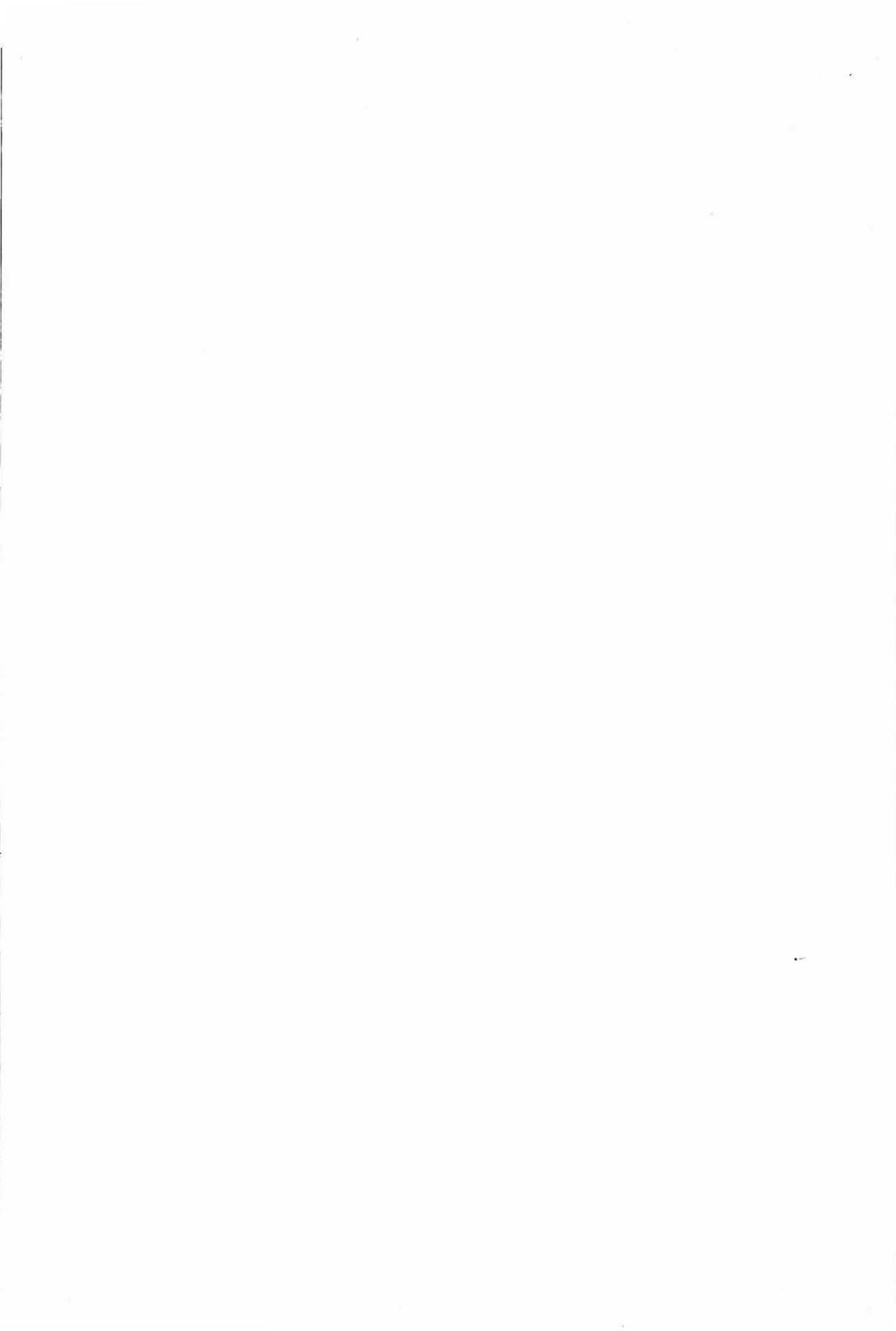


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'DAMMED BY DIVERSION'
THE TONGARIRO POWER DEVELOPMENT
PROJECT AND THE CLASH BETWEEN
CONSERVATION AND DEVELOPMENT
1955-1983

A thesis presented in partial fulfilment of the requirements
for the degree of Master of Arts in History at
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SHANE E. CASKE
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Abstract

This thesis examines the clash of values between Conservation and Development. To examine this the Tongariro Power Development Project is used as an example of the ongoing struggle between the two perspectives.

The first chapter explores the development of Hydro-electricity as the premier energy source in New Zealand. The rise of hydro-electricity was not plain sailing, attitudes waxed and waned over time.

The second chapter discusses the growth of concern for conservation and how it ultimately came to a head to head clash with hydro-electric development. Chapter three describes the Tongariro Development, explaining exactly what was constructed and the reasons for this.

Chapter four discusses the debate over the Tongariro Development. The government anticipated some criticism, but the chapter argues they were off the mark with their planning. They did not expect the widespread negative reaction which is explored in chapter four.

Chapter five links these early protests with challenges to the Tongariro Development in the planning tribunals. A conclusion suggests that the Tongariro Development remains a live and contested issue.

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GLOSSARY and ABBREVIATIONS

AJHR: Appendices to the Journals of the House of Representatives

Concrete Arch Dam: a thin-walled curved dam dependent on the strength of the arch and solid abutments to secure it against the force of the water

Cumecs: One cubic metre of water per second (metric measure of flow)

Cusecs: One cubic foot of water per second (imperial measure of flow)

ECNZ: Electricity Corporation of New Zealand Limited

Head: the length of water above the turbines, used as a measure of hydraulic pressure.

Headrace: a channel leading water to the penstock intakes of the power house

Intake: the structure leading water into the penstocks

KWh: Kilowatt = Kilowatt - Hour = 1,000 units

Load: the demand for power made on a generating unit, plant or system at any one time

MW: Megawatt = one million watts or 1,000KWh

MWRC: Manawatu-Wanganui Regional Council

NA: National Archives, Wellington

NCC: Nature Conservation Council

NZPD: New Zealand Parliamentary Debates

Peak load: the maximum load on a generating plant or system at a given time

Penstock: a downward sloping pipe, tunnel or shaft leading water from the intake to the turbines.

RWCB: Rangitikei- Wanganui Catchment Board

Spillway: a structure for releasing surplus water from a dam

Surge chamber: an open water reservoir designed to absorb a sudden rise in pressure in a pipeline or penstock

Tailrace: the channel for water leaving the power house

TPD: Tongariro Power Development

Watt: unit of power = one volt x one ampere

WVA: Waikato Valley Authority

Chronology

- 1861 First use of Electricity in New Zealand (Dunedin)
- 1887 Tongariro National Park established
- 1903 Water Power Act passed
First investigation into hydro-electric potential of waterways
- 1914 First State constructed Hydro power station at Lake Coleridge
- 1924 First published thoughts of Tongariro Regions potential
- 1932 National Commission on Expenditure opposes hydro developments
- 1946 State Hydro-electric Department established
- 1955 First official discussions of Tongariro Power Development
Gibb's commissioned complete feasibility study of region
Waimarino voice concern at proposed scheme
Discussions held with Ngati Tuwharetoa regarding Tongariro Scheme
- 1958 Order in Council passed allowing Government to construct the scheme
Aratiatia Debate begins
- 1959 National Conference on Scenic Preservation in New Zealand starts
- 1962 Gibb's report received by Ministry of Works
- 1963 First meeting of Nature Conservation Council
Planning Committee recommends Project for approval
- 1964 Peter McIntyre's article published in *Evening Post*
Nature Conservation Council approves Tongariro Development
Cabinet Approval of scheme
- 1971 Western Diversion starts diverting water into Lake Rotoaira
- 1977 New Zealand Canoeing Association letter sent
- 1983 Planning Tribunal meets to discuss a minimum flow for the Whanganui River

Introduction

Relatively little has been written on the Tongariro Power Development Project. The impact of the first stage the Western Diversion, upon the Whanganui River has been particularly neglected.¹ What has been written deals primarily with the latter period of debate, in relation to Planning Tribunal minimum flows hearings in the 1980s.² This study deals primarily with the formative years of the Tongariro Development between 1955 and 1983, in particular debates about the impact of the Western Diversion.

In 1955 when the Tongariro Power Development was first mooted, electricity was considered to be the 'fuel of progress,' it had become the most sought after power source in the country.³ A combination of increased demand during war and a power shortage prior to the war saw New Zealand emerge from World War Two in dire need of new electricity production. The Tongariro Development was part of a post war 'catch up' plan. The Tongariro scheme followed the construction of seven power stations on the Waikato River and served not only to further enhance the power production of these stations by increasing water flow down the river, but also generated electricity in the Tongariro region with two new power stations.

Clearly the Tongariro Power Project was an important event in the history of post war energy development. It was also important as one of several examples of a clash between energy development

¹ The spelling of 'Whanganui' is in accordance with the pronunciation of the river; the town will be spelt the traditional way, Wanganui.

² See ECNZ, Whanganui River Maori Trust Board, Rangitikei-Wanganui Catchment Board and Regional Water Board, and the Wanganui River Flows Coalition. *Whanganui River Flow Submissions: Electricity Corporation of New Zealand (3 vol)*, Marton: Rangitikei-Wanganui Catchment Board, 1990.

³ David Young, 'River of Great Waiting,' in *New Zealand Geographic*, 3: July-Sept, 1989, p.108.

and a growing desire to preserve New Zealand's natural environment. Plans for power developments at Aratiatia and Manapouri promoted widespread debate and facilitated the emergence of the modern conservation movement.⁴ The Tongariro Development needs to be seen in this context. It too was a case of a values clash between energy development and conservation values. The public debate about the Tongariro Development and the opposition to it is the principal subject of this thesis. Unlike the debate over Manapouri, the opposition to the Tongariro Development has not been extensively explored. This thesis seeks to make a contribution to understanding the emergence of the modern conservation movement and its interaction with those seeking to meet the ever growing demand for energy. The thesis has five chapters.

Chapter One examines the development of demand for hydro-electricity in New Zealand from its initial slow, hesitant start in the late nineteenth century to a period of rapid activity after World War Two.

Chapter Two examines the gradual growth of concern for conservation in New Zealand. From the establishment of the Tongariro National Park in 1887, the Tongariro region has been a conservation site of great note. The first two chapters establish the historical context in which the clash of values associated with the Tongariro Development took place.

Chapter Three examines the Tongariro Power Development and explains why it was that the Tongariro scheme was chosen over

⁴ See J.T. Salmon, *Heritage Destroyed - The Crisis in Scenery Preservation in New Zealand*, Wellington: A.H. & A.W. Reed, 1960.

other options. Geography, geology and adding extra value to the Waikato Development were among the reasons the Tongariro Development went ahead.

Chapter Four discusses the debate over the Tongariro Development. The first part of the chapter discusses the views of the Electricity Department and Ministry of Works as to the likely reaction to the project. As it turned out, their ideas were far off the mark. The main part of the chapter examines the negative public reaction to the scheme and the attempts by the Government to allay concerns about the impact of the project.

Chapter Five links the first stage of protest against the Tongariro Development with the commissioning of the Western Diversion, and notes the beginning of a new wave of protest prompted by the operation of the diversion. New avenues of protest were employed, in particular protest became focussed on the Planning Tribunal as a result of changes in resource management introduced by the 1967 Water and Soil Conservation Act.

The thesis concludes by arguing that the Tongariro Project is still a live issue today. Since 1983 both the Waitangi and Planning Tribunals have both considered issues relating to the Tongariro Development.

The clash of values between conservation and energy developments remain one of the central issues in modern resource management. The debate on the Tongariro Development in the 1960s was a beginning of an ongoing contest of values.

Chapter One

The Rise of Hydro-electricity Development in New Zealand

The production of Electricity has been an important aspect in the economic development of New Zealand, however from its introduction to New Zealand in 1861, Governments and the citizens of New Zealand have had a complex relationship with the subject.¹ In the past electricity was often viewed as a new, versatile, clean and cheap alternative to the traditional power sources of gas and coal. Today, and during the construction of the Tongariro Development, the amount of money spent on construction projects and the notion that the hydro-electric developments are environmentally friendly has been hotly contested. As the use of electricity slowly expanded into all sections of the community various controversial issues arose. During the late nineteenth century the main issue was private control versus government control. Mid-way through the twentieth century the controversy frequently centred on the impact of hydro-electric projects on the natural environment. The development that was based upon the waters of the Tongariro Region is an example of this later issue and is the subject of this thesis. The controversy over the Tongariro Development continued the trend of controversy and hydro-electrical production being inevitably linked. This chapter sets the historical context for the Tongariro Development and will discuss the debates about hydro-electricity in New Zealand. The particular

¹ The first use of electricity was for a private electric telegraph line between Dunedin and Port Chalmers. See John.E. Martin (ed.), *People, Politics and Power Stations - Electric Power Generation in New Zealand 1880-1990*, Wellington: Bridget Williams Books Limited and the Electricity Corporation of New Zealand, 1991, p.15.

focus will be the changing support of the Government towards electricity and hydro-electricity production from late nineteenth century through to the approval of the Tongariro Project in 1958.

Tentative Steps: The Liberal Government's attitude to Hydro-electricity

Like most of the countries around the world, private companies started the initial electrical developments in New Zealand. Wealthy individuals formed private companies to develop rivers in their respective regions, while government supplied water rights for the projects to go ahead. Private enterprise and local authorities surveyed, constructed and financed their own initiatives making them totally independent of central government control.² In response to this growth in water manipulation, especially privately run hydro-stations, successive governments went about securing rights over water ways throughout the country.

By the end of the nineteenth century, as the idea of hydro-electric power production began to grow amongst the private companies, the Liberal Government began to an increasing interest in electricity production. It concluded that in part the private sector did not have the interests of the nation in mind, or the finances to provide the entire country with electricity. Nor did they have a national strategy. The private hydro-electric developments were localised projects and did not consider interests outside their own town-districts limits. This meant selected areas of the country had electricity while the rest of the country went without. The state was the only entity which could have financed a national system that provided power throughout the country. It was also the only 'company' that would have the interests

² The private development of electricity in New Zealand is described in, Martin, *People, Politics and Power Stations*, pp.13-36.

of the entire country in mind rather than a few selected areas.³ The Liberals were also motivated by the impressive potential of public electricity supply.

It was not until 1888 that private interests supplied New Zealand with its first public electric lighting. Of all places, the 'booming quartz mining town' of Reefton on the West Coast was the first to receive public lighting by way of hydro-electric development. The Reefton development reflected the character of the private ventures of this pioneering period. With the economy in deep depression during the 1880s, only areas with independent wealth, for example, the gold fields of the West Coast, could afford such developments.

With the success of the Reefton development, the government and the rest of the country became further interested in the development of waterways to produce electric power, however the Liberal Government was somewhat cautious in supporting the new energy form because of the new nature of electricity and of the costs involved. Private investors were less cautious. The Liberals were inundated with requests for water rights from private individuals to dam rivers and produce electricity. For example an enthusiastic gold prospector near Taupo wanted to form a company with the capital of 500,000 pounds to harness the Huka Falls, with the objective to power batteries in the Thames gold fields.⁴ The Liberals caution slowed any early government involvement in the supply side of electricity, however this contrasted with an increased involvement in regulating the industry. This move to regulate was stimulated by several different concerns regarding hydro-electricity and private enterprise. Firstly, the Liberal Government was concerned with the

³ See Martin, *People, Politics and Power Stations*, pp.37-58.

⁴ *New Zealand Parliamentary Debates (NZPD)*, 125 (1903), p.795 (W. Russell)

impact of 'private enterprise monopolies' upon the water rights that already existed in the country.⁵ Over the thirty years prior to the State becoming interested in hydro-electricity, consecutive administrations had consolidated the water rights of New Zealand. With the advent of hydro-electricity, the issue of water rights reemerged. The Liberal's believed that hydro-electricity was going to clash with the requirements of mining and gold fields that had been prevalent during the mid-late nineteenth century.

Secondly, electricity was increasingly being used in differing ways from private telegraph lines, to linking coastal ports to inland towns, to street lighting. With such a wide range of uses, the Liberal Government felt obliged to become involved. The haphazard establishment of an electricity supply system in New Zealand was not conducive with the type of systematic national planning that the Liberals wanted. As a consequence, the government took steps to restrict the powers of the private companies and assumed responsibility for the regulation of electrical supply by means of the 1896 Motive Power Act. The Act stated that any 'generation or use of electricity for motive power required permission from central government,' and gave the government absolute power over who developed electricity and where it would be supplied.⁶ The Act also aimed to prevent 'private enterprise gaining control of any New Zealand waterway for hydro-electricity generation.' It signaled the Liberal Government's intentions of becoming more involved in the development of electricity in New Zealand and served as the first step towards a government controlled electrical system.⁷

⁵ Martin, *People, Politics and Power Stations*, p.37.

⁶ Martin, *People, Politics and Power Stations*, p.38.

⁷ Neil Rennie, *Power to the People - 100 years of Public Electricity Supply in New Zealand*, Wellington: Electricity Supply Association of New Zealand, 1989, p.229.

While there was no shortage of entrepreneurs ready to produce electricity, this new energy surprisingly took some time to develop widespread public and industry demand. This was because of the somewhat radical nature of electricity, compared to the 'tried and true,' coal and gas, traditionally used by Europeans. Conservative minded New Zealanders took some time to see the full benefits in this source of energy. Coal remained the 'premier energy source' up until 1918, fuelling industries, from 'boilers' on 'stationary engines' to 'traction engines.'⁸ With coal as a constant competitor throughout these 'early years' of hydro-electrical formation and production, electricity did not automatically become the natural energy source.

The first step towards the State developing the water powers of New Zealand was the passing of an amendment to the 1894 Public Works Act. This amendment, the 1903 Water Power Act, was passed 'decisively' and vested with the 'Crown the right to use waters for electrical purposes.' In relation to private interests the 'right could be delegated to local authorities, but not to private concerns, for public supply.'⁹ As Historian Neil Rennie suggests 'These later Acts [around 1900] were influenced by a growing understanding that the development of electricity generation and transmission technology was pointing to large hydro-electric stations and long-distance transmission to consumers as the most economical method of providing electric power.'¹⁰ In such a context the government felt obliged to be involved. This 'think big' vision, regarding hydro-electricity was spurred jointly by curiosity in New Zealand about electricity and its benefits, as well as overseas developments. According to Minister of Public Works, William Hall-

⁸ Rennie, *Power to the People*, p.19.

⁹ Rennie, *Power to the People*, p.34.

¹⁰ Rennie, *Power to the People*, p.34.

Jones, electricity was booming in the 'United States, France, Russia and other parts of Europe.'¹¹

The issue became the subject of excited debate due to the perceived unlimited potential New Zealand had with regard to dam-able rivers and lakes. This idea can be linked an 'Arcadian conception' that had been instilled in early pioneers minds regarding the plentiful nature of New Zealand's resources. From a very early date, it had been reported that New Zealand had an unlimited bounty of natural features which had the potential to be developed. Large, untouched native forests, tall mountains, which were believed to possess great mineral wealth and large rivers and lakes, were all seen as possessing potential that one day could be developed. As Miles Fairburn suggests, there was an 'Arcadian conception in New Zealand' at the time. New Zealand was seen as 'a land of natural abundance, rarely was any part of the country lacking in nature's bounty.'¹² Fairburn suggests these notions left a lasting impact on New Zealand society. They also influenced New Zealand economic development, not least in the area of energy strategy. Members of Parliament demonstrated this when commenting on the potential that existed in the lakes and rivers for hydro-electrical production. Sir William Russell believed New Zealand possessed a 'superabundance' in water power that could last 'for the next fifty or hundred years.' He suggested that the 'power now running to waste in our rivers would ... create electric power for a population probably thirty times greater than we have at the present moment.'¹³

¹¹ NZPD, 125 (1903), p.785.

¹² Miles Fairburn, *The Ideal Society and its Enemies - The Foundations of Modern New Zealand Society 1850-1900*, Auckland: Auckland University Press, 1989, p.29.

¹³ NZPD, 125 (1903), p.794.

Such optimistic thoughts were flowing strongly through parliament with the passing of the 1903 Water Act. There was, however, an element of resentment towards the 1903 Act. Not everyone in the General Assembly wanted the government vested with total control of water rights. William Massey, held strong views against the Act. He argued 'that some legislation may be necessary to regulate the control and use of waterfalls, streams and rivers for the purpose of generating electricity,' but it was 'our duty ... as representatives of the people ... to give every encouragement to the harnessing of these giants which are at present lying idle.'¹⁴ Massey was worried by the monopoly that the government had given itself. Such a monopoly, he implied, would hamper the development of the country's water-powers. Massey believed the government should encourage private enterprise to develop these resources.

While the will may have been there for the Liberal Government to start a widespread hydro-electric power construction project, due to money constraints, a lack of local expertise in hydro production and a shortfall in knowledge of New Zealand's water ways, the decision on a state programme was delayed until later that decade. As a temporary measure to curb demand, the Liberals allowed private companies to construct power plants under regulations set out in the 1903 Act.

With a general increase in attention of hydro-electric power production, the Liberal Government decided that an investigation of New Zealand's hydro-electric power potential was justified. An 'eminent American engineer' was commissioned in 1903 to come to

¹⁴ *NZPD*, 125 (1903), p.788.

New Zealand and appraise the country's water resources.¹⁵ L.M. Hancock, the Electrical Engineer and General Superintendent of the Transmission Department of the California Gas and Electrical Corporation, and Peter Hay, the Superintending Engineer of the New Zealand Public Works Department, toured the entire country and observed all the lakes, rivers and waterfalls that had the slightest potential to be harnessed and turned into hydro-electric power. The two engineers, with some helpful advice from Members of Parliament, began their investigations north of Whangarei and ended them in Southland.

The results of Hancock's preliminary report, in 1903, and Hay's substantially larger report in 1904, presented the Liberal Government with a valuable insight into the water-powers of the country. Hancock's report argued that 'the future of the whole country seemed gloriously bright.' Members of Parliament agreed. Thomas Taylor, Member for Christchurch, suggested there was 'more wealth awaiting development in connection with water power in this colony than the gold mines of New Zealand had ever given.'¹⁶ Hancock concluded his report by stating that 'your advantages are numerous - we might say unequalled, and you have a potential for a superabundance of reliable and cheap power.'¹⁷

Hay's report was of a somewhat different nature. It consisted of an in depth study of the water resources of the colony. Yet it too concluded that 'from the information available, there seems to be every reason to suppose that the gradual development of water

¹⁵ NZPD, 124 (1903), p.60.

¹⁶ NZPD, 124 (1903), p.61.

¹⁷ New Zealand Water-Powers, Preliminary Report, *AJHR*, 1904, D.7, p.13.

power would accelerate the general industrial progress of the colony by providing a supply of cheap power.¹⁸

Both reports presented what the government wanted to hear. Essentially, there was a consensus that hydro-electricity would contribute to the further advancement of the country. The two experts supported the idea that the natural resources of the colony had the potential to be harnessed and converted into cheap electricity that would ultimately springboard the country into the twentieth century. The reports recommended that the Waikato River, Lake Taupo and the lakes of the South Island were good starting points for the development of hydro-electricity, due to their accessibility, geology and relative proximity to major population bases. These reports and the 1903 Act laid the foundation on which future hydro-electric schemes were structured. They also began the process which would later lead to the Tongariro Power Development.

A Developing Energy Source?

Any forward momentum provided by the Hancock and Hay Reports was stalled by the fact that the Liberal Government was running short of money, electricity took a back seat to other priorities. Historian John Martin suggests willingness to borrow no more than '1 million pounds per annum,' this entrenched 'self reliance' policy of the Liberals saw enthusiasm for Government controlled hydro-electricity dissipate.¹⁹ A dam, such as the proposal that was eventually built at Lake Coleridge in 1914, would have cost three quarters of the Public Works Department budget in 1904. At that time a majority of the money in the Public Works Department was

¹⁸ New Zealand Water-Powers, *AJHR*, 1904, D.1A, p.36.

