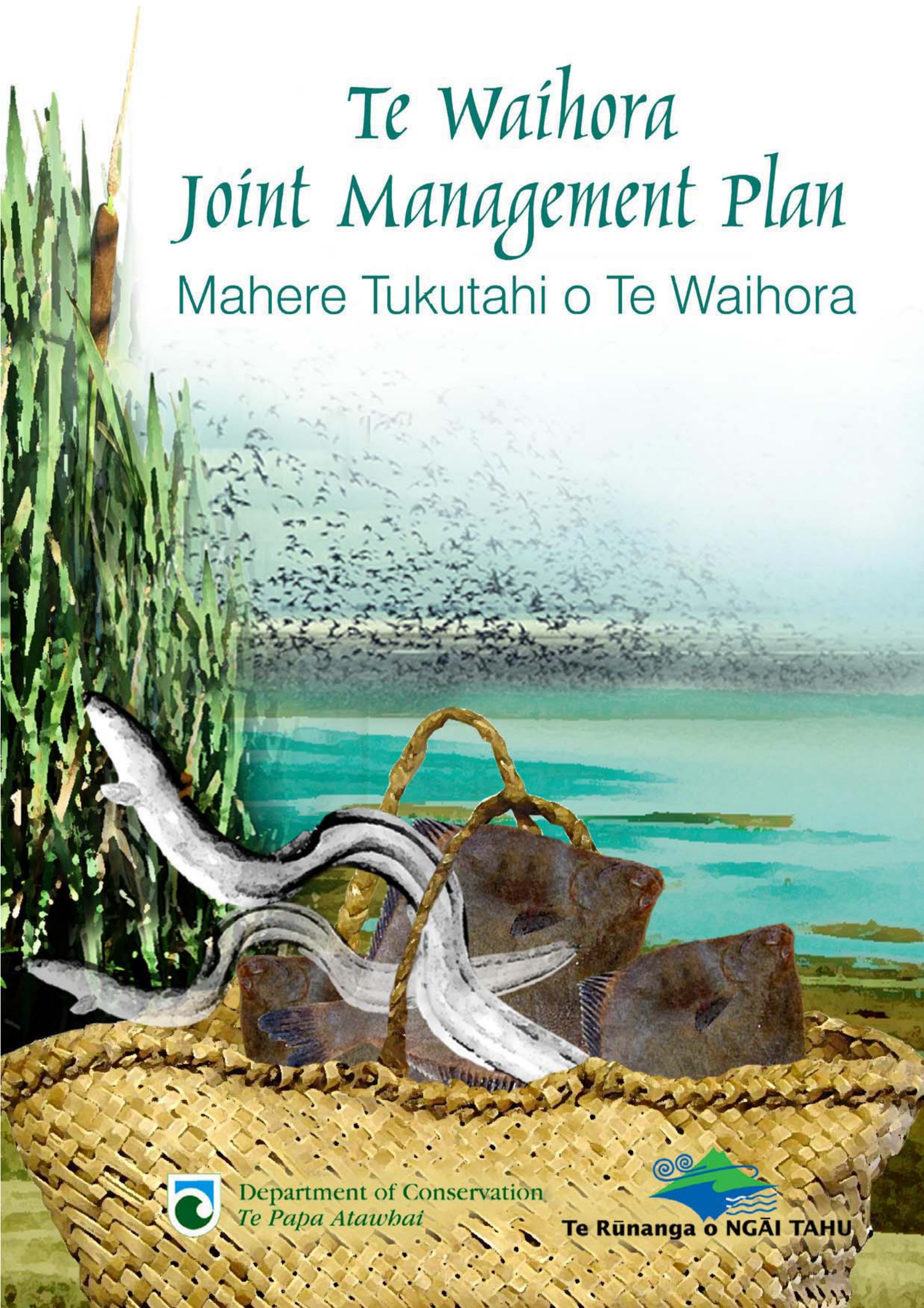


Te Waihora

Joint Management Plan

Mahere Tukutahi o Te Waihora



Department of Conservation
Te Papa Atawhai



Te Rūnanga o NGĀI TAHU

TAUPARAPARA

Hoki mai koe ki te pā Orariki e
Tū ana ki te taha o te kahu tai pōuri
O Te Waihora moana
E rere ana ki a tātou e

Let us return to the village of Orariki
That stands beside the darkened waters
of Te Waihora
That flows to us all

Te kōhaka tuna
Whāriki o te piharau
Repo o te īnaka
Moeka o te mohoa

Gathering place of the eel
Floormat of the lamprey
Spawning swamps of the whitebait
Sleeping ground of the black flounder

Tai timu tai pari
Kā wai o Mahaanui
Te taki haruru ki te pikao mumura
O Kaitōrete whenua
E rere ana ki a tātou e

The tides of Mahaanui
Rise and fall
Crashing against the blazing sand sedge
Lands of Kaitorete
That flows to us all

Ka rere te manu kāhu
I kā hau āwhio
Te kaimatakana ki te māra kūmara
O Taumutu te kāinga
E rere ana ki a tātou e

The hawk flies overhead
Circling on the air currents
As guardian of the kumara gardens
of Taumutu
That flows to us all

Tīhei mauri ora.

Behold this is life.

Te Waihora *Joint Management Plan* Mahere Tukutahi o Te Waihora

Published by

Te Rūnanga o Ngāi Tahu
PO Box 13046
Christchurch
New Zealand

Department of Conservation *Te Papa Atawhai*
Private Bag 4715
Christchurch
New Zealand

10 December 2005

ISBN: 0-478-14059-2

PREFACE *KUPU WHAKATAKI*

This is the first statutory joint land management plan between the Crown and Iwi. It results from the settlement of Ngāi Tahu claims against the Crown and in particular the loss of access to places where the tribe produced or procured food and other resources.

