



**Cultural Values
Assessment**

On the

**Manapouri Amended
Tailrace Discharge
Project**

Prepared for

Meridian Energy Ltd

Prepared by Te Ao Marama Inc
Representing
Te Rūnanga o Awarua, Oraka/Aparima Rūnaka,
Waihopai Rūnaka and Hokonui Rūnaka Inc Society

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Mō tātou, ā, mō nga uri ā muri ake nei
For us and our children after us

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Chapter 1

Executive Summary

Ngai Tahu have a long association with the Waiau Catchment and Taipari-riki area, it is truly valued by all. Six Ngai Tahu Statutory Acknowledgements exist within the project area. These include Te Ara a Kewa (Foveaux Strait), Waiau River, Manapouri, Te Anau, Te Mimi o Tu te Rakiwhanoa (Fiordland Marine) and Mavora. A Topuni exists over the Takitimu mountains. The land is thick with Iwi stories, traditions and cultural practices.

Nga Runanga ki Murihiku recognizes the importance and value of electricity in meeting the social, economic and cultural needs of the peoples of Aotearoa. This is seen as a positive outcome of the MTAD project. Ngai Tahu readily accepts new technologies and have witnessed and participated in the development and use of electricity to meet the changing lifestyles of people. A core Iwi value of Whanautanga (family) and the ability to provide security and comfort is met by the provision of electricity.

In providing this Cultural Values Assessment we acknowledge the differing opinions and values of people. We see differences in values between Iwi and non Iwi. We also take into account the differences in local values as opposed to national values.

The cultural values of Ngai Tahu associated with the Waiau Catchment (ki Uta ki Tai), Te Wae Wae Bay and Taipari-riki are outlined in this report. The protection of these values for the wellbeing, oranga (health), wairua (spirit), tinana (body), of both present and future generations is paramount to Ngai Tahu. This can be summed up in the Ngai Tahu vision.

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For us and our children after us

This report outlines the opinions of Ngai Tahu who have participated. Their views at times are strong. Many of these opinions are as a result of the existing regime. These views are seen as relevant given that Iwi are concerned about accumulative effects and any subsequent future problems.

The effect of the MTAD project on the Long Fin Eel, Dolphin and the marine environment in Taipari-riki, Mauri of the Waiau and accumulative effects are outlined as having impacts on Iwi values.

Reading sections of the Ngai Tahu ki Murihiku Natural Resource and Environmental Management Plan (Te Tangi a Tauira) as outlined in this report is vital if you are to understand our Ngai Tahu ki Murihiku Values, Issues and Policy. Section 3.3.11 Hydro Development/Generation has been especially developed for projects such as the MTAD.

Recommendations come from policy within Te Tangi a Tauira

Introduction

Meridian Energy Ltd is currently preparing to lodge a resource consent application to increase the maximum allowable discharge through the Manapouri Power Station to Deep Cove in Doubtful Sound (the Manapouri Tailrace Amended Discharge Project).

Te Ao Marama Incorporated have been approached to provide consultancy services as they have the necessary resource management and Ngai Tahu kaupapa skills to assist Meridian Energy Ltd with consultation among Ngai Tahu Whanui on matters of spiritual and cultural values pertaining to the acquisition of the Resource Consents required for the proposed project.

Objectives of CVA

This Cultural Values Assessment has been prepared for Meridian Energy Limited to allow them to know and understand the Values held by Nga Runanga ki Murihiku and Ngai Tahu Whanui and potential effects (both positive and negative) the proposed project may have on these values.

Ngai Tahu ki Murihiku and Meridian Energy Limited intend to review these values with a view to resolve any issues raised and concerns held by the participants as a result of the proposed project. Te Ao Marama Inc will provide potential solutions and mitigation regarding potential effects.

This report compliments an earlier report prepared by Te Ao Marama Inc Assessment of Effects of the Second Manapouri Tailrace Tunnel.

Participants

- A. Kaumatua
- B. A Representative from each of the Following Papatipu Runaka
 - Te Runaka o Waihopai
 - Te Runaka O Oraka/Aparima
 - Te Runanga o Awarua
 - Te Runaka o Hokonui
- C. Those Runaka Members who are representatives are on the following organisations/groups
 - Waiau Catchment Eel Group
 - Guardians of Lakes Manapouri, Monowai and Te Anau
 - Fiordland Marine Guardians
 - Waiau Working Party
- D. The Office of Te Runanga o Ngai Tahu
 - Toitu te Whenua

Mana whenua Nga Runanga ki Murihiku

This report is compiled for Meridian Energy Ltd by Te Ao Marama Ltd on behalf of Nga Runanga o Murihiku. These include

- Te Runanga o Awarua based in Bluff
- Te Runanga o Oraka/Aparima based in Riverton
- Te Runaka o Waihopai based in Invercargill
- Te Runaka o Hokonui based in Gore

Waihopai Runaka	The takiwa of Waihopai Runaka centres on Waihopai and extends northwards to Te Matau sharing an interest in the lakes and mountains to the western coast with other Murihiku Runanga and those located from Waihemo southwards.
Te Runanga o Awarua	The takiwa of Te Runanga o Awarua centres on Awarua and extends to the coasts and estuaries adjoining Waihopai sharing an interest in the lakes and mountains between Whakatipu-Waitai and Tawhititarere with other Murihiku Runanga and those located from Waihemo southwards.
Te Runanga o Oraka Aparima	The takiwa of Te Runanga o Oraka Aparima centres on Oraka and extends from Waimatuku to Tawhititarere sharing an interest in the lakes and mountains from Whakatipu-Waitai to Tawhititarere with other Murihiku Runanga and those located from Waihemo southwards.
Hokonui Runaka	The takiwa of Hokonui Runaka centres on the Hokonui region and includes a shared interest in the lakes and mountains between Whakatipu-Waitai and Tawhititarere with other Murihiku Runanga and those located from Waihemo southwards.

The Murihiku Region extends from the Sub-Antarctic Islands in the south to the Mataau (Clutha River) in the north. Nga Runanga o Murihiku share an interest in the mountains and lakes to the western coast with Rūnanga from Waihemo south i.e. Te Rūnanga o Moeraki, Kati Huirapa Ki Puketeraki and Te Rūnanga o Otakou.

The four Rūnanga Papatipu o Murihiku; Te Runanga o Awarua, Te Runanga o Oraka/Aparima, Te Rūnanga o Hokonui and, Te Rūnanga o Waihōpai are collectively involved in the protection/promotion of the region's natural and physical resources by providing input into the processes required by the RMA and other relevant legislation. Specific provisions within the Acts require the recognition and provision for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga, to have particular regard to kaitiakitanga and take into account principles of the Treaty of Waitangi.

Nga Runaka ki Murihiku are four of the eighteen kaitiaki (Papatipu) Runanga that constitute the membership of Te Runanga o Ngai Tahu. Te Runanga o Ngai Tahu is the tribal representative body of Ngāi Tahu Whanui. It is a body corporate established under section 16 of the Te Rūnanga o Ngāi Tahu Act 1996. The Te Rūnanga o Ngāi Tahu Act 1996 and the Ngāi Tahu Claims Settlement Act 1998 give recognition to the status of Papatipu Rūnanga as kaitiaki and manawhenua of the natural resources within their takiwā boundaries.

Nga Rūnanga ki Murihiku are the kaitiaki Rūnanga of the Murihiku Region. In that role Nga Rūnanga have a duty to protect the spiritual and cultural values of the area, including wāhi tapu, wāhi taonga, mahinga kai and other natural resources, for the benefit of members of Ngāi Tahu whanui.

Te Ao Mārama Incorporated

Ngāi Tahu ki Murihiku formed an entity known as Te Ao Mārama Incorporated, which is made up of representatives from Te Rūnaka o Waihōpai, Te Rūnanga o Awarua, Te Rūnanga o Oraka Aparima and Te Rūnanga o Hokonui. Te Ao Mārama Incorporated is authorized to represent the four Southland Rūnanga Papatipu in resource management matters, and can be described as a “one-stop-shop” for iwi liaison for resource management issues in Murihiku.

Te Ao Mārama Incorporated employs a Kaupapa Taiao Manager and other dedicated staff, and is essentially a business unit providing a direct link to local Rūnanga Papatipu, consent applicants, the local authorities and Te Rūnanga o Ngāi Tahu. Resource consent applicants who want to liaise with iwi can contact Te Ao Mārama Incorporated, who can then arrange for consultation with the appropriate Rūnanga Papatipu.

MTAD Project description

Manapouri Tailrace Amended Discharge Proposal.

This has become known as the Manapouri Tailrace Amended Discharge (MTAD) Proposal. The Manapouri Power Scheme harnesses water from Lakes Manapouri and Te Anau, and the Mararoa River to generate electricity in New Zealand’s largest single hydroelectric power station under the Fiordland mountains at West Arm, Lake Manapouri.

MTAD Proposal

The present maximum instantaneous discharge limit from the tailrace of the Manapouri Power Station into Deep Cove is 510 cumecs (cubic metres per second). Meridian operates at a set point maximum discharge of 485 cumecs to ensure compliance with consent conditions.

Meridian proposes to increase the maximum tailrace discharge limit to 550 cumecs, which will require new resource consents. The new consents being sought will not replace existing ones. However, the MTAD Proposal will seek new conditions allowing Meridian to change the way it monitors and records discharge, thus changing how Meridian operates the system, allowing it from time to time to reach the maximum of 550 cumecs.

This proposal will increase electricity generation by 89 GWh on average annually, enough to power approximately 11,000 households. In particular, Meridian is proposing to vary the way it utilises water available to it from natural inflows to the power scheme.

The proposal involves the following components:

- increasing the maximum rate at which water is discharged through the Manapouri Power Station to Deep Cove
- Changes to the pattern of lake level fluctuations in Lake Manapouri and Lake Te Anau
- Changes to the discharge of water released through the Manapouri Lake Control structure to the Lower Waiau River.

The above activities will generally occur when natural conditions permit, in particular during periods of high inflows to the lakes. There will be no changes to Gazetted Guidelines regulating the controlled fluctuations of Lakes Te Anau and Manapouri, and all other existing consents and conditions, except the current 510 cumecs maximum.

Consenting Process Overview

This proposal requires an evaluation of the potential effects under the Resource Management Act (RMA). These evaluations need to be based on a wide range of issues including the potential effects on the physical, biological, social and cultural environment. The studies will essentially cover three affected environments: the Lower Waiau River south to Te Waewae Bay; Deep Cove and Doubtful Sound; and Lakes Te Anau and Manapouri.

Assessing effects on the environment

An assessment of environmental effects (AEE) is currently being developed by Meridian and will address the changes summarised below. (It is important to note the changes are compared to present *operating* conditions of 485 cumecs, rather than the current *maximum* consented limit of 510 cumecs.)

Part of the consenting process includes consultation. Meridian is committed to consulting with the community on this proposal. Meridian wants to understand and take into account issues, concerns and interests related to MTAD.

Assessment of Environmental Effects have been completed on

- Hydrology
- Doubtful Sound Physical and Biological Environment
- Lakes Te Anau and Manapouri Physical and Biological Environment
- Waiau Arm Physical and Biological Environment
- Lower Waiau River Physical and Biological Environment
- Lower Waiau River Mouth and Te Wae Wae Bay
- Human Environment
- Landscape, Natural Character and Visual Amenities

Included in these are sections on

- Marine – physical and biological
- Bottlenose Dolphins
- Lower Waiau River ecology
- Ecosystems of lakes and Waiau Arm, including eels
- Recreation/Tourism and navigational safety
- Landscape and natural character
- Birds
- Lower Waiau groundwater and wetlands
- Lower Waiau geomorphology and river sediments
- Lakeshore and beach sediments and Lake Shoreline vegetation

Summary of MTAD Changes

Tailrace Discharge

- Overall, the power station will discharge an additional 2.6% (or 10 cumecs). In wet years it will discharge 5.1% and 0.6% in dry years.
- MTAD will generate on average an additional 89 GWh annually, enough to power approximately 11,000 households.
- The highest inflows occur during the spring snowmelt period between October and November.
- The majority of increased generation will be during wet years.

Lake Levels

- Both lakes will spend more time in their main range

Lower Waiau River

- The extra water being used for electricity generation would result in an overall 10 cumecs decrease in mean annual daily flow at MLC.
- There will be a slight decrease in frequency and duration of larger floods.
- There will be a 5.6% increase in the number of days the Lower Waiau River is at the minimum flow.

Methodology

This Cultural Values Assessment has compiled its information using a variety of sources.

Literature review and existing information:

- Review of existing information including relevant sections of the
 - Ngai Tahu Claims settlement Act 1998,
 - Te Whakataua Kaupapa o Murihiku,
 - Te Tangi a Tauira, Natural Resource and Environmental Iwi management Plan 2008,
 - Te Runaka o Ngai Tahu Environmental Policies and Plans
 - Waiau River, State of the Takiwa
 - A Cultural Index for Streams and Waterways
 - Te Runanga o Ngai Tahu Freshwater Policy

Consultative process

- Consultation hui with TAMI and participants, liaison with other Iwi representatives on other relevant groups visit
- Site visit with participants (as required)
- Optional site visits by Papatipu Runanga Members.
- Discussions with Tangata Whenua from Nga Runaka ki Murihiku, focusing on the identification and explanation of issues and concerns associated with the proposed project.
- Interviews were undertaken with Participants. These included Kaumatua, representatives of ngā Rūnanga, Ngai Tahu representatives on various groups associated with the Waiau, Te Anau , Manapouri
- Preparation of Draft Cultural Values Report.
- Review the effects study reports prepared by Meridian Energy Limited in relation to the project and presentations and discussions with the study authors as required.
- Discussions/interviews with Tangata Whenua from Nga Runaka ki Murihiku focusing on the identification and discussion of the outcomes Tangata Whenua are seeking in terms of the project and what conditions or outcomes Tangata Whenua would like to see.
- Distribution and review of draft report with Nga Runaka ki Murihiku and Meridian Energy
- Preparation of final Cultural Impact Report.

Statutory Planning and Policy Framework

Te Tiriti o Waitangi

Te Tiriti o Waitangi (Treaty of Waitangi) was signed between the Chiefs of Aotearoa and Her Majesty the Queen of England in 1840. This formalized an agreement to allow British subjects to settle in areas such as Te Wai Pounamu (the South Island), under formal British colonial rule, and also guaranteed Maori the protection of their taonga (possessions) for so long as they wished.

Maori Text

“Ko te Kuini o Ingarani ka whakarite ka whakaae ki nga Rangatira, ki nga Hapu, ki nga tangata katoa o Nu Tirani, te tino rangatiratanga o o ratou whenua o ratou kainga me o ratou taonga katoa. Otiia ko nga Rangatira o te Whakaminenga me nga Rangatira katoa atu, ka tuku kit e Kuini te hokonga o era wahi whenua e pai ai te tangata non ate whenua, ki te ritenga o te utu e whakarite ai e ratou ko te kai hook e meatia nei I te Kuini hei kai hook mona”.