¹⁹ Martin, *People, Politics and Power Stations*, p.41.

designated to the railways and roading developments. It was not until 1906 with the arrival of the Ward Ministry that the 'self reliance' policy was 'loosened.' But priorities did not change immediately, most of the public works expenditure was still 'monopolised by the railways.'²⁰

The Liberal Government was clearly in a state of 'limbo' regarding hydro-electricity. The will to develop the water-powers of the country was there but the money to finance it was not. This was starkly illustrated in a 1907 statement by William Hall-Jones the Minister of Works. It explained the lack of progress on the issue and pointed out that 'all of the [hydro-electric] schemes unfortunately involve very considerable expenditure, the total of proposals running into several millions.' But, as the statement demonstrated, the desire to develop hydro-electricity was still evident. The Minister suggested that 'as soon as expenditure on the North Islands main trunk railway ceases ... it would doubtless be advantageous to take action in the matter of developing one or more of the most promising of the schemes outlined.'²¹

The Liberal Government's pre-existing priorities, such as the further development of the railways, blocked the advancement of hydro-electricity. Railway construction, provided votes for the Liberals and as a consequence received most of the attention.²²

The Liberal Government could hold off on the hydro-electric issue because demand was being met by the various private suppliers of

²⁰ Martin, *People, Politics and Power Stations*, p. 41.

²¹ Minister of Public Works Statement, *AJHR*, 1907, D.1, p.xi.

²² R.J. Noonan, *By Design - A brief history of the Public Works Department Ministry of Works 1870-1970*, Wellington: A.R. Shearer, Government Printer, 1975, p.80.

electricity. Meanwhile the Liberal Government incorporated the 1896 Motive Power Act and 1903 Water Power Act into the 1908 Public Works Act, which 'loosened' the Liberals 'control slightly' of hydro-electricity allowing 'for the generation and supply of electricity by private companies, albeit under strict conditions.'²³ The reason for this change was that the Government had 'other work to be done.' It was considered 'impossible for the State to take in hand this rather costly work now.' Demand was growing, yet the government could not satisfy it at that moment.²⁴

By the time the main trunk line was completed in August 1908 the Liberal Government was ready to begin the national development of hydro-electricity energy.²⁵ Roderick McKenzie, the Minister of Public Works in 1910, believed that the time 'had arrived to take up with vigour the question of developing our abundant water powers.'²⁶ Six sites had been examined by 1910, they ranged from Wairua Falls in Northland, to Lake Coleridge in Canterbury. Of the six examined, three had full surveys completed on them. They were Lake Coleridge, near Christchurch; the Hutt River, near Lower Hutt and the Kaituna River, which flowed between Lake Rotorua and Lake Rotoiti. For a variety of reasons, for example the volcanic geology of the Rotorua area, Lake Coleridge was the only scheme selected for development. The engineer-in-chief suggested this was 'probably the easiest' development to deal with, and argued that the project 'would be simplicity itself.'²⁷

²³ Martin, *People, Politics and Power Stations*, p.41.

²⁴ *NZPD*, 145 (1908), p.564. (W. Hall-Jones).

²⁵ Noonan, *By Design*, p.81.

²⁶ Minister of Public Works Statement, *AJHR*, 1910, D.1, p.viii.

²⁷ Hydro-Electric Power Generation, Report by Engineer-in-Chief, *AJHR* 1910, D.1, p.102.

Development of the Lake Coleridge power station commenced in 1911 and it was commissioned in 1914, the first state owned and constructed power station in New Zealand. Demand for electricity was high and as a consequence the project became a tremendous success. The power supply from Coleridge, however, soon came under pressure. The 'volume of business soon outgrew the capacity of the original 6,000 horsepower plant.'²⁸ As a result, another unit of 2,000 horsepower was installed in 1916. A Government engineer reported in 1918 suggested that Electricity demand in Christchurch had taken off so much that it was 'probable' in the near future that the 'growing demand' would require the 'installation of still another generating unit at Lake Coleridge' which would exhaust the 'capacity of the present headworks at the lake.'²⁹

With the country's first public hydro-electric power plant becoming such a success, it was clear that demand for electricity was always going to supplant the supply of electricity. Thus a major theme in New Zealand electricity production was established' it would dominate the energy debate for the next seventy years. The Tongariro Project was one of many projects which attempted to address the imbalance between supply and demand.

Hydro-electricity as the Premier Energy Source?

The success at Coleridge led to renewed confidence in hydro-electricity and the government instituted a programme of dam-building to convert the country's abundant resources of water into hydro-electricity. In 1918 the Chief Electrical Engineer of the Ministry of Works, Evan Parry, returned a report analysing the possibility of hydro-development of the North Island. Parry's report outlined the

²⁸ Public Works Statement, *AJHR*, 1918, Vol. 1, D.1, p.ix.

²⁹ Public Works Statement, *AJHR*, 1918, Vol. 1, D.1, p.ix.

potential benefits of hydro-electrical developments to New Zealand's economy, emphasising the potential contribution to town and country alike. Parry argued that it would be 'in the interest of the national economy' that 'a supply of power shall be [made] available' to 'every householder in the North Island and for any industry requiring the supply of power.'³⁰ He envisaged the introduction of electricity into agriculture reducing the amount of 'drudgery' that would be associated with farming. As a consequence this would reduce the 'most remarkable and deplorable movements' in New Zealand which was 'the drift of the country population into towns.' Parry argued that once electricity was adopted in the country the 'movement would then be in the opposite direction.' For industry, he forecast 'activity in many directions,' emphasising in particular the potential for it to be used 'for manufacturing purposes' which, he suggested, was 'of paramount importance.'³¹ Such glowing and upbeat reports encouraged the government to pursue hydro-electricity as a key component of the economic and social development of the country.

One of the first steps was to get electricity into private homes and rural areas came via the 1918 Electric Power Boards Act. Rennie suggests this was the first serious step by the government to provide 'a fundamental framework for electricity generation and distribution in New Zealand.' The 1918 Act set up 'special purpose local authorities to establish electric power distribution systems in their districts.'³² Martin suggests had the goal of providing for the

³⁰ Hydro-Electric Development, North Island Scheme, *AJHR*, 1918, Vol. 1, D.1A, p.1.

³¹ Hydro-Electric Development, North Island Scheme, *AJHR*, 1918, Vol. 1, D.1A, p.3.

³² Rennie, *Power to the People*, p.229.

'local reticulation and retail distribution of power brought from the state.'³³ In other words it presuppose state electricity production.

With the consequent advancement of electricity into smaller urban, and less accessible rural areas, a technological advancement gripped New Zealand. As Parry had promised in his 1918 Report, the agricultural sector and related industries advanced considerably with the help of electricity. Life on the farm was also made easier with advancements such as the automatic milking and shearing machines. While the domestic home life of farmers was revolutionised with the time saved from labours which were now run by electrical appliances. In towns and cities electrical technology also flourished. Electric ranges, motion pictures, heaters and the 'wireless' were just a few of the electricity related advances which consolidated the place of electricity in everyday life. Manufacturing companies began to follow suit with the availability of the compact electric motor which made the running and establishing of new businesses easier. All these advances resulted in an increase in demand, however, Rennie argues it was the electric tram and street lighting that was the 'carrot that first enticed New Zealand cities and towns into the electricity generating business.'³⁴

The combination of innovations and advances in electrical use, plus an energetic advertising campaign by the local authorities, saw a rapid rise in demand for electricity throughout New Zealand. Local authorities controlled the electricity reticulation in their allotted areas and as a consequence it was in their best interests to maximize the amount of people using electricity. Slogans such as 'HYDRO-

³³ Martin, *People, Politics and Power Stations*, p.71.

³⁴ Rennie, *Power to the People*, p.23.

ELECTRCITY is available - it is yours - USE IT!,’ and used to advertise electricity.³⁵

These advertising campaigns were designed, to an extent, to compete for customers with neighbouring authorities. This was evident in areas where geographical boundaries between supply authorities could not be settled. But the main objective was to capture new customers from the traditional power sources of coal and gas. This competition with coal and gas had been evident since the first discussions of electricity in New Zealand. As a response to coal and gas, local authorities pressed on with their aggressive advertising campaigns which offered special deals for home appliances, cheap electrical rates and free installation. The practice of ‘load building,’ which was the ‘sale of more power’ at lower marginal cost in a ‘situation of perceived surplus capacity,’ also built up demand in the 1920s.³⁶ The practice relied upon the local authorities building up a constant level of demand for electricity and also upon the ‘government’s construction of power stations’ keeping pace ‘with the escalating demand.’ By the end of the 1920s, the Government, with the aid of the local authorities had, as Martin suggests, ‘firmly established’ electricity ‘as a marketable commodity.’³⁷

Throughout the 1920s, the continued development of productive capacity made it easy for the local authorities to market electricity to the public. By 1930, five state run power stations existed. Lake Coleridge (1915), Mangahao (1924), Waikaremoana (1929) and Arapuni (1929), all in the North Island, were constructed, along with

³⁵ Martin, *People, Politics and Power Stations*, p.125.

³⁶ Martin, *People, Politics and Power Stations*, p.125.

³⁷ Martin, *People, Politics and Power Stations*, p.123.

the Horahora power station, which was purchased in 1919 from the Waihi Mining Company.³⁸ These five power stations soon struggled to meet the demand spurred along by the local authorities 'load building' and advertising campaigns. Things were not made any easier when in June 1930, as a consequence of a geological shift the Arapuni hydro-electric power station on the Waikato River was closed down.³⁹

This event saw the government's perception of hydro-electricity suddenly change. The government became concerned at the level of demand. While the government managed to cover the loss of Arapuni's power with the use of the various local authority power plants, it signaled that urgent further development was required to satisfy demand.⁴⁰

What future Electricity? The Depression, the Labour Government and the War

Other factors added to a degree of uncertainty about the place during the 1930s of electricity. The worldwide depression, a change in Government and an incorrect forecast of the expected demand for electricity prior to World War Two, meant that throughout the 1930s the juggernaut of electricity was on the 'back foot' for the first time since the Liberal period.

In 1932, as a means to deal with the depression, the government established a National Commission on Expenditure. The Commission was tasked with helping the government reassess its spending priorities. The Commission believed that the Dominion

³⁸ Dates note year when the Hydro-electric development was commissioned.

³⁹ Martin, *People, Politics and Power Stations*, p.94.

⁴⁰ Martin, *People, Politics and Power Stations*, p.95.

had 'progressed too rapidly in the matter of hydro-electric development' and suggested that its development may have had 'a detrimental effect upon the future of the coal industry and labour conditions.'⁴¹ As a result, alternative power supplies were to be commissioned with 'diesel and steam plants utilised to build up the loads for consumers.'⁴² The Commission's final opinion regarding hydro-electricity was that they were

definitely of the opinion that the present stage of development in the matter of hydro-electric power is sufficient for the needs of the Dominion for many years to come - in view of the uncertainty as to what will prove to be the cheapest form of power development in the future, any move for the commencement of further works, whether by the State or by local authorities, should be strenuously opposed.⁴³

The Government followed the commission's recommendations and in this period only completed one power station, at Waitaki in 1934.

Along with the Commission's request for a 'status quo' in hydro-electric developments, it also raised the issue of whether hydro-electricity was, as had been assumed, the cheapest form of energy available to New Zealand. The Commission questioned whether the cost of development was in fact justified. The local authorities, who were attempting to deal with the rapid growth in demand, seemed to agree with the Commission's findings. In 1936, the Electric Power Board and Supply Authorities Association suggested 'it appears that

⁴¹ Final Report of the National Expenditure Commission, *AJHR*, 1932, Vol. 1, B.4A, p.164.

⁴² Martin, *People, Politics and Power Stations*, p.125.

⁴³ Final Report of the National Expenditure Commission, *AJHR*, 1932, Vol. 1, B.4A, p.164.

the necessity for developing an entirely new [hydro-electric] scheme is remote.⁴⁴

With a lull in enthusiasm for hydro-electric development and a questioning of its competitive advantage, following the Commissions report, now hydro-electricity development stagnated. While the supply of electricity failed to grow, demand for power continued to grow steadily. Even though New Zealand experienced depression, the annual rate of increase in the demand for electricity only 'slowed to 5.3 per cent during the period 1930-33.' It then 'more than doubled to 12.0 per cent per annum up to 1940.'⁴⁵ This 'jump' in demand prior to World War Two, would see the government experience ongoing problems with hydro-electricity supply which was not seriously addressed until after the War.

Compounding this problem the newly elected Labour Government also seemed to down play the importance of hydro-electricity development. In the Labour Government's first budget spending was diverted away from hydro-electric development and directed to other works which were believed to be more 'important and urgent' at the time, including infrastructure such as roading and railways.⁴⁶ Historian John Baker argues that the Labour Government saw this 'as a means of boosting the economy and providing full time work for those previously unemployed,' as a consequence hydro-electricity was overlooked because more employment opportunities were believed to be created in 'roading and railways.' These alternative government activities were also relatively cheaper to

⁴⁴ J.V.T. Baker, *The New Zealand People at War - War Economy*, Wellington: Historical Publications, Branch of Internal Affairs, 1965, p.428.

⁴⁵ Martin, *People, Politics and Power Stations*, p.125.

⁴⁶ Noonan, *By Design*, p.136.

finance.⁴⁷ This was most important when cost cutting of control was a government priority.

While the Labour Government reduced the importance of hydro-electric development in its priority list, demand began to accelerate to a rate that caused the local authorities to panic. Winter power needs began to exceed supply in 1936, especially in the North Island. While in the South Island, demand was beginning to exceed the output from the Waitaki development leaving no other alternative to meet the demand. In the face of rapidly increasing demand, and a level of supply which was not going to expand any further until near the conclusion of the war, the country endured a sustained period of electrical shortages.

A majority of the hydro-electric developments that had been accepted in 1940, such as the scheme at Karapiro on the Waikato River, were put on hold in 1942 because of wartime pressures upon manpower and resources. Contrary to the supply situation, throughout the 1930s, local authorities continued marketing electricity. The supply authorities appealed to the government for the introduction of an 'inducement rate.' This was 'a temporarily lower rate for electricity intended to attract new customers.'⁴⁸ With such aggressive methods used to 'induce' new customers to use electricity, demand for electricity continued to rise.

The combination of aggressive advertising, the 1932 Commission's decisions, a Labour Government with alternative priorities and an inadequate assessment of the future requirements of the nation, left

⁴⁷ Baker, *The New Zealand People at War*, p.47.

⁴⁸ Martin, *People, Politics and Power Stations*, p.127.

the government with a serious problem leading into the second world war.

The transformation of the industrial and manufacturing sectors of the country to supply war materials to Great Britain further highlighted the crisis. It was clear that New Zealand was going to experience a period of significant electrical shortages. Unlike the preceding period, during the war, electricity was recognised as an important asset if New Zealand was going to meet its needs and progress. The on-again, off-again relationship of New Zealand to electricity is clearly demonstrated.

A new phase of enthusiasm for electricity began during the war, it was again at the heart of the energy development policy. While some argue electricity supply was 'sufficient at the outbreak of war,' there was clearly inadequate 'provision for expansion.'⁴⁹ This left the Labour Government with the problem of holding demand at a level that would not surpass the maximum level of supply. In an attempt to stem the use of electricity, the Government passed the 1939 Emergency Regulations Act which gave Frederick Kissel, who was appointed 'Electricity Controller' wide ranging powers to regulate the industry. He was given 'absolute control of the generation, transmission, distribution, sale and use of electricity energy throughout New Zealand.'⁵⁰

Local authorities, as well as the Government managed the shortage of power quite well up to 1942, however at that point, the 'situation became critical.'⁵¹ Blackouts and power cuts became regular

⁴⁹ Baker, *The New Zealand People at War*, p.428.

⁵⁰ Martin, *People, Politics and Power Stations*, p.128.

⁵¹ Martin, *People, Politics and Power Stations*, p.128.

occurrences as the electricity supply throughout the country came under severe pressure. As a consequence further regulations were passed to ration the supply of electricity. The 1942 Electricity Control Order 'forbade the use of electric radiators and space heaters during peak hours,' as well as introducing extreme measures such as the introduction of day light savings through winter.⁵²

Restrictions and blackouts continued after the war. While the level of demand continued to grow the supply staggered along behind it, increasing the pressure on the government to act. In response, the State Hydro-electric Department, was established by the 1945 Electricity Act. This Act transformed the Hydro-electric Branch of the Public Works Department into a 'separate department of state.'⁵³ The Hydro-Department proceeded to form plans to develop the 'water-powers' of the North Island to satisfy the demand.⁵⁴

At the top of the list of potential developments was the Waikato River, which had the largest catchment in the North Island and a natural storage reservoir in Lake Taupo. The river possessed the 'highest flow in the North Island, and the most stable flow of any of New Zealand's major rivers.'⁵⁵ The proposed Waikato River project was planned to have a minimum of eight hydro-electric stations utilising several suitable sites. The project was supposed to take New Zealand out of power shortages and blackouts and into a

⁵² Martin, *People, Politics and Power Stations*, p.128.

⁵³ State Hydro-Electric Department Statement, *AJHR*, 1946, D.4, p.1.

⁵⁴ The State Hydro-Electric Department was given the responsibility to administer and control State Supply of Electrical Energy Act 1917; Electric Power Boards Act 1925; Electrical Wiremans Registration Act 1925; sections of the Public Works Act dealing with water power and erection of electric lines and sections of such other Acts as deal with the supply and use of electricity. State Hydro-Electric Department Statement, *AJHR*, 1946, D.4, p.1.

⁵⁵ Martin, *People, Politics and Power Stations*, p.145.

period where such things were but a memory. The systematic development of the Waikato River cemented hydro-electricity as New Zealand's premier method of power production. Thus ending an era of uncertainty, and an 'on-again, off-again' relationship between the government and hydro-electricity.

During the 1950s, when several of the Waikato stations were nearing completion, it was acknowledged that with the Waikato Development completed the development of the North Island's water resources needed to continue if demand was to be met. This view widely held in central government, was reinforced by the Power and Finance Utilisation Committee which was formed by the local supply authorities in 1953. Its objective was to estimate future demand, and it argued that in the five years to 1958 'there would be an overall increase of 9.8 per cent.'⁵⁶ The 'Tongariro Power Development Project' was one several solutions explored by the State Hydro-electric department at this stage, other options included the establishment of thermal electrical generation.

While the development of the Waikato River was progressing, public disapproval of the treatment of the natural scenic wonders of the North Island, was voiced. There had been for sometime an underlying concern at the development of the country's water resources and other aspects of conservation. From the late 1950s the notion of unlimited potential for hydro development was questioned, not only on the grounds of cost, but also due to its impact on the environment. The 1950s saw the consolidation of hydro electricity as the solution to New Zealand's 'energy crisis,' yet it was increasingly confronted with a conservation lobby. The

⁵⁶ Martin, *People, Politics and Power Stations*, p.134.

development of this challenge to the notion of unlimited resources is the subject of the following chapter.

Chapter Two

The Rise of Conservation in New Zealand

The advocates of the Tongariro Power Development, and hydro-electric power generation more generally, believed in the unlimited potential of New Zealand's natural resources. While such views were widely shared by the public, there had also been dissenting voices for many years. This chapter will outline the emergence of a fledgling conservation perspective from the establishment of the Tongariro National Park in 1887 to the formation of the Nature Conservation Council in 1962.

What is Conservation?

Conservation is a dynamic concept, of which, several notions developed from the late nineteenth century. Soil conservation, forest conservation, and the topic of this chapter, nature conservation, all became established in different capacities. While these specific perspectives, or emphases emerged overtime, a general definition of conservation was more difficult to ascertain. Dr. John Salmon, Senior Lecturer of Biology at Victoria University, attempted to define conservation in his 1960 publication, *Heritage Destroyed*. According to Salmon, conservation meant the 'wise use of natural resources.'¹ He classified natural resources into two categories. The first being non-renewable resources, such as soil, oil and coal. The second being renewable resources such as forests, plant cover and animal life. Salmon pointed out that the basic objective of 'wise use' of resources was difficult to achieve at the time he was writing due to the fact that the government had try

¹ Salmon, *Heritage Destroyed*, 1960, p.13.

to seek a balance between full exploitation, and conservation. Salmon was no neutral observer, he stood up publicly for conservation. In particular, he urged the establishment of a properly constituted conservation authority to advise government on the conservation dimension of development. This goal was achieved in 1962 with the establishment of the Nature Conservation Council, which played a role in the debate over the Tongariro Development.²

Pioneers of Conservation

According to Salmon, 'Conservationist's' were people wanting a 'balance of nature, both biologically and physically, while at the same time permitting utilisation ... for economic advancement.'³ 'Conservationists' such as Salmon, did not just appear in the 1950s when hydro-electric developments threatened the environment, they had been actively working for over a hundred years. Three of the most prominent which were, Thomas Potts, Walter Buller and Perrine Moncrieff.

Potts has been described by his biographer as one of 'New Zealand's earliest conservationist.'⁴ He held several different public positions from the 1850s through to the 1870s, and used these to 'advance the cause of conservation,' in particular the condition and protection of the forests.⁵ Walter Buller had a somewhat different notion of conservation. He believed along with many of his contemporaries, that 'native plants, birds and people of New Zealand would inevitably be displaced by the more vigorous

² Salmon, *Heritage Destroyed*, pp.13-14.

³ Salmon, *Heritage Destroyed*, p.15.

⁴ P. Star, 'Thomas Henry Potts', in *The Dictionary of New Zealand Biography 1870-1900, Vol.2*, Wellington: Bridget Williams Books and the Department of Internal Affairs, 1993, p.396.

⁵ Star, 'Thomas Henry Potts', p.397.

European immigrants.' Although he backed the protection of native birds and the creation of sanctuaries, he continued to capture specimens of New Zealand's 'rarer birds for his own and other collections.'⁶ Perrine Moncrieff arrived in New Zealand in 1921, and was part of a 'second wave' of conservation. Her biographer Robin Hodge suggests she possessed an 'ecological attitude to and love of nature' and a 'wish to preserve the past for the future.' She published several influential papers, on the 'diminishing habitat of New Zealand native birds,' and herself campaigned directly to save native bush and bird species.⁷ The life and work of conservationists such as these, demonstrate that the issue had been alive in New Zealand for sometime. The roots of the contemporary conservation movement lie in the nineteenth century rather than in the 1960.

Reluctant Acknowledgement

While a tiny minority strived to preserve the natural environment of country the majority, including the state, were attempting to harness its potential for development. As projects proceeded and resources were used various issues of conservation emerged which troubled developers and conservationists alike. The first, soil conservation, emerged during the nineteenth century as a result of the damage that was occurring on the farmlands of New Zealand. Soil Conservation became prominent during the late nineteenth century when large areas of hill country throughout the country began to lose valuable topsoil due to erosion, a process attributed to the clear-felling of forests for farmland. During this pioneering period,

⁶ R. Galbreath, 'Walter Lawry Buller', in *The Dictionary of New Zealand Biography*, Vol. 1 1769-1869, Wellington: Allen and Unwin New Zealand Limited and the Department of Internal Affairs, 1990, p.54.

⁷ R. Hodge, 'Perrine Moncrieff', in *The Dictionary of New Zealand Biography*, Vol. 4 1921-1940, Auckland: Auckland University Press with Bridget William Books and the Department of Internal Affairs, 1998, p.353.

land was the most important aspect of economic life. With erosion threatening the economic future of the country, forest conservation soon became intertwined with soil conservation in debates about resource usage.