This joint management plan has been prepared by Te Rūnanga o Ngāi Tahu with advice from the Te Waihora Management Board (local Papatipu Rūnanga representatives) and the Canterbury Conservancy of the Department of Conservation in accordance with the provisions set out in sections 167 to 182 and schedule 12 of the Ngāi Tahu Claims Settlement Act 1998. This is a statutory document and provides for the management of the Joint Management Plan Area in accordance with the *Conservation General Policy* (2005), the *Canterbury Conservation Management Strategy* (2000) and the relevant iwi management plans approved by Te Rūnanga o Ngāi Tahu, including *Te Whakatau Kaupapa - Canterbury* (1990), *Ngāi Tahu Freshwater Policy* (1999), *Ngāi Tahu 2025* (2001), and *Te Taumutu Runanga Natural Resource Management Plan* (2003), but does not override the provisions of the primary legislation.

The joint management plan contains long-term objectives and detailed policies and methods for effective integrated management of the Joint Management Plan Area and the natural and historic resources within the area. The plan represents a coming together of the rangatiratanga of Ngāi Tahu and the Kāwanatanga of the Crown for the enhancement and protection of this taonga. It is a significant point for the continuing development of co-operative management between Te Rūnanga and the Department and provides a platform for joint advocacy to other agencies with management responsibilities within the Te Waihora environment.

Notification of intention to prepare the plan was given in November 1999 and statutory bodies were invited to make written suggestions on the content of the plan. Subsequent consultation occurred through the development of a *Draft Te Waihora Joint Management Plan* (October 2004) with input from the Canterbury Aoraki Conservation Board, local Papatipu Rūnanga, the North Canterbury Fish and Game Council, relevant territorial local authorities and other interested groups and individuals. Public submissions were sought on the draft plan, hearings held and the draft plan amended.

With our approval, the plan will be effective for 10 years, or for an extended period as agreed by Te Rūnanga o Ngāi Tahu and the Minister of Conservation but may be reviewed at any time as a result of increased knowledge, or changes in circumstance.

Te Waihora is an important site to Ngāi Tahu as a mahinga kai and nationally and internationally important to New Zealand for its wildlife and conservation values. We therefore will ensure the full use of this plan by our two organisations and encourage other organisations and the general public to participation in the management of Te Waihora.

Mark Solomon
Kaiwhakahaere
Te Rūnanga o Ngāi Tahu

Hon Mahara Okeroa
Associate Minister of Conservation
On behalf of Hon. Chris Carter
Minister of Conservation

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HOW TO READ THIS PLAN

ME PĒHEA TE PĀNUI TIKA I TE MAHERE NEI

This Joint Management Plan is divided into four parts:

- ◆ Part 1: Introduction
- ◆ Part 2: Values
- ◆ Part 3: Management
- ◆ Part 4: Plan Implementation and Review.

Part 1: Introduction covers the purposes of the Joint Management Plan, its vision, and the roles and responsibilities of the various agencies involved in the management of Te Waihora and the Te Waihora environment.

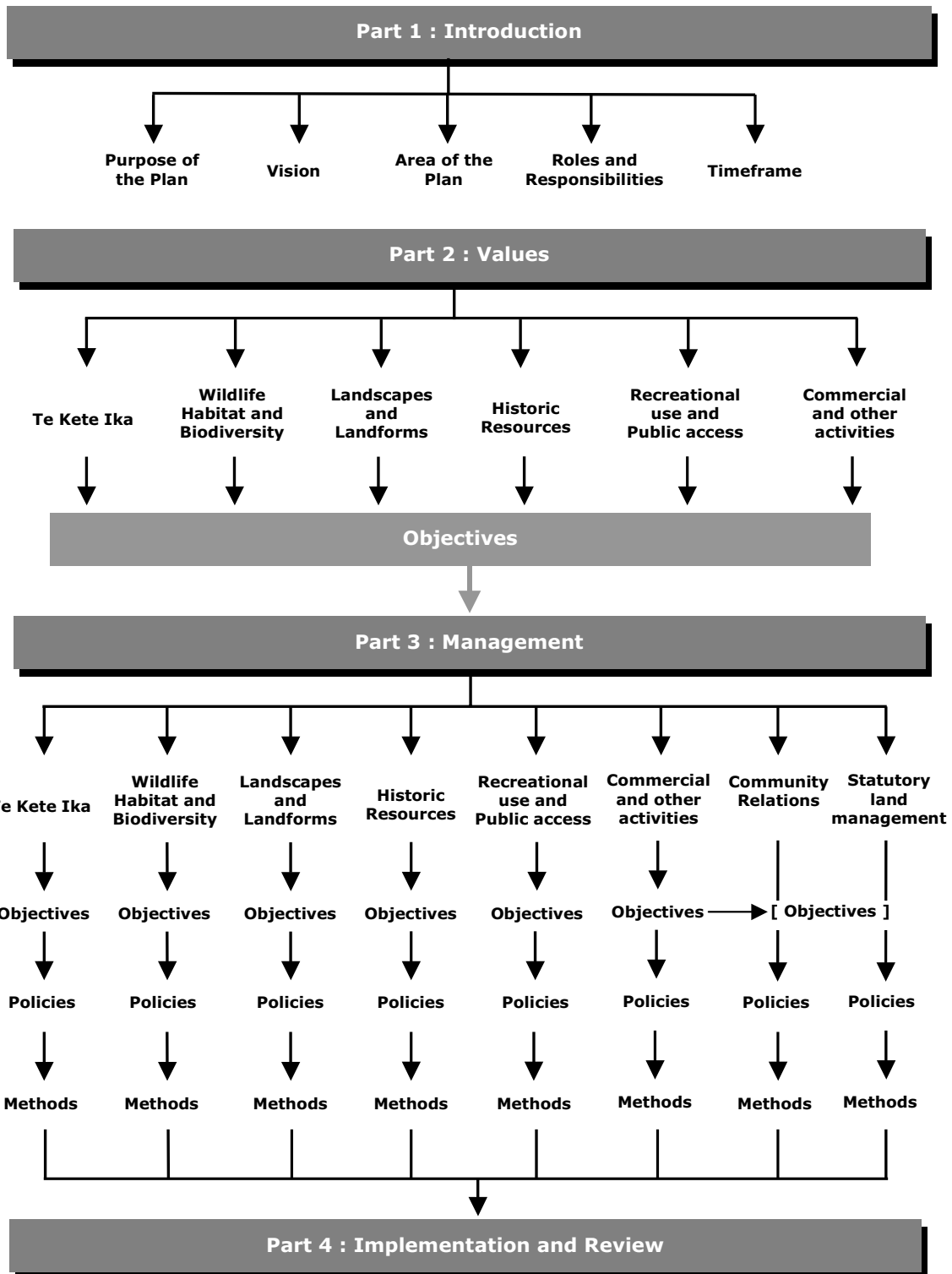
Part 2: Values is a descriptive section giving background information on the values of Te Waihora. This is to give an understanding of the associations Ngāi Tahu and other New Zealanders have with Te Waihora and the Te Waihora environment. These associations are encapsulated in highlighted statements at the beginning of each section. This part of the Plan provides a context for management and establishes the objectives from which the policies and methods in the remaining parts of the Plan are derived.