English Text

“Her Majesty the Queen of England confirms and guarantees to the Chiefs and Tribes of New Zealand to the respective families and individuals thereof the full, exclusive and undisturbed possession of their Lands and Estates, Forests and Fisheries and other properties and other properties which they may collectively or individually possess so long as their wish and desire to retain the same in their possession...”

The wording embodied within Article 2 of the Treaty of Waitangi text states “their lands and estates, forests, fisheries ...” thereby providing for the right to mahinga kai, access to places where resources are gathered, the activity and business of gathering resources, and the type of resources that are caught or gathered.

Resource Management Act 1991 (RMA)

The RMA is the mechanism under which the natural and physical resources of New Zealand are to be managed.

Section 5: Sustainable Management

Section 5(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) “ Sustainable management means managing the use development, and protection of natural and physical resources in a way or at a rate which enables people and their communities to provide for their social, economic, and cultural well-being and for their health and safety while:

- (a) Sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and*
- (b) Safe-guarding the life-supporting capacity of air, water, soil and ecosystems; and*
- (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.”*

The duties and obligations the RMA imposes apply to all people who exercise functions or powers under the Act in relation to the utilization of natural resources.

Section 6: addresses matters of national importance

Section 6. Matters of National Importance. In achieving the purpose of this Act, all persons exercising functions and powers under it in relation to managing the use, development and protection of natural and physical resources, shall recognize and provide for the following matters of national importance:

- (a) The preservation of the natural character of... rivers and their margins and the protection of them from inappropriate...use and development;*

- (b) *The protection of outstanding...landscapes from inappropriate...use and development;*
- (c) *The protection of...significant habitats of indigenous fauna;*
- (d) *The maintenance and enhancement of public access to and along... rivers;*
- (e) *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga.*
- (g) *The protection of customary activities*

Section 7: sets out other matters that regard has to be had to

Section 7 Other matters. In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to:

- (a) *Kaitiakitanga*
- (c) *The maintenance and enhancement of amenity values*
- (d) *Intrinsic values of ecosystems*
- (e) *Recognition and protection of the heritage values of sites, buildings, places or areas .*

Kaitiakitanga is defined in the Act as meaning “the exercise of guardianship by the tangata whenua; and, in relation to a resource, includes the ethic of stewardship based on the nature of the resource itself.” [s2]

Kaitiaki and the exercise of their responsibilities (kaitiakitanga) are concepts that are firmly rooted in Maori culture and spiritual belief. It gives an obligation to actively participate in monitoring of the health of the environment and an obligation to use resources in ways that respect and preserve them both physically and as a source of spiritual power and identity association for people.

Section 8: provides for the principals of the Treaty of Waitangi to be taken into account.

Section 8 In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

Court of Appeal in *Court of Appeal v Attorney General 1987 CA 54/87:*

- (i) *The principle of partnership.*
- (ii) *The principle of active protection of Maori people in the use of their lands and waters to the fullest extent practicable.*
- (iii) *The principle of utmost good faith in dealings with the other Treaty partner.*

Within the RMA context a further principle, that of consultation has been found to arise under the principles of the Treaty of Waitangi. The Environment Court has noted that active protection of Māori interests requires positive action, which will at times oblige both the consenting authority and the applicant to consult, and also to initiate, facilitate, and monitor the consultation process as part of the duty to take into account the principles of active protection and partnership. Consultation must be conducted in a spirit of good will and open mindedness, and over a reasonable span of time, and to a degree sufficient for the local authority to be informed on the matters in issue.

Chapter 2

The Ngai Tahu Relationship to the Waiau River, Taipari-riki, Te Wae Wae Bay and Nga Roto.

Ngai Tahu, Kati Mamoe and Waitaha (Mana Whenua) have an unbroken relationship with the Waiau, Taipari-riki and Te Wae Wae since the arrival of our people 1000 years ago.

There are various reports that have been produced for Meridian which include valuable information on Ngai Tahu history and our association with the Waiau, Te Wae Wae and Taipari-riki.

This includes a comprehensive study on the history of the Waiau produced by Susan Corry and Rachel Puentener (Tikanga Maori Cultural, Spiritual and Historical Values of the Waiau River February 1993)

A Report on Assessment of Effects was completed by Te Ao Marama Incorporated for the Second Tailrace Project. Included in this report are the associations and history that Ngai Tahu have with Taipari-riki and Atawhenua.

Included in the Ngai Tahu Settlement Act 1998 are Statutory Acknowledgements. Statutory acknowledgements recognise Ngai Tahu's mana in relation to a range of sites and areas.

These acknowledgements include Ngai Tahu histories associated with the statutory area. Within the area affected by the proposed project are five Statutory Acknowledgements. This points strongly to how important this area is to Ngai Tahu.

These documents should be read to gain an understanding of the history of Mana Whenua within these areas.

Brief History

Ngai Tahu association with Murihiku and the Waiau area extends back to the first settlement of Te Waipounamu by Waitaha then Ngāti Mamoe and finally Ngāi Tahu. Archaeological evidence suggests our people have been here for over 700 years. Oral traditions and whakapapa (genealogy) back this up.

Ever since the arrival of our first ancestors our fires have not been extinguished (ahi kaa). This is our Turanga waewae or standing place.

The Murihiku area was and remains well known to Ngāi Tahu. Historically they travelled great distances for the collecting of resources. They accessed the many lakes of Murihiku by Ara Tawhito (ancient trails). Ara Tawhito such as what is now known as the Milford Trek also provided access to Fiordland on the West Coast where Pounamu was collected.

Ko Takitimu te maunga
Ko Waiau te awa
Ko Te Ara a Kewa te Moana
Ko Murihiku te whenua
Ko Ngāi Tahu, Ngāti Mamoe a Waitaha te iwi

The Takitimu are our mountains
The Waiau is our river
The Path of Kewa is our sea
Murihiku is our land
We are Ngai Tahu, Ngati Mamoe and Waitaha

There are many stories which have been passed down. They include the famous Takitimu canoe and its Chief Tamatea Pokai Whenua who have historical ties to the Waiau, the story of Kewa and Foveaux Strait, Tu te Rakiwhanoa created the fiords and Rakaihautu created many of the lakes of Te Waipounamu. These stories remain very powerful and remind us of our responsibilities as Kaitiaki. (The protectors of Papatuanuku, Ranginui, their children and stories.)

Place Names

As Ngāi Tahu moved throughout the whole of Te Wai Pounamu their presence was preserved in the naming of places. Such names take their source from the earliest people, creation traditions, incidents, mahinga kai resources, and tūpuna. Place names also provide us with descriptions of the character of the environment and give us an insight to the values and uses of sites and resources.

The long history of occupation and travel within the Murihiku Region has left many sites that are of significance. It has also enabled us to accumulate an extensive amount of knowledge of the water resources of catchments and the associated water based food resources. Many of the place names in the Murihiku Region are interwoven in the tribal myths and legends. Collectively myths, legends and place names were the medium by which Māori described and passed on both the nature of the resource and an assessment of its status.

Chapter 3

Review of Iwi Planning Documents

Ngai Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan

The plan is a vision of how the management and protection of the natural and physical resources can be achieved based on the cultural and spiritual values of nga Papatipu Rūnanga o Murihiku.

Below are the relevant sections, issues and policy the plan and as they will apply to the MTAD project.

3.3 Te Ata Whenua Fiordland

This section of the plan describes *ngā take* (issues) and *ngā kaupapa* (policies) associated with the land, water, coast, mahinga kai, biodiversity and wāhi tapu/wāhi taonga of the Fiordland region, from the Waiau River west, including the lakes and the mountains of southwestern Te Waipounamu, between Whakatipu Waitai (Lake McKerrow) and Tawhיתarere. For the purposes of this Plan this area is referred to as Atawhenua, however there are several other names for this area.

The Fiordland area represents, in tradition, the raised up sides of Te Waka o Aoraki, after it foundered on a submerged reef and its occupants, Aoraki and his brothers, were turned to stone. The brothers are now manifested in the highest peaks of Ngā Tiritiri o Te Moana (the Southern Alps). The Fiords at the southern end of the Alps were carved out of the raised side of the wrecked Te Waka o Aoraki (the canoe of Aoraki) by Tū Te Rakiwhānoa, in an effort to make it habitable by humans. The deep gouges and long waterways that make up the Fiords were intended to provide safe havens on the rugged coastline, and stocked with fish, forest and birds to sustain humans.

It was the richness of pounamu (particularly kokotangiwai) and mahinga kai resources that attracted Ngāi Tahu to Fiordland. Thus the area has a network of coastal settlements, pounamu trails, mineral working areas, kāinga, nohoanga, cultivation areas, and fishing grounds.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the lakes, rivers and coast and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

There are numerous trails throughout Fiordland. A sea route around the Fiords links Piopiotahi (Milford Sound) to Murihiku and was the main route by which the koko-takiwai gathered from that end of the Fiords was transported. An important inland route for transporting koko-tangiwai lay over what is now known as the Milford Track, over Omanui (McKinnon Pass), down the Waitawai (Clinton River) to the head of Te Ana-au (Lake Te Anau). From there, the pounamu would be transported by mōkihi to the head of the Waiau River, and down the Waiau to Te Ara a Kewa (Foveaux Strait).

The lands addressed in this section of the plan are part of Fiordland National Park, the largest national park in New Zealand.

The region is part of Te Wahi pounamu (the place of pounamu), a UNESCO World Heritage Area established in 1990. World Heritage is a global concept that identifies natural and cultural sites of world significance, places so special that protecting them is of concern for all people.

Key management issues for Ngāi Tahu ki Murihiku in Fiordland are those associated with visitor management (recreation, tourism, and concessions), natural resource use (hydro electric power development), protection of wilderness areas, species recovery, and customary use of culturally important resources on conservation land.

Vision for Fiordland

In developing this Iwi Management Plan (IMP), Ngāi Tahu ki Murihiku articulated a vision for Fiordland. The vision sets the policy direction for this section of the Plan.

- That the lands, waters and biodiversity of Fiordland are managed in a way that is consistent with indigenous concepts of wilderness –whereby humans are a part of nature, as opposed to separate from it, and sustainable customary use is consistent with the protection of this special place.
- That the pristine waters of Fiordland are used as a baseline for water quality policy in other areas of
- Fiordland.
- That throughout the Fiordland region, we keep up with best practice and new technologies, to minimise the impacts of tourism, development and other human activities.
- That tourism and visitor activities are concentrated in areas where infrastructure already exists (e.g. Milford Sound), as opposed to opening up new areas for development, and that existing areas of development are managed in a co-ordinated and sustainable way.
- That Ngāi Tahu development rights are recognised and given effect to in future development of Fiordland lands, waters and other resources.
- That the “sounds of Fiordland” (e.g. the dawn chorus) are restored, through effective and appropriate pest control operations and species recovery programmes.
- That Ngāi Tahu cultural heritage values associated with Fiordland are protected and enhanced, *mō tātou, ā, mō ngā uri ā muri ake nei*, for all of us and the generations that follow.

O TE WAI THE WATER

Ngāi Tahu ki Murihiku have a spiritual and cultural relationship with the waters of the Fiordland region. This relationship stems from the Māori worldview of creation, the way we understand ourselves and where we come from, the environment we live in and the mysteries of nature. Our beliefs and values act as guidelines by which we live and conduct our relationship with the freshwater resources of our region.

3.3.10 General Water Policy

The essence of Fiordland is water. Traditionally the waters of Fiordland provided a means of transport, supported mahinga kai, was used for recreation purposes and maintained populations that centred themselves along major waterways. Today, the pristine waters of the region are an example of what we can strive for in other areas of Murihiku.

Ngā Take - Issues

- Management of waters - *ki uta ki tai*.
- Protection of the mauri of all water.
- Recognition of Ngāi Tahu development rights, with respect to future development opportunities involving water, including the export of water from Fiordland.
- Adverse effects on water associated with hydro development.
- Impacts of discharges of contaminants on water resources and the relationship of Ngāi Tahu ki Murihiku to such resources.

Ngā Kaupapa – Policy

1. Require that freshwater management in Fiordland reflects the principles of *ki uta ki tai*, and thus the flow of water from source to sea, including the relationship between rivers, lakes, wetlands, waipuna and the coastal Fiords.
3. Ngāi Tahu's right to development, as per the Treaty of Waitangi, must be recognised and provided for with respect to future development and commercial activities in Fiordland, including the export of water.
4. Use the waters of Fiordland as a baseline for water quality standards in other areas of Murihiku.
5. Manage our freshwater resources wisely, *mō tātou, ā, mō ngā uri ā muri ake nei*, for all of us and the generations that follow.

3.3.11 Hydro Development / Generation

There are two large-scale hydroelectric power schemes in Fiordland, on Lakes Manapouri and Monowai, and three smaller scale schemes (for local purposes), located at Piopiotahi – Milford Sound, Deep Cove, and Te Anau-au Cave. Hydro development, if managed appropriately, can provide a cleaner source of energy than fossil fuels. However, such projects have the potential to impact significantly on Ngāi Tahu ki Murihiku cultural values and beliefs, including the spiritual value of water, mahinga kai, terrestrial vegetation, aquatic biota, and water quality.

Ngā Take - Issues

- Scale of projects: costs/benefits of large scale vs. small scale hydro development on river and cultural values.
- Ability of schemes to minimise or avoid environmental, cultural and social effects.
- How well schemes can balance cultural, environmental and economic values.
- Cumulative effects of schemes over the long term.
- Consideration of alternatives.
- Economic and social benefits of hydro electric generation.
- Effects on the ecology of the Fiords as a result of changes to saltwater-freshwater ratios that occur as a result of hydro generation schemes (e.g. freshwater flows into Doubtful Sound via a tunnel under the mountain, and tangata whenua have observed that kelp is not so close to the surface when the volume of freshwater increases).
- Impacts on the Waiau River as a consequence of water takes associated with hydro schemes, including:
 - a. a lessened ability of the river to cleanse itself;
 - b. an increased risk of threats such as didymo due to longer periods running at minimum flow;
 - c. changes to the river mouth environment, such as less depth to the sand and changes to the freshwater saltwater mix;
 - d. adverse effects on the Foveaux Straight Toheroa beds changes to productivity of environment).
- Increased reliance on hydroelectricity may have implications for reduced flow levels for Manapouri and West Arm.
- National significance of long fin eel fishery in Fiordland, and the adverse effects caused by power schemes:
 - a. elvers attracted to strong flows of freshwater;
 - b. loss of access up and down the river due to dams;
 - c. eels may be caught in turbines;
 - d. cost of elver transfer.
- Discharge of sediments, and adverse effects on aquatic and terrestrial habitat.