Forest Conservation was for a time unpopular amongst both farmers and parliamentarians, the protection of forests was seen as an impediment to the development of the country. This was reflected for example in Julius Vogel's faltering attempt to pass a Forest Bill in 1874. The proposed legislation attempted to protect the forest lands that remained throughout the country. As the bill proceeded through a series of readings in the General Assembly, the conservation measures of the bill were removed due to the 'strong opposition by provincial representatives' who according to Hackett had 'a vested interest in forest removal in order to attract and build up their immigrant populations.'⁸

This mentality had earlier be present when in 1867 a Select Committee of the Otago Provincial Council recommended the 'public reservation of surviving forest lands to prevent further wilful waste.' However the Committee's recommendations were not followed because native forests were believed by the majority to be 'a great obstacle to the settlement of the country.' Landowners, it was argued, 'should be permitted to destroy it without being interfered with by unnecessary legislation.'⁹

Conceptions of development during this period which were based on a flow of immigrants to settle on farmland, served to justify such

⁸ J. Halkett, *The Native Forests of New Zealand*, Upper Hutt: GP Publications Ltd, 1991, p.90.

⁹ Craig Potten, *Tongariro - A Sacred Gift*, Nelson: Craig Potten Publishing, 1987, p.130.

opinions. While forest conservation did not receive universal approval, soil conservation did, as its economic benefit was more immediately apparent. While campaigning for the 1874 Forest Bill, Vogel argued that soil conservation was an essential part of 'the long term economy of the country' and that its management was of the utmost importance.¹⁰

This greater acceptance of soil conservation became evident over the following century when a series of acts were passed dealing with the conservation of soil. Among the most significant was the Soil Conservation and River Control Act of 1941. This Act was the first that dealt specifically with the connection between soil and water. Michael Roche suggests the act 'represented a fusion' of 'long standing concerns about river control and flood protection.'¹¹ It had three basic objectives, 'the promotion of soil conservation; the prevention and mitigation of soil erosion and the prevention of damage by flooding.'¹² Soil conservation was promoted because of the potential effect on the economy of New Zealand, it represented the Government's attempt to protect the backbone of the economy.

The final notion of conservation that developed in New Zealand during this early period was 'nature conservation.' This version of conservation had a more holistic conception and was more in tune with the current usage of the term conservation.¹³ By the late nineteenth century New Zealand had no national concept of nature

¹⁰ M. Roche, *Land and Water - Water and Soil Conservation and Central Government in New Zealand 1941-1988*, Wellington: Historical Branch - Department of Internal Affairs, 1994, p.31.

¹¹ Roche, *Land and Water*, p.31.

¹² Roche, *Land and Water*, p.46.

¹³ *New Zealand Statutes*, 1962, p.208, define Nature Conservation as 'the preservation of the native flora and fauna and the natural features and natural beauty of New Zealand.'

conservation, however, specific sites throughout the colony had been identified as being of significance. In 1885 Mt Cook was made a recreational reserve that was 'intended to conserve for all time a place whose beauties would not be easy to exaggerate' and which would 'undoubtedly become one of the attractions of the globe.'¹⁴ This initial step was accelerated with the gift on 23 September 1887 of the three volcanic peaks of the central volcanic plateau of the North Island. The gift led the government into nature conservation with the establishment of the Tongariro National Park.¹⁵ Ngati Tuwharetoa paramount chief, Te Heuheu Tukino IV, gifted the mountains to the people of New Zealand with the hope 'that their tapu might be protected for all time.'¹⁶ New Zealand became only the fourth country in the world to establish a National Park, behind the United States, Australia and Canada. New Zealand had made a major step on the world stage of conservation, albeit somewhat reluctantly.

The Government, although happy to acquire such a unique scenic area, did not appear overly eager to continue establishing more recreational reserves. While having areas conserved because of their beauty would have been nice, development was considered far more important, there was also no political mileage to be gained from supporting conservation. The idea of nature conservation did not endure in the forefront of the government thinking.

With the early development of hydro-electricity in New Zealand little consideration was given to the natural environment on which

¹⁴ John H. Baker, Local Commissioner for Crown Lands, quoted in Potten, *Tongariro*, p.132.

¹⁵ The three peaks are Mt Ruapehu, Mt Ngauruhoe and Mt Tongariro.

¹⁶ Potten, *Tongariro*, p.130.

schemes depended. In the major reports commissioned by the Liberal Government, no mention was made of the impact that hydro-electric development would have on the waterways subject to damming. An acknowledgement that the Aratiatia Rapids were the 'most beautiful and most valuable power location on the river' was the nearest mention of the scenic values.¹⁷ The only evidence that there was some concern with the environment was the potential effect that the Aratiatia hydro-electric lake would have on the geyser fields that were in the proximity of the project. Ironically, the Aratiatia Rapids would later become one of the first conservation issues nationally debated in New Zealand.

Economic Development and Nature Conservation

Prior to 1959, successive governments had little direct role in the issue of nature conservation in New Zealand; although economically important aspects of conservation did receive attention. Notable individuals and acclimatisation societies were left to advocate nature conservation, although they were largely powerless to stop developments. In late 1959, however the two issues of Conservation and Economic Development came into direct confrontation.

New Zealand was developing quickly which put great pressure on the economic infrastructure. As a consequence, there was seemingly little time or incentive for the government to consider nature conservation. It was considered uneconomic for the government to conserve all water ways when they could be utilised productively. Meeting the demand for electricity was a higher priority for the government than nature conservation. This was a classic

¹⁷ New Zealand Water Powers Report, Ministry of Works, *AJHR*, 1904, D.7, p.10.

clash of values between the need to develop and the need to conserve. As Neville Peat points out the term conservation was little used at the time, and was 'associated with a narrow, non-progressive outlook,' hostile to the development of the country.¹⁸ Conservation minded people were not considered to be working for the country, to oppose development was to oppose crucial national objectives. However the issues of hydro-development and conservation became inextricably linked in the late 1950s.

Public discussion and debate on the issue began in June 1958 with the revelation that the Electricity Department planned to construct hydro-electric power stations on two sites of outstanding natural beauty the Aratiatia Rapids and Lake Manapouri. The announcement brought the issue of development and nature conservation starkly to the fore, both waterways would be considerably altered proposed developments. The proposal suggested Lake Manapouri's level would be raised by as much as 30 metres, flooding shorelines and the native beech forests of the area.¹⁹ While the Aratiatia Rapids original course was to be used as 'a spillway from the power station' with the consequence 'that from time to time the spectacle [of the rapids] would be turned on and off.'²⁰ The proposed developments were seized upon by a number of concerned groups and individuals and turned into a nationwide issue.

The New Zealand Travel and Holidays Association (NZTHA), which was an advisory board to the government's Tourist and Publicity

¹⁸ Neville Peat, *Manapouri Saved! New Zealand's First Great Conservation Success Story*, Dunedin: Longacre Press, 1994, p.2.

¹⁹ Peat, *Manapouri Saved!*, p. 3.

²⁰ *New Zealand Herald*, 9 Sept 1959, TO 1, 47/62/2, Conservation of Scenery News Clippings, NA.

Department, was the first group to publicly oppose the hydro-electric developments at Aratiatia and Manapouri.²¹ An address by Dr John Salmon at a NZTHA Convention in Christchurch, in June 1958, alerted members of the Association to the potential damage from the schemes. Salmon's address, according to Mr J. Newman, the Associations president, 'provided the spark which set alight dormant public thinking on this problem of the destruction of some of our valuable scenic resources.'²² As a result, the Association began to publicly question the impact of certain government activities on the natural environment. The questioning intensified with the approval in September 1959 of the Aratiatia project.²³ As a result of the Aratiatia announcement, the NZTHA immediately voiced its opposition and organised a deputation to discuss the development with the Labour Government. The deputation consisted of Dr Salmon, Mr Newman; Mr J.L. Chapman, the Associations executive member and Mr N.E. Lobb, the Associations chief executive. They met with Prime Minister, Walter Nash, to discuss the issue and put forward three principal suggestions.

Firstly, that the Government establish an authority, that had 'representation from Government and non-Government sources,' which 'would advise the Government on all works likely to impinge in any way on the scenic reserves, soil conservation, national parks and wildlife.' The authority would ideally be 'based on the best features of England's Nature Conservancy Act and America's National Park Act.' England's Conservancy was established by Royal Charter on 23 March 1949 with the function 'to provide scientific advice on the conservation and control of the natural flora

²¹ NZPD, 335 (1963), p.3 (Sir B. Fergusson).

²² Salmon, *Heritage Destroyed*, p.42.

²³ Salmon, *Heritage Destroyed*, p.42.

and fauna of Great Britain; to establish, maintain and manage nature reserves in Great Britain, including the maintenance of physical features of scientific interest; and to organise and develop the research and scientific services related thereto.²⁴ It was envisaged that the New Zealand authority, if established, would be based upon such functions.

The second suggestion was that as a first step towards establishing this authority, the Government should hold a 'conference of interested parties to discuss all points of view,' while in the 'meantime work on the Aratiatia power scheme should be stopped.' The deputation was keen for 'all available Government resources to be directed towards the development of alternative power projects' that were unlikely to 'interfere with major scenic assets.'

The third point was to highlight the mistakes that past governments had made in relation to damage to the natural environment. Examples of such mistakes, they argued, were Lake Waikaremoana where the lake became 'surrounded by a 50 feet belt of mud, rotting trees and weeds as a result of a lowering of the lake level ... despite assurances that it would not happen.' Also at Lake Monowai in Southland which they argued was 'the first of our bush surrounded lakes to be desecrated by hydro-electric development.'²⁵

As a result of this forceful deputation, Nash conceded that 'although the Government feels its first consideration must be the power and industrial needs of the country, it is anxious to avoid any damage to

²⁴ Salmon, *Heritage Destroyed*, p.33.

²⁵ *Auckland Star*, 9 Sept 1959, p.8, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

natural scenery.²⁶ As a consequence the Labour Government decided to call a conference of interested parties, including government departments, to discuss the conservation of scenic resources and the prevention of damage by hydro-electric and industrial development the Labour Government.²⁷

Nash pointed out that 'we are blessed in New Zealand with some of the loveliest natural scenery in the world' and hoped 'the proposed conference will assist us to find ways of retaining it for the benefit of our own people and for our visitors from overseas.'²⁸ However, as the *New Zealand Herald* noted, the 'calling of the conference' was 'no guarantee that the Government will not proceed with the violation of such superb natural spectacles.' The *Herald* cautioned that it was a 'favourite gambit of those in authority to make a token gesture toward their opponents, talk their heads off and then proceed with their original plans.'²⁹

Prior to 1959 no event such as the proposed gathering had occurred. Considerable attention was centred upon the event. There was a significant public debate between Ministers of the Crown and concerned groups. Hugh Watt, the Minister of Works, was reported as saying that 'there is just no alternative' to the development at Aratiatia, Otherwise there will be power blackouts in

²⁶ *Auckland Star*, 12 Sept 1959, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

²⁷ *Auckland Star*, 12 Sept 1959, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

²⁸ *Auckland Star*, 12 Sept 1959, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

²⁹ *New Zealand Herald*, 12 Sept 1959, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

the North Island from 1964 to 1966.³⁰ Watt also used the image of the public 'sitting at home on a winter's night shivering with a cold tea waiting, knowing, that there is water running down the Aratiatia Rapids.'³¹ Would the public prefer such a scenario, he asked repeatedly.

The *Auckland Star* reported that the proposed conference was 'aimed primarily at removing misconceptions about the fate of the Aratiatia Rapids' and government sources suggested 'the plan to build a power station will enhance the attractions of the rapids by improving subsidiary amenities.'³² The National Party opposition stated that it was 'nonsense to say that the rapids would not be affected by the Aratiatia station.' Alfred Allen, National M.P for Franklin, suggested that the 'construction of the Aratiatia power station could have been avoided had there been more enthusiasm shown for the Cook Strait Cable and had Korokoro [power station] been linked with the North Island scheme.'³³

The Auckland Branch of the NZTHA also had plenty to say. A meeting was held in early November 1959, just before the conference started. Dr Salmon, addressed the meeting arguing that 'there was no national policy on conservation' and that 'seven departments meddled with scenery under fifteen Acts of Parliament.' He concluded his address by 'criticising the loopholes in the Acts allowing the use of scenic reserves on the decision of a

³⁰ *Auckland Star*, 16 Sept 1959, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

³¹ *New Zealand Herald*, 25 Sept 1959, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

³² *Auckland Star*, 16 Sept 1959, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

³³ *Auckland Star*, 16 Sept 1959, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

minister' and suggested that the government 'obtain a packaged atomic power unit' from England. The meeting concluded by passing a resolution deploring the action of the Electricity Department in endangering scenic assets.' They 'considered Aratiatia was more valuable as a scenic attraction than as a power station.'³⁴ The Conference, commenced in Wellington on 24 November 1959, and was attended by a large number of concerned parties, representation of government departments and public interest groups. The Minister of Works, Hugh Watt, chaired the gathering and was assisted by the Minister in Charge of Tourist and Health Resorts, Mr John Mathison.³⁵

A wide array of opinions and suggestions came out of the conference. The *Auckland Star* reported that the government had decided to 'establish a committee' which would consist of 'representatives of the National Parks Authority, the Ministry of Works and Electricity Department' which would have the objective of preserving scenery at development projects. It was believed that the government would, out of necessity, 'retain the final responsibility for decisions about projects.' The same report claimed that Dr R.A. Falla, of the Royal Society, considered 'a conference of this kind ... relatively futile, and rather too late in the day' to save anything.³⁶

Dr John Salmon, who described the events of the 1959 conference in his 1960 publication took a different view. He believed, that the

³⁴ *New Zealand Herald*, 13 Nov 1959, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

³⁵ *Auckland Star*, 12 Sept 1959, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

³⁶ *Auckland Star*, 24 Nov 1959, TO 1, 47/62/2, Conservation of Scenery news clippings, NA.

'entire proceedings degenerated into a form of gigantic deputation in which the various organisations present were allowed to put forward their submissions.'³⁷ According to Salmon, the Conference was informed, by the Chairman and Hugh Watt, 'that nothing the conference said or did would be allowed to stand between the Government and its plans' and that any attempt to bring forward the question of Aratiatia for proper discussion was circumvented. Any attempt to discuss the Manapouri scheme 'was ruled out of order.' The whole affair was, Salmon's opinion, a 'carefully engineered sop to an outraged public opinion.'³⁸

The ultimate outcome of the Conference was that the Labour Government promised to establish a Nature Conservancy in New Zealand.³⁹ Mr Newman, in concluding the Conference, announced that the

Conference approves in principle the setting up of a nature conservancy in New Zealand and requests Government to take such legislative steps as are necessary to this end without delay. This conservancy to be responsible to Parliament and to have statutory powers sufficient to enable it to implement a conservation policy aimed at the protection and preservation of New Zealand scenery, wildlife, natural and historic monuments.⁴⁰

While the government committed itself to the establishment of a Nature Conservancy in New Zealand, it did not reverse the decision to construct the development at the Aratiatia Rapids.

³⁷ Salmon, *Heritage Destroyed*, p.40.

³⁸ Salmon, *Heritage Destroyed*, p.41.

³⁹ Salmon, *Heritage Destroyed*, p.41.

⁴⁰ Salmon, *Heritage Destroyed*, p.45.

Before the policy could be implemented by the government the National Party defeated the Labour Government in the 1960 election. This led to fears that the outcome of the 1959 conference would be overlooked by the new administration. The National Party, however, had included in its 1960 election manifesto a section on Nature Conservation. It stated that they considered the natural scenic attractions of New Zealand 'a priceless heritage' and recognised its importance to everyone. The new National Government would give due attention to the 'scenic areas of New Zealand, and give full weight to their value when assessing proposals to change scenic areas in the course of economic progress.' National also proposed to establish 'a widely representative nature conservation council' which would 'advise the Government on the preservation of scenic areas.' The Party promised to 'initiate a study of [its] long term plans for national projects with a view to determining their possible effect on New Zealand's scenic attractions and the problems connected with their preservation while allowing for the country's natural expansion.'⁴¹ Prior to the 1959 conservation conference, the National Party had no nature conservation policy, their policy was a direct reaction to the Labour Party holding the conference and exposing the degree of support for the notion of conservation.

Institutionalising Conservation: The 1962 Nature Conservation Act

A Nature Conservation Council was established following the passing of the 1962 Nature Conservation Act. The Act was established by the National Government because of the 'unprecedented concern' of the public at the 'projected hydro-

⁴¹ New Zealand National Party, *1960 General Election Policy*, Wellington: New Zealand National Party, 1960, p.13A.

electric scheme[s] at Manapouri' and Aratiatia.⁴² Although the Nature Conservation Act was passed into law, it did not receive universal approval. During the first reading, questions were fired at the Government by the Labour opposition, and also from within its own ranks regarding certain details of the Act.

The Bill was introduced by Minister of Lands, Richard Gerard. He presented it as a 'positive step forward in the field of conservation in New Zealand,' and argued it would provide the 'machinery for information and informed opinion to be made available to the Government on nature conservation.'⁴³ His positive perspective on the Act was supported by several other members the Government. Roy Jack, National Party Member for Patea, believed that 'in the matter of conservation' New Zealand had 'been dragging the anchor for some decades' when compared to the likes of England and the United States.⁴⁴ The Act, he believed, indicated a 'turning point'⁴⁵ in the thinking of the Government. The Nature Conservation Council would 'grow to be a great power.'⁴⁶ Herbert Pickering, National M.P for Hurunui argued that the Government did not 'want to hold up the development of the country' but was 'aware that there has in the past been too much unnecessary, hasty and wanton destruction of our bush and bird life' which resulted in the 'rapid erosion of a great national heritage.'⁴⁷ The need was for the Government to 'take care of the future.'⁴⁸

⁴² Nature Conservation Council, *The Nature Conservation Council 1962-75*, Wellington: Nature Conservation Council, 1975, p.8.

⁴³ NZPD, 331 (1962), p. 1168.

⁴⁴ NZPD, 331 (1962), p.1163.

⁴⁵ NZPD, 331 (1962), p.1160.

⁴⁶ NZPD, 331 (1962), p.1163.

⁴⁷ NZPD, 331 (1962), p.1177.

⁴⁸ NZPD, 331 (1962), p.1175.

Opposition to the Bill revolved around three broad issues. The first highlighted the limited powers of the council. The Nature Conservation Council was to be allocated powers that 'may be reasonably necessary or expedient to enable it to carry out its functions.'⁴⁹ This meant that the Council did not have the power to enforce its findings but purely to advise the Government on a projects impact upon the environment. Members of the Labour Party, such as Norman Kirk, felt that as a consequence of this lack of power, the Act would simply be 'window dressing.' As a result, he questioned whether the Act was indeed going to be 'an effective measure to provide for the conservation of our flora and fauna and the natural beauty of New Zealand.'⁵⁰ Kirk believed that the Act possessed a 'paucity of enforcing powers,' and as a consequence likened it to the International Court at the Hague. It could, he argued, 'comedown with huge decisions, but if the persons who offend against those decisions decide to take no notice, there is nothing in the Bill giving the council power to enforce its recommendations.' In effect, the Council was going to be a 'court without a police force.'⁵¹ In reply to the criticism, Gerard stated he believed New Zealand could not have a totally independent Nature Conservation Council with absolute powers, 'because the Government ... should have the final say and responsibility.'⁵²

The second issue raised by some opponents was that established entities such as the National Parks Authority or the Soil Conservation and Rivers Control Council, could have dealt with the

⁴⁹ *New Zealand Statutes*, 1962, p.208.

⁵⁰ *NZPD*, 331 (1962), p.1168.

⁵¹ *NZPD*, 331 (1962), p.1169.

⁵² *NZPD*, 331 (1962), p.1157.

issues that the new Nature Conservation Council would deal with, thus the new Council was unnecessary.⁵³ Eruera Tirakatene, Labour Member of Parliament for Southern Maori, argued that the provisions of the Bill should instead be 'included in an amendment to the Soil Conservation and River Control Act 1952' so that this council be 'given more authority.'⁵⁴ He was supported by the opposition spokesman for the Electricity Department Hugh Watt. The Labour Member for Onehunga believed that these two organisations councils' could 'adopt the proposed functions of the Nature Conservation Council,' meaning there was no need for the new Council.⁵⁵

The third objection was that the resources of New Zealand were there to be developed and should be regardless of the effect on the environment. Watt suggested that 'Nature herself had destroyed much of New Zealand's scenic beauty' and his former department, the Electricity Department, had done 'excellent work' in 'restoring [the] beauty,' and in some cases, 'creating beauty, where beauty did not exist before its works started.'⁵⁶ He was supported by Patrick Blanchfield, Labour M.P for Westland, who argued that there was 'plenty' of 'bush scenery in other parts of New Zealand to make up for the very small amount which might be cut.' Blanchfield did admit that 'some destruction' did go on in New Zealand, but he believed 'we should weigh up the facts to see whether the overall gain for New Zealand will be greater than the overall loss.'⁵⁷

⁵³ NZPD, 331 (1962), p.1174.

⁵⁴ NZPD, 331 (1962), p.1159.

⁵⁵ NZPD, 331 (1962), p.1174.

⁵⁶ NZPD, 331 (1962), p.1173.

⁵⁷ NZPD, 331 (1962), p.1165.

Except for minor amendments to wording the National Government passed the Nature Conservation Bill establishing the Nature Conservation Council. Although there was an apparent commitment to conservation in these debates there was not support for the Aratiatia Development to be stopped. It was clear that the newly established Nature Conservation Council was going to have difficulties as a consequence of its limited powers and also the strong commitment of government to major hydro-electric developments.

The Nature Conservation Council's first meeting was held on 5 March 1963. It comprised seven to nine individuals who all had some 'specialised knowledge, scientific qualifications or interest in nature conservation.'⁵⁸ Membership included notable individuals such as Dr John Salmon, the now, well known advocate of nature conservation. Other original members included Mr John Te H. Grace, Mr J.L. Hazlett, Dr Robert Falla, Mr T.W. Preston, Mr John Seabrook and Mr H.W. Smith.

At its first meeting the Council's parameters and guidelines were established. It was decided to regard itself not as an 'agency' that just received and investigated complaints but that it would approach 'all problems of conservation' in a 'positive and constructive' manner, and 'concern itself with a policy of fact finding' and 'assessment of the need for research into particular aspects of nature conservation.'⁵⁹

⁵⁸ Nature Conservation Council, *Nature Conservation Council 1962-1975*, p.9.

⁵⁹ Report of the Nature Conservation Council, *AJHR*, 1963, H.30, p.3.

From its establishment, it was acknowledged that the task facing the Council was going to be a difficult one.⁶⁰ The Council could only do so much with the Aratiatia and Manapouri developments because both schemes were well advanced at the time it had been established. The Tongariro Development on the other hand had only just been approved, at the time the Council was established, this gave it a chance to test its powers. The Tongariro Development had several similarities to those developments that caused the first great debate between conservation and development. All three projects were hydro-electric projects and were based on areas that possessed natural scenic wonders, the Tongariro Power Development Project was based, rather ironically, upon an area where the first nature conservation step was taken by the Government in 1887, with the establishment of the Tongariro National Park. The subsequent Tongariro Development debate demonstrated that the idea of conservation was still relatively weak when compared to the imperative of development.

⁶⁰ Report of the Nature Conservation Council, *AJHR*, 1963, H.30, p.4.