Part 3: Management Sets out the policies and methods for the future management of the Joint Management Plan Area, and for advocacy in the Te Waihora environment, and outside of the land management responsibilities of Te Rūnanga and the Department. Each section starts by repeating the relevant objectives from Part 2.

Part 4: Plan Implementation and Review outlines the actions that will be carried out by Te Rūnanga and the Department, both individually and together, to implement this Joint Management Plan and undertake monitoring and review.

The main headings within Part 2: Values and Part 3: Management, namely Te kete ika, Landforms and landscapes, Wildlife habitat and biodiversity, Historic resources, Recreational use and public access, and Commercial and other activities - were developed from an initial scoping report (2001) and consultation with key interest and user groups. These headings have been used in both Parts 2 and 3 of this Plan to provide for easy cross-referencing (see Figure 1).

Figure 1: Structure - Draft Te Waihora Joint Management Plan



Place names *Ngā ingoa o ngā wāhi*

Te Kete Ika a Rākaihautū is the original Māori name for the area. Over time, the descriptive name Te Waihora, meaning spread out waters, has been applied. The New Zealand Geographic Board *Ngā Pou Taunaha o Aotearoa* place name is “Lake Ellesmere (Te Waihora)” but the name “Te Waihora (Lake Ellesmere)” is used in the sections of the Ngāi Tahu Claims Settlement Act 1998 pertaining to this Joint Management Plan.

For the purposes of this Plan “Te Waihora” has been used, in recognition of the increasing use of this name to describe the area and of the changing management focus and values from those associated with the European name Lake Ellesmere.

Place names throughout this Plan are referred to by their Geographic Board name followed where applicable by their original Māori name in italics. In some cases, only the original Māori name is used, in italics (see Figure 3).

Ngāi Tahu dialect *Reo-ā-iwi o Ngāi Tahu*

The southern Ngāi Tahu dialect replaces “ng” with “k”, for example “Ngāi Tahu” is pronounced and written as “Kāi Tahu”. The “ng” dialect has been used throughout this Plan however, except where the Geographic Board name, traditional Māori name, or traditional whakataukī use the “k” dialect. Where both forms of the word are used these are included in the glossary with both the English translation and the general Māori synonym (e.g. Kā/Ngā, Takaroa/Tangaroa).

Acknowledgements

Te Rūnanga o Ngāi Tahu and the Department of Conservation acknowledge the involvement of the many contributors to this Plan. The Papatipu Rūnanga representatives on the Te Waihora Management Board met frequently and provided valuable ‘flaxroots’ experience and advice. Several agencies were formally consulted and provided useful feedback. Researchers gathered new and discovered old information. Various public individuals and groups provided information and comments and then submitted on the draft Plan. The combined Ngāi Tahu and Department hearings panel heard the submitters and recommended changes to the draft Plan and last but not least, the staff of Te Rūnanga and the Department who drafted and designed it all.

Kei te mihi ki a koutou katoa.

PART 1: INTRODUCTION

HE KUPU WHAKATAKI



1 PURPOSES OF THE PLAN

NGĀ TAKE O TE MAHERE

Te Waihora is an area of cultural, natural, historic, recreational and commercial importance to many people. To Ngāi Tahu, Te Waihora represents a major mahinga kai¹ and an important source of mana. The loss of this precious tribal taonga was part of the grievance outlined in the Ngāi Tahu claim to the Waitangi Tribunal. The Tribunal strongly recommended the return of Te Waihora to Ngāi Tahu, and commented that this needed to be accompanied by significant and committed Crown action to restore Te Waihora as a tribal food resource (Chapter 17, Waitangi Tribunal 1991).

This Plan is the resultant statutory Joint Management Plan between Te Rūnanga and the Minister arising from the Ngāi Tahu Claims Settlement Act, 1998.