Ngā Kaupapa – Policy

1. Require that hydroelectric development consideration, feasibility studies, and project management in Fiordland recognises and gives effect to the principle of ki uta ki tai (mountains to sea).
2. Avoid compromising mahinga kai as a result of damming, diversion or extraction of freshwater resources.
3. Ensure that activities in the upper catchments do not have adverse impacts on mahinga kai resources in the lower catchments.
4. Ensure that all native fish species have uninhibited passage between lakes, rivers and sea, where such passage is a natural occurrence, through ensuring continuity of flow ki uta ki tai, and fish passageways within dam structures.
5. Require that adverse effects associated with the discharge of sediments on aquatic and terrestrial ecosystems are avoided.
6. Require the development and implementation of monitoring regimes to ensure that any adverse effects including existing or potential loss of tuna/eel on the health of mahinga kai resources and/or their habitats are identified and addressed.
7. Require, if deemed necessary, that companies provide opportunities for iwi representatives to participate in monitoring.
8. Require that monitoring provisions are present in all aspects of hydropower development scheme operations.
9. Ensure that Ngāi Tahu ki Murihiku are involved in the setting of consent conditions (during consultation) associated with any and all resource consents for hydro power development activities.
10. Avoid taking any more water from the Waiau River for the purposes of hydroelectric power generation.
11. Require the active mitigation of tuna/eel loss in the turbines of power generation schemes.
12. Require that the costs of elver transfer are met by the electricity generator where there is a cause-effect link.

3.3.12 Ngā Roto Waimāori – Lakes

The tradition of Ngā Puna Wai Karikari o Rakaihautu tells how the principal lakes of Fiordland, including Moturau (or Motu-ua Lake Manapōuri), Hauroko and Te Ana-Au (Lake Te Anau) were dug by the Rangatira Rakaihautu on his inland journey south with his famous ko.

Moturau, Hauroko, and Te Ana-au lakes are the deepest lakes in New Zealand. Moturau, Hauroko, and Te Ana-au are Statutory Acknowledgement sites under the NTCSA 1998 (Schedules 45, 29, and 58), providing for the special association of Ngāi Tahu with the lakes.

Ngā Take - Issues

- Protection of wāhi tapu associated with ngā ā roto waimāori.
- Recognition of the cultural and spiritual association with ngā roto waimāori.
- Access to lakes and mahinga kai, including customary fishing opportunities.
- Intergenerational transfer of knowledge and traditions associated with ngā roto waimāori, including mahinga kai and pūrākau.
- Impacts on the mauri of ngā roto waimāori.
- Protection of indigenous flora and fauna associated with ngā roto waimāori.
- Tourism and recreational use, and concession activities, and potential impacts on ngā roto waimāori.

Ngā Kaupapa – Policy

1. Require that ngā roto waimāori where Statutory Acknowledgements apply are recognised for their special associations to Ngāi Tahu irrespective of expiry dates of 20 years contained in the Ngāi Tahu Claims Settlement (Resource Management Consent Notification) Regulations 1999. This means that places identified as Statutory Acknowledgements should continue to be:
 - a. identified in relevant district and regional plans and policy statements as notice of their cultural importance to Ngāi Tahu (noting on plans);
 - b. considered a trigger for a notice of application to Ngāi Tahu with respect to resource consents relating to, or impacting on, such areas (notice of applications);
 - c. given regard to by Councils, the Environment Court and Historic Places Trust when decisions are made about who has the right to comment and be listened to, or to appear in court (Standing);
 - d. accepted as evidence of the relationship of Ngāi Tahu with a particular area in any proceedings under the Resource Management Act or Historic Places Act.
2. Require that ngā roto waimāori subject to Deeds of Recognition are recognised for their special associations to Ngāi Tahu in perpetuity. This means that:
 - a. the cultural importance of such places is identified in relevant plans and policy;
 - b. the landholding Crown agency (either DOC or LINZ) must have particular regard to the views of Ngāi Tahu ki Murihiku in relation to the management of these areas.
3. Maintain and protect the cultural, spiritual, historic and traditional association of Ngāi Tahu ki Murihiku with ngā roto waimāori in Fiordland.
4. All Ngāi Tahu Whānui, current and future generations, must have the ability to access, use and protect ngā roto waimāori, and the history and traditions that are part of such landscapes.
5. Protect, and where needed enhance, the mauri or life supporting capacity of ngā roto waimāori.
6. Avoid the use of ngā roto waimāori as a receiving environment for the discharge of contaminants (e.g. industrial, residential, recreational or agricultural sources).

3.3.13 Te Mimi o Tū Te Rakiwhānoa – Coastal Fiordland

The Fiordland Coastal Marine Area is known to Ngāi Tahu as *Te Mimi o Tū Te Rakiwhānoa*. The immense importance of the area historically, culturally and spiritually is captured in the NTCSA 1998 (Schedule 102), as a Statutory Acknowledgement - a recorded statement of the relationship between Ngāi Tahu and the Fiordland coast and sea.

Coastal Fiordland is a unique marine environment. In addition to its inherent biodiversity values, it is also an important economic area. Areas such as Milford Sound can receive in excess of 300 000 visitors annually.

Human activities can bring a wide range of risks and challenges to the Fiordland coastal environment, including over fishing, noise pollution, and impacts on water quality.

Coastal Fiordland is also a uniquely managed environment. *The Fiordland Marine Conservation Strategy* provides a framework for collaborative management of the Fiordland (Te Moana o Atawhenua) Marine Area, created by the *Fiordland (Te Moana o Atawhenua)*

Marine Management Act 2005. The *Fiordland (Te Moana o Atawhenua) Marine Area* extends from Awarua Point on the West Coast to the Waiau. The Act also gives formal recognition to the *Fiordland Marine Guardians*, a group appointed by the Minister for the Environment to advise central and local government agencies on the management of the Fiordland Marine Area. Ngāi Tahu ki Murihiku have representation within this group.

Ngāi Tahu ki Murihiku policy with respect to the coast and sea is set out in Section 3.6 of this plan, Southland's Coastal Environment. Policy areas of particular relevance to Fiordland include commercial surface water activities.

3.3.18 Species Recovery

Species recovery focuses on enhancing the recovery of threatened native plant and animal species in coastal, land and freshwater ecosystems. This is achieved through such initiatives as habitat enhancement, breeding programmes, species transfer and predator control.

For Ngāi Tahu ki Murihiku, species recovery is about restoring populations of native species that can be sustained in natural habitats. It is also about restoring populations to a level where customary use is an achievable goal.

Ngā Take - Issues

- Protection of breeding and feeding areas.
- Need for sanctuaries for species recovery.
- Protection of the association between tangata Whenua and birds.
- Protection of long-finned eel in Fiordland National Park. Fiordland is one of the few places where long-fin eel are protected from commercial fishing and habitat loss.

Ngā Kaupapa - Policy

1. The cultural, spiritual, historic and traditional association of Ngāi Tahu ki Murihiku with native species must be recognised and provided for in all management associated with those species.
2. Ensure that taonga species provisions of the Ngāi Tahu Claims Settlement Act 1998 are given effect to within Fiordland National Park boundaries, including taonga species management, recovery plans, and species transfers onto/from the area.
4. Consider the potential effects (positive and adverse) on native birds when assessing any resource consent or concession application in Fiordland.
5. Avoid compromising the habitat, diversity and abundance of native bird species at risk as a result of inappropriate land use, development or subdivision.
6. Support and encourage scientific research that assists in the conservation and recovery of native birds, particularly those that are at risk.
7. Encourage researchers to consult with and involve local tangata whenua experts as part of any research on culturally important native bird species.
8. Encourage the use of Mātauranga Māori in scientific research and monitoring surveys for species recovery.
9. Protect and enhance the eel population and/or habitat within Fiordland National Park, while recognizing the customary use rights of Ngai Tahu.

3.5.10 General water policy

Ngāi Tahu ki Murihiku recognise that the welfare of the people and the success of their activities within the environment depend on water being maintained in the best possible condition. We believe that “if you have your water right, you will have everything else right”.

Ngā Take - Issues

- Participation of iwi in freshwater management.
- Access to freshwater resources for cultural and customary use.
- Maintenance of water quality and water quantity.
- Protection of the mauri and wairua of rivers, lakes and wetlands.
- Protection, maintenance and enhancement of mahinga kai.
- Protection of wāhi tapu and wāhi taonga associated with rivers, lakes and wetlands.
- Recognition of the special significance of particular water bodies to Ngāi Tahu ki Murihiku.
- The aspirations of iwi to develop, use and protect water resources.
- Enhancing waterways, in addition to ensuring no adverse effects.

- Lack of knowledge as to the nature and extent of the sustainable water resource.
- Relationship between what happens on land and what happens to the water.
- Direct and indirect discharges to water.

Ngā Kaupapa - Policy

1. The role of Ngāi Tahu ki Murihiku as kaitiaki of freshwater must be given effect to in freshwater policy, planning and management.
2. Work with local authorities and other statutory agencies involved in freshwater management to ensure that cultural values and perspectives associated with freshwater management are reflected in statutory water plans, best practice guidelines and strategies, and in resource consent processes for activities involving water.
3. Protect and enhance the mauri, or life supporting capacity, of freshwater resources throughout Murihiku.
4. Manage our freshwater resources wisely, *mō tātou, ā, mō ngā uri ā muri ake nei*, for all of us and the generations that follow.
5. Promote the management of freshwater according to the principle of *ki uta ki tai*, and thus the flow of water from source to sea.
6. Promote catchment management planning (*ki uta ki tai*), as a means to recognise and provide for the relationship between land and water.
7. Ngāi Tahu's right to development, as per the Treaty of Waitangi, must be recognised and provided for with respect to future development and commercial activities in Fiordland, including the export of water.
8. Protect and enhance the customary relationship of Ngāi Tahu ki Murihiku with freshwater resources.

3.5.11 Rivers

Several major river catchments are located on the Southland Plains, including the Aparima, Ōreti, Matāura, and Waiau. These rivers flow from *ki uta ki tai*, from mountain to sea, and are connected to numerous tributaries, wetlands and waipuna, as well as the groundwater that nourishes the catchment from below.

They are part of Ngāi Tahu ki Murihiku history and identity. While the last 165 years have resulted in significant changes to these rivers, their importance has not diminished.

Many of the waterways of the Southland plains have specific cultural associations. They are known for an abundance of mahinga kai, used for a specific purpose, or associated with a specific ceremony or ritual. Waterways may be considered wāhi tapu (i.e. associated with urupā or with an activity or occurrence considered tapu), or wāhi taonga (general site of cultural significance). The Ōreti, Waiau, Aparima, Mataura, Pomahaka and Mata-au /Clutha are Statutory Acknowledgement areas under the NTCSA 1998 (Schedules 50, 69, 15, 42, 52 and 40), providing for the special association of Ngāi Tahu with the rivers (see Appendix 5).

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of Southland rivers, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu ki Murihiku today.

Ngāi Tahu ki Murihiku associations with the main river catchments of Murihiku are described in Table 2, alongside significant resource management issues for each catchment.

A priority for Ngāi Tahu ki Murihiku is on-going advocacy, through resource consent and other processes, for the protection and enhancement of Murihiku waterways.

Ngā Take - Issues

- Ensuring that water is valued as a taonga for all of New Zealand.
- Effects on the mauri of Murihiku Rivers due to land use and discharge activities, and water abstractions.
- Impacts of tourism (e.g. commercial jet boating) and recreational fishing activities on river health, particularly in terms of the risk of didymo spread.
- Impacts of hydro development on river health and natural character.
- Tāngata whenua involvement in the management of freshwater resources in Murihiku.
- Ngāi Tahu development rights pertaining to water resources.

Ngā Kaupapa - Policy

1. Promote catchment management planning (ki uta ki tai), as a means to recognise and provide for the relationship between land and water.
2. Promote river management that adopts the priorities established in the *Te Rūnanga o Ngāi Tahu Freshwater Policy 1997*.
3. Continue to work with the Regional Council to ensure that cultural values and perspectives associated with freshwater management are reflected in statutory water plans, best practice guidelines and strategies, and in resource consent processes for activities involving water.
4. Management of our rivers must take into account that each waterway has its own mauri, guarded by separate spiritual guardians, its own mana, and its own set of associated values and uses.
5. Adopt a precautionary approach for any activity involving a waterway where there is an absence of detailed knowledge of that waterway (ecology, flow regimes, species, etc).
6. Require that rivers recognised as Statutory Acknowledgements be recognised for their special associations to Ngāi Tahu beyond the expiry date of 20 years. This means that places identified as Statutory Acknowledgements should continue to be:
 - Identified in relevant district and regional plans and policy statements as notice of their cultural importance to Ngāi Tahu (noting on plans).
 - Considered a trigger for a notice of application to Ngāi Tahu with respect to resource consents relating to, or impacting on, such areas (notice of applications).
 - Given regard to by Councils, the Environment Court and Historic Places Trust when decisions are made about who has the right to comment and be listed to, or to appear in court (Standing).
 - Accepted as evidence of the relationship of Ngāi Tahu with a particular area in any proceedings under the RMA or Historic Places Act.
7. The cultural importance of particular rivers (e.g. Statutory Acknowledgements, rivers associated with whakapapa and identity) must be reflected these rivers.
8. The establishment of river flow regimes (e.g. minimum flows) must reflect the principles of *ki uta ki tai*, and thus river flow requirements from source to sea, including the wetlands, tributaries and waipuna that are associated with that river flow.
9. The establishment of environmental flow regimes must recognise and provide for a diversity of values, including the protection of tāngata whenua values,
10. Ensure that all native fish species have uninhibited passage from the river to the sea at all times, through ensuring continuity of flow ki uta ki tai.
11. Promote, where appropriate, the use of Freshwater Mātaitai, Water Conservation Orders (WCO), rāhui, and similar tools to protect the rivers of Murihiku, where those rivers are under threat from competing water uses, and/or when there are outstanding cultural, amenity or intrinsic values that require protection.
12. Promote the use of State of the Takiwā environmental monitoring for Murihiku river catchments
13. Promote the use of the Cultural Health Index (CHI) 10 as a tool to facilitate monitoring of stream health, and to provide long term data that can be used to assess river health over time.

16. Prioritise the restoration of those water bodies of high cultural value, both in terms of ecological restoration and in terms of restoring cultural landscapes.
17. Ensure that activities in upper catchments have no adverse effect on mahinga kai, water quality and water quantity in lower catchments.
19. Oppose any activity that may result in the spread of exotic alga *Didymosphenia geminata* (didymo) from contaminated rivers to uncontaminated rivers.