Chapter Three

The Nature of the Tongariro Power Development Project

The Tongariro Power Development Project was planned and constructed during a period of transition, a period when the conflicting objectives of development and conservation met head on for the first time. From 1955, the year the first steps were made to develop the Tongariro, to 1971, when the first stage of the scheme was completed, the Government was forced to debate issues in public concerning hydro-electric development. They faced an unenviable task, balancing simultaneous demand for more electricity and for the protection of the environment. It was within this context, that the Tongariro Development developed. This chapter describes the Tongariro Development and outlines why the project was chosen to follow on from the major Waikato Development.

Early Interest in the Tongariro Region 1924-1955

The government started taking a serious interest in the Tongariro region in 1955. Definitive action towards developing the waters of the Tongariro Region was started with introductory meetings and investigations of the region. However, this was not the first time that the area had been considered with a view to electricity production. The history of curiosity about the power producing potential of this area goes back to the turn of the century. L.M. Hancock, the American engineer, investigated the area in 1904. Hancock only took time to appraise Lake Rotoaira, situated at the foot of Mt Tongariro, he overlooked the possibilities that lay in the Wanganui

and Tongariro Rivers. Hancock concluded that the lake was 'worthy of some attention' but 'the distance and the limited amount of power available' would 'not seem to justify any surveys at present.' He did, however, suggest that it would be advisable to gather what information is possible and use it 'for future reference.'¹

Following on from Hancock's investigation, the Public Works Department inspected the area in 1924 when an electrical supply was needed for proposed hostel sites in the Tongariro National Park. Nothing further was made of the idea as alternative plans were made for a power supply. It was not until the 1940s that real interest occurred again. In 1941 a proposal was put forward by a local engineer to harness the Moawhango River for power production, but this proposal was rejected by Frederick Kissel, the State Hydro-electric Department manager. Who did however suggest that 'a record of its flow might be useful in the future.' Martin argues that Kissel did not accept the proposal 'probably because of opposition from local people.' While he did recommend a 'comprehensive study' of the proposed development, he had no staff available to complete it.²

Although Kissel refused to accept the proposals on the Tongariro region, ideas continued to be circulated regularly regarding the Tongariro watershed. In 1947, a Taumarunui engineer, became 'interested in the power potential of the area' while investigating 'low summer flows' resulting in a 'report on the possible diversion of water from the Wanganui watershed. A thorough investigation by a surveyor in the Mangakino Office was completed in 1948, and by 1952, thinking had advanced considerably. The 1948 report outlined

¹ Water Powers Report, *AJHR*, 1904, D.7, p.10.

² Martin, *People, Politics and Power Stations*, pp.220-221.

much of the information which a decade later the Ministry of Works and Electricity Department would use to formally propose the Tongariro Power Development. The project was based around the diversion of the 'entire volcanic plateau catchment above 2,000 feet' and diverting it into Lake Taupo.³

Detailed Planning and Approval

As a result of the growing interest in the Tongariro region, and the need for a major development to follow the Waikato Project, a closer study was undertaken in 1955. After a preliminary investigation of the region the Minister of Works to his colleagues that the 'Tongariro Development' appeared 'to be practical.'⁴ The government, commissioned the British engineering firm, Sir Alexander Gibb and Partners to further develop the concept. The company had experience in New Zealand, having previously worked on the Atiamuri project on the Waikato River. They were asked to investigate the possibility of 'producing more power from the existing hydro stations on the Waikato River.'⁵ This was to be achieved, according to F.M. Hanson the Commissioner of Works, by the diversion of the 'headwaters of the Wanganui, Tongariro and Moawhango Rivers into Lake Rotoaira and thence into Lake Taupo, developing power en route.'⁶ The Gibb investigations commenced in November 1955.

³ Martin, *People, Politics and Power Stations*, pp.221-223.

⁴ Minister of Works Statement, Future Power Development, 12 Sept 1955, ED 1, 1/2/0/21, Estimates of Future Requirements Dec1953 - Mar 1966, NA.

⁵ Information Division of the Ministry of Works and Development. *New Zealand's latest power story... Tongariro Power Development*, Wellington: Ministry of Work and Development, 1974, p.4.

⁶ Memorandum from Commissioner of Works to the General Manager of the State Hydro-electric Department, 30 Nov 1955, ED 1, W3214, 6/0/10/4, Part 8, NA.

The first objection to the project based on the potential environmental impact of the development appeared in December 1955. The Waimarino Acclimatisation Society sent a letter to the National Government protesting against the proposed scheme, especially the plans to 'divert the Wanganui River into Lake Rotoaira for power purposes,' because of the potential affect upon wildlife and fish.⁷ Apart from this letter, very little opposition to the Tongariro Development arose until considerably later in the planning process.

Preliminary investigations were completed by September 1957 and the development was officially authorised by an Order in Council on 29 October 1958. The initial approval authorised more in depth surveying and investigations to begin. The project was authorised under section 311 of the Public Works Act 1928 by which the Governor General 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.' The Order authorised the waters of five rivers and streams, the 'Wanganui, Tokaanu, Tongariro, Rangitikei and Wangaehu [sic] Rivers' to be developed for the generation of electrical energy. It also allowed the 'tributary lakes, rivers, and streams' of these waterways to be developed.⁸ This process was standard procedure of the Electricity Department's hydro-electric planning during this period. The Government would authorise a scheme well in advance of its construction so any potential problems, either technical or social, could be examined and dealt with.

⁷ Martin, *People, Politics and Power Stations*, pp. 223-24.

⁸ *New Zealand Gazette*, 1958, p.1463.

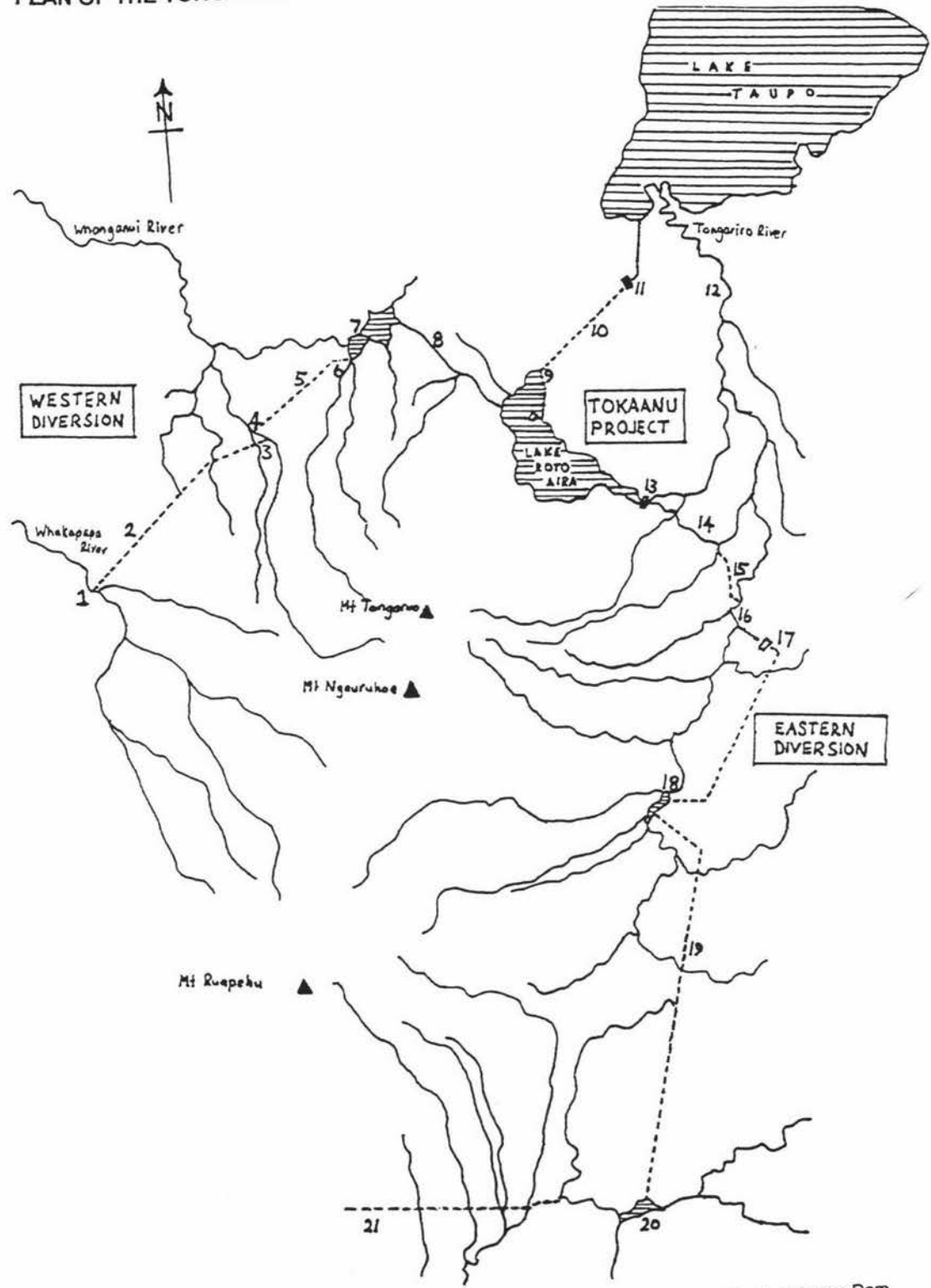
Up to the time of the Order in Council there had been no substantial problems. The Electricity Department and Ministry of Works had held informal discussions with the local tangata whenua, the Ngati Tuwharetoa, in 1955, these will be examined in the next chapter. Other parties that were also consulted from as early as 1955, include the Waikato Valley Authority and the Wanganui River Harbour Board. At this stage all that was discussed was the broad outline of the proposed scheme. The possible impact and scale of the project were to be announced later. When more detail was released these groups were among the more prominent critics of the development.

The Nature of the Tongariro Power Development

The Tongariro Development was based upon the central volcanic plateau of the North Island, south of Lake Taupo. The scheme was initiated with the objective of capturing the untapped waters of the three volcanic peaks of the area, Mt Ruapehu, Mt Ngauruhoe and Mt Tongariro, and also the nearby Kaimanawa Ranges, and divert them into Lake Taupo. The objective being to increase the water outflow down the Waikato River and increase its productive capacity. The Tongariro Project would install totally new techniques in hydro-electric production, particularly to do with the 'trapping of water' which was required for this unusual hydro-electric development. It was reported that 'instead of dams blocking the rivers,' the standard form of New Zealand hydro-developments, 'vast plug holes' would 'be formed in the river beds' of the waterways 'through which the river would pour into underground tunnels.'⁹ Water was to drop into massive grates and run through tunnels feeding a power station several miles in another direction.

⁹ *Wanganui Herald*, 11 Feb 1960, ED, 2/0/65/7, Wanganui River Harnessing 1957-1966, NA.

PLAN OF THE TONGARIRO POWER DEVELOPMENT PROJECT



KEY

- 1) Whakapapa Intake
- 2) Whakapapa to Tawhitikuri Tunnel
- 3) Okupata Intake
- 4) Tawhitikuri Intake
- 5) Tawhitikuri to Whanganui Tunnel
- 6) Te Whaiu Dam
- 7) Otamangakau Dam
- 8) Wairehu Canal
- 9) Tokaanu Intake

- 10) Tokaanu Tunnel
- 11) Tokaanu Power Station
- 12) Turangi Township
- 13) Poutu Dam
- 14) Poutu Canal
- 15) Poutu Tunnel
- 16) Poutu Intake
- 17) Rangipo Power Station
- 18) Rangipo Dam
- 19) Moawhango to Tongariro Tunnel

- 20) Moawhango Dam
- 21) Wahianoa Aqueduct

Source: New Zealand Electricity Department, Wanganui River Minimum Flows Submissions to Rangitikei-Wanganui Catchment Board, Hamilton: New Zealand Electricity Department, 1982, W/333/L/510 C Lower Wanganui Catchment Wanganui Management Plan 1977-1980, MW/

Although the idea of diverting water from one catchment to another was unusual, it was not unique in New Zealand. Other developments had a diversion component including those at Mangahao, Highbank and Manapouri.¹⁰ However nothing ever approached the scale of the proposed Tongariro Project.

The Tongariro Development was planned to be completed in four stages over a twenty-year period. The first stage, called the Western Diversion, was started in 1964 and completed in 1971. This part of the scheme saw prominent streams originating on the Western slopes of Mt Ruapehu, Ngauruhoe and Tongariro captured and diverted by way of dams, intakes and tunnels into Lake Rotoaira. The Western Diversion diverts seven mountain streams from their natural west to south-west flow and conveys them into Lake Rotoaira to power the Tokaanu Power Station.

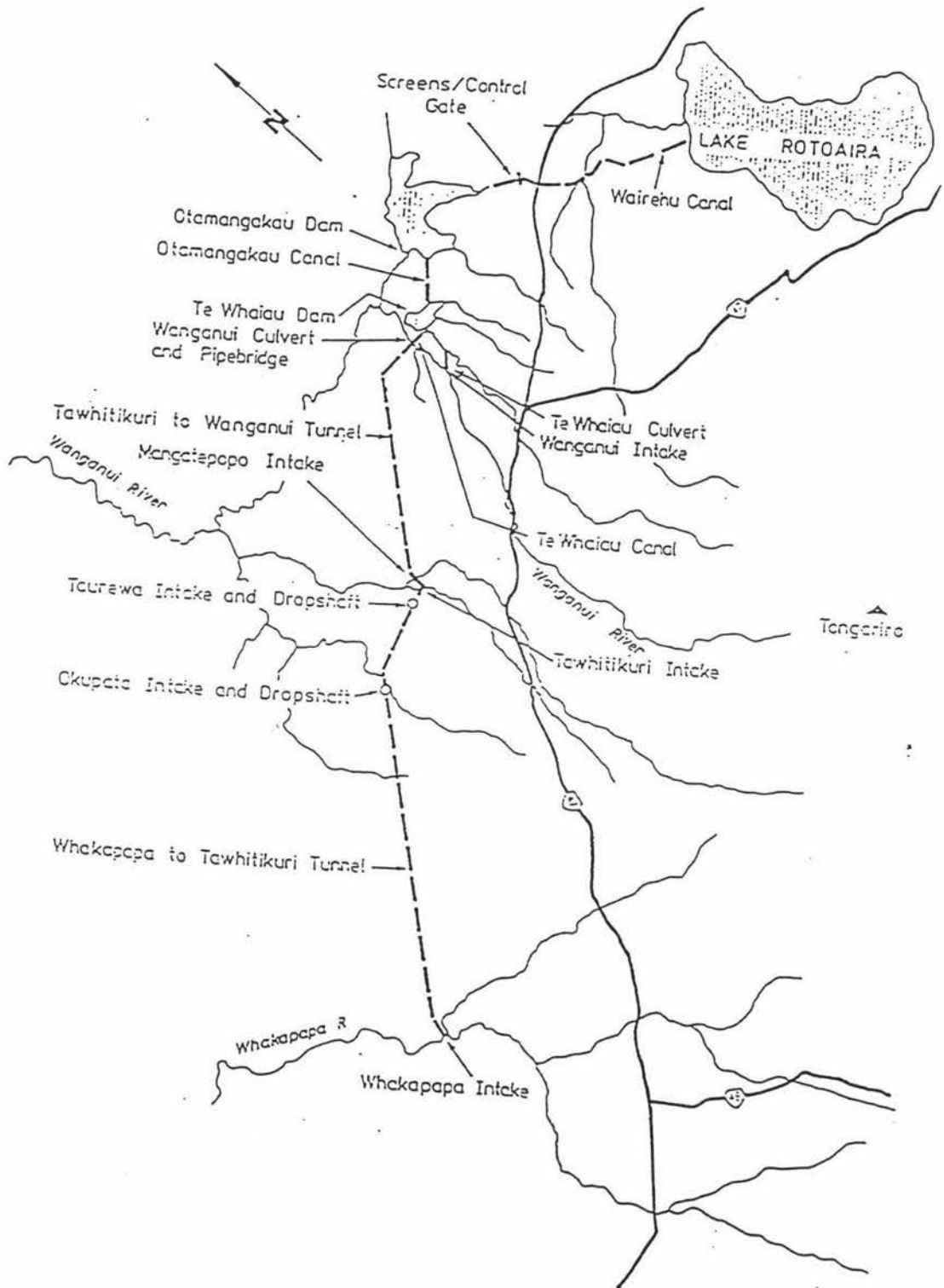
The first river diverted was the Whakapapa, it was also the largest of the diverted waterways in the diversion. The river was diverted by way of an 'intake structure built into the bed of the river,' from there the intake would 'lead water into a tunnel running some 600 feet underground,' 11km to the Tawhitikuri Stream.¹¹ The tunnel between Tawhitikuri and Whakapapa had two vertical drop shafts, like large drains, incorporated into them, to collect the waters of the Okupata and Taurewa streams, it too would then be conveyed to the Tawhitikuri stream.

The Tawhitikuri intake was significantly different when compared to the other intake structures on the Western Diversion. The

¹⁰ Background to the Tongariro, 17 Sept 1964, p.2, ED 5, W3214, 6/0/10/4, part 12, NA.

¹¹ Information Section, Government Publicity Division, *Tongariro Power Development*, Wellington: R.E. Owen, Government Printer, 1965, p.7.

PLAN OF THE WESTERN DIVERSION



Tawhitikuri stream was to be led into a culvert where it would join the other waters from the previous diversions. What makes this diversion so different is that the water already in the tunnel would run into a culvert and the Tawhitikuri led into it, making the culvert entirely independent, so that should the intake screens become blocked the main flow would not be interrupted. The diverted water would then re-enter a 5.5km tunnel which finally ended at the Wanganui proper. Once again, a vertical drop shaft collects the water of the Mangatepopo stream before it reaches the Wanganui River.¹² Once the water was diverted it was conveyed through a tunnel to Lake Te Whaiau, which was formed by the construction of an earth dam on the Te Whaiau Stream. The water would then flow through the open Otamangakau canal from Lake Te Whaiau into Lake Otamangakau, which was formed by damming the Otamangakau stream. The water finally ended its assisted journey by passing through the Wairehu Canal and flowing into Lake Rotoaira.¹³

As a consequence of the Western Diversion seven of the most prominent rivers and streams running down the western slopes of the three peaks were diverted north into Lake Rotoaira, these seven waterways collectively represented five percent of the Wanganui Rivers catchment, and contributed extensively to the regional economy of the towns downstream, especially the township of Taumarunui which had its own power station, sewage system and water supply based on the river.

¹² Information Section, *Tongariro Power Development*, p.8.

¹³ Electricity Corporation of New Zealand Limited (ECNZ), *Overview of the Tongariro Power Scheme Handout*, Tokaanu: Electricity Corporation of New Zealand, 1998, p.1.

The second stage of the Tongariro Development was the Tokaanu Project which was scheduled to be constructed between 1966 and 1973. This stage saw the construction of a 240 MW power station at Tokaanu, on the southern shores of Lake Taupo. Also part of the Tokaanu Project was the construction of the Poutu Canal and the Poutu Dam, which diverted water from the Tongariro River into Lake Rotoaira by way of the Poutu River.

The Poutu River was the natural outlet of Lake Rotoaira and would usually have flowed into the Tongariro River and ended up in Lake Taupo. Instead, the Ministry of Works dammed the outlet to the Rotoaira thus retaining the waters of the Poutu River, preventing any outflow from the lake, other than through the Tokaanu power station. The Poutu Dam, a concrete gravity dam, 43 feet high and 492 feet long,¹⁴ was used to regulate the outflow of the lake 'within the range of its natural levels.'¹⁵ The Ministry followed the construction of the Poutu dam by installing an intake in the bed of the Tongariro River with the objective of transporting the water into Lake Rotoaira which would then contribute to the power production at the Tokaanu Power Station. This was achieved by the construction of a 2.8km long Poutu tunnel and the 6km long concrete lined Poutu canal, which carried the water from the Tongariro River back into Lake Rotoaira.

The Tokaanu stage of the Tongariro scheme concentrated upon Lake Rotoaira which was used as a storage area for 'natural inflows' of the area as well as the combined inputs of the Western and Eastern Diversions.¹⁶ Once the water had reached Lake

¹⁴ Martin, *People, Politics and Power Stations*, p.222.

¹⁵ Martin, *People, Politics and Power Stations*, p.224.

¹⁶ ECNZ, *Overview*, p.1.

Rotoaira it was tunneled 6km through the saddle of Mt Tihia and into a surge chamber on the other side where it was dropped 207 metres through the penstocks and into the Tokaanu power station. Once the water passed through the Tokaanu power station it was led via a 3km tailrace into Lake Taupo. The Eastern Diversion was the third stage of the Tongariro Development and was based upon the waters of the South-eastern catchment of the Tongariro National Park and the Kaimanawa Ranges. This phase of the development was started in 1969 and completed a decade later.

The Eastern Diversion collected water from around the southern region by 'damming and diverting the flow of twenty-two small streams on the southern slopes of Mt Ruapehu' and conveying them by way of the Moawhango reservoir, and several tunnels, into the Tongariro River.¹⁷ The Moawhango reservoir was the hub of the Eastern Diversion and was created by way of a 'concrete gravity arch dam which was 325 metres long and 68 metres high.'¹⁸ The water was gathered from the prominent rivers and streams of the southern catchment and diverted north, by way of diversions and dams. For example, the Wahianoa aqueduct captured water from around the southern area of Ruapehu and diverted it, by way of a 9km long aqueduct, into the Mangiao Stream and then into the Moawhango reservoir. The major characteristic of this part of the project, and a demonstration of the lengths the power planners went to in order to harness water, was the 19km tunnel which diverted the water of the Moawhango reservoir through the Kaimanawa Ranges and into the Upper Tongariro catchment supplementing the natural waters of the Tongariro River. As a precaution, the waters of the Whangaehu River were not diverted due to its acidic nature and

¹⁷ ECNZ, *Overview*, p.1.

¹⁸ Martin, *People, Politics and Power Stations*, p.222.

the potential effect it may have upon the fish life of the Tongariro River.

The fourth and final stage of the Tongariro Development was commenced in 1974 and completed in 1983. This stage saw the construction of a 120MW underground power station on the Tongariro River at Rangipo. The Rangipo Power Station was powered by the waters of the 'Upper Tongariro River, water from the Waihohonu Stream, by way of diversion, and the discharge from the 19km Moawhango tunnel' which was pooled behind the Rangipo dam, a concrete gravity dam, 23 meters high and 150 meters long.¹⁹ The water was then conveyed through a 8km long, 4.5 meters in diameter, concrete lined head race tunnel and into the underground power station which was 240 meters below the surface, utilising the head between the two for power production.²⁰ Once the water has been through the power station, via two turbines of 60MW each, it was discharged through a 3 km tailrace tunnel and back into the Tongariro River at Begg's Pool, which is situated immediately above the Poutu Intake.²¹ The water then combines with the flow of the Tongariro River and is consequently diverted via intake into Lake Rotoaira. Today a regulated flow is kept in the Tongariro River to maintain the rivers reputation as a world class fishing area. This was to become one of the most important issues of dispute as the Tongariro project became more publicly known in the 1960s.

¹⁹ ECNZ, *Overview*, p.1.

²⁰ Martin, *People, Politics and Power Stations*, p.222.

²¹ ECNZ, *Overview*, p.1.

Why the Tongariro Power Development?

The Tongariro Development was adopted by the government for a variety of reasons. There was of course the need for electricity to support the growing New Zealand economy but there were also several other reasons the Ministry of Works and Electricity Department to adopted the Tongariro Development.

The first was that the Tongariro Region possessed several natural advantages which saw this project preferred to other alternatives in the North Island. The region was the starting point for several of the major rivers of the North Island, including the Waikato, Whangaehu, Tongariro and Whanganui Rivers, which begin their descent to the sea from the slopes of the three volcanoes of the Tongariro National park. The river system is based on very high annual rainfalls, as a consequence the rivers and streams around the volcanoes have high cusec flows, which means a lot of water running at a fast rate. The region also possessed suitable sites for dams and despite the volcanic nature of the region, conditions that were adequate for the tunneling, canals and diversion structures that were part of the development.