This Joint Management Plan is prepared “*for the integrated management of those areas [set out in Part 1, section 3], and the natural and historic resources within those areas*” (section 177, NTSCA).

The purposes of the Joint Management Plan are defined in Schedule 12, Clause 11.6.19 (a) of the Ngāi Tahu Claims Settlement Act 1998 as:

“...to establish detailed objectives:

- (i) for the integrated management of natural and historic resources within the areas covered by the plan for Mahinga Kai and conservation purposes and for the purposes for which the [lands administered by the Department] are held, including recreation purposes (where appropriate) to the extent, with respect to the [lands administered by the Department], that Mahinga Kai purposes are consistent with the purposes for which that land is held;*
- (ii) where this can be accommodated consistent with clause 11.6.19 (a) (i), for the management of the areas covered by the plan for tourism purposes;*
- (iii) where this can be accommodated consistent with clause 11.6.19 (a) (i), to recognise the national and international significance of Te Waihora; and*
- (iv) to identify any adverse effects of public access or recreational use and enjoyment upon the Mahinga Kai and conservation values of the bed of Te Waihora and to recommend to the Minister of Conservation the making of bylaws to prohibit or regulate such public access or recreational use and enjoyment;”*

These purposes are referred to collectively throughout the Plan as “mahinga kai, conservation and other purposes”.

¹“Mahinga kai” means, for the purposes of a joint management plan, the customary gathering of food and natural materials and the places where those resources are gathered.” (Section 167, NTSCA).

In fulfilling the statutory purposes of the Joint Management Plan, the intention is to restore Te Waihora as a tribal food resource, to protect the conservation values of the area, and to restore and protect Te Waihora for the use and enjoyment of all New Zealanders, now and in the future - Mō tātou, ā, mō kā uri ā muri ake nei - for us and our children after us². The Plan seeks to establish the desired mix of use and protection of land and to set in place policy guided by the values for Te Waihora (set out in Part 2) and the purposes of the Plan as set out in the Ngāi Tahu Claims Settlement Act 1998.

Management through the Plan aims to sustain the vitality of Ngāi Tahu culture by restoring resource-centred relationships, and recognising the relationships of Ngāi Tahu and their culture and traditions with the ancestral lands and taonga of Te Waihora through enabling the gathering of healthy mahinga kai.

The Plan will assist the implementation of the Ngāi Tahu Claims Settlement Act 1998 in relation to Te Waihora and represents a coming together of Te Rūnanga and the Department for the enhancement and protection of this taonga. It is a significant point for the continuing development of co-operative management between Te Rūnanga and the Department. It also provides a platform for joint advocacy and informed management with other agencies for the Te Waihora environment.

The Plan also provides information on the Te Waihora environment, to highlight the cultural, natural, historic, recreational and commercial values of the area.

² Ngāi Tahu tribal whakataukī.

2 VISION *TE WAWATA*

“Ngāi Tahu cultural identity is restored through the rejuvenation of the mauri and life-supporting capacity of Te Waihora.

The Joint Management Plan Area is managed in an integrated manner for “mahinga kai, conservation and other purposes”, in a way that enhances the enjoyment of the wetland for all New Zealanders.

Management of the Joint Management Plan Area provides an example that can be encouraged for the management of the entire lake margin and the adjoining inflowing tributaries and their wetlands.”

2.1 Development of the vision

Te whanaketanga o te wawata

The above vision statement was developed by a joint working party of Te Rūnanga and the Department at the outset of the drafting of the Joint Management Plan. The aim was to establish a common approach for the management of the Joint Management Plan Area and for advocacy about the Te Waihora environment, that could be shared by all the key parties and individuals involved in the Te Waihora environment and in the development of the Joint Management Plan. The vision was used as a starting point for Plan development and consultation and was further refined and confirmed as the values of Te Waihora and the policy directions were established.

2.2 Components of the vision

Ngā wāhanga o te wawata

The vision is comprised of the following components:

- ◆ Enhancing mana
- ◆ Enhancing mauri and therefore the natural and spiritual values of the area
- ◆ Supporting indigenous biodiversity
- ◆ Enabling the gathering and use of mahinga kai
- ◆ Providing for compatible recreational use and enjoyment
- ◆ Providing for compatible commercial opportunities (including tourism opportunities)
- ◆ Recognising the national and international significance of Te Waihora
- ◆ Developing awareness of other management tools and agency processes while supporting holistic management.

Figure 2: Te Waihora location



Figure 3: Te Waihora Joint Management Plan Area and Localities



Figure 3: Te Waihora Joint Management Plan area and localities

3 AREA OF THE PLAN *TE TŪRANGA O TE MAHERE*

3.1 Regional, national and international settings *Ngā tūranga-ā-rohe, ā-motu, ā-ao hoki*

Situated just west of Banks Peninsula/*Horomaka*, Te Waihora is the largest lake in Canterbury and is an important link in the chain of coastal lagoons and estuaries along the east coast of the South Island/*Te Wai Pounamu* of New Zealand.

Te Waihora is situated within the Canterbury Conservancy of the Department of Conservation and lies wholly within Ngāi Tahu takiwā. It sits within the Canterbury Region and the Christchurch City and Selwyn Districts. The districts' boundary transects Te Waihora from the Halswell River/*Huritini* mouth to the southwest corner of the lake near where it is opened to the sea.

Te Waihora is a tribal taonga representing a major mahinga kai and an important source of mana. It is of national importance for the protection of wildlife habitats and ecological functioning and has been described as the most important wetland habitat of its type in New Zealand.³

Internationally, Te Waihora is important for many migratory wader bird species which visit the wetland, as well as for threatened indigenous species, the diversity and high proportionate population of the bird species it supports and for the many indigenous fish species it supports.