3.5.16 Mahinga Kai

Mahinga kai was, and is, central to the Ngāi Tahu ki Murihiku way of life. The collection and processing of mahinga kai is an important social and economic activity. Tangata whenua aspirations and expectations for mahinga kai are a common kaupapa throughout this plan. Mahinga kai is about *mahi ngā kai* – it is about places, ways of doing things, and resources that sustain the people. The loss of mahinga kai is attributed to habitat degradation, resource depletion, legislative barriers that impede access, changes in land tenure that affect ability to access resources and the introduction of predators that have severely reduced the traditional foods of Ngai Tahu.

Ngā Take - Issues

- Habitat degradation and destruction.
- Legislative barriers to accessing resources.
- Resource depletion.
- Impact of predators on mahinga kai species.
- The role of tāngata whenua in managing key mahinga kai species.
- Intergenerational knowledge transfer of mahinga kai practices.
- Impacts of human activities on mahinga kai places and species.

Ngā Kaupapa - Policy

1. Work with local authorities and other statutory agencies to ensure that cultural values and perspectives associated with those species and places valued as mahinga kai are reflected in statutory water plans, best practice guidelines and strategies and in concession and resource consent processes.
2. Work towards the restoration of key mahinga kai areas and species, and the tikanga associated with managing those places and species.
3. Support the concept of Mahinga Kai Cultural Parks, as a means of protecting and using specific cultural landscapes within the takiwā that have important mahinga kai associations.
4. Consider the actual and potential effects of proposed activities on mahinga kai places, species and activities when assessing applications for resource consent.
5. Use the enhancement of mahinga kai places, species and activities to offset or mitigate the adverse effects of development and human activity on the land, water and biodiversity of Murihiku.
6. Support mechanisms that enable tāngata whenua to access mahinga kai species and resources, such as esplanade provisions and marginal strips adjacent to waterways

MAHINGA KAI – MAHI NGĀ KAI AND BIODIVERSITY

Mahinga kai is defined in the Ngāi Tahu Claims Settlement Act 1998 as “the customary gathering of food and natural materials, and the places where those

resources are gathered” (s. 167). Furthermore it is about the ways resources are gathered and the work involved in doing so, mahi ngā kai. There are numerous ancient mahinga kai sites in Fiordland, places where specific resources were planted and cultivated specifically for use.

The extensiveness of Ngāi Tahu customary use of Fiordland is evidenced by the numerous trails and nohoanga located throughout the region, as well as by the wāhi ingoa that describe mahinga kai traditions associated with particular places. Many of these wāhi ingoa remain on the landscape today.

3.3.14 Customary Use

Customary use is the on-going access to, and sustainable use of, mahinga kai resources. Following European settlement, there was an enormous loss of mahinga

kai resources, and hence a great loss of customary use by tangata whenua. This loss was due to a number of reasons, including the physical destruction of habitats (e.g. clearance of forest and drainage of wetlands), the subsequent decline in species that relied on that habitat, and the introduction of foreign animals, birds, fish and

Section 3.3_Te Atawhenua_Fiordland

Ngā Take -Issues

- The importance of customary use to Ngāi Tahu identity and history.
- Customary use of native birds, plants and other materials on conservation land.
- Customary use of game birds, relationship between iwi and Fish and Game Council.
- Relationship between iwi and the Department of Conservation regarding customary use.
- Ensuring sustainable use: need for appropriate processes and monitoring.
- Protection of customary rights as usufruct rights.
- Access to mahinga kai areas and customary resources on conservation land (e.g. trees for carvings, whare, pou pou, waka).
- Access to places and species that are important to us in terms of customary use.
- Restoration of key mahinga kai areas and species.

Ngā Kaupapa - Policy

1. All Ngāi Tahu Whānui, current and future generations, must have the ability to access, use and protect mahinga kai resources, and the history and traditions that are part of customary use of such resources, as guaranteed by the Treaty of Waitangi.
2. Protect existing customary use rights from erosion by government policy.
3. The cultural, spiritual, historic and traditional association of Ngāi Tahu ki Murihiku with taonga species must be recognised and provided for within all management and/or recovery plans associated with those species. This includes taonga species as per the Ngāi Tahu Claims Settlement Act (Appendix 4), and all other species considered taonga by Ngāi Tahu ki Murihiku
4. Encourage effective working relationships with the Department of Conservation with regards to customary use of native plants, birds, marine mammals, and other traditional materials on conservation lands.
5. Encourage communication between the Department of Conservation and Ngāi Tahu ki Murihiku, with regards to specific areas on conservation land where specific traditional resources may be found and sustainably harvested.
6. Use the kaitiaki rūpū forum to facilitate access to specific cultural and customary resources (e.g. trees, bone and feathers) held by the Department of Conservation.

7. Work towards the restoration of key mahinga kai areas and species, and the tikanga associated with managing those places and species.
8. Make full use of the knowledge of tangata whenua with regards to native birds, plants and other traditional materials, and its value in understanding how to protect and enhance biodiversity.
9. Promote joint management and co-management of key mahinga kai places and species on conservation land.
10. Encourage collaborative research and monitoring projects between tangata whenua and scientists that address customary use issues using both Mātauranga Māori, or traditional knowledge, and mainstream science.
11. Promote a good working relationship with the Fish and Game Council with regards to customary use and access to game birds (native and non-native) for cultural use.
12. Advocate for the addition of a “Mahinga kai Schedule” to the Wildlife Act, in order to provide iwi with control and management powers, similar to Fish and Game Council, for certain native bird species. Such a schedule would include those species of large population numbers that could sustain a controlled take, outside of a Fish & Game management regime, and provides an opportunity for future generations to exercise customary rights.
13. The management of customary freshwater eel fisheries in national parks is the responsibility of Tangata Tiaki (appointed by Ministry of Fisheries), in consultation with the Department of Conservation, not national park legislation. This means that, for example, the use of customary area management tools such as rāhui must be separate from national park policy and planning.
14. Ngāi Tahu ki Murihiku should not require a concession or permit to access customary resources on conservation land, however customary authorisation is needed.

State of the Takiwa

Murihiku Pilot Project - Waiau River

The pilot project, which ran for a year to July 2005, resulted in the development of the first State of the Takiwā report in the world using the Takiwā 1.0 monitoring tool and database developed as part of the project.

This report specifically outlines the results of the pilot study undertaken in the Waiau River Catchment, Southland in March 2005 and presents critical ‘baseline’ information that captured the current cultural health of the 12 sites assessed within the pilot study. The report also displays information on past health and other measures of the state of these sites to understand significant changes over time.

Overall, the pilot Takiwā assessment found that the Waiau catchment was in a state of good cultural health. The results showed that the upper catchment, around Te Anau, the tributary sites in the Jericho Block and sites at the mouth, overlooking Te Wae Wae Bay, were in a healthier state than those sites in the mid-catchment or near settlements.

Positive features of the higher scoring sites related to their relatively unmodified nature, native vegetation dominance, good access and potential for mahinga kai. The lower scoring sites, however, were associated with the negative impacts of settlement, agriculture, pests, weeds, as well as the loss of river flow as a result of hydro-generation.

It is envisioned that this report will be the first of many more, with regular monitoring and reporting being undertaken in subsequent years to gain a fuller picture of the State of the Takiwā.

Te Runanga o Ngai Tahu Freshwater Policy 1997.

Water is central to all Maori life. It is a taonga left by ancestors to provide and sustain life. It is for the present generation, as tangata tiaki, to ensure that the taonga is available for future generations in as good as, if not better quality.

Ngāi Tahu considers that its relationship with the waters of its rohe has been eroded over the last 150 years. Evidence produced by Ngāi Tahu to the Waitangi Tribunal documented numerous examples of the waterways within the Ngāi Tahu rohe:

- that are now severely polluted by discharges; and
- Where reworking of the hydrological regime of waterways has resulted in unnatural patterns of erosion, sedimentation, drying up of flows and damage to rich mahinga kai habitats on the riparian margins.

The degraded state of many of the waterways is confirmed by the State of the Environment Report (1997). These adverse effects impact on the health and wellbeing of the waterways and the ability of Ngāi Tahu to access the life sustaining resources of the waterways.

Water has many stakeholders. The interdependency of different parts of the hydrological system creates many stakeholders, including other organisms and humans (both current and future generations). The RMA 1991 confirms that future generations are also stakeholders. From Ngāi Tahu's perspective, the present generation has an obligation to pass on healthy water resources to future generations.

These Maori values of Mauri and Kaitiakitanga are identified within the Ngai Tahu Freshwater policy.

Mauri

The mauri should not be desecrated. Resource management agencies need to be aware that natural disasters cannot harm the mauri only those resulting from the actions of man. The mauri of a waterway is unable to protect itself against unnatural aspects of the environment. If the mauri of an entity is desecrated or defiled, the resource itself, resource users and others depending on that entity are at risk.

Sadly, the mauri of many water bodies have been seriously eroded by water use and development including:

- The damming of the rivers;
- Abstracting water from rivers, streams and lakes;
- The diverting of the waters;
- Mixing the waters of distinct ecosystems; and
- River protection works.

Te Rūnanga o Ngāi Tahu is concerned that human activities have altered the frequency and intensity of natural change. Tangata tiaki over the years have come to realise that every time the processes and functioning of a river are altered the river system is weakened. If enough adverse changes occur the mauri of the river will die.

Kaitiakitanga

Preservation of the integrity of valued waterways is an important aspect of the responsibilities of those members of Ngāi Tahu Whānui that are identified as the Tangata tiaki. Values (both tangible and intangible) associated with specific water bodies include:

- the role of particular waterways in unique tribal creation stories;
- the role of those waterways in historical accounts;
- the proximity of important wāhi tapu, settlement or other historical sites in or adjacent to specific waterways;
- the use of waterways as access routes or transport courses;
- the value of waterways as traditional sources of mahinga kai, food and other cultural materials;
- the continued capacity for future generations to access, use and protect the resource.

Chapter 4

Interviews (Nga Hua/ Results)

Nga Runaka and Ngai Tahu Whanui who identified an interest in the project were interviewed to ascertain their position on the Meridian project and the effects (both positive and negative) on their Ngai Tahu Values.

Ten participants were interviewed individually with a set of questions; other information was gathered randomly from iwi as the opportunity arose.

Individual interviewees were given an overview of the project which included a discussion on the presentation material presented to affected parties such as the Waiau Working Party, Guardians of the Lakes and Fiordland Marine Guardians. A set of questions was asked, based around section 3.3.11 (Hydro development) of Ngai Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan, Te Tangi a Taurira.

Interviewees were very happy to discuss their knowledge and iwi values. They did not comment on areas that were outside their knowledge base and in many cases referred the interviewer to iwi members known to be expert in those areas.

Participants Feedback

Question 1 – What are your views of the scale of the MTAD project, the economical and social benefits there would be and any effects there may be on river and Iwi cultural values?

A selection of answers

- Of the 10 participants who were interviewed individually most agreed that the value of having electricity was very important. The modern comforts that electricity provide such as heating, lighting and communication are a necessity at this point in our history.
- Two said they had seen huge changes in the Waiau River over their lifetimes mainly since the diversion of water for the Manapouri Power Station. The Waiau River has lost much of its mauri (life force). They went as far to say they would rather go without power rather than see more water taken from the Waiau and nature played with again. They do not want any more changes to the Waiau Catchments ecosystem.
- They felt that electricity is part and parcel of life but not at the cost of doing away with iwi values.
- He believed the project would continue but is mainly interested in mahinga kai values and the long term sustainability of eel.
- Others said what is good for New Zealand in terms of the benefits they gain from this project may not be good for Southland.
- Cost benefits should be weighed up against ecological benefits and also to right the wrong.
- An Iwi member felt the water take from the flood flows was minimal and would not degrade the Waiau system however the increase in the amount of instantaneous water flowing to Doubtful Sound would be a problem. The eels are also a big concern.

Summary

A majority of iwi members have concerns that their values will be compromised as a result of the project. The costs in terms of the adverse effects on the Waiau River outweigh the benefits of increased electricity generation as a result of MTAD.

Question 2 – Are cumulative affects an issue as a result of the MTAD project?

A selection of answers

- A Kaumatua believes that this may be the straw that breaks the Camels back. Was very concerned about the health of the river now. How can you know if a small change as a result of MTAD does not cause the ecosystem to collapse? Doesn't believe you can rely on the data.
- Believe Cumulative effects unknown, possibly traumatic.
- Sustainability of the river and cumulative effects are an issue.
- The accumulative effects on the Waiau are minimal. Eels and the accumulative effects of the increased maximum instantaneous discharge on our value associated with mahinga kai resources in the sounds are an issue.
- There are unknowns which are not adequately addressed by the conclusions in the reports from Meridian, their consultants and scientists.

Summary

The majority of iwi interviewed see cumulative effects as a major issue. The terms minimal effects, less than minor are not reassuring. If more water is taken from the Waiau then Iwi struggle to see how this cannot affect the Waiau ki Uta ki Tai. The interviewee's major concerns are with the health and cumulative effects on the Waiau River.

Question 3 – Are alternatives an option?

A selection of answers

- There should be no more water taken from the Waiau. They are concerned about the Waiau, not even considering alternatives.
- Prefers alternatives. Little extra benefits not worth the risk.
- In the right environment wind and solar generation are better options.
- One iwi member considers nuclear energy a good alternative to hydro generation and the environmental effects hydro can have on the landscape.
- The water taken for this project will be minimal, it could continue, there are some areas, especially Doubtful Sound, where there has been impacts that could be increased as a result of MTAD.

Summary

Most saw alternatives as desirable options as opposed to the MTAD project. Most realise the importance of energy and its values but believe other options should be looked for first.

Question 4 – Will iwi values be effected as a result of MTAD on the ecology of the Fjords?

A selection of answers

- The Sounds have changed since the power station. Mahinga kai species have moved further out from were they existed. Dolphins are a concern. Will the extra water increase this effect?
- Used to catch fish off the Wanganella you can't catch now.

Summary

Most iwi members felt they did not know enough to comment on the impact of MTAD on iwi values in Doubtful Sound.

Question 5 – Will iwi values be effected as a result of MTAD on the Waiau River and Te Waewae Bay?

A selection of answers

- Common sense says if there is less water (because of MTAD) then you are changing a natural cycle.
- The Toheroa beds have changed so much. There are more gravel beaches were there was once long sandy beaches.
- Have real concerns for the Toheroa.
- The Mauri will be affected as a result of the project. It will diminish.
- Waiau doesn't get the same flushes. Didymo won't flush out the same.
- The Waiau has changed so much since the Power Station. A small amount as proposed by the MTAD at peak flows won't effect or degrade the river anymore than what it is already.

Summary

The most concern from the project was from the impacts it would have on Values associated with the Waiau River, not only Iwi values.