Another natural advantage was that the Tongariro region possessed was its close proximity to Lake Taupo and the Waikato River. With this location, the Tongariro Development would add considerably to the productive capacity of the power stations on the Waikato River, in effect increasing the economic value of the Tongariro Development. This prospect was seized upon by the Electricity Department and Ministry of Works. A 1955 statement by the Minister of Works explained the idea. 'Such a diversion' would not 'only make possible a development of the order of 200,000 Kwh in the Upper Waikato' but would also allow 'the additional water'

diverted to 'generate extra units [of electricity] in all the lower Waikato stations' which could equate to another 'large generating station.'²² It was estimated by the Ministry of Works, that by collecting the headwaters from these catchments and diverting it into Lake Taupo, and increasing the lake's level, it would increase the outflow of water down the Waikato River by twenty-five per cent. Therefore, the Tongariro Development would work as an auxiliary scheme to the eight Waikato River power stations and provide extra water down the river, increasing their annual electricity production by some 16 per cent, as well as contributing to the electrical capacity of the North Island with two 300,000 Kwh power stations, which were to be situated at Tokaanu and Rangipo.²³ This made the Tongariro Power Development Project all the more valuable for the Electricity Department to proceed with.

This view was further demonstrated in a 1958 Progress Report from the Commissioner of Works, Frederick Hanson. According to Hanson, the proposed power project could be divided into 'two main classifications.' The first being the diversion schemes which brought more water into Lake Taupo and as a consequence produced more power down the Waikato River. The second were the power stations which were situated between points of diversion and Lake Taupo. Hanson emphasised that the 'economics of all schemes show improvement with the increase in quantity of water diverted.' This meant that the 'maximum quantity of water should be intercepted and utilised.' It was believed for each 'cusec of water

²² Minister Of Works Statement, Future Power Development, 12 Oct 1955, ED1, 1/2/0/21, Dec 1953-Mar 1966, NA.

²³ Information Division, *New Zealand's latest power story*, p.4.

diverted into Lake Taupo an additional 600,000 Kwh per annum of extra power may be developed from the Waikato.²⁴

As the discussion above indicates, a second reason for the Tongariro Development was that it was the most economically beneficial hydro-electric alternative available in the North Island. Other sites were either fully committed already, not yet thoroughly investigated or considered too expensive.²⁵ Sometimes technical difficulties interfered, for example, a hydro-electric development planned on the Whanganui River could have been constructed instead of the Tongariro Development but was 'recalled' because the 'original site chosen for the development proved unsatisfactory.'²⁶

Another factor which made the Tongariro Development so appealing was that the construction of the project was divided into four stages so could be built in 'progressive steps.'²⁷ This meant total labour costs would be lower at any one time and as a consequence, smaller overheads would result. The project appealed to the Labour Government who had just won the election of 1957. Any development which was relatively cheap and produced electricity in quantity was seriously considered at the time. With hydro-electric construction not conducive to the urgency with which new power production was required, natural gas, geothermal and even nuclear alternatives were being discussed as a way to build the capacity of the North Islands power supply.²⁸ As a

²⁴ Progress Report, Commissioner of Works to Minister of Works, 7 July 1958, p.1. ED, W3214, 6/0/10/4, part 9, NA.

²⁵ Martin, *People, Politics and Power Stations*, p.235.

²⁶ Background to the Tongariro Development, 17 Sept 1964, ED5, W3214, 6/0/10/4, part 12, NA.

²⁷ Martin, *People, Politics and Power Stations*, p.224.

²⁸ The average length of time it takes to construct a Hydro-electric power station was five to seven years.

consequence, geothermal electricity production was started at Meremere in 1958. The Meremere power station was the first step to a series of power stations which were not of the conventional 'hydro-electric' type, although hydro-electricity continued to be the preferred method of power production in New Zealand.

The Tongariro Development was ultimately constructed because of the constantly increasing demand for electricity in New Zealand. At the time, the 'demand for electricity was increasing at a rate faster than the generation facilities could be built.'²⁹ Its advocates suggested that the Tongariro Development would save the North Island from the power restrictions and blackouts which had been experienced throughout the 1940s. The Tongariro Development was seen as a necessary follow on from the Waikato Development. The Waikato and geothermal developments could only satisfy the demand for so long.

Technical Concerns of the Tongariro Development

While the Tongariro Development would become controversial for its environmental impact, there were other concerns early in the development. Several people expressed technical concerns about the project. The first concern was linked to the geological conditions of the area. Such conditions had never before been encountered in a New Zealand hydro-electric project. The 38 degree temperatures in the tunnels, fractured rock and general geothermal activity around work sites made work difficult and land unstable which could have threatened the lives of the men. Secondly, the broader issue of erosion and soil stability was a problem because of the impact of heavy machinery. With unstable hillsides, potential disasters could

²⁹ Postal Interview, ECNZ Civil Engineer, Mr. I Patience, 7 Sept 1998.

occur.³⁰ As a result, civil engineers and landscape designers worked together to ensure the hillsides were made stable and replanted them with native trees once construction was completed to ensure stability was maintained.

* * * * *

The construction of the Tongariro Project was completed in 1983, ending twenty-five years of hydro-electric development on the central volcanic plateau. The Tongariro Development was proposed at a time when power shortages were envisaged. It was seen as the best means to prevent the problem.

The Tongariro Development implemented innovative new techniques to capture water and divert it to where it was needed. However the construction of the Tongariro Development, raised concerns of a different kind. It became the focus of the conflict between development and conservation. When the full extent of the Tongariro Project was made public there was a strong response from several quarters. A sense of betrayal surfaced throughout the Tongariro area because of the apparent secrecy in which the whole scheme had been conceived. The scope and impact of the scheme on the region had not been pointed out. As a consequence a protest movement, of a kind, emerged in 1964 following a newspaper article exposing the scheme to New Zealand, this is the subject of the next chapter.

³⁰ Information Division, *New Zealand's latest power story*, p.15.

Chapter Four

The Response to the Tongariro Power Development Project

1955-1964

In November 1963, with planning of the Tongariro Development having been completed in 1962, the National Government approved in principle the construction of the hydro-electric project. Until this time the Tongariro Development had not been an issue of great public importance. It took a combination of events for the public to become more aware of the Tongariro Development. The government's public announcement of the scheme in March 1964 and, a front page article in the *Evening Post* in June 1964, helped the New Zealand public become aware of the proposed development. Significant concerns were raised against the project. This chapter will discuss the approach of the government to the public's concerns. It is clear that assumptions the government agencies made about likely public reaction differed from the actual concerns expressed, this led to heated debate on many issues and a government policy which reacted to events rather than taking the lead.

As early as 1958, the Ministry of Works and Electricity Department acknowledged in private that sections of the Tongariro and Waikato regions would be affected by the proposed hydro-electric project.¹ The Tongariro scheme was the most far-reaching hydro-electric development conceived in New Zealand effecting areas of the North

¹ Progress Report, Commissioner of Works to Minister of Works, 7 Jul 1958, ED 4, W3214, 6/0/10/4, part 9, NA.

Island from Port Waikato in the North to the Whanganui Harbour in the South. As a consequence of the Tongariro Development different catchments stood to be affected in different ways by either an increase or reduction in waters flowing through them. The Waikato catchment, for example, would have an increase in flow down the river as a result of the Tongariro Development. This meant that there would be an increase in the mean river level which could threaten low lying areas of the Waikato region. On the other hand, the Whanganui catchment was to have a reduction in flow, meaning that there would be a marked reduction in the amount of water flowing in the river, especially above the confluence of the Whanganui River with its major tributary's downstream. With potential impacts such as these, and the fact that the two Government Departments had waited nine years since the initial genesis to inform the public of the project, the reception to its public presentation in 1964 was less than hospitable.

Unlike the Manapouri and Aratiatia debates which were concerned primarily with the impacts on the natural environment of the area, the proposed Tongariro Development also had a considerable human aspect which had to be considered. The impact of the Western Diversion upon the amenities of the Taumarunui township proved to be a significant issue. This made the investigation and planning of the project a more complex matter.

Anticipating Objections

From their investigations, the Electricity Department built a picture of what they considered to be the most controversial aspects of the Tongariro Development. These views were produced in an internal

report by the Electricity Department.² The Department's Planning Committee, which was charged with continuing the development of electricity production in New Zealand, believed that the project would have an impact on the region that 'must be discussed with the various authorities concerned.'³ It was decided by the committee that 'ample time' should be allowed for these discussions, but it also emphasised the importance of an 'early decision on the scheme, since it almost takes seven years to plan and build a hydro-station.'⁴ The approval of the project by the Planning Committee was subject to it 'being satisfied that suitable arrangements can be made to preserve the interests of parties who would be adversely affected by the scheme.'⁵ This report signaled the government's concern for the opinions of the Tongariro community, yet also illustrates the pressure that the Electricity Department was under. With electricity demand continuing to grow around 7% per annum, time to plan and construct a scheme on the scope that was proposed was fast running out, yet the Electricity Department were expected by its own Planning Committee, to allow 'ample time' to discuss the potential effects of the development.⁶ This tension of objectives was an underlying theme through all the discussions that were held between the Electricity Department and the public.

The first problem that the Electricity Department Report anticipated, was the 'effect of extra water down the Waikato River.' The Department believed that extra water down the river would effect the Waikato River in three ways. The first impact was on 'flood

² New Zealand Electricity Department, Notes on Tongariro Power Development, Feb 1964, ED, W3214, 6/0/10/4, part 9, NA.

³ *The Evening Post*, 8 Feb 1964, p.21, ED4, W3214, 6/0/10/4, part 9, NA.

⁴ *The Evening Post*, 8 Feb 1964, p.21, ED4, W3214, 6/0/10/4, part 9, NA.

⁵ New Zealand Electricity Department, Background to the Tongariro Hydro-Electric Development, 17 Sept 1964, p.1, ED5, W3214, 6/0/10/4, part 12, NA.

⁶ G.R. Hawke, *The Making of New Zealand - An Economic History*, Sydney: Cambridge University Press, 1985, p.282.

conditions' around the lower Waikato River farmland which bordered the river. The added water from the Tongariro Development to a Waikato River already in flood would mean potential for widespread damage. The Electricity Department's solution was for the waters from the Tongariro Development to be retained in Lake Taupo, via its control gates, or released down its original channels on the Western Diversion. They therefore concluded the diversions would 'have no effect on flood disposal down stream of Lake Taupo,' and as a consequence, 'no effect on the necessary height of stopbanks.'⁷

The second perceived impact was the possible effect of extra water down the Waikato River at periods of low flow. Extra water down the river meant the mean flow of the river would increase by between 3 to 4 inches, meaning drainage problems may occur and 'marginal grazing areas may be reduced' along the river side because of the rise in the water table. The Electricity Department acknowledged that this problem would have to be discussed with the Waikato Valley Authority and that they would need to 'meet any legitimate charges for pumping' water off farmland.⁸

The third anticipated impact was the progressive increase of water in the Waikato River from the first and third stages of the Tongariro Development. Both the Western Diversion in 1972, and the Eastern Diversion in 1979, would progressively add water to the Taupo catchment, which fed the Waikato River. The concern was with the

⁷ New Zealand Electricity Department, Notes on Tongariro Power Development, Feb 1964, p.7, ED, W3214, 6/0/10/4, part 9, NA.

⁸ New Zealand Electricity Department, Notes on Tongariro Power Development, Feb 1964, p.7, ED, W3214, 6/0/10/4, part 9, NA.

potential impact of added water in the Taupo catchment and what the possible effects would be.⁹

The report then noted the likely effect of a reduction water down the Whanganui River due to the Western Diversion. The Department identified three aspects of the diversion that were in its opinion potentially controversial. The first was the possible impact of the development upon the Whanganui Harbour. The report argued that the 'probable effect had been exhaustively investigated by consultants and found to be negligible.' The second anticipated impact was on the proposed Whanganui River Power Development which was to be situated upon the lower Whanganui River. The Electricity Department believed that the Whanganui Development would be able to go ahead even with the prospect of water being diverted into Lake Taupo.¹⁰

The third impact, and the most important in terms of its impact upon people, related to the likely impact upon the township of Taumarunui. The Taumarunui issue was anticipated to be a 'controversial aspect' of the Tongariro Development because of the effects of the Western Diversion upon the towns water supply and power station at Piriaka. The Western Diversion would impact severely when there were 'low flows in the catchment,' subsequently affecting the towns key amenities. The exact extent of impact upon these amenities was not known to the Department at the time of approval, so further investigations were to be conducted. Possible solutions suggested by the Electricity Department at the pre-consultation stage were for Taumarunui to switch to using the

⁹ New Zealand Electricity Department, Notes on Tongariro Power Development, Feb 1964, p.7, ED, W3214, 6/0/10/4, part 9, NA.

¹⁰ New Zealand Electricity Department, Notes on the Tongariro Power Development, Feb 1964, p.8, W3214, ED 6/0/10/4, part 9, NA.

national grid in the event of the power station losing water to the diversion. The Electricity Department believed that on going discussions were needed to explain the scheme and negotiate an agreement with the Taumarunui local authority.¹¹ The report also identified aspects of other parts of the scheme that they believed were of potential concern. The Electricity Department identified the reduction of water down the Rangitikei and Whangaehu Rivers as being 'controversial.' There would be a reduction in 'flooding in the lower Rangitikei' but the Department believed there would be 'no significant effect on groundwater levels' in the entire river. This meant that farmers of the lower reaches of the river would not, in their opinion, be affected in any way. The Whangaehu River would not be affected by any reduction of water because the river drained the crater lake on the summit of Mt Ruapehu, and as a consequence was too acidic to be mixed with the other waters of the Eastern Diversion, especially the Tongariro River. This meant that the Whangaehu River proper was excluded from the diversion and only its tributaries were diverted, leading to a negligible impact on the river.¹²

The diversion of water from the Tongariro River to Lake Rotoaira was also identified as 'controversial' in light of the renowned trout fishing around the Tongariro River. The Electricity Department believed that a 'sufficient flow' would be maintained down the Tongariro to ensure 'satisfactory fishing conditions.' According to the Report, the topic of the Tongariro minimum flow had already been discussed between the Electricity Department and the Marine Department. There appears to be no discussion of the possible

¹¹ New Zealand Electricity Department, Notes on Tongariro Power Development, Feb 1964, p.8, ED, W3214, 6/0/10/4, part 9, NA.

¹² New Zealand Electricity Department, Notes on Tongariro Power Development, Feb 1964, p.9, ED, W3214, 6/0/10/4, part 9, NA.

effects of the project on the scenic, recreational or natural features of the river, but there was discussion regarding the possible contamination of the Tongariro from diverted water from the Whangaehu.¹³

The final 'controversial aspect' of the Tongariro Development identified by the Electricity Department were certain problems connected with Lake Rotoaira. The report acknowledged that the lake is 'the key point for the collection of waters diverted from all rivers and streams, and is an essential part of all Stages of the whole development.' One problem with Lake Rotoaira was that Ngati Tuwharetoa possessed fishing rights to the lake and these could be affected by increasing the level of the lake by two feet. The Electricity Department believed that the feeding grounds for the lakes fish would not be affected by this rise in its level.¹⁴

This then was the Electricity Department's opinion of which aspects of the scheme would potentially be controversial. In the mind of the Electricity Department, the Tongariro Development had been one 'of the most thoroughly investigated of all the schemes.' The planners believed they had anticipated, and in their minds resolved, the likely problems with the project. There were, however, significant sections of the Tongariro community which disagreed.¹⁵

Minor debate about the proposed development had started in 1955 with the Waimarino Acclimatisation Society, however the real opposition emerged after March 1964 and the formal public

¹³ New Zealand Electricity Department, Notes on Tongariro Power Development, Feb 1964, p.10, ED, W3214, 6/0/10/4, part 9, NA.

¹⁴ New Zealand Electricity Department, Notes on Tongariro Power Development, Feb 1964, p.10, ED, W3214, 6/0/10/4, part 9, NA.

¹⁵ *New Zealand Herald*, 14 Jul 1964, ED, W3214, 6/0/10/4, part 10, NA.

announcement that the Tongariro Development was proceeding. This debate was further propelled by an article in the *Evening Post* on 24 June 1964, by artist and local Taumarunui resident Peter McIntyre. In his article McIntyre argued that the Government had no right to alter natural resources, especially a river such as the Whanganui and Whakapapa Rivers.¹⁶

While the dominant response to the Tongariro Development was critical even from the beginning of the debate a minority thought the Development was something the region needed.¹⁷ Supporters of the project believed it would inject much needed money and employment into the Tongariro Region. Some sections of the community thought that instead of opposing hydro-electric developments, the public should 'take pride in them.'¹⁸ Some 'Anglers,' were 'prepared to accept Government assurances' and support the scheme.¹⁹ The voices of the opponents were for the most part more prominent. While there was never a cohesive opposition movement or organisation, a number of concerns were shared by those unconvinced of the merits of the scheme.

Local Concerns

One common complaint was the alleged 'blanket of secrecy' that the Tongariro Development was shrouded in.²⁰ This feeling of being kept in the dark and 'community ignorance' fuelled much of the initial opposition towards the project. As one newspaper explained, the reason that the protest arose was that 'no one among the

¹⁶ *Evening Post*, 24 Jun 1964, p.1.

¹⁷ See for example, *Wanganui Chronicle*, 18 Sept 1964, ED5, W3214, 6/0/10/4, part 12 and *Taupo Times*, 2 Jul 1964, ED1, W3214, 6/0/10/4, part 10, NA.

¹⁸ *Wanganui Chronicle*, 18 Sept 1964, ED5, W3214, 6/0/10/4, part 12, NA.

¹⁹ *Taupo Times*, 2 Jul 1964, ED1, W3214, 6/0/10/4, part 10, NA.

²⁰ *Hawkes Bay Herald-Tribune*, 20 Jun 1964, AAZU, W3619, Box 62, 3/11/63, NA.

planners had bothered to tell the public' that the project was being planned.²¹ The 'secrecy' was justified by the government because it believed that the Electricity Department and the Ministry of Works were ill-equipped to do a 'good public relations job.' Others believed they did not 'want the public to know' what they had 'up their sleeves.' The government handling of the issue was described as being the 'worst form of public relations' because it resulted in the government departments 'struggling to correct damaging inaccurate statements.'²² It was suggested by one provincial newspaper that both government departments involved should have cultivated public understanding in advance of announcing the project, rather than springing a 'thunderbolt that startled the country.'²³ As a consequence of this lack of communication with the public, 'inaccurate statements' were published that further complicated the issue of the Tongariro Development.

The explanation for the lack of communication between the public, local authorities and government departments was further explained in a 1963 report by the Commissioner of Works, J.T. Gilkinson, to the Nature Conservation Council chairman, Dr. Robert Falla. The Commissioner explained that the secrecy surrounding the project was to 'avoid public misunderstandings of information' which was only 'preliminary and not complete.'²⁴ The public believed, however, the government had attempted to keep the project secret which fuelled the fire of opposition to the development. It also facilitated the very speculation and misunderstanding the Commissioner sought to avoid.

²¹ *Evening Post*, 15 Aug 1964, AAZU, W3619, Box 62, 3/11/63, NA.

²² *Evening Post*, 15 Aug 1964, AAZU, W3619, Box 62, 3/11/63, NA.

²³ *Taranaki Herald*, 19 Aug 1964, ED1, W3214, 6/0/10/4, part 11, NA.

²⁴ Consultants Report, Gilkinson to Falla, 22 Nov 1963, AAZU, W3619, Closed Files, 3/11/63, NA.

While irritation at secrecy was a key factor, the groups that emerged to voice their concern at the Tongariro Development also had a variety more specific reasons for doing so. Several groups and individuals wanted the area maintained as an area of natural beauty, while others wanted to protect the famous trout fishing of the Tongariro River. A characteristic of this public opposition and protest was that there was no coordinated joint opposition to the scheme. Whether through a lack of desire for coordination between the groups, differing objectives or the disparate location of opponents due to geography of the area, the protest currents that developed regarding the Tongariro Development did not coalesce or merge. As a consequence the opposition to the Tongariro Development could not effectively pressure the government and present a strong united front for their cause.

This marks a contrast to the 'Save Manapouri' campaign, which became a national movement and very effectively grasped the country's imagination. The opposition groups that were concerned with the Tongariro Development could not harness similar backing. The 'Save Manapouri' campaign used several methods that the Tongariro opposition also used, including the use of the news media and the establishment of local protest groups. Some things, however, the Tongariro opposition did not, and could not make use of, including most importantly, the financial backing of the movement by professional men and national petitions. A truly united national movement, named the 'National Save Manapouri Campaign Organisation' saw that campaign work successfully, no such movement supported the Tongariro protests.²⁵

²⁵ L. Cleveland, *The Anatomy of Influence - Pressure Groups and Politics in New Zealand*, Wellington: Hicks Smith and Sons Limited, 1972, pp.30-31.

The National Government appeared to have an 'ad-lib' and entirely reactive policy towards opposition to the scheme. As opponents published their views in newspapers or voiced them in other ways, the Electricity Department would publish a rebuttal. In response to McIntyre's article, in June came a sharp refutation from Tom Shand, the Minister of Electricity, who ultimately played an important role in the process of accommodating the concerns of some who opposed the project.²⁶

Early Concerns

The first group to oppose the Tongariro Development was the Waimarino Acclimatisation Society who first raised concerns in November 1955. Their principal concern related to the Ministry of Works proposal to 'divert water from the Wanganui River to Lake Taupo.' They believed that the idea of a diversion between the two catchments would have an 'effect on the fishing on the lower Wanganui' and also hamper a proposal to reopen the river for tourist steamer services. With such a major development this new service was considered to be 'rendered impossible.'²⁷ The Society saw the development of the Western Diversion as likely to cause considerable impact upon the natural environment of the Whanganui area. The Upper reaches of the river were home to the rare Whio, or blue duck, which lived on the torrents of the Whakapapa and Whanganui Rivers. This habitat would be threatened by the advancing Western Diversion. The trout fishing of the area, although less internationally significant than the Tongariro River, would also be threatened.²⁸

²⁶ *Evening Post*, 25 June 1964, AAZU, W3617, 3/11/63, Box 62, NA.

²⁷ *Wanganui Chronicle*, 30 Nov 1955, p.6. ED5, 6/0/10/4, part 10, NA.

²⁸ Keith Chapple, *The Rape of the Wanganui River - One of New Zealand's Most Misguided Engineering Projects*, Taumarunui: C&S Publications, 1987, p.23.

The Society became active on the issue again in 1964 and again urged a reconsideration of the Western Diversion. It demanded the blue duck and trout's environment on the Whanganui and Whakapapa Rivers be protected. The Society especially wanted a 1964 Fisheries Technical Report, which had been completed by the Marine Department, reexamined. The report had considered the impact of the Tongariro Development on the rivers and lakes of the area, it did not anticipate any problems. The report was considered to be inadequate by the Society due to its narrow focus on 'ascertaining the risk of eel damage to the Taupo and Tongariro fisheries.' As a consequence, it neglected the significance of the Whanganui River.²⁹

Although the Waimarino Acclimatisation Society raised concerns about the project as early as 1955 and repeated this in 1964, their views largely fell on deaf ears. The various Government Departments planning the project were enthusiastic towards the project. A Progress Report completed by the Commissioner of Works, Frederick Hanson, in July 1958 pointed out that 'none of the objections likely to be raised are insurmountable' and in many ways the diversion would be 'beneficial both to scenic and fishing interests.'³⁰ These comments would later come back to haunt the government.

