are known. He would not be prepared to issue a licence for the Mangateitei for other than metal in the actual bed of the stream, with no interference to any metal in the banks, and then to only one foot below present water level. This

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<sup>375</sup> Report by Water and Soil Officer Taumarunui, 20 November 1986. Rangitikei-Wanganui Catchment Board and regional Water Board file E7/W. Supporting Papers #521-524.

could mean the obtaining of considerably less than the 10,000 cubic yards estimated by the Borough Foreman. There is also some doubt as to whether Raetihi Carrying Co still hold an operative licence to work the Mangateitei.<sup>376</sup>

Further down the Mangawhero, as part of the Parapara Road works, a series of metal pits were established to provide a locally-available supply that did not need lengthy cartage. These were not in the river itself, though some were on the terraces close to the river banks. This was an advantage for the Ministry of Works, though a disadvantage for the river. When the Wanganui Acclimatisation Society complained about pollution in the river in 1955, the response in part was:

The only construction work from which spoil is known, in recent times, to have been put into Mangawhero River is from Littlewoods Pit, near Raetihi. Here about 600 gallons per hour of muddy water goes into the river when the pit is working. It would be difficult to dispose of this washing water otherwise, and the quantity is small relative to the stream flow of about 500 cusecs, that it can hardly be important. It is insignificant by comparison with the material brought into the stream by surface waters at times of heavy rainfall.<sup>377</sup>

## **5.6 Concluding Remarks**

Gravel extractions and roadworks affecting waterways are a subset of the general disturbances to waterways condoned and sometimes physically carried out by the Crown. Just as in the preceding section of this evidence, there was little or no evidence of the Crown listening to or seeking out Maori views. Indeed, the Crown tended to regard disturbance and change to waterways as an inevitable consequence of the settlement and development of the country, with the waterways, like the land, being treated as the raw material for the transformation that it thought was needed.

Owing to the relative paucity of gravel and road metal supplies in the papa country that covered so much of the Inquiry District, the rivers were looked to for the supply of roading metal and railway ballast material. This had unfortunate and disturbing ramifications on the Whanganui River at Taumarunui, where the Crown seems to have adjusted its interpretation of legal rights to the river in a cavalier fashion to suit its own purposes. The result has been that the readily accessible gravel resources in

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<sup>376</sup> Maintenance Superintendent Wanganui to District Highways Engineer Wanganui, 20 October 1963, attached to District Commissioner of Works Wanganui to Commissioner of Works, 11 December 1963. Works and Development Head Office file 62/86/8. Supporting Papers #205-208.

<sup>377</sup> Commissioner of Works to Secretary for Marine, 14 February 1956. Works and Development Head Office file 70/8/28/1. Supporting Papers #209.

the river there, and elsewhere in the Inquiry District, have been mined virtually to depletion. Even if Maori might now want to adopt a different approach, it would not be possible for them to do so, because the resource has been reduced almost to nothing.

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