Most of the Iwi interviewed were very concerned about the mauri of the river and how this will be impacted on as a result of MTAD. Mahinga kai values and the ability to gather were also important. Kaitiakitanga and the inability to help protect the river as Iwi was a concern.

Question 6 – Will iwi values be effected as a result of MTAD on the lakes and waters Ki Uta ki Tai?

A selection of answers

- Don't see the lakes being affected as much as the Waiau River and Doubtful Sound.
- Migrating Tuna in the lakes and the unnatural flow towards West Arm will result in more tuna losses through the power station.
- The Mauri of the Waiau River exists ki uta ki tai from the mountains to the sea. Therefore the whole Waiau catchment must suffer as a result of any new changes in the natural cycle, including the mouth at Te Wae Wae Bay.

Summary

The Iwi values associated with the lakes area of the project was of the least concern. However the values associated with the lake are affected because of the values in ki uta ki tai.

Question 7 – What is your knowledge of the Tuna? Will iwi values regarding the Tuna be affected?

A selection of answers

- As can be seen from the results of the NIWA work. Migrating eels are going to be effected. What are the numbers of successful eels migrating?
- We are getting good Elver numbers over the Mararoa Weir.
- The same issues appear to be happening on a lot of dammed rivers.
- There is some real concern with the long fin eel population. Especially if they live to over fifty years and only migrate once to sea! Then we are losing over 70% because of the Power Station.
- Can they put a net of some sort from the outlet of the Waiau were it comes into Lake Manapouri to direct the tuna in the right direction.
- What can be done at the Power end to stop the tuna from going into the turbines? What about some sort of net.

Summary

Most of the Interviewees felt they didn't know enough about the eel. They felt others in the Iwi were better qualified. Those that did have the knowledge saw elver transfer as very important. They also acknowledge the migrating eels continue to be in danger as a result of MTAD.

Questions 8 –What other concerns might you have?

A selection of answers

- Native species will continue to be impacted on.
- The recharge of the river.
- Rains maybe less. Future weather patterns. Lakes drying up.
- Black corals, kelp mahinga kai in Doubtful.
- The impact of Dairying and the need for more water from the catchment as a result.

Summary

Most Interviewees had many concerns regarding the MTAD project. Some believed it would impact on certain areas but not others. Others felt they were not knowledgeable enough to comment on all things but believed as Iwi and Kaitiaki there is responsibility to ensure the health of the environment ki uta ki tai.

Question 9 – How can your concerns be solved?

A selection of answers

- Put it back the way it was.
- Insure the some environmental gains are made by way of enhancing other important areas on catchment.
- Put more water into the river. Scale down.
- Agreement no more water to be taken.
- By using Ngai Tahu Cultural Health Indicators such as the Cultural Health Index monitor the health ki Uta ki Tai.

Summary

Interviewee concerns and the ability for these to be solved were very broad. These ranged from reversing the past projects so the river can have its former mana, not allowing anymore taking of water because of the unknown accumulative effect. Others thought the damage has already been done. While others felt there would be minimal effects on the river, lakes and fiord.

Whakatauki used by participants to reflect their views while being questioned.

*He aha te mea nui.
He tangata, he tangata, he tangata*

*What is the most important thing in this world?
We say Tis Men, Tis Men, Tis Men*

Humans are the most important thing on this earth. We have the ability to acknowledge and contemplate our creator. No other known animal on this earth has this ability. Men also have the ability to interact with nature in both a positive and negative manner.

*Ko te Waiau ko au
Ko te wairua ko au
Ko te oranga ko au*

*I am the River
I am the spirit of the river
I am the life of the river*

This is explained by the river having an influence on the interviewee as tangata whenua and as a kaitiaki of that river. Even to the extent that when the river becomes unwell then he himself will feel unwell.

Chapter 5

Ngai Tahu Cultural Values

There are many Iwi Cultural values. But five can be used in terms of the MTAD project that can be inclusive of all the other values. They are Mauri, Kaitiakitanga, Wai, Mahinga Kai and Spiritual wellbeing. They are described below.

Mauri

Papatuanuku (Earth Mother) supports life including all people, flora, fauna and water. Waterways supply nourishment to her, through her, and to all living things.

Maori conceive that each waterway carries its own mauri, guarded by separate spiritual guardians and tribal caretakers and having its own status or mana. The mixing of waters by unnatural means, the mixing of waters from different sources with separate mauri, or discharges of “used” waters or wastes to living waters that supply food, are prohibited in the Maori conception. These activities are considered to degrade the mauri of the waters and may also offend the mana of different iwi who hold traditional rights and responsibilities with respect to the different waterways.

Mauri represented by the physical properties of a water resource is an extinguishable value. It can be defiled by poor resource practice, which results in the water resource no longer being considered fit for the particular human uses for which it is valued. Damaging the mauri of a river will affect its productivity and the food and other materials sourced from it.

Restoring the ecological and spiritual integrity of degraded waterways is a very significant principle in modern Māori resource management, given the extensive environmental degradation that has occurred. Restorative action, including replenishing minimum flow levels and habitat restoration will be seen as a priority, particularly with respect to resources of high ecological or cultural value.

The mauri of a water resource is protected through application of a complex system of specific cultural and spiritual practices, customs and rules that were developed to manage and control the interactions of people and the natural world, commonly called tikanga.

Primary institutions of this nature include the practices associated with the rites of kaitiaki, tapu and rahui (temporary prohibitions). The result sought from application of these practices is sustainable management of the resource – to ensure that such resources were maintained as appropriate to present and future community needs.

The primary management principle for Ngai Tahu is the maintenance and enhancement of the mauri or life-giving essence of a resource. Mauri can be tangibly represented in terms of elements of the physical health of the land, a river, or surrounding biodiversity. While there are also many intangible qualities associated with the spiritual presence of a resource, elements of physical health which Ngai Tahu use to reflect the status of mauri and to identify the enhancements needed include:

- Aesthetic qualities, e.g. natural character, indigenous flora and fauna;
- Life supporting capacity and ecosystem robustness;
- For rivers, the continuity of flow of water (of high quality) from the mountain source of a river to the sea;
- Fitness for cultural usage; and
- Productive capacity.

A water body or other natural resources can be desecrated by improper resource management activities. These may extinguish the mauri of the resource and in turn offend the mana of Papatipu Runanga who holds traditional rights and responsibilities in respect to the resource. A river’s mauri can be desecrated if it no longer supports the traditional uses and values.

Across the rohe, one of the principle indicators Ngai Tahu uses to assess the mauri of a resource is its productivity and the quality of the food and other materials sourced from it, hence Ngai Tahu’s use of the nature and extent of mahinga kai as an environmental indicator.

Preservation of the mauri of Lakes Te Anau, Manapouri Mavora, streams, flora, fauna and creatures from the adverse of development is of cultural significance to Ngai Tahu.

Ngāi Tahu maintain that all elements of the environment possess a mauri or life force, be they mountain, flora, or fauna, their quality and sanctity is to be carefully protected from degradation. The mauri is an extinguishable value, the loss of which is recognised by its degraded state, the loss of life supporting values and at worst, irreversible breakdown.

Mauri binds the spiritual and the physical elements of resources together, enabling their existence within the bounds of their own creation. When something dies, the mauri is no longer able to bind the physical and spiritual elements together and thereby give life.

Without mauri, nothing can survive. To Ngai Tahu it is essential therefore that the mauri not be lost and not be degraded.

Kaitiakitanga

Preservation of the integrity of valued water bodies and the resources supported by that waterway is an important aspect of the responsibilities of those members of Ngai Tahu whanui that are identified as Kaitiaki.

The term kaitiakitanga derives from the verb tiaki. In a natural resource context, the term incorporates notions of guarding, keeping, preserving, fostering, sheltering and watching over resources. Kaitiaki are the agents of this preservation and guardianship.

Kaitiakitanga denotes the responsibility of specific appointed iwi representatives to carry out particular functions, to keep and guard iwi interests and taonga resources. The obligations of kaitiaki include enforcement of the practices of tikanga, or those customary practices established to nourish and control the relationship between people and the natural world.

Kaitiaki may be human or non human, kaitiaki are” *persons sanctioned by inherited rights and responsibility or by election and instruction by tribal elders and authorities.*” (Ngati te Ata 2.2.3)

Kaitiaki are accountable back to Iwi, and care must be taken to ensure appropriate communication processes are established between Iwi and decision-makers to avoid interfering in representation and accountability processes.

The responsibilities of kaitiaki can only be discharged by outcomes which sustain the spiritual and physical integrity of the resources and their relationship with the people, so that the resources and the cultural values they support are passed down to future generations.

Given that objective, Maori are likely to measure the effectiveness of opportunities provided for the exercise of kaitiakitanga against the environmental outcomes that are achieved. Those outcomes will be represented by physical resource health and opportunities for continuing cultural usage according to Iwi customary preferences and priorities.

To iwi, the importance of maintaining equilibrium of the environment is central to the role of kaitiakitanga. Each generation has an obligation to exercise guardianship. Kaitiakitanga needs not be in conflict with development but, in essence, seeks to protect and preserve the special characteristics of the various elements of the environment, recognising the holistic nature of the natural world of which people are but one part, and protecting the spiritual and physical wellbeing of one’s own.

Awa/Nga Wai

Without water no living thing, plant, fish or animal can survive. Water is a taonga and this taonga value refers to values associated with the water itself, the resources living in the water and the resources in the wider environs that are sustained by the water. Further, water is a holistic resource. The complexity and interdependency of different parts of the hydrological system should be considered when carrying out activities that have known effects to water. This includes groundwater systems that provide the continuous flows of rivers that may retreat beneath the surface and appear again in valued waipuna (springs).

As a taonga it is the kaitiaki responsibility of tāngata whenua to ensure that water is available for future generations in as good as, if not better quality.

Water has the spiritual qualities of mauri and wairua. The continued well-being of these qualities is dependent on the physical health of the water. Water is the lifeblood of Papatūānuku, and must be protected. We need to understand that we cannot live without water.

Water is often seen as a commodity, and is thus subject to competing use demands. An understanding of the significance and value of water to Ngai Tahu and other stakeholders is necessary to change existing behavior from one that prioritises consumptive uses and permits inefficient use towards one that recognises and provides for cultural and ecological values as priorities.

Mahinga Kai

Ngai Tahu had an intimate knowledge of the resources available to them, and utilised this knowledge to develop a seasonal cycle of harvesting of mahinga kai. Ngai Tahu relied on a large foundation of land and water based food resources. Because of the way in which food was collected from different areas at different times Ngai Tahu ensured the continued availability of the resource. Ngai Tahu had an intimate knowledge of the lifecycle of the food resources available to them. If numbers in a particular area were low then another area could be utilised for the same resource or another resource could be collected from a different source.

Ngai Tahu have lost a lot of their traditional food gathering places in the Murihiku Region due to a variety of reasons such as the introduction of pests, domestic animals, pastoral farming and modification to waterways most notably through damming, abstractions for irrigation and gravel extractions. There has also occurred draining of wetlands that would once have been a natural habitat to many plants and animals valued by Ngai Tahu. The loss of access to certain areas where food can be collected and loss of certain foods that are now extinct have accompanied this loss of physical habitat. It is the responsibility of nga Runanga o Murihiku to ensure that activities in the Murihiku region do not contribute to the further degradation of mahinga kai resources.

Nga Runanga are Kaitiaki for the present generation and for our future generations

Spiritual Health and Wellbeing of Ngai Tahu

The cultural identity of Ngai Tahu stems from their relationship with maunga, roto and awa. Ngai Tahu ki Murihiku identifies with the surrounding mountains and their awa as evidenced by their mihi. The health and wellbeing of Ngai Tahu whanui is dependent on the continued health and wellbeing of these mountains, the waterways of Murihiku and the resources supported by the waterways, Ki Uta Ki Tai

Large negative changes in this region, in particular the waters, represents a loss in the culture and identity of Ngai Tahu.

Impacts on Values:

Impacts on Mauri

Mauri of the Waiau River

The Mauri of the Waiau has been affected significantly by the building of the Manapouri Power Station. Many of our Kaumatua feel the hurt when they see the condition of the Waiau River and see it as a minor trickle of its once mighty self. The life force has diminished and the river our Tupuna remember has gone. (However it still exists in potentiality). The river exists but in another form.

According to the Assessment of Environmental Effects (Draft) commissioned by Meridian Energy there are minor impacts expected upon the ecosystems of the Waiau River as a result of the MTAD project. These minor impacts will still decrease the Mauri of the river; if these are added to the collective loss of mauri as a result of the Manapouri Power Station, then the accumulative effects are a major concern to Iwi.

If the mauri of an entity is desecrated or defiled, the health and wellbeing of the resource itself, resource users and others depending on or associated with that entity are at risk.

The adverse impact upon the water of the Murihiku region will be significant if there are any effects on the mauri of the water from the proposal. This conclusion is derived from the fact that Awa nourishes Papatuanuku.

Mauri of Nga Roto (Lakes)

Iwi have representatives on The Guardians of the Lakes who have expertise and knowledge on the management of the lakes and their present state of health. Iwi look upon these representatives to ensure that the best interests of Iwi and future generations are cared for and that the Mauri of the lakes is maintained and enhanced. There should be no degradation of the Mauri.

The Iwi concept of Ki Uta ki Tai and the idea that different parts of a river catchment's can affect others makes us come to a conclusion that MTAD will affect the Mauri of the lakes. From the AEE draft that Meridian Energy has provided it appears that the Mauri of the lakes would however be the least effected.

Iwi are less concerned about the effects the MTAD project will have on the Mauri of the lakes. The management of the Lake will be under existing consenting conditions and little effect is seen as a result of the project.

Mauri of Taipari-riki Doubtful Sound

Iwi also have a representative on The Guardians of Fiordland. Their expertise and knowledge and their ability to represent and protect Iwi values in Fiordland is very important.

The Mauri of Taipari-riki and how it will be affected is harder to evaluate for Iwi. There is no doubt there will be a change to the Doubtful Sound ecosystems (and subsequently its Mauri) as a result of the MTAD project. Extra discharges will course a change to the mauri and subsequently there is a concern for the ecology in terms of unknown accumulative effects.

Mauri of Te Wae Wae Bay

There have been great changes in the Mauri of the Te Wae Wae bay over the years. This can be seen in the conditions and decline of the Toheroa beds. There is debate whether this is a result of natural events and weather patterns or the MPS.

The effect on Mauri as a result of MTAD project would appear to be less than minor.

The MTAD project will affect the Ngai Tahu Value of Mauri.

Impacts on Kaitiakitanga

Kaitiakitanga for the Waiau River

It is very clear the closer one lives to the river then the stronger one feels about their roles and responsibilities in terms of the Maori value of Kaitiakitanga. Obviously the Hau Kainga or Mana Whenua has a responsibility to fulfil on behalf of the mana of the tribe. If they are unable or fail to meet these obligation then they may feel degraded, dejected or a failure.