During 1964, the Minister of Internal Affairs, Sir Leon Gotz, and the Minister of the Marine Department, Richard Gerard, continued to assure anglers that the fishing of the Tongariro area 'would not be

²⁹ Letter, Auckland/Waimarino Acclimatisation Society to the Marine Department, 25 Aug 1964, ED4, W3214, 6/0/10/4, part 11, NA.

³⁰ Progress Report, Commissioner of Works to Minister of Works, 7 Jul 1958, ED4, W3214, 6/0/10/4, part 9, NA.

harmed but in most cases would be improved.³¹ This argument was based on the 1964 Marine Department Report.

Prior to the Report being released in August 1964, the Acclimatisation Society had received a 'confidential' letter from the Marine Department outlining how the waters of the Western Diversion would be affected. Three rivers were identified as being affected by the Western Diversion. The Whanganui River was the first with the letter arguing that the area usually fished would 'probably be slightly but not seriously affected.' The second river was the Whakapapa River and was likely to be 'seriously reduced in size in the lower reaches where it is heavily fished.'³² Along with its impact on the lower reaches, the upper reaches, below the diversion point, would be dry with very little if any water flowing. The third river identified was the Mangatepopo. The Marine Department believed that the stream would be 'virtually beheaded' but was justified because the stream 'was difficult to access' and was 'hardly ever fished.' The letter concluded by suggesting that the anglers of the Waimarino district would 'suffer a slight to moderate deterioration in their principal fishing river but 3 to 4 useful lakes will be created, one being conveniently placed to compensate anglers.'³³ The letter revealed the fact that the government departments knew what the effects of the Western Diversion would be upon the headwaters of the Whanganui River, yet their policy was to insist no harm would be done.

³¹ *New Zealand Herald*, 21 Mar 1964, ED5, W3214, 6/0/10/4, part 11, NA.

³² Confidential Letter, Marine Department to Waimarino Acclimatisation Society, 22 Jul 1964, ED1, W3214, 6/0/10/4, part 10, NA.

³³ Confidential Letter, Marine Department to Waimarino Acclimatisation Society, 22 Jul 1964, ED1, W3214, 6/0/10/4, part 10, NA.

Ngati Tuwharetoa

A feeling of bitterness of being 'left in the dark' was a common theme around 1964 and provided a lot of the passion to the debate. The response of the Ngati Tuwharetoa was more restrained. Although some tangata whenua of the area held reservations regarding the development, on the whole the iwi supported the project. The Ngati Tuwharetoa, had known of the proposed scheme since October 1955. They were consulted early in the development because the iwi held certain rights to Lake Rotoaira which was destined to become the main storage reservoir for the Tongariro Development. Consultation discussions were held to outline the impact of the hydro-electric development upon Maori interests in the area.

During their investigations into the feasibility of the Tongariro development, Gibb and Partners had incorporated into their cost estimates the approximate price of compensation to Maori.³⁴ This demonstrated the importance that the Electricity Department and Ministry of Works gave to Ngati Tuwharetoa opinion. A meeting was held on 26 October 1955 at Tokaanu between the Ministry of Works, the Maori Affairs Department and Tuwharetoa,³⁵ the purpose was to acquaint the iwi with the 'proposals for developing the Tongariro River.' W.M. Fisher, of the Ministry of Works, presented the government case stressing that demand for electricity was expanding. He stressed that there would be 'further investigations' on potential impact and steps 'had already been

³⁴ Draft Press Statement, Minister of Electricity, Tongariro Power Development, 29 Jul 1964, p.2, ED1 W3214 6/0/10/4, part 10, NA.

³⁵ Members who attended, Ministry of Works Mr W.M. Fisher, Mr A.D Benham, J.E. Burt; Maori Affairs Dept. Mr S.E. Swift. Maori were represented by Mr P.A. Grace (meetings chairman), Mr J.A. Asher, P.Hura, W.A. Ngauhano and fifty tribal elders.

taken to safeguard' the 'fishing interests' of the area. He concluded his presentation by stressing the 'need for co-operation with Maori in all aspects' of the development. After the presentation Maori attendees deliberated and reported that while they were in 'sympathy with the proposals outlined,' since there were 'no concrete plans available' the matter should 'be deferred for further consideration at some future date.'³⁶

After the initial consultation in 1955, Ngati Tuwharetoa was next consulted in 1964. Throughout the process, the iwi attempted to cooperate with the Electricity Department, primarily because they accepted that 'time was important' to the progress of the scheme.³⁷ Several issues were canvassed in discussions during April, all of which centred around converting the Turangi township into a Ministry of Works town.³⁸ Another meeting took place on 7 May 1964. The meeting was essentially a progress report on the Tongariro Development and the planning of the Turangi township. The one concern that Ngati Tuwharetoa raised was the possible 'loss of 400-500 acres of land near Rotoaira' due to the proposed man-made lake at Otamangakau.³⁹ The Ministry of Works promised the Tuwharetoa Trust Board that the loss would be looked into. The meeting ended with no fundamental opposition to the scheme from Ngati Tuwharetoa.

A more comprehensive discussion took place on 24 May 1964. Again, Ngati Tuwharetoa expressed that it was the 'wish of the

³⁶ Tongariro Power Development: Maori Interests in Lake Rotoaira, 26 Oct 1955, ED, W3214, 6/0/10/4, part 8, NA.

³⁷ Notes on Meeting Tongariro Development, Maori Land Owners, 15 Apr 1964, p. 1, ED4, W3214, 6/0/10/4, part 9, NA.

³⁸ Notes on Meeting Tongariro Development, Maori Land Owners, 15 Apr 1964, p. 1, ED4, W3214, 6/0/10/4, part 9, NA.

³⁹ Notes on Confidential Meeting at the Trust Office, Tokaanu, 7 May 1964, p.3, ED4, W3214, 6/0/10/4, part 9, NA.

people to remain on the best terms possible and to cooperate with the departments.' At this meeting Asher queried the effect that the two small man-made lakes would have upon the 'Maoris experimental grain growing in the area and also advised of the existence of a court order defining ownership of the land in this area in the name of the Tuwharetoa Maoris.'⁴⁰ In response, Gibson the Project Engineer expressed the desire to inspect the area and 'determine what effect the lakes would have on the grain growing.' In relation to increasing the levels of Lake Rotoaira, Asher wanted to know the potential impact on fishing in the area. In response, Gibson explained that 'it was intended that as far as possible, fishing would not be interfered with but where this was not possible, it was intended that full compensation would be made.'⁴¹ The meeting concluded with the following resolution

That this meeting approves the proposal of the Crown for establishment of a town at Turangi along the lines outlined to the meeting, and accepts the assurance given that the owners will be reasonably and fairly compensated.⁴²

Although no mechanism was outlined, compensation was guaranteed to all those affected by the diversion. Shand, however, in some public statements, made the compensation appear to be a repayment for not opposing the development. It was acknowledgement of their 'cooperation with the Government.'⁴³

⁴⁰ Minutes of Meeting Tuwharetoa Maori Land Owners and Ministry of Works Officials, 24 May 1964, p.2, ED4, W3214, 6/0/10/4, part 9, NA.

⁴¹ Minutes of Meeting Tuwharetoa Maori Land Owners and Ministry of Works Officials, 24 May 1964, p.2, ED4, 6/0/10/4, part 9, NA.

⁴² *Taumarunui Press*, 22 Sept 1964, W/333/U/280 3, Upper Wanganui Catchment, Catchment Board Office, Taumarunui 1975-1985, MWRC.

⁴³ *Taumarunui Press*, 22 Sept 1964, W/333/U/280 3, Upper Wanganui Catchment, Catchment Board Office, Taumarunui 1975-1985, MWRC.

In 1964 when the issue became the subject of more extensive and open debate, it was reported that Maori were 'in favour' of the development. The iwi position was explained in an article in the *Taranaki Daily News*. A member of the iwi argued that 'When you realise that 71,000,000 [pounds] will be involved in the scheme in the Turangi area, you cannot expect the people in that area to speak against the proposal.'⁴⁴ Clearly the economic boost to the region and the government assurances on fishing issue shaped the Tuwharetoa attitude to the project.

While Ngati Tuwharetoa was involved in extensive discussions with the government, other tangata whenua of the area were overlooked. The Whanganui iwi, who were based along the shores of the Whanganui river, did not receive the attention that Ngati Tuwharetoa received. This is perhaps because of the particular prominence that the Ngati Tuwharetoa held in the region, especially the special relationship with the mountains and National Park area.

Local Government Concerns

Along with the Waimarino Societies concerns regarding conservation aspects of the scheme, the local regional authorities of the region also had concerns about the project, these were principally to do with the impact of the project upon the human environment and economy. One local authority which was concerned about developments around the Tongariro Region was the Waikato Valley Authority (WVA).

The WVA knew of the Tongariro Development a lot earlier than the majority of the Tongariro Region, and like Ngati Tuwharetoa, were to play an important role in proposed project. The Authority was

⁴⁴ *Taranaki Daily News*, 29 May 1964. ED, W3214, 6/0/10/4, part 10, NA.

responsible for water management issues in the Waikato River catchment. From as early as December 1958, the WVA had discussed the likely effects of the proposed Tongariro Development with the Electricity Department. With the threat of additional water being diverted into the Waikato River, the position of the WVA was straight forward, they 'opposed to any diversion of water into Lake Taupo.'⁴⁵

The Waikato Valley Authority's concern was based around the possibility of the increased water load in the river affecting farms in low-lying areas north of Cambridge. Coupled with this was the threat of flooding in the low lying areas bordering the river. There was good cause for concern as the Waikato River had a long history of flooding. The proposed Tongariro Development was considered to further aggravate a problem which had already significantly hampered the farmers of the lower regions of the Waikato River.⁴⁶ One of the key objectives of the Tongariro Development was to increase the water flow through the Waikato power stations, the very opposite would have been the farmer's preferred position. As a consequence of this, as early as October 1958 the WVA was fielding calls from farmers and landowners who 'expressed concern over the possible further deterioration of their conditions.'⁴⁷

These complaints continued up to the public announcement of the Tongariro Development in 1964, when it was reported that 'before the Tongariro Project comes into operation' the schemes impact

⁴⁵ Letter, General Manager Electricity Department, Mr. Davenport to Chairman of Waikato Valley Authority, Mr Wallis, 17 Dec 1958, ED, W2673, 2/0/94, 1956-1963, NA.

⁴⁶ *Waikato Times*, 9 Oct 1964, p.4.

⁴⁷ *Waikato Times*, 22 Oct 1958. ED, W2673, 2/0/94, 1956-1963, NA.

would 'be fully analysed and any necessary counter measures incorporated in the Authority's river control works.' The WVA was given a 'definite assurance that any extra costs resulting from the Tongariro scheme will be borne by the New Zealand Electricity Department.'⁴⁸

Other local authorities of the Tongariro region were also concerned with the possible implications of the scheme. The Tongariro regional authorities were perhaps more acutely concerned with the development than the WVA and yet they had not been consulted by the Electricity Department prior to the public announcement of the plan.

The strongest opposition to the Western Diversion came from the Taumarunui Borough Council.⁴⁹ Their opposition began in the early 1960s when rumours circulated regarding a possible hydro-electric development based around the Tongariro National Park. With such stories being circulated, the Borough Council awaited an official explanation from the government outlining the development. In April 1964, a month after the announcement, the Borough Council made a request for information about the scheme, in an endeavour to gauge the ultimate effect on the future of the district. They did not get a reply from the Electricity Department or Ministry of Works and expressed their dismay to the Prime Minister.⁵⁰

This lack of communication between the government and the Borough Council upset a considerable number of locals, although it

⁴⁸ Background to the Tongariro Development, 17 Sept 1964, p.3, ED5, W3214, 6/0/10/4, part 12, NA.

⁴⁹ *Hawkes Bay Herald*, 20 Jun 1964, AAZU, W3619, Closed Files, 3/11/63, N.A.

⁵⁰ Letter F.J. Stenner, Town Clerk to Rt. Hon K.J. Holyoake, 24 Apr 1964, ED 4, W3214, 6/0/10/4, part 9, NA.

should be acknowledged that there had been some earlier indications of the possibility of the project. In November 1963, for example, when the Tongariro Development finally recommended by the Power Planning Committee, was briefly noted by the *Wanganui Chronicle*.⁵¹ Through either a lack of enthusiasm, or not knowing the scope of the Tongariro Development, only one inquiry was made to the Electricity Department for more information.⁵²

Despite this inability to pick up early indicators of the scheme, the Council, which represented the interests of the Taumarunui township, strenuously opposed the Tongariro Development. Their case had several components. The Council feared that the Electricity Department was going to turn the Whanganui and Whakapapa Rivers 'into an on again, off again monstrosity' similar to that which existed at the Aratiatia Rapids.⁵³ They believed that their township was going to be most affected by the development and as a consequence were angry and upset that the government had not informed them of the plan from an earlier date and engaged in meaningful consultation.

According to the Council their township was going to be affected in five ways, a contrast with the Electricity Department's belief that Taumarunui had only two reasons to be concerned about the development. The Council believed that the power plant at Piriaka would be affected, as well as the towns water supply, the towns sewage system and the water quality of the Whanganui river at Taumarunui would be affected. These views were based mostly

⁵¹ Chronology, p.2, ED 1, W3214, 6/0/10/4, part 10, NA.

⁵² Chronology, p.1, ED 1, W3214, 6/0/10/4, part 10, NA.

⁵³ *Dominion*, 29 Apr 1964, ED5, W3214, 6/0/10/4, part 10, NA.

upon speculation because a project of this type, involving the diversion of rivers, had never been constructed in New Zealand.

The Borough Council also believed that with the Western Diversion of the Tongariro Development capturing all of the Whanganui's pure, snow fed water and diverting it away, the water that remained in the river would simply be the run off from the farmlands that bordered the river. They considered that the remaining water in the river would be highly polluted by farming fertilisers and not suitable for recreational activities. The Council was also concerned with at the possible impact that the scheme may have upon the scenic and natural wonders of the Whanganui River, for example, the possible reduction in numbers of the rare blue duck which lived upon the Upper-Middle reaches of river.

Communications between the Electricity Department and the Taumarunui Borough Council, focused primarily on issues that could be resolved by monetary compensation. The Council held a number of meetings to discuss the Tongariro Development and its possible affect upon the region. Following a 'special meeting' of 'councillors and the public of Taumarunui' on 24 April 1964, a letter was written by the town clerk of Taumarunui, Mr F.J. Stenner to Prime Minister Keith Holyoake. The letter expressed concern at the possible 'outcome following the proposed diversion of the headwaters of the Wanganui, Whakapapa, and Tongariro Rivers for hydro-electric purposes.' The letter continued

[The Council] up to now has had complete faith in the Government assurance that it would be approached, and is concerned to learn that certain happenings are taking place which give us the impression that the Government Departments concerned are proceeding with the

adoption of the scheme which up to date has been approved in principle only.⁵⁴

Not only was the Borough Council concerned with the general nature of the diversion, but it was concerned with the pace which the scheme was apparently moving. According to the letter, funds had been given to the National Roads Board to 'upgrade State Highway 45 to carry extra traffic from the National Park railhead.' There was also evidence that bridges in the region were being lengthened to allow 'certain rivers to carry the additional water which will be diverted.'⁵⁵ This seemingly illustrated that the Electricity Department and Ministry of Works were already preparing the Western Diversion for construction. It also suggests the government's conception of the consultations that they were about to start was as a one way process. Clearly, they did not figure very highly in the minds of the planners, too much had already been set in action to make the consultations meaningful. This reflected the planners belief that there would be little real opposition to the development. The Borough Councils letter conceded that the 'scheme could have advantages in increasing the power output into the national network' but argued that 'consideration has not been given to the despoliation of the natural beauty provided by the rivers.'⁵⁶

The letter concluded with the Town Clerk stating that the 'Government may have been ill-advised on the possible effect of this scheme on existing scenic attractions, and [the Council] would not like to see these go the same way as Aratiatia, Manapouri and

⁵⁴ Letter, Town Clerk, F.J. Stenner to Prime Minister, Rt. Hon K.J. Holyoake, 24 Apr 1964, ED4, W3214, 6/0/10/4, part 9, NA.

⁵⁵ Stenner to Holyoake, 24 Apr 1964, ED4, W3214, 6/0/10/4, part 9, NA.

⁵⁶ Stenner to Holyoake, 24 Apr 1964, ED4, W3214, 6/0/10/4, part 9, NA.

Waikaremoana.' Stenner requested that the government 'drop this project immediately and assist us in preserving this beautiful river [Whanganui] for the peoples of New Zealand and their descendents.'⁵⁷

Although the correspondence continued between the Electricity Department and Borough Council, steps were taken to discuss the issue face to face. The first meeting was held on 13 May 1964. The Council was represented by Stenner, and several engineers, while the government was represented by officials from three different departments.⁵⁸ The Electricity Department was represented by Mr Fyfe and Mr Shanks, the Ministry of Works was represented by Mr Askin, and Mr Hallewell, as well as several other associates, an official from the Health Department was also present.⁵⁹ The consultation party participated in an inspection tour of the area, viewing the sites which were of concern to the Borough Council. The first site was the Piriaka Power Station, followed by Taumarunui's water supply, the sewage disposal plant and finally the Whanganui River. Discussions continued throughout the afternoon and into the evening. Askin, of the Ministry of Works, gave an outline of the project, with particular reference to the aspects of interest to Taumarunui. He sought to reassure the Council, that any adverse effects due to the diversions would be 'equitably compensated.'⁶⁰

⁵⁷ Stenner to Holyoake, 24 Apr 1964, ED4, W3214, 6/0/10/4, part 9, NA.

⁵⁸ These engineers were Mr Gregor, Mr Field, Mr Jones, Mr Mandeno and Mr Newton-King.

⁵⁹ Also attending Mr Cowie, Mr Davies, Mr de Lambert, Mr West and Mr Campbell.

⁶⁰ Tongariro Power Development, Taumarunui Borough Council, 13 May 1964, p.3, ED4, W3214, 6/0/10/4, part 9, NA.

Discussions revolved primarily around the issue of the Piriaka power station and the effect of a reduced flow upon the stations power producing potential. The notion of a 'dry weather minimum flow of about 200 cusecs' was discussed, along with its 'possible implications on Piriaka power station.'⁶¹ Fyfe, of the Ministry of Works, identified three ways in which the Council could be compensated for the loss of power production at Piriaka. The first was to 'guarantee a minimum flow of water' by 'not diverting some part of the flow for use down the Waikato River.' It was pointed out that this option was 'definitely not favoured' by the Electricity Department, because they 'could generate 50-60 times more [electricity] in the Waikato Catchment' if the diversion took place. The second option was for the Borough Council to accept 'bulk supply' electricity from Electricity Department. The final option was for the Electricity Department to offer a 'lump sum payment for loss in revenue' from the Piriaka power station. The Electricity Department argued that the third option was the most desirable and it was ultimately the policy which came into practice.

With the assurance of 'equitable compensation' for loss of power, the Mayor, Mr L. Byars, concluded proceedings saying he accepted the government's assurances in respect of compensation, but that the minimum flow of 217 cusecs mentioned was of some concern. He stated that 'no reply would be given at the meeting since his Council would clearly wish to consider the matter.'⁶²

Following the meeting an exchange of letters took place between the government and the Council. A letter from the Minister of

⁶¹ Tongariro Power Development, Taumarunui Borough Council, 13 May 1964, p.3, ED4, W3214, 6/0/10/4, part 9, NA.

⁶² Tongariro Power Development, Taumarunui Borough Council, 13 May 1964, p.3, ED4, W3214, 6/0/10/4, part 9, NA.

Works, Percy Allen, requested an indication as to whether the assurances were 'reasonable and acceptable' to the Council. The letter also canvassed several other issues which had not raised at the first meeting. Allen stressed that the Tongariro Development was in the 'national interest' and argued that the 'large spending capacity of the people employed will in some measure offset any detriment.'⁶³

An immediate reply to Allen's letter came from Stenner. Since the meeting, he explained, the Council had met again to discuss the matter further. The Council did accept the 'assurances' given by the Electricity Department that 'any financial problems would be met by fair and reasonable compensation' but it still had concerns which had not been answered at the meeting. In particular the Council was concerned that the Whanganui River would be reduced in dry weather to a mere stream. There was in their view a real threat that the guaranteed minimum flow in both the Whakapapa and Whanganui Rivers was not adequate enough to ensure the safety of fish stocks. The Council was also concerned that the National Government could have the right to deprive a town of 6,000 people of its natural rights without the consent of all the people concerned.⁶⁴

The Council argued that they were being used as a guinea pig by the government. The proposal to rob water from one catchment and divert it into another was something never before attempted in New Zealand, and the Electricity Department was using the Tongariro region as a test development. As a result of these concerns,

⁶³ Minister of Works, Percy Allen to Taumarunui Borough Council, Mayor Byars, 19 May 1964, p.1, ED4, W3214, 6/0/10/4, part 9, NA.

⁶⁴ Taumarunui Borough Council Town Clerk, Stenner to Prime Minister, Holyoake 21 May 1964, ED4, W3214, 6/0/10/4, part 9, NA.

Stenner stated the Borough Council were 'strenuously opposed to water being taken [from the Whanganui] watershed.' He concluded by arguing that 'no Government can compensate a district for the loss of heritage and no Government can use money to buy the basic rights of 6,000 people.'⁶⁵

This letter demonstrated the passion with which the Borough Council and the district, responded to the Western Diversion. The Council hosted a public meeting on 23 July 1964, it was attended by 550 people. The meeting was particularly significant in the debate because Tom Shand, the Minister of Electricity, attended and gave a series of assurances which became known as the 'Shand Agreement.'⁶⁶ These assurances were crucial to the ultimate progress of the project.

The Shand Agreement was a series of guarantees which, if implemented, would regulate the Western Diversion and attempt to minimise the impact on the Council's assets. Shand agreed to the flows in the 'Whakapapa River being maintained [to] provide a water temperature safe for fish.' With a loss of water flowing down the Whakapapa River, trout could have been boiled alive. It was decided that a 'target maximum temperature of 23 degrees and an absolute maximum of 25 degrees' would be achieved, and a 'minimum flow of 0.6 cumecs' be allowed through the Whakapapa Intake to maintain these temperature levels.⁶⁷

⁶⁵ Taumarunui Borough Council Town Clerk, Stenner to Prime Minister, Holyoake, 21 May 1964, ED4, W3214, 6/0/10/4, part 9, NA.

⁶⁶ Chapple, *The Rape of the Wanganui River*, p.16.

⁶⁷ Rangitikei Wanganui Catchment Board. *Statements of Evidence of John Wilkinson Garrett for the Respondent for the Hearings of the Minimum Flows, Wanganui River, Electricity Corporation of New Zealand Limited versus Rangitikei Wanganui Catchment Board*, Marton: Rangitikei Wanganui Catchment Board, 1988, p.17.

Shand also guaranteed that compensation would be paid to the Borough Council for the 'lost power generation at the Piriaka Power Station.' A regime of payment was agreed whereby compensation would be paid to the Borough Council if the 'Wanganui River flow at Piriaka falls below 14.2 cumecs' with 'increased compensation if the flow falls below 9.9 cumecs.'⁶⁸ Five dollars, per cusec, per day would be paid by the Electricity Department.⁶⁹ This assurance removed a major obstacle to the Tongariro Development.