3.2 Area descriptions *Te āhua o ngā wāhanga*

The area for which the Joint Management Plan has been prepared is set out in Appendix 1 and shown on Figure 3 and Figure 4 and includes:

- ◆ Lands administered by the Department on the margins of and near Te Waihora.
- ◆ The Ngāi Tahu lakebed being the “bed of Te Waihora”, and Te Waiomākua on Kaitorete Spit.

The Plan could also have been prepared for any other surrounding lands with the agreement of the landowners, but this has not been sought for this first Joint Management Plan.

3.2.1 Lands administered by the Department of Conservation

Within the Joint Management Plan Area the Department administers approximately 35 percent of the margin of Te Waihora. It also administers other lands in the Te Waihora environment, the largest of which is McQueen's Lagoon on the Halswell River/*Huritini*.

³ Canterbury CMS, section 4.6.2 Te Waihora/Lake Ellesmere pp 71.

The Department also administers other areas in the Te Waihora environment that are not part of the Joint Management Plan Area, including coastal lands on Kaitorete Spit and lands in Kaituna Valley and near Coopers Lagoon/ *Muriwai*.

Additional information on some of the areas listed in Appendix 1 is available in Volume 2 (Schedule 2) of the *Canterbury Conservation Management Strategy* (2002).

3.2.2 Ngāi Tahu lakebed

The Ngāi Tahu land subject to this Joint Management Plan is the “bed of Te Waihora” and Te Waiomākua on Kaitorete Spit, referred to jointly throughout the Joint Management Plan as the “Ngāi Tahu lakebed”.

The “bed of Te Waihora” was vested in Te Rūnanga o Ngāi Tahu as fee-simple estate as part of the Ngāi Tahu Settlement, pursuant to section 168 of the NTCSA. Title extends to the bed of Te Waihora only and does not include the water above it nor the aquatic life within the water, but it does however include plants attached to the bed of Te Waihora (section 171, NTCSA). Te Waiomākua was vested in Te Rūnanga o Ngāi Tahu as fee-simple estate pursuant to section 124 of the NTCSA. The Ngāi Tahu lakebed area is shown on Figure 3 and Figure 4.

The Ngāi Tahu lakebed includes the width of Kaitorete Spit to the line of mean high water springs at the south-western corner of the lake, from ‘the black hut’ in the east to near *Taumutu Māori Road* in the west (see Figure 3). This includes an area subject to an easement to Environment Canterbury to enable the opening of Te Waihora to the sea.

The Ngāi Tahu lakebed does not fully correlate with the physical lakebed, i.e. the area of land covered by the waters of Te Waihora at all lake levels. It is that piece of land that was generally beneath lake waters and that was in Crown ownership before Settlement. Consequently, there are substantial stretches of other lands around the lake margin which lie beneath the waters of Te Waihora at various lake levels, including private freehold land, council endowment land, legal roads, Māori owned land (other than Ngāi Tahu lakebed) and lands administered by the Department.

3.2.3 Other areas relevant to the Joint Management Plan

Ngāi Tahu owns other areas in the Te Waihora environment including Fishermans Point/ *Whakamātakiuru* and Greenpark Huts, and has long term leases of *Waikirikiri* on the Selwyn Delta and *Pakōau* at Lakeside pursuant to section 201 of the NTCSA.

There are a number of other areas in the Te Waihora environment that are currently protectively managed, or are likely to be in the future, including land administered by Territorial Local Authorities (Environment Canterbury, Christchurch City and Selwyn District Councils) and land owned by the North Canterbury Fish and Game Council. These areas are shown on Figure 4 and are listed in Appendix 2.

The beneficial owners of the two hectare Ahuriri-Te Waihora Ancillary Claim site immediately to the east of Greenpark Huts, have requested that the site be managed in accordance with the Joint Management Plan, by the Te Waihora Management Board (see Part 1, 4.1.2)