The adverse impact upon Nga Runanga especially Oraka/Aparima is significant. They feel a greater responsibility than other Runanga in terms of Kaitiakitanga as the Waiau River is within their Runanga boundaries. Members of this Runanga have seen the changes in the river since the diversion of water from the Waiau River for the Manapouri Power Station in 1969. Many members who were interviewed could not disassociate the less than minor effects the new MTAD proposal will have and the major effects the Waiau River has seen since 1969. There are unknown accumulative effects of the MTAD project. The ability of Kaitiaki to make relevant and meaningful decisions as a result of these effects is seen as an impact.

Kaitiakitanga for the Lakes (Nga Roto)

Iwi hold these lakes in great regard. We have always felt strongly that they must be managed well. These lakes have been given Statutory Acknowledgement by Ngai Tahu recognising their value to Iwi. The Ngai Tahu Value of Kaitiakitanga and the impact caused by MTAD will be less than minor.

Kaitiakitanga of Doubtful Sound (Taipari-riki)

As Kaitiaki, Iwi should act responsibly and provide appropriate kaitiakitanga. Iwi recognise there are concerns with the infant mortality among the Bottlenose Dolphins of Taipari-riki. Many possible reasons to this have been identified these include the MPS discharge. Iwi wish to ensure there are no negative effects on the Bottlenose population as a result of human activities.

The accumulative effect of increased discharge from tailrace is unknown. As part of our Kaitiaki role Iwi need to be assured that there will be no future affects on Bottlenose Dolphins and other parts of the ecology as a result of MTAD.

Kaitiakitanga for Te Wae Wae Bay

Our ability to provide appropriate Kaitiakitanga of the environs of Te Wae Wae Bay has been limited. Iwi members feel strongly about this, they have seen many changes and there is a strong belief that they are a direct cause of the MPS. No doubt other factors contribute.

The MTAD project will affect the Ngai Tahu value of Kaitiakitanga.

Impacts on Awa/Nga Wai, Rivers and Waters

The Waters of the Waiau River

Iwi have seen the change in the Waiau River since 1969. The loss of water to the Waiau River below MLC as a result of the MPS has had a tremendous effect on the Iwi value on Wai. Without this water the river has not been able to provide the same resources to humans. The waters of the Waiau River are a very emotive issue for some of our Iwi.

The river at MLC, as a result of MTAD, will decrease on average 10 m/s; this represents the total volume of extra water that could be used for generation. The reduction in the peak flow levels in high flow conditions may have an impact on ecologies on the river, such as a lessened ability of the river to cleanse itself. The accumulative effect of the loss of water within the Waiau River below MLC as an unknown is a concern to Iwi.

The Waters of the Lakes (Nga Roto)

There will be some variations on the lake levels. It appears under the MTAD project these variations will have minor effects. As a whole the lakes will have no less water in them than the present regime.

The Waters of Doubtful Sound (Taipari-riki)

There will be extended periods were the MPS will be operating over the 485m³/s. AEE reports (draft) produced by Meridian Energy show there will be less than minor impacts as a result of MTAD. The accumulative effects on the marine environment as a result of the increased discharge to Taipari-riki are unknown but are a concern to Iwi.

The Waters of Te Wae Wae Bay

The ability of the Waiau River to provide nutrients to the coastal environment, to transport gravels and sediment is seen as vital by Iwi. This provides for a healthy environment at Te Wae Wae Bay and therefore healthy and abundant mahinga kai resources.

Barrier retreat and breaching, loss of lagoon environment and coastal changes are seen as significant by Iwi. Many Iwi members believe a major contributor to this is the MPS.

The MTAD project will only have minor effects to the Te Wae Wae Bay environment.

However any future cumulative effects will impact on Iwi.

The MTAD project will affect the Ngai Tahu Value of Awa/ Wai.

Impacts on Mahinga Kai

Mahinga Kai of the Waiau River

A list of Mahinga Kai species important to Iwi can be found in the appendices of this report. These include birds, fish, plants and animals. Many of these are found in the Waiau River catchments. Of most concern to Iwi are the fish species. The inability of tuna and other fish species to negotiate the lake control structures is well documented. This has been mitigated in the past by the transfer of Elver over the MLC. From feedback by Iwi these transfers have been successful.

The impact on Mahinga Kai resources below MLC, especially the change and loss of habitat for Mahinga kai, has affected our ability to gather from traditional areas alongside and within the river. However, impacts on the values of Mahinga Kai on the Waiau River as a result of the MTAD are seen as minor except for the Tuna.

The loss of Migrating Tuna away from the Waiau River is seen as a major impact on Iwi Mahinga Kai values.

Mahinga Kai of the Lakes (Nga Roto)

Effects on our Mahinga Kai values are seen as minimal except for the migrating Tuna through the lakes into the MPS.

Mahinga Kai of Doubtful Sound (Taipari-riki)

Iwi members have expressed some concerns about the Biological Environment and the effects of increased current velocities and salinity levels on Mahinga Kai and Black Corals in the Sound. The migration of mahinga kai further out into the sound has been noticed. Mahinga Kai is not as abundant since the development of the MPS. Iwi believe that there will be an accumulative effect as a result of MTAD.

This has been addressed by the MTAD AEE as a less than minor impact.

Mahinga Kai of Te Wae Wae

There is real concern for the ecology of Te Wae Wae Bay and the Foveaux Strait Toheroa. Our Kaumatua have seen real change in the condition of the Toheroa beds and their productivity. Concerns range from a loss of the sandy beach environment to large changes at the mouth and lagoon of the Waiau River.

The MTAD project will affect the Ngai Tahu Value Mahinga Kai.

Impacts on Spiritual Health and Wellbeing

Many of our Ngai Tahu values are affected to varying degrees. Some are considered minor others are considered major. With so many values being affected our wellbeing is also affected.

The MTAD project will affect the Ngai Tahu Value of Spiritual Health and Cultural Wellbeing.

Chapter 6

Summary

Ngai Tahu has a long association with the Murihiku region. Ngai Tahu led a nomadic lifestyle, following resources throughout the region. The use of the areas was extensive rather than intensive. Intimacy with and knowledge of the terrain was built up over generations and passed from one generation to another generation.

The proposed Manapouri Tailrace Amended Discharge has the potential to impact significantly upon Ngai Tahu values and beliefs if it is not managed carefully. This adverse impact is associated with effects on Ngai Tahu values of Mauri, Kaitiakitanga, water, lakes and rivers and Mahinga Kai. Within these values are matters concerning our spiritual wellbeing, the spiritual value of water, effects on terrestrial vegetation, effects on aquatic biota, and the effect on water quality and effects on animals and fishes that share this environment with us. Ngai Tahu values need to be respected when dealing with any activity that poses risks. These values and beliefs are central to Ngai Tahu existence. Any impact upon one value will impact upon all.

Iwi look at the ability of schemes to minimise or avoid environmental, cultural and social effects, how well schemes can balance cultural, environmental and economic values and the cumulative effects of schemes over the long term. They need to avoid compromising mahinga kai as a result of damming, diversion or extraction of freshwater resources

Ngai Tahu ki Murihiku agree with many of the AEE reports produced by Meridian Energy for the MTAD project. These conclude that the effects on the Environment will be minor or less than minor.

This, however, does not address the aroha (sadness) that our people feel for the state of the Waiau River and Taipari-riki as it presently exist as a result of MPS. They only see an addition to loss of Mauri in the Waiau River as a result of the proposed MTAD project.

The three main issues Ngai Tahu ki Murihiku have are

1. The accumulative effects of the MTAD project on all associated environments, and the future and potential impact this could have on the Environment and Iwi.
2. The increasing loss of Long Fin Eels.
3. Unknown effect on Dolphin and habitat decline in Taipari-riki as a result of increased discharge.

Ngai Tahu ki Murihiku acknowledge the commitment by Meridian Energy to consult with Iwi and the community and to take into account the issues and concerns we have.

We also acknowledge the commitment Meridian Energy has to operating sustainably, while considering social, economic and environmental impacts and their commitment to providing renewable generation facilities.

Recommendations

Nga Runanga is unlikely to submit against the application provided the following are conditions of the consent:

1. Require that hydroelectric development consideration, feasibility studies, and project management in Fiordland recognises and gives effect to the principle of Ki Uta ki Tai (mountains to sea)
2. Take into account Issues and Policy outlined in the Ngai Tahu ki Murihiku Natural and Environmental Iwi Management Plan.
3. Require the continued development and implementation of monitoring regimes to ensure that any adverse effects including existing or potential loss of tuna/eel on the health of mahinga kai resources and/or their habitats are identified and addressed.
4. Require, if deemed necessary, that companies provide opportunities for Iwi representatives to participate in monitoring.
5. Require the active mitigation of tuna/eel loss in the turbines of power generation schemes.
6. Require that the costs of Elver transfer are met by the electricity generator.
7. Promote the use of State of the Takiwa environmental monitoring for Murihiku river catchments.
8. Promote the use of the Cultural Health Index (CHI) as a tool to facilitate monitoring of streams, rivers and waterbody health, and to provide long term data that can be used to assess river health over time.
9. Prioritise the restoration of those water bodies of high cultural value, both in terms of ecological restoration and in terms of restoring cultural landscapes.
10. Work towards the restoration of key mahinga kai areas and species, and the tikanga associated with managing those places and species.
11. Support the concept of Mahinga Kai Cultural Parks, as a means of protecting and using specific cultural landscapes within the takiwā that have important mahinga kai associations.
12. Use the enhancement of mahinga kai places, species and activities to offset or mitigate the adverse effects of development and human activity on the land, water and biodiversity of Murihiku.

APPENDICES

Papakupu Glossary

Äkau reefs

Ahi kā occupation, land rights; continued occupation, properly ahi kā roa “long burning fires”, one of the most important elements of traditional lore of Māori land tenure

Hāpua coastal/estuarine lagoon, where natural food collects

Hei-tiki ornament

Hui gather, meeting

Kai hau kai customary exchanges of gifts and resources between whānau/hapū, the creation and satisfaction of such obligations within the wider Ngāi Tahu tribe

Kai moana seafood, especially shellfish etc.

Kaimataitai sea food

Kāinga village permanently occupied

Kaitiaki guardians

Karakia prayer, charm, incantation

Kaumātua elders, wise men or women

Kāwanatanga governance, relating to the exchange of gifts enshrined in the Treaty of Waitangi

Kawa protocol

Ki uta ki tai from the mountains to the sea

Koha gifts, and consequential reciprocal obligations

Kōiwi tangata human skeletal remains

Kotahitanga unity

Mahinga kai food, and places for obtaining natural foods, methods and cultural activities involved

Mahinga parenga customary use activities

Manaakitanga support, caring and hospitality, as shown towards guests

Mana integrity, respect, prestige, authority

Manamoana tribal authority over the sea coasts and offshore fisheries, generally accepted as extending iwi manawhenua from the traditional tribal land boundaries into the adjacent ocean as far as New Zealand statutory limits-currently 200 miles offshore

Manawhenua traditional/customary authority or title over land, and the rights of ownership and control of usage on the land, forests, rivers etc. Manawhenua is held by an iwi or hapū rather than individuals. Also the land area (and boundaries, Rohē) within which such authority is held

Manuhiri visitor, quest

Māoritanga actions and attributes of being Māori, culture, living according to Māori custom, traditional values, in modern New Zealand

Marae traditional Māori open meeting ground. All important matters affecting an iwi must be discussed, and ultimately decided, on their own traditionally recognised marae. Here leaders, chiefs and commoners alike, are accountable, before the people of the tribe, to their families, relations and to the wider tribal and Māori community

Mātauranga information, knowledge, education

Maunga mountains

Mauri spiritual essence, lifeforce

Mōkihi raft

Mō tātou, ā, mō ngā uri āmuri ake nei
For all of us and the generations that follow

Moa extinct bird

Mokopuna grandchildren

Motu islands adjacent to shore

Moutere floating islands (offshore)

Murihiku the takiwā of the four Murihiku Rūnanga Papatipu of Ngāi Tahu Whānui is identified in Te Rūnanga o Ngāi Tahu Act 1996 (for Ngāti Mamoe in pre-Ngāi Tahu times the term included most of the southern two-thirds of the South Island)

Noa without restriction

Nohoanga temporary campsite (stopover), for seasonal gathering of food/kai and natural resources

Pā Tawhito ancient pā sites

Pöhā a kelp bag in which muttonbirds were preserved and stored

Pononga servants

Pürākau cultural history

Rāhui restriction, reservation/exclusion under tribal authority, and a marker warning of this; controls, also a statement that a resource is being actively managed, also “No Trespass” sign, reserve, reservation

Rangatiratanga chieftanship, the powers and qualities of chiefly leadership, and exercise of tribal authority. Self determination

Repo wetlands and swamps

Ritenga custom, meaning, similarity, style

Rūnanga Papatipu means the Rūnanga Papatipu of Ngāi Tahu Whānui, referred to in the Te Rūnanga o Ngāi Tahu Act 1996, including Waihōpai Rūnaka, Te Rūnanga o Awarua, Te Rūnanga o Oraka Aparima and Hokonui Rūnaka

Taiāpure local fisheries areas. They can be established over areas of special significance to tangata whenua

Take raupatu land rights by conquest and occupation

Take tuku land rights gifted (or in exchange for value)

Take tūpuna land rights inherited

Takiwā area

Tāne husband, male, man, manly

Tangaroa deity of the sea and fish and other marine life

Tangata whenua people of the land, local owner-occupier, original inhabitant, the people that hold the tūrangawaewae and the manawhenua in an area, according to tribal and hapū custom

Taniwha water monster, powerful person, ogre

Taonga treasured possession, material or abstract (e.g. language); Māori interest in these is protected by the Treaty of Waitangi and New Zealand statute and common law/lore

Taonga pounamu greenstone treasures

Tangata Tiaki Manage customary fisheries in terms of the Fisheries (SI Customary) Fisheries Regulations 1999 and Fisheries Act 1996.