Other sections of the Taumarunui community started voicing their concern in early September, but were perhaps too late to make a significant difference. Taumarunui businessmen demanded further guarantees from the Electricity Department as 'part of their compensation for the effects of the Tongariro Hydro Scheme on their town.' The businessmen put together a list of requirements which they thought the Electricity Department should meet. The first being a 'Forestry Scheme to replace native timber.' The second was that the Electricity Department establish a 'railway repair depot at Taumarunui for wagons.' The third was for the alteration of 'Taumarunui's County boundaries' so they would include 'Turangi,' thus 'giving the county a tourist centre.' The fourth demand was for the Ministry of Works to 'complete State Highway 4,' which connected Turangi to Taumarunui, before 1966 so that 'the buying habits of Turangi people' could be established in Taumarunui rather than Taupo. The businessmen also wanted compensation, not only for the loss of electricity production, but the 'loss of tourist traffic resulting from the diversion of the river,' which they agreed was its main attraction. Other demands were for Taumarunui to be supplied

⁶⁸ RWCB, *Statements of Evidence from John Garrett*, p.17.

⁶⁹ *Plateau Gazette*, 27 Feb. 1973, W/333/U/466, Upper Whanganui Catchment, Tongariro Power Scheme 1969-89, MWRC.

with an 'airport suitable for a DC3 aircraft,' as well as the Taumarunui High School being supplied a new hostel.⁷⁰

These demands were not directly connected to the case being put by the Borough Council, however, it demonstrated the widespread feeling within the district towards the project, and perhaps the opportunist nature of some members of the community. It was obvious that since the Electricity Department was willing to pay compensation certain individuals were keen to capitalise upon the handouts, even if most of the demands had very little to do with the Western Diversion of the Tongariro Project.⁷¹ The exact Government response to these requests were not reported, but Taumarunui never got an airport and the other requests were not reported elsewhere.

Other local authority agencies, including the Wanganui City Council, Wanganui Harbour Board and Wanganui Scenic Trust Board also began voicing concerns regarding the development. Some of these concerns were expressed as early as 1959 when the first notions of hydro-electric development involving the Whanganui River emerged. The major concern for the Wanganui community came from the potential effect of the diversion of the Whanganui's headwaters, and subsequent reduction in river flow. One major concern for the city was the impact that a reduction of water in the river would have upon the sewage system of the city. Despite the uncertainty on the issue the Wanganui City Council perhaps surprisingly remained in favour of the river diversion. Even in 1973, the Mayor, Mr. R.P Andrews, spoke for the council in suggesting

⁷⁰ *Taupo Times*, 10 Sept 1964, W/333/U/280 3, Upper Wanganui Catchment, Catchment Board Office, Taumarunui, 1975-1985, MWRC.

⁷¹ *Taupo Times*, 10 Sept 1964, W/333/U/280 3, Upper Wanganui Catchment, Catchment Board Office, Taumarunui, 1975-1985, MWRC.

that 'we are not worried ... because the river is tidal.' He said they did not expect 'any adverse effects from the diversion,' however, he did point to the need for government support to the sum of \$7 million to further develop the city's sewage system so the river could be cleaned up.⁷²

A second area of concern was the effect that the diversion might have on the city's harbour. Some believed that the harbour would become clogged with silt because of the reduction in river flow. The main question was whether the change in flows and silt level would hamper the Wanganui Harbour Board's everyday running. The Harbour Board met the Electricity Department at a meeting on 10 June 1964 and was assured that the impact on the harbour would be negligible. The assurance was based upon Gibb and Partners investigations that found the scheme posed no 'insoluble problem' to the Whanganui River Harbour. The Harbour Board expressed its concern the Electricity Department had 'left the board in the dark,' for too long about the project. The General Manager of the Board, Mr R.E. Buckeridge, noted that the government has had a 'report on the effects of the project on the Wanganui River' for sometime and 'we have been told nothing.'⁷³ Like the Taumarunui Borough Council, the Harbour Board was somewhat bitter that the Electricity Department had waited for so long to let them know what they had been planning. Yet they ultimately accepted the government's assurances as to the likely impact of the scheme.

A third concern that coming from Wanganui region was related to the potential impact of reduced flows on the work of the Wanganui

⁷² *Wanganui Chronicle*, 17 Feb 1973, W/333/U/466, Upper Whanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

⁷³ *Wanganui Herald*, 24 March 1964, ED, W3214, 6/0/10/4, part 9, NA.

River Scenic Trust Board. The River Trust maintained the reserves which lined the river between Wanganui and Taumarunui. It did this by jet-boating up and down the river trimming bush and tidying camp sites. With the building of the Western Diversion, and the subsequent reduced flows, the Trust believed its work could be crippled by making the reserves below Taumarunui inaccessible. The Trust was consulted regarding the Tongariro Development at a meeting on 9 July 1964. The Electricity Department assured the Trust that 'everything was 100% in terms of Wanganui River levels.' The Department guaranteed the Trust that channel work, the clearing of boulders and the deepening of the river would be completed, guaranteeing the Trust access throughout the river. In cases where access to the river was difficult, for example the river immediately below Taumarunui, a boat ramp would be constructed to provide easy access.

The Trust accepted the Electricity Department's assurances however the chairman, Mr A.C. Seivewright, expressed the view that 'no Government in its right senses would destroy that asset,' namely the Whanganui River.⁷⁴ In practice while the Ministry of Works did fulfill the Electricity Department's assurances, their work was completed prior to the diversion beginning, meaning that once the level of the river dropped permanently the Board was confronted with a range of new obstacles.

The decision to tell some and not all of the Tongariro Region made sections of the community angry. It served to fuel the opposition even more knowing that the government, and a select few in the community, had known of the scheme for so long and had not

⁷⁴ *Wanganui Chronicle*, 17 Feb 1973, W/333/U/466, Upper Whanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

informed the Tongariro public. This was but one concern which came out of the public reaction to the scheme following the announcement.⁷⁵

The Public Opposition

One of the most outspoken and colourful opponents of the Tongariro Power Development was Peter McIntyre, the prominent pictorial artist. McIntyre owned a cottage on the Whakapapa River, near Taumarunui, and took a deep seated interest in the welfare of the river and the possible affects that may occur as a result of the Western Diversion. In terms of political activity and protesting, McIntyre was relatively unknown, but from 24 June 1964, the government began to take more interest in what the artist had to say. They had little choice in the matter. In a front page article for the *Evening Post* of 24 June 1964, McIntyre had turned the issue of the Tongariro Development, from a regional issue, with no real outside interest, into one of national prominence, almost overnight. His article amounted to a written appeal to the country, to oppose the destruction of the central plateaus 'God-given assets.' The article, entitled 'Rampaging Philistine With Bulldozer Must Be Told 'Hands Off!,' was designed to capture attention. It reflected the anger and emotion that he, and many people like him from the Tongariro area, felt towards the proposed development and government's general treatment of the environment. The article focussed not only upon the Tongariro Development but queried the country's attitude towards its natural environment. McIntyre suggested that New Zealanders had become complacent regarding

⁷⁵ This was discussed in a Consultations Report, Gilkinson to Falla, 22 Nov 1963, AAZU, W3619, Closed Files, 3/11/63, NA.

their environment and argued that the natural environment of the country could be destroyed.⁷⁶

McIntyre believed that New Zealander's, especially from around the Whanganui and Tongariro region risked losing their whole natural heritage from what he called the 'most callous scheme of them all.' He admitted that many hydro-electric schemes had been 'necessary,' but he suggested that an equilibrium may have been reached where the 'assets being destroyed far outweigh in value the advantages of the scheme.' For him a line needed to be drawn in the sand, the Tongariro Development, he suggested, was part of the Government's 'mindless rush towards an industrialised nightmare.' The project was important to those 'engaged in them to a high degree' but as a consequence they 'ride roughshod over those trying to oppose them.'

The article clearly stated his objective, which was to develop a national outcry regarding the Tongariro Development. He believed that 'in an atmosphere of blind acceptance of progress,' schemes such as the Tongariro Development were 'politically advantageous,' however 'when through the anger of the people, they become a political hazard, then, and then only, will something be done to save one of the world's most beautiful countryside's.' In other words, McIntyre believed the bigger the public outcry, the more the government would pay attention. For a short time his article achieved that goal.

McIntyre's individual campaign was soon bolstered by the formation of a loose opposition movement, the 'Hands Off the Tongariro and Surroundings Movement,' formed in Wellington on 29 June 1964.

⁷⁶ *Evening Post*, 24 June 1964, p.1.

The movement consisted of citizens, from 'all walks of life,' who had an objective to gain public support for a halt to the 'desecration of our national playground.'⁷⁷ The Hands Off Tongariro group appealed to the Government to allow a 'years delay' in the development, in part to allow the Electricity Department to explore alternatives to the scheme and perhaps more importantly, for the 'people to have a say.'⁷⁸

The movement also demanded to know what the government's plans beyond the Tongariro scheme were. They feared that in the subsequent period 'every available piece of water in the country would be harnessed.' The group expressed its was confidence in 'gaining the support of the citizens throughout the country' because of the location and nature of the development. They believed that they were 'assured of the active support of 130,000 sportsmen throughout the country' and the 'people of Taumarunui.'⁷⁹ A clear sign that cool analysis had given way to idealism.

The initial reception to the movement was very positive, with a lot of public support for this campaign against the development. This came in the form of letters and frequent newspaper reports. The public had been previously exposed to this type of debate, earlier Electricity Department schemes at Aratiatia and Manapouri, had been criticised in the media. As a consequence, the Movement succeeded in capturing the attention of the public, albeit only briefly.

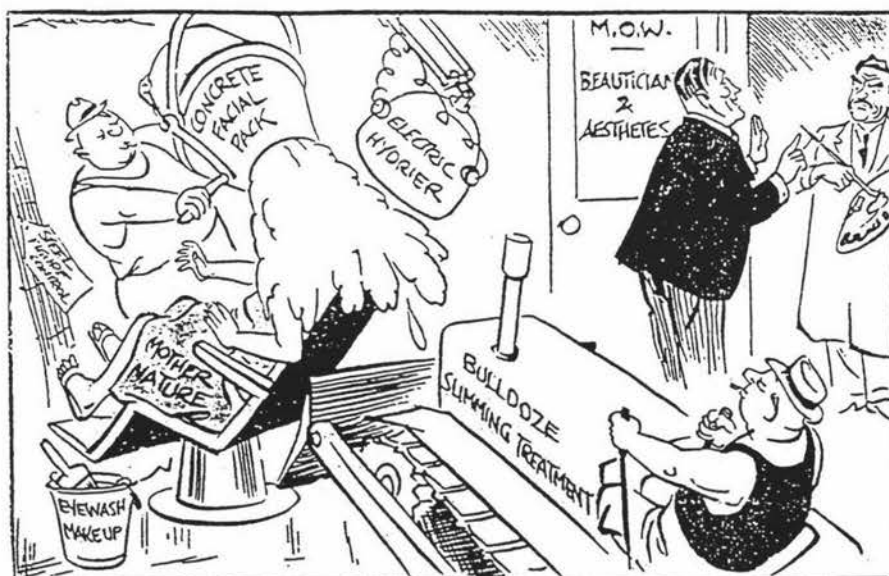
The *Evening Post* article also gained the attention of the Minister of Electricity, Tom Shand, who understandably took exception to

⁷⁷ *Evening Post*, 30 Jun 1964, AAZU, W3617, 3/11/63, Box 62, NA.

⁷⁸ *Auckland Star*, 3 Jul 1964, ED1, W3214, 6/0/10/4, part 10, NA.

⁷⁹ *Evening Post*, 30 Jun 1964, AAZU, W3617, 3/11/63, Box 62, NA.

McIntyre calling the National Government 'rampaging philistines'.⁸⁰ The news media carried a weekly 'war of words' between McIntyre and Shand regarding the issues of preservation of the natural environment and the conflicting need for the country to progress. This is reflected in the cartoon reproduced above. This kept the issue of the Tongariro Development on the front pages of the papers for several weeks. It also reflected the reactive nature of the National Government to the concern voiced by the public. Shand responded to McIntyre's article in the *Evening Post* of 25 June. He attempted to undermine McIntyre's article by arguing that the supporters of the development outnumbered its critics.⁸¹ These public debates continued for sometime with both sides attacking each others viewpoints and attempting to discredit the argument of the opponent.⁸² Each of the two key combatants was supported by others. McIntyre was supported by John Salmon, of the Nature Conservation Council, and Shand, by F.M. Hanson, the former Commissioner of Works.



"Wait, Mr McIntyre — when we've finished you won't know her!"⁸³

⁸⁰ *Evening Post*, 24 Jun 1964, p.1, Heritage House, Wanganui.

⁸¹ *Evening Post*, 25 Jun 1964, AAZU, W3617, 3/11/63, Box 62, NA.

⁸² *Evening Post*, 7 Jul 1964, AAZU, W3619, 3/11/63, Box 62, NA.

⁸³ *New Zealand Herald*, 9 Jul 1964, AAZU, W3617, 3/11/63, Box 62, NA.

McIntyre's movement died away after a few months of sustained opposition to the development. There were several reasons including financial resources becoming limited and a dwindling of support when the reality was clear that the project would be constructed. In the end the Electricity Department won the battle, with the Tongariro Development proceeding, but did not necessarily win the war.

The Nature Conservation Council Approves the Project.

Joining the debate alongside these other currents of dissent was the newly established Nature Conservation Council. At the time the Tongariro Project was announced the NCC had only existed for a matter of months. The Council had initially dealt with only small cases, but soon became embroiled in major national debates. One of which was the early stages of the contest over the development at Manapouri. The Tongariro Development, however, became the Council's first major test. In the process the Council's power to protect the environment was put under scrutiny and ultimately found wanting.

The Nature Conservation Council had been established to protect the natural environment, this was to be accomplished by investigating proposed government works and reporting on their potential impact upon the natural environment. The Council had no power to enforce its rulings, as a consequence, the government could choose to ignore its findings. Even though the Conservation Council had no teeth, the government placed some credence in what the Council had to say, for the decision to proceed with the

Tongariro Development was delayed until the Nature Conservation Council had deliberated on the development.⁸⁴

The Council reported to the government in September 1964 and raised several concerns. The Council concentrated on particular aspects of the development, rather than the wider picture. For example, at a Council meeting in early February 1964 the resolutions passed centred on: gaining information from the Marine Department on the 'possible effects' of the scheme on fishing in the area; ensuring an 'adequate flow of water' in the Otueru Stream when it crosses the road for a planned picnic spot; and for the spoil from the works to be adequately disposed of.⁸⁵ The assumption seemed to be that the project would proceed regardless, and the task was to iron any environmental fish hooks.

The scheme was again discussed over two days, in mid September 1964. Throughout these meetings two members of the Council, John Seabrook and John Salmon opposed the Tongariro Development. Seabrook believed the 'Tongariro River should be left alone and the area preserved in its natural state.' His solution to the power problem and the Tongariro issue, was to propose a 'nuclear fuel alternative.' Salmon 'opposed the whole scheme' and suggested that an alternative, such as an 'oil fuel station' would be easier and quicker to assemble.⁸⁶

In response to specific questions raised by the NCC. The Minister of Electricity gave several assurances by letter that the project would

⁸⁴ *Evening Post*, 11 Aug 1964, AAZU, W3617, 3/11/63, Box 62, NA.

⁸⁵ Nature Conservation Council Minutes, Vol.7, 17 and 18 Feb 1964, p.4. AAZU, W3619, Box 93, Vol. 2, NA.

⁸⁶ Nature Conservation Council Minutes 1963-68, 15 Sept 1964, p.3, AAZU, W3619, Box 93, Vol. 2, NA.

favour rather than hinder the natural environment. He assured the Council that sufficient water would be spilled at the Poutu Canal Intake to provide the recommended mean flow of around 1000 cubic feet per second at the Tongariro road bridge. Artificial freshes would also be induced down the Tongaririo River which would hopefully 'give best possible fishing conditions' for trout to spawn. The flow of the Wanganui and Whakapapa Rivers would not be allowed to 'fall so low that safety of fish is endangered even if it means diversion temporarily halted.'⁸⁷ These assurances were considered alongside the opinions of the members of the Council. They were a key element in the NCC coming to what, to a present day reader is a surprising decision on the Tongariro Development.

The Nature Conservation Council ended its deliberations by considering two proposals which reflected the divergence of opinion among its members. One resolution, proposed by Salmon who continued to oppose the project, sought a postponement. It read as follows:

Having regard to the widely expressed concern as to the wisdom of taking immediate action to commence operations on the Tongariro Power Development Project, and with full appreciation of its responsibilities to the Government and people of New Zealand, the Council recommends that the Government should postpone the commencement of the project.⁸⁸

Salmon provided reasons to support the view that it was desirable to preserve such 'primitive areas,' like the Tongariro Region. Firstly, for the 'education and recreation of present and future

⁸⁷ Nature Conservation Council Minutes 1963-68, 15 Sept 1964, p.4, AAZU, W3619, Box 93, Vol. 2, NA.

⁸⁸ Nature Conservation Council Minutes 1963-68, 15 Sept 1964, pp.4-5, AAZU, W3619, Box 93, Vol. 2, NA.

generations.' Secondly, that the extent of 'interference' that the Tongariro Development would inflict on the environment was 'unknown' or only 'partially known' as a result some 'unpredictable changes' could occur. Thirdly, it was also suggested that New Zealand was nearing its 'limit of hydro-electric development' and, the Council recommended 'that further investigations should be made into [the] development of other sources of power.'⁸⁹

The second Council resolution that the NCC debated was markedly different and read as follows:

That the need for additional power by 1972 having been weighed against conservation factors, the Council offers no objection to Government proceeding with the scheme provided that every effort is made to preserve the recreational value of the Tongariro River, and in particular the proposal to build a new town at Turangi be reviewed with a view to siting it elsewhere.⁹⁰

The second resolution was adopted by four votes to two, with the chairman Dr Falla abstaining. Seabrook and Salmon voted against the resolution. With the Council's final decision favouring the Tongariro Development the last obstacle in the government's mind had been removed. The project was formally adopted by Cabinet in November 1964.

With the Cabinet decision in November 1964, the Tongariro Power Development Project moved from planning to implementation. This effectively ended the first phase of protest and opposition to the scheme. As the Electricity Department and Ministry of Works began

⁸⁹ Nature Conservation Council Minutes 1963-68, 15 Sept 1964, pp.4-5, AAZU, W3619, Box 93, Vol. 2, NA.

⁹⁰ Report of the Nature Conservation Council, *AJHR*, 1965, H.30, pp.3-4.

their construction, the concerned locals observed closely the construction and awaited the commissioning of the development to determine the full impact of the Tongariro Development. The wait was not very long before it was obvious that the Tongariro Power Development Project was severely undermining the streams and rivers of the Western Diversion. As a consequence a second phase of opposition emerged in 1972 which continued through to 1983.

Chapter Five

Reactions to the Commissioning of the Western Diversion 1972-1983

With the completion of the consultations in September 1964, the Tongariro Development received the final approval to commence construction in November 1964. The most vocal opposition to the Tongariro Development seemingly ended. More accurately it went into abeyance until late 1972, when active and vocal opposition towards the project reemerged. In this stage of the campaign, the Western Diversion of the Tongariro Development was the principal topic of concern.

The opposition was no longer easily ignored. In 1967 the government had passed the Water and Soil Conservation Act which changed the administration of the country's waterways.¹ By passing this Act, the government had inadvertently provided the Tongariro Development opponents with a mechanism by which they could legally obstruct the diversion of water out of the Whanganui catchment. This chapter will outline the events which led to the Western Diversion becoming the focus of a contest between the government and opponents of the Tongariro Development between 1972 and 1983. It emphasised the differences which existed between the earlier period of opposition and the latter period of debate, in particular the effect that the 1967 Water and Soil Act had on the nature and form of protest.

¹ The 1967 Water and Soil Conservation Act and its subsequent amendments are examined thoroughly in Michael Roche *Land and Water - Water and Soil Conservation and Central Government in New Zealand 1941-1988*, Wellington: Historical Branch, Department of Internal Affairs, 1994.

Old Concerns Confirmed

The opposition that had emerged between 1955 and 1964 saw the Tongariro Development as having widespread negative impact on both the natural environment of the area and the economic and social well being of the local townships, in particular, Taumarunui. The news media took an interest and significant sectors of the Tongariro community were stung into action, voicing their concerns in various national and local forums. However with the Tongariro Development receiving approval to proceed, this first phase of opposition ended. Almost a decade later, a second phase of protest emerged. This renewal of active opposition was a direct result of the commissioning in late 1972 of the Whakapapa Intake to the Western Diversion.² This first stage of the Tongariro Development had reduced the water flow in the Whakapapa and Whanganui Rivers to a level that threatened the natural attractions of the downstream area. As a consequence, several concerned organisations and individuals, such as long time campaigner Peter McIntyre, led a second campaign against the project.

As the first stage of the Tongariro Development was constructed, it became apparent what the Western Diversion's impact upon the Whanganui river and its tributaries would be. It was soon obvious that the first stage severely reduced the water levels of the Whakapapa and Whanganui River. This led to a new focus of contention during the following two decades. The battle lines were drawn on the water levels of the Whakapapa and Whanganui Rivers. This was a contrast to the 1964 protests which were predominantly based upon Tongariro River and the amenities of the township at Taumarunui.

² *Wanganui Chronicle*, 19 Feb 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

The Controversial Western Diversion

The Western Diversion of the Tongariro Development became particularly controversial because of the effect that the diversion of water out of the catchment had upon the headwaters of the Whanganui River. The diversion began functioning in late 1971,³ although it did not become fully operational until early 1974 when water could be passed through the newly completed Tokaanu Power Station.⁴ The Electricity Department had only gradually started diverting water because Lake Rotoaira's level was not to be raised. Until that time, excess water was passed through Lake Rotoaira and down the Poutu River into the Tongariro River increasing the power yield of the Waikato River.

Despite earlier assurances, once the Electricity Department diverted the full amount of water possible what remained in the Whakapapa River could barely flow between the large rock pools that were formed. Many trout were stranded and the increase in the temperature of the river killed other aquatic life. The Diversion reduced the Whakapapa River, the principle contributor to the Western part of the scheme, to a 'shadow of its former self.'⁵ Prior to the Tongariro Development the Whakapapa River had the reputation as being a tremendous trout fishing and white water rafting river,⁶ as a consequence of the Western Diversion, the Whanganui River was closed to fishing above Taumarunui because the river's low levels had trapped the surviving trout in

³ Letter, General Manager of Central Districts Catchment Boards, R.A. Barrett to Minister for the Environment, G.J. Palmer, 17 Nov 1988, p.1, W/333/510(f), Lower Wanganui Catchment, Water Management Plan 1988, MWRC.

⁴ New Zealand Electricity Department, A Division of the Ministry of Energy. *Wanganui River Flow Submissions to Rangitikei Wanganui Catchment Board*, Hamilton: New Zealand Electricity Department, 1982, p.2.

⁵ Linda Clarke, TVNZ, Frontline Documentary, 'Hell or High Water,' Nov 1988.

⁶ *Wanganui Chronicle*, 19 Feb 1973, W/333/U/466 Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

small pools which meant anglers could easily wipe out the entire population.⁷

Not only had the river been valued for its recreational use but it also had a reputation for its unique natural assets, such as the blue duck. With the water reduced to a level that could not sustain a constant flow between pools, both the recreational and natural assets of the Upper reaches of the Whanganui and Whakapapa were threatened. The Whanganui River was also effected to a point that parts of the river bank previously under water were exposed.

Concerned parties who had been observing the Ministry of Works and Electricity Departments actions, became active again. The later protest was similar to the earlier period of opposition in that there was no cohesive movement which opposed the Western Diversion. The Whanganui River Maori and Waimarino Acclimatisation Society were involved, but were narrowly focussed on their own particular reasons for opposing the development to join any other group.