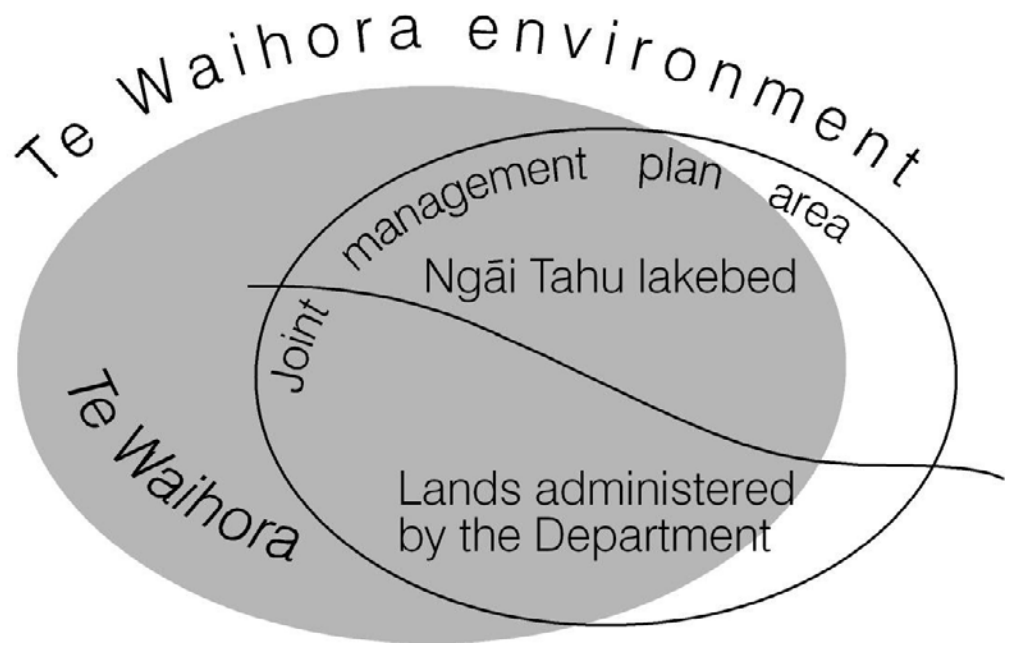
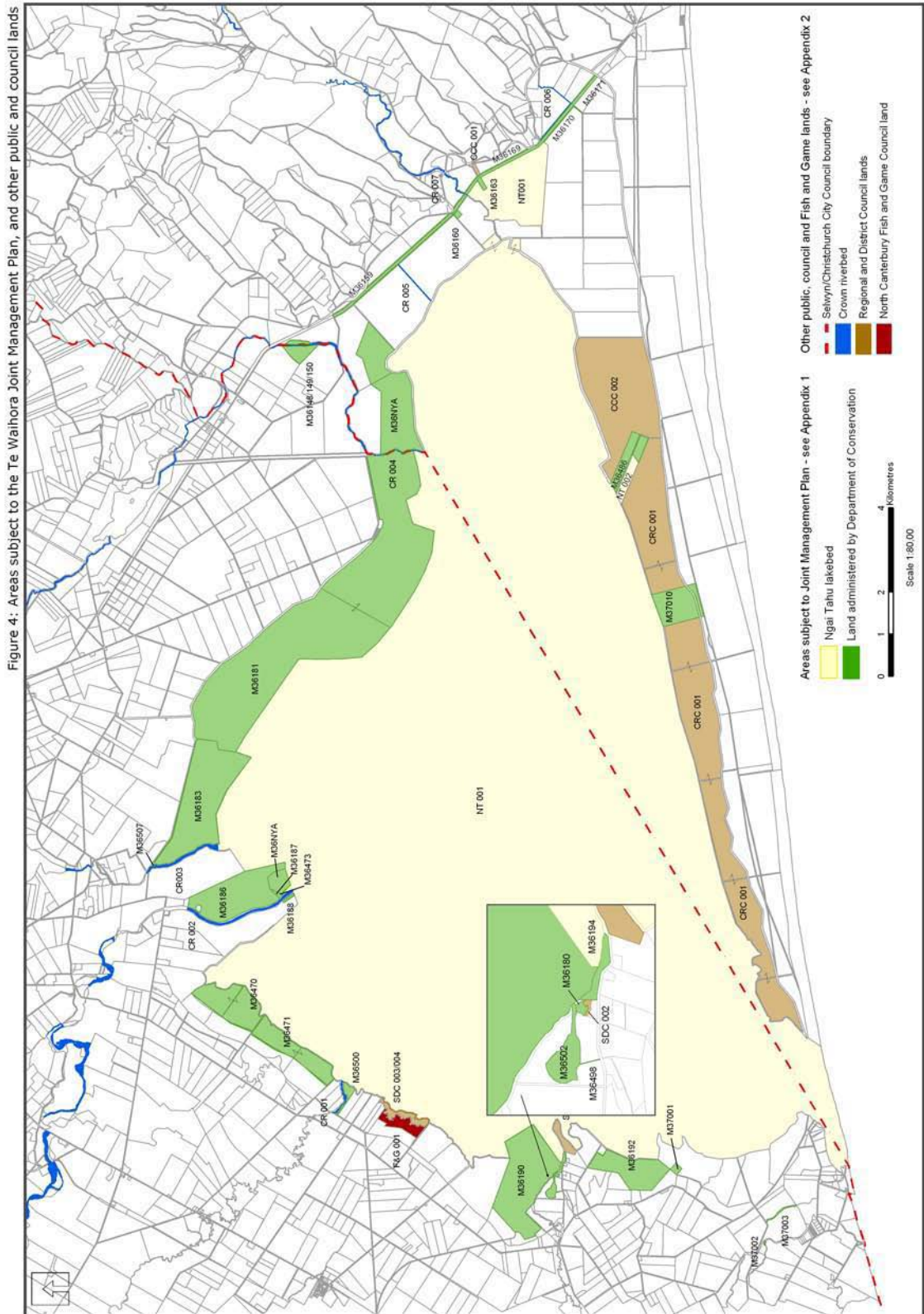


Figure 4: Areas subject to the Te Waihora Joint Management Plan and other public and council lands



4 ROLES AND RESPONSIBILITIES **NGĀ TŪNGA ME NGĀ KAWENGA**

4.1 Ngāi Tahu

Ngāi Tahu Whānui, represented by Papatipu Rūnanga and Te Rūnanga o Ngāi Tahu, comprise people of Ngāi Tahu, Ngāti Māmoe and Waitaha descent, who hold manawhenua over an area that includes Te Waihora.

The takiwā or tribal area of Ngāi Tahu Whānui includes all the lands, islands and coasts of the South Island/*Te Waipounamu* south of White Bluffs/*Te Parinui o Whiti* on the east coast and Kahurangi Point/*Te Rae o Kahurangi* on the west coast as described in section 5 of the Te Rūnanga o Ngāi Tahu Act 1996.

4.1.1 Te Rūnanga o Ngāi Tahu

Te Rūnanga o Ngāi Tahu (Te Rūnanga) was established by the Te Rūnanga o Ngāi Tahu Act 1996 to give a legal identity to the tribe and to represent the tribal collective of Ngāi Tahu Whānui.