Tapu sacredness, forbidden, restricted

Tauranga ika fishing ground

Tauranga waka canoe landing sites

Tauira students

Te Reo Māori Māori language

Tikanga rights, customs, accepted protocol, rule, Māori traditions, lore or law, the correct Māori way

Tītī Muttonbird chick

Tohorā whales

Tohu markers

Tohunga expert

Tōpuni derives from the traditional Ngāi Tahu custom of persons of rangatira (chiefly) status extending their mana and protection over an area or person by placing their cloak over them or it

Tūāhu sacred place used for spiritual purpose

Tuhituhi Neherā rock drawing sites

Tūpuna ancestors

Tūrangawaewae a person's right to stand on a particular piece of land or in a certain place and to speak and be heard on matters affecting them; their relationships to that land and its resources

Umu oven, earth oven

Uri descendants

Urupā burial place, cemetery, often enclosed

Wāhi Ana important cave areas

Wāhi ingoa place names

Wāhi Köhatu rock formations

Wāhi Kaitiaki resource indicators from the environment

Wāhi Mahi Köhatu quarry sites

Wāhi Pakanga battle sites / grounds

Wāhi Paripari cliff areas

Wāhi Pounamu greenstone, jade sources

Wāhi Rākau areas of important trees

Wāhi Rāranga sources of waving material

Wāhi Rua food storage areas

Wāhi taonga places of sacred or extreme importance

Wāhi Täpuketia buried taonga

Wāhi Tapu sacred places

Wāhi Tohu locators and their names within landscapes

Wai whakaheke tūpāpaku water burial sites

Waiata sing, chant, song, psalm, song poem

Waikōura fresh water crayfish

Waimätaitai refers to coastal sea and waters in estuaries where the two waters are mixed, brackish. Also includes areas of coastal swamp

Waiora waters used for healing by tohunga. Like waitohi, these waters were pure, fresh running

Waipuna important springs

Wairua spirit

Waitapu sacred waters

Waitohi waters used by tohunga during initiation and baptismal ceremonies. The function was to remove the tapu from the people (whakanoa).

Waiwera ngāwhā hot water for healing purposes and recreation

Waka canoe

Wakawaka sections, divisions in customary Māori lore. Allocation of areas of resource usage to whānau, hapū. Well defined areas of either land or sea, usually marked by a natural feature such as a ridge or stream, or by erected markers of rocks or poupou (posts). The whānau would have exclusive resource rights within their own areas

Wänanga place of learning, lore, special knowledge

Whakaaro think, opinion, feelings, concept

Whakanoa to remove tapu

Whakapapa genealogy, cultural identity

Whakatauki proverbial saying

Whānau family (extended). Several whānau may constitute a hapū and several hapū constitute an iwi (tribe); further, several tribes of related descent may comprise a waka (canoe) grouping. Such groupings based on whakapapa (descent) and waka (migratory) relationships are significant in modern NZ Māori life and politics, evolving over time

Whānaungatānga the relationship which binds people together through common genealogy; unity of purpose and mutual support

Wharenui big house

Whenua land, country

Glossary Meridian Terms

AEE:	assessment of environmental effects
Cumec:	one cubic metre of water per second flowing past a given point
Dry years:	mean annual daily inflow to the power scheme less than 367 cumecs
ECNZ	Electricity Corporation of New Zealand
ES	Environment Southland
Event:	a period of time when the flow is continuously greater than or less than a given baseline
Freshes:	50 to 149 cumecs
GWh	Gigawatt hour. A measure of energy production equivalent to one million kWh.
Hydrology	The dynamic processes of water within an environment including the sources, timing, amount, and direction of water movement.
Large floods:	greater than 1000 cumecs
LSL	Low salinity layer. A surface layer of reduced salinity water across the Doubtful Sound fiord known as the Low Salinity Layer (LSL). The LSL overlies the underlying saltwater and results in a net seaward current of low-salinity water.
Manapouri Power Station	The underground power station at West Arm, Lake Manapouri.
Mean flow:	average flow during a period of time (e.g. daily, weekly)
Meridian	Meridian Energy Limited
Minimum flow:	flows that must be released and maintained per consent conditions as required
Minor flows:	17 to 49 cumecs
MLC	Manapouri Lake Control.
Moderate floods:	300 to 599 cumecs
MPS	Manapouri Power Scheme.
MTAD	Manapouri Tailrace Amended Discharge.
MW Megawatt.	A measure of power, equivalent to one million watts.
MWh	Megawatt hour is a measure of energy
NIWA	National Institute of Water and Atmospheric Research.
RMA	Resource Management Act 1991.
Small floods:	150 to 299 cumecs
SoDaPop	Stochastic Dynamic Programming - an optimisation model that
TLC	Te Anau Lake Control
Typical years:	mean daily inflow to the power scheme is in the range 367 to 506 cumecs
Transmission	A network that transports large quantities of energy. In the electricity industry, a transmission network includes high voltage lines, transformers and switches used to move electrical power from generators to the distribution system. In the gas industry, a transmission network involves large diameter gas pipelines and associated infrastructure such as compressors.
Wet years:	mean (or average) annual daily inflow to the power scheme is less than 506 cumecs
WWP	Waiau Working Party.
2MTT	Second Manapouri Tailrace Tunnel employs a technique called Stochastic Dynamic Programming (SoDaPop). The primary purpose of the model is to provide basic assistance to Meridian's generation controllers in the day-to-day running of the MPS by providing operational settings for the TLC, MLC, and power station flows for the scheme each day.

Mahinga Kai

The following table lists some of the mahinga kai species that were found in the Murihiku Region. Many of these species are still present and such populations are highly valued by members of Ngai Tahu Whanui.

Nga Ika	Fish	Taonga Species
Tuna	Eel (Short Fin & Long Fin Varieties)	
Kanakana	Lamprey	
Pātiki	Flounder	
Inaka	Whitebait (Adult)	
Mata	Whitebait (Juvenile)	
Koura	Freshwater Crayfish	
Kakahi	Freshwater Mussel	
Kökopu	Native trout and galaxiids	*
Paraki/Ngaiore	Common Smelt	
Kokopara	Bully	
Kueo	Species of fish	
Taiwharu	Giant Kökopu	*
Nga Manu	Birds	
Kākā	South Island Parrot	*
Kāhu	Harrier	*
Moa	Moa	
Kākāpō	Kākāpō	*
Kākāriki	Parakeet	*
Kakaruai	South Island Robin	*
Kaki	Black Stilt	*
Kārearea	Falcon	*
Karoro	Black Backed Gull	*
Kea	Kea	*
Kōau	Shag	*
Koekoeā	Long-tailed Cuckoo	*
Kōparapara or Korimako	Bellbird	*
Kōtare	Kingfisher	*
Kōtuku	White Heron	*
Kōwhiowhio	Blue Duck	*
Kūkupa/Kererū	Wood Pigeon	*
Mātā	Fernbird	*
Miromiro	South Island Tomtit	*
Mohua	Yellowhead	*
Pākura/Pūkeko	Swamphen	*
Pārera	Grey Duck	*
Pateke	Brown Teal	*
Pīpīwharauoa	Shining Cuckoo	*
Pīwakawaka	South Island Fantail	*
Poaka	Pied Stilt	*
Pūtangitangi	Paradise Shelduck	*
Ruru koukou	Morepork	*
Riroriro	Grey Warbler	*
Takahē	Takahē	*
Tuturiwhatu	Banded Dotterel	

Tete	Grey Teal	*
Tieke	South Island Saddleback	*
Tititipounamu	South Island Rifleman	*
Tokoeka	South Island Brown Kiwi	*
Tūi	Tūi	*
Weka	Woodhen	*
Nga Manu	Various Birds	
Nga Hua	Eggs of Bird Species	
Nga Rakau	Plants	
Akatorotoro	White Rata	*
Aruhe	Fern Root	*
Harakeke	Flax	*
Horoeka	Lance Wood	*
Kaihikatea	White Pine	*
Kāmahi	Kamahi	*
Kānuka	Kānuka	*
Kāpuka	Broad Leaf	*
Karaka	NZ Laurel	*
Kauru	Stem of Cabbage Tree	*
Kökōmuka	Koromiko	*
Kōwhai	Kōwhai	*
Mania	Sedge	*
Mānuka Kahikātoa	Tea Tree	*
Mātai	Black Pine	*
Miro	Brown Pine	*
Pingao	Pingao	*
Ponga	Tree Fern	*
Rātā	Southern Rātā	*
Raupō	Bull Rush	*
Rimu	Red Pine	*
Rimurapa	Bull Kelp	*
Taramea	Spear Grass	*
Tatarakeka	Berries	*
Tawai	Beech	*
Teteaweka	Muttonbird Scrub	*
Ti Kōuka	Cabbage Tree	*
Tikumu	Mountain Daisy	*
Toetoe	Toitoe	*
Tōtara	Tōtara	*
Tutu	Tree (Cororia Arborea)	*
Wī	Silver Tussock	*
Wīwī	Rushes	*
Nga Kararehe	Animals	
Kiore	Rat	

Note: Taonga species are species that are valued by Ngāi Tahu for a particular reason, whether it is as a mahinga kai or as a cultural icon. These are identified as such in the Ngāi Tahu Claims Settlement Act 1998.

Literature Review

Sources used to compile this CVR have been published articles, books and interviews. Background references for this CVR include the Internet and articles from environment newsletters. The books provide information on the relationship of Māori to Te Wai Pounamu and in particular to the Murihiku region. They also provide insight into the resources that are available to Ngāi Tahu.

Written sources included:

- Te Tangi a Tauria. Ngai Tahu ki Murihiku Natural and Environmental Iwi Management Plan.
- Te Rūnanga o Ngāi Tahu Freshwater Policy Statement
- Resource Management Act 1991
- State of the Takiwa
- Ngāi Tahu Claims Settlement Act 1998
- Te Rūnanga o Ngāi Tahu Freshwater Policy Statement

Secondary sources included

- Te Wai Pounamu - The Greenstone Land
- Iwi Historical and Archaeological Survey of Deep Cove and West Arm
- Māori Customary and Traditional Instream Water Values
- Te Whakatau Kaupapa o Murihiku
- Beattie J H Maori Place names of Otago
- Evison, H. C. (1993) Te Wai Pounamu: The Greenstone Island
- Cowan J Maori Place names

These articles provided information that was used to assess the impact the Application will have on Ngāi Tahu values.

STATUTORY ACKNOWLEDGEMENT FOR MOTURAU (LAKE MANAPOURI)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the lake known as Moturau (Lake Manapouri), the location of which is shown on Allocation Plan MD 40 (S.O. 12257).

Preamble

Under section 206, the Crown acknowledges Te Runanga o Ngai Tahu's statement of Ngai Tahu's cultural, spiritual, historic, and traditional association to Moturau, as set out below.

Ngai Tahu Association with Moturau

Moturau (or Motu-ua) is one of the lakes referred to in the tradition of 'Nga Puna Wai Karikari o Rakaihautu' which tells how the principal lakes of Te Wai Pounamu were dug by the rangatira (chief) Rakaihautu. Rakaihautu was the captain of the canoe, Uruao, which brought the tribe, Waitaha, to New Zealand. Rakaihautu beached his canoe at Whakatu (Nelson). From Whakatu, Rakaihautu divided the new arrivals in two, with his son taking one party to explore the coastline southwards and Rakaihautu taking another southwards by an inland route. On his inland journey southward, Rakaihautu used his famous ko (a tool similar to a spade) to dig the principal lakes of Te Wai Pounamu, including Moturau. Rakaihautu named the lake Motu-ua, a reference to the persistent rain, which troubled his party here.

Tamatea and his party passed this way in their journey back to their homeland after their waka, Takitimu, broke its back at the mouth of the Waiau River. It was Tamatea who named the lake Moturau (possibly a woman's name but more likely to relate to the many islands found in the lake). Tamatea's party established a camp on the edge of the lake, which is probably under water now, and called it Whitiaka-te-ra (the shining of the sun), indicating that they enjoyed a very different experience of the lake from Rakaihautu. Other traditional names associated with the lake include Te Maui (North Arm), Te Tukeroa (Beehive), Manapouri (north-eastern reach), Wairoa River (upper Waiau River), Te Rakatu (Garnock Burn), Te Konuotu-te-Makohu (Monument), and Huatea (South Arm).

For Ngai Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events, which shaped the environment of Te Wai Pounamu and Ngai Tahu as an iwi.

A number of wahi taonga and nohoanga associated with the lake are now under its waters. Eel weirs have been found at the Monument and Hope Arm of the lake, and there was a canoe-manufacturing site at Pigeon Island. Such wahi taonga are places holding the memories, traditions, victories and defeats of Ngai Tahu tupuna.

As a mahinga kai, the lake was important for the fowling it offered Murihiku coastal settlements in summer. The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka (landing places), places for gathering kai and other taonga, ways in which to use the resources of Moturau, the relationship of people with the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngai Tahu today.

The mauri of Moturau represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngai Tahu Whanui with the lake.

STATUTORY ACKNOWLEDGEMENT FOR TE ANA-AU (LAKE TE ANAU)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the lake known as Te Ana-au (Lake Te Anau), the location of which is shown on Allocation Plan MD 42 (S.O. 12259)

Preamble

Under section 206, the Crown acknowledges Te Runanga o Ngai Tahu's statement of Ngai Tahu's cultural, spiritual, historic, and traditional association to Te Ana-au, as set out below.

Ngai Tahu Association with Te Ana-au

Te Ana-au is one of the lakes referred to in the tradition of 'Nga Puna Wai Karikari o Rakaihautu' which tells how the principal lakes of Te Wai Pounamu were dug by the rangatira (chief) Rakaihautu. Rakaihautu was the captain of the canoe, Uruao, which brought the tribe, Waitaha, to New Zealand. Rakaihautu beached his canoe at Whakatu (Nelson). From Whakatu, Rakaihautu divided the new arrivals in two, with his son taking one party to explore the coastline southwards and Rakaihautu taking another southwards by an inland route. On his inland journey southward, Rakaihautu used his famous ko (a tool similar to a spade) to dig the principal lakes of Te Wai Pounamu, including Te Ana-au.

For Ngai Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events, which shaped the environment of Te Wai Pounamu and Ngai Tahu as an iwi.

Te Ana-au figures in Ngai Tahu histories as one of the last places where Ngai Tahu and Ngati Mamoe came into conflict after the peace established between Rakiihia and Te Hautapunui o Tu. After Rakiihia had died, his bones were stripped of flesh and were buried in a cave on a cliff facing the seaside near Dunedin. However, a landslip led to the bones being uncovered. The bones were found by Ngai Tahu fishermen and made into fish hooks, an act designed to insult. Among Maori it was a practice to take the bones of enemy leaders who had recently died, fashion them into fish hooks and present fish caught with them to the enemy as a gift. Once the fish had been eaten, the enemy would be told they had feasted on fish that had in turn feasted on their dead.

While Ngai Tahu were fishing with their Ngati Mamoe relations, one of the Ngai Tahu fisherman referred to the fish biting the bones of Rakiihia. The Ngati Mamoe fisherman recognised the insult and checked the cave in which their leader had been interred. Finding that the grave had been desecrated, the Ngati Mamoe found and killed the son of a senior Ngai Tahu rangatira (chief). Before Ngai Tahu could retaliate, the Ngati Mamoe were warned that they should leave the coast for the

inland lakes where they would not be found. Ngati Mamoe headed to Te Ana-au. Among this Ngati Mamoe party was Rakiihia's brother, Pukutahi. Pukutahi fell sick along Te Ana-au's shoreline and rested while his followers explored the lake to find a safer place.