Like the earlier period, there was a sense of betrayal amongst the concerned locals. This was strongly reflected in the media reports of the time. Locals from Taumarunui and Wanganui, for instance, wanted the water returned to the river immediately.⁸ Others wanted the government to address and explain the broken promises and assurances which had resulted in the disastrous impact upon the river. The Taumarunui Mayor, Mr Byars who had experienced the 1964 protests believed that the whole issue had become a 'tragic situation.' He believed that the scenic and fishing attractions of the

⁷ *Wanganui Chronicle*, 8 Dec 1972, W/333/510(a) Lower Wanganui Catchment, Water Management Plan 1972-1977, MWRC.

⁸ *Wanganui Chronicle*, 19 Dec 1972, W/333/U/466 Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

area would in the future 'exist in name only.'⁹ The *Wanganui Chronicle* reported that the locals were referring to the Whakapapa River as 'the river that was.'¹⁰

In 1964 the Electricity Department had made a series of promises and assurances in an attempt to appease the opposition, in 1972 these promises once again came to the forefront of the debate. The assurances were made with the primary objective of avoiding controversy and satisfying the demands of the communities affected. The guarantees made to the Tongariro community during the 1964 consultative process, soon back fired upon the government and fueled the new opposition to the development.

The first assurance had been that the approval of the Tongariro Project was subject to the government being 'satisfied that suitable arrangements' had been made to 'preserve the interests of parties' who would be 'adversely affected' by the project.¹¹ In the opinion of the Electricity Department, the Taumarunui community had been satisfied, however with the impact of the project on the river this was clearly no longer the case.

A second assurance which was clearly broken once the Whakapapa and Whanganui River levels were reduced, was that trout would not be threatened. The Electricity Department had promised that in dry spells the flow of the Whanganui and Whakapapa rivers would 'not be allowed to fall so low that the safety of the fish' was endangered even if it meant that the

⁹ *Wanganui Chronicle*, 19 Dec 1972, W/333/U/466 Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

¹⁰ *Wanganui Chronicle*, 17 Feb 1973, W/333/U/466 Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

¹¹ Annual Report of the Power Engineering Division, New Zealand Electricity Department, *AJHR*, 1963, D.1, p.23.

'diversion will be temporarily discontinued.'¹² It was clear to all in 1972 and 1973 that the safety of the fish was being compromised by the large amount of water that was being diverted. By the Electricity Department's own standard, the diversion should have been temporarily discontinued.

A third assurance had been for the Electricity Department to guarantee a minimum flow in both the Whanganui and Whakapapa rivers that would be adequate enough to ensure both the safety of fish stocks and the maintenance of power production at the Piriaka power station. On the presumably rare occasions that a flow of 350 cusecs could not be maintained, a compensation payment of ten dollars per cusec per day would be paid by the Electricity Department.¹³ This assurance, and whether it would be honored, was of particular interest to the Taumarunui Borough Council who since agreeing to compensation payments had been at loggerheads with the Electricity Department over a desire by the Council to have the level of payments reviewed. Shand in 1964 had believed that even if the compensation for the Western Diversion ran into millions of pounds the Tongariro Development would still be the 'most economical to provide the country's power needs.'¹⁴ By 1973 his successors were not so sure.

These assurances continued to be restated by the Electricity Department after 1964. In 1969, for example, the guarantees that there would be a minimal affect on the rivers 'fishing amenities' and that the 'area will be safeguarded' were again echoing through the

¹² *Plateau Gazette*, 27 Feb 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

¹³ *Plateau Gazette*, 27 Feb 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-89, MWRC.

¹⁴ *Wanganui Chronicle*, 19 Feb 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

region.¹⁵ However, as the effects of the Western Diversion unfolded the Electricity Department began to make concessions to its critics who challenged their assurances as hollow. In early 1973, the Electricity Department publicly acknowledged that the diversion of some of the water from the Upper Whanganui would 'affect the quality of the river.'¹⁶ Public skepticism and anger increased. The Mayor of Taumarunui, Byars expressed a common view when he stated that 'they don't know what the effect' the Project will 'have on the river.'¹⁷

By 1973 the Taumarunui Borough Council were also keen to remind the Electricity Department of their guarantee that the Whanganui river would not be 'less usable by jet boats.' This was tested with the third stage of a annual jet boat marathon that ran from Taumarunui to Wanganui in February. Due to the reduced flows from the upper reaches, the marathon had to start 18 miles down river from Taumarunui.¹⁸

In their agreement with the Taumarunui Borough Council, the Electricity Department was agreed to 'regularly inspect the channels, banks and river bed of the river' removing all the 'obstructions and plant growth due to the reduced flows.' This had been attended to briefly prior to the scheme coming fully operational but once the water level had dropped this was neglected.

¹⁵ *Wanganui Chronicle*, 20 Sept 1969, p.13.

¹⁶ *Wanganui Chronicle*, 17 Feb 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

¹⁷ *Plateau Gazette*, 27 Feb 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

¹⁸ *Plateau Gazette*, 27 Feb 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-89, MWRC.

The Nature Conservation Council's Role

A new set of obstacles presented themselves to the Electricity Department, in the form of the Nature Conservation Council. The Government's own watchdog, the Nature Conservation Council played a much larger role in the second phase of opposition to the Western Diversion. Unlike the earlier period, the NCC helped expose the problem and lead discussions in 1973 over the Project's impact.

From the outset of this second phase of opposition, it was reported in the *Wanganui Chronicle* that the Whakapapa River, 'one of the North Island's finest trout streams,' had been severely affected by the first stage of the Tongariro Development. The Nature Conservation Council feared that 'hundreds of trout' would die in the river valley unless they got fresh water. Several members of the NCC's Board were publicly critical of the scheme. Dr Robert Falla, the Council Chairman and Mr Stratford McDonald, the Executive Officer, were both given coverage in the *Wanganui Chronicle*. Falla announced that the Western Diversion's impact on the Whakapapa Stream and Whanganui River appeared to be another example of 'myopic planning.' He expressed the hope that 1973 would mark the 'beginning of an era in which planning' would take 'account of more factors than the immediate objective.'¹⁹ McDonald visited the Whakapapa River to survey the extent of the impact, and concluded that there had 'to be a flow down there [Whakapapa] or the fish will die.'²⁰

¹⁹ *Wanganui Chronicle*, 19 Dec 1972, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

²⁰ *Wanganui Chronicle*, 17 Feb 1972, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

The Council recommended to the government that a residual flow of water be allowed past the diversion to 'protect the fish' and the 'colony of blue duck[s].'²¹ The Council also brought another issue to the attention of the Ministry of Works. They noted that with the diversion of so much water from the Whakapapa and Whanganui Rivers, the large goat population of the upper reaches of the two rivers would have 'direct access' to the Taurewa State Forest in times of low flow.²² This was another unanticipated and undesirable consequence of myopic planning.

The Waimarino Acclimatisation Society had received a confidential report in July 1964 which outlined the likely negative effects of the Western Diversion upon three of the most used rivers and streams of the project. As it turned out government's private estimations were correct as to the impact on the rivers. However they did not correctly anticipate the widespread public disapproval. It was natural for the people of the Tongariro Region to complain about having the Whakapapa River 'devoid of water for up to four miles' and replaced with dry rocks and the occasional rock pool. Such environmental impact did not go down well with the locals.²³

As a result of the widespread public and media response to the impact of the Western Diversion, McDonald of the Conservation Council sought an emergency meeting with the Ministry of Works engineers. The purpose of the meeting was to discuss the effect of

²¹ *Wanganui Chronicle*, 17 Feb 1972, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

²² *Wanganui Chronicle*, 17 Feb 1972, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

²³ *Wanganui Chronicle*, 19 Dec 1972, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

the diversion on the headwaters in an attempt to keep the 'Whakapapa alive.'²⁴

Two series of tests and investigations were conducted to determine exactly what the 'minimum level of water' would need to be to 'support the trout life.'²⁵ An independent investigation, which was a response to the attention the Western Diversion was receiving, concluded that a minimum flow of 20-30 cusecs would be needed to maintain the fish life in the Whakapapa. A unidentified Fisheries expert, however reported that they did not know how much water flow is needed to 'keep the fish alive.'²⁶ He concluded that it could take 'a lot more than that to preserve the fishery.' From these reports, a general consensus emerged, that Thomas McGuigan, the new Labour Minister of Electricity announced in late February 1973. He argued that the fish would 'still be there; but the river will never be the same again.'²⁷

At a public meeting in February 1973 the NCC made several recommendations to the government which was represented by the Minister of Lands, Matiu Rata. The meeting was attended by a wide range of concerned people from throughout the Tongariro Region, including groups who had long been concerned with the Tongariro Development, plus the Whanganui River Maori who emerged as a significant concerned group.

²⁴ *Wanganui Chronicle*, 19 Dec 1972, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

²⁵ *Wanganui Chronicle*, 15 May 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

²⁶ *Wanganui Chronicle*, 19 Feb 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

²⁷ *Wanganui Chronicle*, 19 Feb 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

The NCC stressed that the reduction of the Whakapapa River would not just affect the region's trout fishing prowess but also threaten the colony of rare blue ducks. The Council and concerned locals, received assurances from the Ministry of Works and Electricity Departments project engineer, Mr B. Dekker, that they had 'no intention of riding roughshod over the interests of the people.' Dekker again assured the meeting that the promises made would be met and 'reasonable compensation be paid.'²⁸

During these discussions the Electricity Department was broad-sided their own District Manager, Mr L. Shanks who argued that he did not 'think the importance of the Whakapapa River had been stressed sufficiently when the scheme was first suggested.' He believed that the message had never 'got home,' as a consequence the river was overlooked in favour of the Tongariro River, which was a well publicised attraction.²⁹

Peter McIntyre was again prominent, arguing that the scandal of the Whakapapa River was the sort of 'national vandalism that only a Government could commit.'³⁰ He requested that there be an even distribution amongst the rivers so that the Whakapapa could have some water flow.

Thomas McGuigan, the Minister of Electricity addressed the meeting and presented the conservationists with what he saw as the government's dilemma. If a 'minimum flow of 20-30 cusecs' was not achieved then they would have to 'come up with an alternative

²⁸ *Taumarunui Press*, 1 Mar 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

²⁹ *Taumarunui Press*, 1 Mar 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

³⁰ *Taumarunui Press*, 1 Mar 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

level' that would be 'satisfactory to the power requirements.' He reminded the meeting of the government's efforts to protect the environment but pointed out that given the amount of capital which had been spent on the diversion the government 'could not afford to waste natural resources.'³¹

The meeting concluded with Mr Dekker, the Tongariro project engineer, stressing that the diversion could perhaps be modified but he could not make any promises. He acknowledged that over the previous 5-10 years there had been 'a considerable change in New Zealand's approach to the environment.' So much so that there was a real 'need for compromise between development and environment.'³² In this case, the government's idea of a compromise was a minimum flow of 20-30 cusecs to keep water flowing between pools. This was unsatisfactory to the supporters of the river.

After the Ministry of Works had finished hearing submissions from the Nature Council and other conservationists, such as the Waimarino Acclimatisation Society, they contemplated whether or not they should reopen the diversion to allow water to flow down the Whakapapa River. Surprisingly, the decision whether to release water down the Whakapapa River took several months to decide. During this period, debate continued in the media. The message that began leaking out was that the decision was unlikely to please the protestors. The Minister of Electricity, McGuigan, in his media statements concentrated on the fact that the government had already 'spent \$30 million' on the Western Diversion and that they

³¹ *Wanganui Chronicle*, 15 May 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

³² *Plateau Gazette*, 1 Mar 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

were 'currently faced with a great demand for power.'³³ He stated that there had to be some sort of trade off, between either Electricity cuts or more water down the river.

In a context of growing speculation throughout the Tongariro region, another public meeting was held on 15 May 1973, called by the president of the Waimarino Acclimatisation Society, Mr L.R. Todd. The meeting was essentially for the trout fisherman and conservationists of the area to get together to discuss their joint problem. From the meeting two key requests emerged. The first request was for the government to conduct a survey in all the areas related to the 'fishery and that equipment and money be made available for this.' The second request was to establish a 'worthwhile fishery on the Whakapapa River' which they considered would mean a 'continual release of not less than 80 cubic feet a second over the Whakapapa.'³⁴

The Electricity Department response to the requests was not favourable. The Minister reported that the Whakapapa River was an 'essential part of the Western Diversion project of the Tongariro Power Scheme' and as a consequence its 'flow could be reduced from its present minimum of 200 cusecs to a minimum level of 20-30 cusecs.' In response to this Mr H.F. Low, of the Wanganui Acclimatisation Society argued that it 'seems inevitable' that the stream bed ecology and consequently its ability to maintain a substantial number of fish will have been 'grossly impaired.'³⁵

³³ *Wanganui Chronicle*, 15 May 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

³⁴ *Wanganui Chronicle*, 16 May 1973, p.7.

³⁵ *Wanganui Chronicle*, 19 May 1973, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

The Electricity Department continued to assert that it could not afford to allow too much water through the diversion because the point of the whole Western Diversion was to divert the maximum amount of water to power the generators at Tokaanu and on the Waikato River.

A New Protest Mechanism is Discovered

Between 1965 and 1972, while the Western Diversion and the Tokaanu Power Station stages of the Tongariro Development were being planned and constructed, the government passed legislation which was to have a major affect upon the issue on the river flow issue. The Water and Soil Conservation Act, passed in 1967 was an attempt to revolutionise water rights and soil conservation in New Zealand. According to historian Michael Roche, the 1967 Act was an 'effort to meet the new demands on water resources.'³⁶ The Act established regional boards that administered soil conservation measures, distributed water rights and carried out maintenance works.

The establishment of the government's new water and soil conservation machinery, gave the opportunity for the concerned locals of the Tongariro Region to discuss their concerns through new official channels. Ultimately this enabled a new phase of the protest to begin. This phase began with a letter written by the New Zealand Canoeing Association in December 1977 to the National Water and Soil Conservation Organisation. At the heart of the letter was the issue of the Whanganui River and Western Diversion of the Tongariro Development. The letter requested a fixed minimum flow for the Whanganui River. As a result of the letter, the Water

³⁶ Roche, *Land and Water*, p. 97.

Resources Council, established by the 1967 Act, ordered the local water board, which at the time was the Rangitikei-Wanganui Catchment Board, to 'report and recommend' on establishing a 'desirable minimum flow' for the Wanganui River.³⁷ The Rangitikei - Wanganui Catchment Board prepared a 'water allocation plan' for the Whanganui River which outlined the river's 'uses and likely development potentials' with a view to setting a desirable minimum flow.

With investigations into the river use complete, the Rangitikei-Wanganui Catchment Board called for submissions from the 'public on future management of the waters of the Wanganui River.' These were scheduled to be completed by 1 August 1979. The response was disappointing with no substantial interest taken in the process. The Electricity Department and Ministry of Works made a joint submission stating that there seemed to be 'no reason' to 'object to the statement of policy or minimum flows.'³⁸ Concerned locals were either unaware of what was going on or were confused by what was required under the new regime. The limited response saw the Catchment Board delay this decision pending further consultation.

Another request was made for public submissions in 1982, this time seventeen interested parties submitted proposals. This was a pivotal moment in the long contest over the river flows. The Catchment Board set up a Tribunal during 1983 which heard the submissions from the different groups. It then made a decision. An increased flow of 22 cumecs was established between 1 December

³⁷ Letter, Director of Water & Soil Conservation Organisation, A.W. Gibson to Rangitikei Wanganui Catchment Board, Secretary, 16 Dec 1977, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

³⁸ New Zealand Electricity Department - A Division of the Ministry of Energy. *Wanganui River Minimum Flows Submissions to Rangitikei Wanganui Catchment Board*, Hamilton: New Zealand Electricity Department, 1982.

and 14 January and over the Easter period, and for the rest of the year it was set at 16 cumecs.³⁹

From 1983 the meeting rooms of the planning tribunals would become the cauldron of the debate. In 1983, and more importantly in 1988 planning tribunal, made significant determinations on minimum flows. The Tongariro Development and its impact continued to be the subject of significant debate.

³⁹ ECNZ, Whanganui River Maori Trust Board, Rangitikei-Wanganui Catchment Board and Regional Water Board, and the Wanganui River Flows Coalition. *Whanganui River Flow Submissions: Electricity Corporation of New Zealand (vol. 1)*, Marton: Rangitikei-Wanganui Catchment Board, 1990.

Conclusion

This thesis has used a study of the Tongariro Power Development Project to explore a clash between the contrasting values of conservation and development. Hydro-electric development projects provided the focal point from which an ongoing contest between advocates of conservation and development emerged in post World War Two New Zealand. Between 1955 and 1983 debate over the Tongariro Development, along with the more widely reported Aratiatia and Manapouri schemes, brought the issue of nature conservation dramatically to the public's attention.

The Tongariro Development was hotly contested, as a result of the debate it became a defining moment in the process of the government consulting the public over conservation issues. Before the Tongariro Scheme the impact of projects on natural scenic resources had largely been ignored by the government. The natural environment had been seen only as a source of further economic gain. The debate in Tongariro helped to weaken this view and made the government more inclined listen to public opinion.

With the establishment of the Nature Conservation Council in 1962 the government acknowledged the emerging level of public opinion with regard to conservation, although the Nature Conservation Council did not immediately have an impact on the government's actions. Those planning the Tongariro Development tried to anticipate public reaction, but gravely underestimated the response.¹ This miscalculation was a catalyst for the hostile public response to the announcement of the project in 1964. Concerned

¹ New Zealand Electricity Department. Notes on the Tongariro Power Development, Feb. 1964, ED, W3214, 6/0/10/4, part 9, NA.

groups and locals soon emerged in protest many of whom had never been vocal on conservation topics before.

This thesis has explained the debate over the Tongariro Development from the front page of the *Evening Post* in 1964 to the Planning Tribunal in 1983. Changes in the site of protest can be attributed to a change in the government's attitude towards the management of soil and water issues in 1967 marked by the passing of the Water and Soil Conservation Act. The passing of the Act also reflected however the fact that once the project was operating a more legalistic approach was perhaps required.

The 1983 minimum flows decision did not end debate over the Tongariro Development. Many grievances associated with the project have continued to be discussed in a variety of places. The Planning Tribunal and, more recently, the Waitangi Tribunal have dealt with numerous issues relating to the construction and operation of the Tongariro scheme.

Following the 1983 hearing, in which a minimum flow was negotiated, the Planning Tribunal met again in July 1988 to discuss the Tongariro Development, in particular, a possible review of Whanganui river flow. The suggestion of fixing a new minimum flow led to intense debate between power planners, represented by the ECNZ, and a new wave of protestors, which were made up of the Whanganui River Maori Trust Board and several conservation groups. The 1988 Minimum Flow Hearings resulted in several

recommendations after hearing evidence from more than '70 witnesses.'²

The Tribunal allowed the smaller diversions at 'Okupata, Taurewa, Tawhitikuri, Mangatepopo and Te Whaiiau streams' to continue, but set an increased minimum flow at the Whakapapa Intake of '8.5 cumecs for the period 1 December to 30 April and 4.2 cumecs for the balance of the year, subject to such flows being naturally available.' The Tribunal recommended that

In the event of a National Power Supply Emergency Electricorp may seek the approval of the Rangitikei-Wanganui Catchment Board for a minimum flow. Such approval, if granted, to be subject to any conditions that the Board may impose.³

The final recommendation established that the flow regime would be in place for five years expiring on 31 October 1993. At this time, the arrangement would be renegotiated. This was not the ideal conclusion for either side. As a result, the issue of the Whanganui River flows remain a live issue, revisited every five years.

² There are a large body of submissions. The ECNZ, Whanganui River Maori Trust Board, Rangitikei-Wanganui Catchment Board and Regional Water Board, and the Wanganui River Flows Coalition all made submissions. See for example: *Whanganui River Flow Submissions: Wanganui River Flows Coalition*, Marton: Rangitikei-Wanganui Catchment Board, 1990. ECNZ, Whanganui River Maori Trust Board, Rangitikei-Wanganui Catchment Board and Regional Water Board, and the Wanganui River Flows Coalition. *Whanganui River Flow Submissions: Electricity Corporation of New Zealand (3 Vol.)*, Marton: Rangitikei-Wanganui Catchment Board, 1990. ECNZ, Whanganui River Maori Trust Board, Rangitikei-Wanganui Catchment Board and Regional Water Board, and the Wanganui River Flows Coalition. *Whanganui River Flow Submissions: Whanganui River Maori Trust Board*, Marton: Rangitikei-Wanganui Catchment Board, 1990.

³ Letter, Planning Tribunal to the Chairman, Rangitikei-Wanganui Catchment Board, 20 Sept. 1988, p.1-3, W/333/U/466, Upper Wanganui Catchment, Tongariro Power Scheme 1969-1989, MWRC.

The Government in the 1960s believed it had satisfied all issues relating to Ngati Tuwharetoa and the Tongariro Development. This belief proved to be unfounded. The Waitangi Tribunal also became embroiled in discussions relating to the Tongariro Development, on two fronts. The first involved the township of Turangi, the second Lake Rotoaira.

The town of Turangi became the centre of attention after a claim was lodged in September 1995 by a hapu of Ngati Tuwharetoa, Ngati Turangitukua.⁴ The claim was based upon the Government having taken 'an extensive area of ancestral land ... under the compulsory acquisition provisions of the Public Works Act 1928 and Turangi Township Act 1964.'⁵ The Tribunal concluded in favour of Ngati Turangitukua recommending the 'return of some, but not all, memorialised properties' in the Turangi area as well as the return of 'Crown owned property' in the township.⁶ The Tribunal also recommended a monetary payment by the Crown to Ngati Turangitukua.⁷

The Crown's Policy in relation to Lake Rotoaira and its involvement with the Tongariro Development was also investigated by the Tribunal.⁸ This was after a claim was lodged in February 1991 by

⁴ Waitangi Tribunal, *The Turangi Township Remedies Report*, Wellington: G.P Publications, 1998, p.101.

⁵ Waitangi Tribunal, *The Turangi Township Remedies Report*, p.1.

⁶ Waitangi Tribunal, *The Turangi Township Remedies Report*, p.101.

⁷ The monetary payment was to be paid under four headings; Establishment of Turangitukua House, Preservation and maintenance of wahi tapu, the purchase of land in the Industrial Area no longer in Crown ownership and for the Establishment of a 'start fund.' Waitangi Tribunal. *The Turangi Township Remedies Report*, pp.103-4.

⁸ J. Koning, *Lake Rotoaira: Maori Ownership and Crown Policy towards electricity generation 1964-1972*, Wellington: Waitangi Tribunal Division, Department of Justice, 1993.

the Lake Rotoaira Trust.⁹ The Trust maintained that they had been 'prejudicially affected by the acquisition by the Crown of the right to use their Lake Rotoaira title for the generation of electricity without the payment of compensation.'¹⁰ The Tribunal has not yet heard the Trust's claim. As a consequence it remains a live issue today.

* * * * *

The Tongariro Development remains an on going issue of contention after almost five decades of discussion and debate. In the 1960s those opposed to the Tongariro Development were resisting a proposal and its anticipated consequences. Since the construction of the project the focus has moved to alleviating the actual consequences for the environment. Many of the concerns raised during the 1960s have proven to have been well founded.

⁹ Lake Rotoaira Trust are members of the Ngati Tuwharetoa hapu, Ngati Kurauia, Ngati Turangi, Ngati Rongomai, Ngati Hikairo, Ngati Matangi, Ngati Pouroto, and Ngati Wae Wae.

¹⁰ J.T Asher, Secretary, Lake Rotoaira Trust, to Registrar, Waitangi Tribunal, 25 Feb. 1991 in Koning, *Lake Rotoaira: Maori Ownership and Crown Policy towards electricity generation 1964-1972*, p.1.

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