As well as working jointly with the Department of Conservation on the development of this Joint Management Plan, Te Rūnanga acts as an advisory committee to provide advice to the Minister of Conservation on all matters concerning the management and conservation of freshwater fisheries within the Ngāi Tahu takiwā, pursuant to section 56 of the Conservation Act 1987. Similarly, Te Rūnanga may also act as an advisory committee to provide advice to the Minister of Fisheries on all matters concerning the management and conservation of fisheries under the Fisheries Act 1983 and Fisheries Act 1996, within the Ngāi Tahu takiwā, pursuant to section 21 of the Ministry of Agriculture and Fisheries (Restructuring) Act 1995.

Te Rūnanga o Ngāi Tahu also acts as a Statutory Advisor to Fish and Game Councils within the takiwā to provide advice in relation to native gamebirds (sections 277-279, NTCSA).

Aspects of this Joint Management Plan also help to achieve the ki uta ki tai management planning aspirations of Te Rūnanga⁴, especially in terms of the importance of wetlands as a link between land and water and for the large number of mahinga kai species present. This Joint Management Plan is thought of by Ngāi Tahu as one ‘chapter’ of its ki uta ki tai aspirations. A ki uta ki tai – mountains to the sea management approach is based on a traditional Ngāi Tahu concept of resource management that recognises the interconnectivity of all resources, including people. The framework requires a holistic approach and requires co-ordination by all agencies responsible for environmental management.

⁴ *Ngāi Tahu 2025* tribal vision.

4.1.2 Te Waihora Management Board

“As the Te Waihora Management Board members came to understand the opportunities available to us we endeavoured to maximise these throughout this Plan. Our aim was to support those initiatives which will reinstate the Waihora environment so that the descriptive name Te Kete Ika a Rākahautū and its associated whakatauki have relevance to the full.”

Donald Brown

The Te Waihora Management Board, an advisory body for the development of the Joint Management Plan, comprises representatives of the six Papatipu Rūnanga of mid Canterbury who have interests in Te Waihora. The Board’s composition is in recognition of whakapapa, kaitiaki roles and the flax-roots local knowledge of the Te Waihora environment held by the Board members and their respective Papatipu Rūnanga.

The Board is made up of eight members, three appointed by Te Taumutu Rūnanga and one member each from Te Ngāi Tūāhuriri, Wairewa, Koukourarata, Ōnuku Rūnanga and Te Hapū o Ngāti Wheke. Te Taumutu Rūnanga appoints the Chair of the Board in recognition of their ahi kā status.

The takiwā areas around which each of the Papatipu Rūnanga represented on the Te Waihora Management Board are centred, and described in Appendix 8. Papatipu Rūnanga Marae locations are shown on Figure 2.

4.2 Department of Conservation *Te Papa Atawhai*

The Department of Conservation (the Department) is responsible under the Conservation Act 1987 for the management of protected species and ecosystems, providing for public enjoyment of public conservation lands, conserving historic resources in protected areas and promoting the conservation of natural and historic resources generally.

For the purposes of this Plan, and as in the Conservation Act 1987, conservation means⁵ *“...the preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations.”* The Department’s functions include to preserve, as far as practicable, all indigenous freshwater fisheries and to protect recreational freshwater fisheries and freshwater fish habitats.

For the areas administered by the Department subject to this Joint Management Plan, and for the purposes of section 17A(b) (re management in accordance with strategies and plans) and 17W(7) and 17W(8) (re concessionaire activities in accordance with strategies and plans) of the Conservation Act, this Joint Management Plan is to be considered as a conservation management plan (section 178, NTCSA). This Joint Management

⁵ Section 8, NTCSA.

Plan is guided by the objectives and implementation priorities of the *Canterbury Conservation Management Strategy* (2000).

Other legislation administered by the Department that affects Te Waihora is set out in the First Schedule of the Conservation Act and includes the Wildlife Act 1953 and the Reserves Act 1977. The Minister of Conservation may make bylaws prohibiting or regulating public access or use of the bed of Te Waihora where such bylaws are recommended through this Joint Management Plan (section 182, NTCSA).

Treaty of Waitangi (Te Tiriti o Waitangi) obligations

Section 4 of the Conservation Act 1987 requires the Department to give effect to the principles of the Treaty of Waitangi, at least to the extent that the provisions of the Acts listed in the First Schedule of the Conservation Act are not clearly inconsistent with the principles (*Ngāi Tahu Māori Trust Board v Director-General of Conservation* [1995] 3NZLR 553, 558, Lines 33-35). Appendix 3 sets out the principles which guide the Department and Te Rūnanga respectively in their organisational approaches to honouring the Treaty of Waitangi.

The *Deed of Settlement* (1997) and the Ngāi Tahu Claims Settlement Act 1998 also provide specific obligations for the Department, including the joint preparation of this Plan. These specific obligations are noted, where relevant, in policies, explanations and methods throughout this Joint Management Plan. These obligations mean that the Department has a joint role in management for “mahinga kai, conservation and other purposes” within the Joint Management Plan Area.

4.3 Other Agencies *Ngā umanga kē*

As well as the kaitiaki role of Ngāi Tahu and the management roles and responsibilities of the Department, several other agencies are also involved in the management of resources and resource users in and around Te Waihora.

4.3.1 North Canterbury Fish and Game Council

Fish and Game Council functions, as set out in section 26P of the Conservation Act 1987, are to manage, maintain and enhance the sports fish and game resources in the recreational interests of anglers and hunters. The North Canterbury Fish and Game Council has this statutory responsibility at Te Waihora, and undertakes it in accordance with its *North Canterbury Fish and Game Management Plan* (1999). Game species at Te Waihora include Canada goose, black swan and various duck species. The sports fish, brown trout, are also present (see Part 2, section 4). The Council manages maimai within the JMP Area in accordance with the Maimai Agreement 1997 (see Appendix 4). The Council also owns and manages a ‘reserve’ at Boggy Creek on the western shore of Te Waihora.