Approaching the lakes, Te Hau, the leader of the Ngai Tahu party, observed that the fugitives had divided in two, and unfortunately for Pukutahi, decided to follow the trail up to Te Ana-au. The Ngati Mamoe camp was found and in the morning the chiefs of Ngati Mamoe, including Pukutahi, were killed. This was to be one of the last battles between the tribes.

The lake was an important mahinga kai in the interior. The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of Te Ana-au, the relationship of people with

the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngai Tahu today.

The mauri of Te Ana-au represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngai Tahu Whanui with the lake.

STATUTORY ACKNOWLEDGEMENT FOR WAI AU RIVER

Statutory Area

The statutory area to which this statutory acknowledgement applies is the river known as Waiau, the locations of which is shown on Allocation Plan MD 124 (S.O. 12263).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic and traditional association to the Waiau River, as set out below.

Ngāi Tahu Association with the Waiau

The Waiau River features in the earliest of traditional accounts, and was a place and resource well known to the earliest tūpuna (ancestors) to visit the area, Rakaihautu and his followers traced the Waiau from its source in Te Ana-au (Lake Te Anau) and Motu-ua or Moturau (Lake Manapouri), to its meeting with the sea at Te Wae Wae Bay.

The waka Takitimu, under the command of the rangatira (chief) Tamatea, was wrecked near the mouth of the Waiau River and the survivors who landed at the mouth named the river 'Waiau' due to the swirling nature of its waters. Tamatea and his party made their way up the river to Lake Manapōuri where they established a campsite. The journey of Tamatea as bedevilled by the disappearance of Kaheraki who was betrothed to Kahungunu, a son of Tamatea. Kaheraki strayed away from the party, and was captured by the Maeroero (spirits of the mountain).

For Ngāi Tahu, traditions such as this represents the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

The Waiau has strong links with Waitaha who, following their arrival in the waka Uruao, populated and spread their influence over vast tracts of the South Island. They were the moa hunters, the original artisans of the land. There are remnants of Waitaha rock art associated with the river. Surviving rock art remnants are a particular taonga of the area, providing a unique record of the lives and beliefs of the people who travelled the river.

There is also a strong Ngāti Mamoe influence in this area of the country. Ngāti Mamoe absorbed and intermarried with the Waitaha and settled along the eastern coast of Te Wai Pounamu. The arrival of Ngāi Tahu in Te Wai Pounamu caused Ngāti Mamoe to become concentrated in the southern part of the island, with intermarriage between the two iwi occurring later than was the case further north. The result is that there is a greater degree of Ngāti Mamoe influence retained in this area than in other parts of the island. These are the three iwi who, through conflict and alliance, have merged in the whakapapa (genealogy) of Ngāi Tahu Whānui.

Numerous archaeological sites and wahi taonga attest to the history of occupation and use of the river. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna. The main nohoanga (occupation site) on the Waiau was at the mouth and was called Te Tua a Hatu. The rangatira (chief) Te Wae Wae had his kainga nohoanga on the left bank of the Waiau River mouth.

The Waiau, which once had the second largest flow of any river in New Zealand, has a huge influence on the lives and seasonal patterns of the people of Murihiku, over many generations. The river was a major mahinga kai: aruhe (fernroot), ti root, fish, tuna (eels), shellfish and tutu were gathered in the summer, a range of fish were caught in the autumn, kanakana (lamprey) were caught in the spring, while the people were largely reliant during winter on foods gathered and preserved earlier in the year. Rauri (reserves) were applied to

the mahinga kai resources, so that people from one hapū or whānau never gathered kai from areas of another hapū or whānau. Some 200 species of plants and animals were utilised by Ngāi Tahu as a food resource in and near the Waiau.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the Waiau, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

Place names provide many indicators of the values associated with different areas, including Waiharakeke (flax), Papatōtara (tōtara logs or bark), Kirirua (a type of eel found in the lagoon), Te Rua o te Kaiamio (a rock shelter that was a 'designated meeting place' for the local Māori, similar to a marae) and Kā Kerehu o Tamatea – ('charcoal from the fire of Tamatea' – black rocks near old Tuatapere ferry site).

The Waiau River was a major travelling route connecting Murihiku and Te Ara a Kiwa (Foveaux Strait) to Te Tai Poutini (the West Coast) and, as such, was an important link between hapū and iwi. Pounamu on the West Coast, and summer expeditions to Manapōuri (Motu-ua or Moturau) for mahinga kai were the main motivations for movement up and down the Waiau. Mōkihi (vessels made from raupō) were utilised for travel down the river and were a very effective and common mode of travel, making transportation of substantial loads of resources possible.

The tūpuna had an intimate knowledge of navigation, river routes, safe harbours and landing places, and the locations of food and other resources on the Waiau. The river was an integral part of the network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the river.

The Waiau was once a large and powerful river, up to 500m across at the mouth, narrowing to 200m further upstream. The water flow from the Waiau River was an important factor in the ecological health and biodiversity of the coastal resources.

The mauri of the Waiau represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the river.

STATUTORY ACKNOWLEDGEMENT FOR TE MIMI O TU TE RAKIWHANOA (FIORDLAND COASTAL MARINE AREA)

Statutory Area

The statutory area to which this statutory acknowledgement applies is Te Mimi o Tu Te Rakiwhanoa (Fiordland Coastal Marine Area), the Coastal Marine Area of the Te Anau constituency of the Southland region, as shown on S.O. Plan 11503, Southland Land District, as shown on Allocation Plan NT 505 (S.O. 19901).

Preamble

Under section 313, the Crown acknowledges Te Runanga o Ngai Tahu's statement of Ngai Tahu's cultural, spiritual, historic, and traditional association to Te Mimi o Tu Te Rakiwhanoa as set out below. Ngai Tahu Association with Te Mimi o Tu Te Rakiwhanoa

Ngāi Tahu Association with Te Mimi o Tu Te Rakiwhanoa

The fiords of this region represent, in tradition, the raised up sides of Te Waka o Aoraki. The waka (canoe) foundered on a submerged reef and its occupants, Aoraki and his brothers, Raraki, Rakiroa and others, were turned to stone. They stand now as the highest peaks of Ka Tiritiri o te Moana (the Southern Alps). The fiords at the southern end of the Alps were hacked out of the raised side of the wrecked waka by Tu Te Rakiwhanoa, in an effort to make it habitable by humans. The deep gouges and long waterways that make up the fiords were intended to provide safe havens on the rugged coastline, and stocked with fish, forest and birds to sustain travellers. For Ngai Tahu, traditions such as these represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events, which shaped the environment of Te Wai Pounamu and Ngai Tahu as an iwi.

Particular stretches of the coastline also have their own traditions. The visit of Tamaahua to Piopiotahi (Milford Sound) in search of Poutini, who had absconded with his wife Waitaiki, is linked to the creation of Pounamu further north on Te Tai Poutini (the West Coast). The koko-takiwai, which is found in Piopiotahi, has its basis in a visit to Piopiotahi by the waka Tairea. A woman, Koko-takiwai, and her children, known as Matakirikiri, were left behind by the Tairea and were turned into varieties of pounamu.

Place names along the coast record Ngai Tahu history and point to the landscape features, which were significant to people for a range of reasons. For example, in his voyage around the Sounds in the waka Takitimu, Tamatea gave the chiselled terrain the name 'Te Rua-o-te-moko', likening the deep gouges adorning the impressive cliff faces of the fiords to the tattoos on a chief's face. Martins Bay (Whakatipu-waitai or Kotuku) to the north of the fiords was the site of an old settlement, located to control the pounamu resources to be found here. An area of Doubtful Sound is known as Kahui-te-kakapo, while Dagg Sound had a canoe harbour known as Te Ra. Breaksea Island (within Breaksea Sound---Te Puaitaha) is known as Te Au Moana, referring to the ocean current that sweeps around the inlet. Cape Providence is known as Orariki, a cliff near here is called Taka-o-te-karehu-o-Tamatea, referring to an episode when some tattooing ink belonging to Tamatea washed over board. Chalky Sound is known as Taiari and a rock in the Sound is known as Te Kakahu-o-Tamatea, a place where Tamatea had his clothes spread out to dry after being drenched by the salt spray. Preservation Inlet has the name Rakituma.

The area was visited mainly by Ngati Mamoe and Ngai Tahu, who had various routes and nohoanga for the purpose of gathering koko-takiwai and manu (birds), particularly the kakapo. The area played a significant role in the history of conflict between Ngai Tahu and Ngati Mamoe, with a number of Ngati Mamoe taking refuge in the isolation of the fiords in order to escape the unforgiving attitudes of some sections of Ngai Tahu. The noted rangatira Tarewai from Otago Heads met his end here at the hands of Ngati Mamoe, having pursued them from the Otago Peninsula to Rakituma. Tarewai and his warriors were successfully ambushed by those they were pursuing, with the result that no one ever returned to Otago from this battle. Te Whare Pa in Rakitimu was the scene of one of the last major battles between Ngati Mamoe and Ngai Tahu.

Another dark piece of history occurred at Te Tauraka o te Hupokeka (Anita Bay). Hupokeka and his whanau (family) regularly visited Piopiotahi, travelling from Murihiku to gather koko-takiwai, and staying at a nohoanga in Anita Bay. It was here, in the 1820s, that he and his whanau were slaughtered by sealers in retribution for an incident of which they were quite innocent.

Because of its attractiveness as a place to establish permanent settlements, including pa (fortified settlements), the coastal area was visited and occupied first by Ngati Mamoe and later by Ngai Tahu. Through conflict and alliance these two iwi have merged in the whakapapa (genealogy) of Ngai Tahu. Battles sites, urupa and landscape features bearing the names of tupuna (ancestors) record this history. Prominent headlands, in particular, were favoured for their defensive qualities and became the headquarters for a succession of rangatira and their followers. Notable pa and nohoanga occurred in many areas on the Fiordland coast including: Milford (Lake Marchant) and Caswell Sounds; Kahui-te-kakapo (Doubtful Sound), known as the gathering place of the kakapo, in reference to the gathering of kakapo meat and feathers which was one of the key reasons that Ngai Tahu Whanui regularly travelled to the fiords; Dagg Sound gets the sun all day, and consequently is well known as a nohoanga site, it also has a good canoe harbour known as Te Ra; Rakituma is the site of several pa or nohoanga, including one at Matauira and another at Te Whare Pa.

It was the koko-takiwai and kakapo, which primarily attracted Ngai Tahu to Fiordland. The koko-takiwai is favoured as a softer type of pounamu, more easily shaped into a finer quality of end product. It was therefore particularly sought-after for the making of ornaments, such as hei-tiki. The area also offered many other mahinga kai to sustain parties on their arduous expeditions, including a range of manu (birds), fish and kaimoana resources.

The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the area, the relationship of people with the coastline and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngai Tahu today.

There are two principal trails linking the Fiordland coast with the rest of Te Wai Pounamu (the South Island). A sea route around the fiords links Piopiotahi to Murihiku, and was the main route by which the koko-takiwai gathered from that end of the fiords was transported. The inland route for transporting koko-takiwai by backpack lay over what is now known as the Milford track, over Omanui (McKinnon Pass), down the Waitawai (Clinton River) to the head of Te Ana-au (Lake Te Anau). From there, the pounamu would be transported by mokihi to the head of the Waiiau River, and from there down the Waiiau to Te Ara a Kiwa (Foveaux Strait). In addition, a trail from Martins Bay, up the Hollyford Valley and over into the Routeburn Valley to the pounamu source at the head of Lake Whakatipu-wai-maori, was commonly used by Tai Poutini iwi, who regularly travelled south via this route to obtain koko-takiwai.

Hence tauranga waka (landing places) occur up and down the coast and wherever a tauranga waka is located there is also likely to have been a nohoanga, fishing ground, kaimoana resource, with the sea trail linked to a land trail or mahinga kai resource. The tupuna had a huge knowledge of the coastal environment and weather patterns, passed from generation to generation. This knowledge continues to be held by whanau and hapu and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the coast.

The fiords are the repository of many koiwi tangata, secreted away in keeping places throughout the region. There are also many other wahi tapu in the area, including examples of rock art in Chalky Sound. Urupa are the resting-places of Ngai Tahu tupuna and, as such, are the focus for whanau traditions. Urupa and wahi tapu are places holding the memories, traditions, victories and defeats of Ngai Tahu tupuna, and are frequently protected in secret locations.

The mauri of Te Mimi o Tu Te Rakiwhanoa represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngai Tahu Whanui with the area.

STATUTORY ACKNOWLEDGEMENT FOR MANAWAPÖPÖRE/HIKURAKI (MAVORA LAKES)

Statutory Area

The area to which this Statutory Acknowledgement applies (Statutory Area) is the Wetland known as Manawapöpöre/Hikuraki (Mavora Lakes), the location of which is shown on Allocation Plan MN 77 (SO Plan 12235).

Preamble

Pursuant to section [] of the Settlement Legislation (clause 12.2.2 of the Deed of Settlement), the Crown acknowledges Te Rūnanga's statement of Ngāi Tahu's cultural, spiritual, historic and/or traditional association to Manawapöpöre / Hikuraki as set out below.

Cultural, spiritual, historic and/or traditional association of Ngāi Tahu with the Statutory Area

Manawapöpöre and Hikuraki are part of one of the most significant catchments in Murihiku (Southland). The wetland also lies in the path of the important trail from the mouth of the ōreti River onward, via the Greenstone Valley, to the head of Whakatipu-wai-māori (Lake Wakatipu), or alternatively continuing along the Greenstone Valley and out via the Hollyford to the West Coast. These were important trading routes, to gather pounamu for exchange with northern iwi for materials and foods unavailable in the south.

The wetland area was, therefore, an integral part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continue to be held by whānau and hapū and are regarded as taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the area.

In addition the trails were part of summer time pursuits such as kai hau kai, whānaungatanga (the renewal and strengthening of family links) and arranging marriages with hapū from the neighbouring region of Otago, and further afield. Such strategic marriages between hapū strengthened the kupenga (net) of whakapapa and thus rights to use the resources of the area. The Manawapöpöre (Upper Mavora) is noted for eel weirs, which were constructed on the lake edges for catching eels, utilising flat stones, built in a loop out from the lake edge, with gaps at either end and one in the middle. Construction of the eel weir recreates the type of environment that eels like to congregate in, hence reliable catches are made.

The tūpuna had considerable knowledge of such techniques, places for catching and gathering kai and other taonga, ways in which to use the resources of the area, the relationship of people with the area and their dependence on it and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

The mauri of Manawapöpöre / Hikuraki represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the area.