The Maimai Agreement

Agreed to as part of the *Deed of Settlement* (1997), this Agreement between the North Canterbury Fish and Game Council, the

Department and Te Rūnanga recognises the occupation and use of the JMP Area for recreational hunter maimai.

The intent of the Agreement is to secure the rights of hunters to the continued use of maimai for recreational hunting while recognising the freehold land rights of Te Rūnanga and the permitting requirements of the Conservation and Reserves Acts. In exchange for the continued use, control and management of maimai within the JMP Area, half of the gamebird hunting licence fee from maimai users goes into a joint fund for enhancement projects and/or to give effect to objectives of this Joint Management Plan, or any other projects mutually agreed by all parties (Clauses 6.1 and 6.5 of the Agreement).

The Agreement is also a means to establishing a long-term relationship between the parties for the integrated management of Te Waihora and identifies the Council as a key stakeholder in the development of this Joint Management Plan and the on-going integrated management of Te Waihora.

To date, all maimai within the JMP Area have been located and registered and the Council is removing derelict maimai. Other abandoned or stranded material such as stakes, tree stumps, tyres and car bodies have also been removed to 'clean up' the JMP Area and provide safer access. The register of maimai will be updated on an annual basis.

A full copy of the Agreement is included as Appendix 4.

4.3.2 Local Authorities

The Resource Management Act 1991 and the Local Government Act 2002 are the main Acts that affect the management of Te Waihora by local authorities.

Environment Canterbury

Environment Canterbury (the Canterbury Regional Council) is responsible for the integrated management of the natural and physical resources of the Canterbury region, which includes monitoring and control of Te Waihora lake levels, issuing and monitoring water and discharge permits and monitoring water quality and other aspects of the use of the bed of the lake and inflowing rivers. The Council is also responsible for proposing regional pest management strategies under the Biosecurity Act 1993 and is enabled under the 'general competency' provisions of the Local Government Act 2002 to maintain a system of drains within the Halswell Drainage District. This maintenance includes weed cutting (hand and mechanical), mechanical excavation, spraying of weeds and banks, removing blockages such as wind-blown trees and slips and the operation of floodgates.

The Council must "*take into account*" the Joint Management Plan as a relevant planning document recognised by an iwi authority when preparing or changing a regional plan, as well as "*have regard to*" the Joint Management Plan as a plan prepared under another Act in the preparation of their plans and policy statements under sections 61(2)(a) and 66(2)(c) of the Resource Management Act.

Section 4 of the Local Government Act 2002 states "*In order to recognise and respect the Crown's responsibility to take appropriate*

account of the principles of the Treaty of Waitangi and to maintain and improve opportunities for Māori to contribute to local government decision-making processes, Parts 2 and 6 provide principles and requirements for local authorities that are intended to facilitate participation by Māori in local authority decision-making processes.” Under the Act local authorities must, at section 77(c), “take into account the relationship of Māori and their culture and traditions with their ancestral land, water, sites, wāhi tapu, valued flora and fauna and other taonga.”

Council consideration of the relationship of Ngāi Tahu with Te Waihora is in part covered by the matters of national importance under section 6(e) of the Resource Management Act, in providing for “the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga.” This relationship is also pertinent to achieving the purposes of the Resource Management Act, particularly through sections 7(a) Kaitiakitanga and 8 Treaty of Waitangi.

Environment Canterbury holds and manages endowment lands (Along much of the lake-side of Kaitorete Spit) are leased for grazing to help fund Te Waihora lake openings. A management plan has been prepared for the wetlands on the Kaitorete Spit recommending that management of this area should be consistent with the aims of the JMP in terms of grazing, pest control and conservation management.

From an initial proposal for a Lake Ellesmere regional plan Environment Canterbury assisted in the establishment of the Waihora Ellesmere Trust formed to prepare the non-statutory *Community Strategy for the Future Management of Lake Ellesmere/ Te Waihora and its Tributaries* (2004).

The National Water Conservation (Lake Ellesmere) Order 1990

The National Water Conservation (Lake Ellesmere) Order 1990 (WCO) affects the management of Te Waihora by Environment Canterbury. The WCO allows for the application of resource consents to open/close the lake within certain times and lake levels and prevents any further damming, stopbanking, or drainage of any part of Te Waihora below the level of 1.13m amsl. The WCO provides for existing drains and stopbanks and their maintenance. See Appendix 7.

Selwyn District and Christchurch City Councils

District and city councils are responsible under the Resource Management Act for the management of the effects of the use, development, or protection of land and associated natural and physical resources of their districts (sections 12 to 15, RMA). District and city councils are also responsible under the Local Government Act 2002 for the provision and maintenance of some land drainage schemes that flow through the Te Waihora environment.

The Selwyn District Council maintains an extensive network of drains and streams in the area. Christchurch City Council maintains a further system of streams and drains, including some in the Kaituna Valley, which discharge to Te Waihora. The

Christchurch City Council is also involved in drainage in the upper catchment of the Halswell River / *Huritini*.

Selwyn District Council administers Lakeside Domain (Recreation Reserve) on the western shore of Te Waihora. This is a popular recreation area, especially as a base for water sports and for camping and picnicking. The Council administers other areas of the lakebed and lake shore (see Figure 4 and Appendix 2).

Christchurch City Council administers endowment land on the eastern lake-side of Kaitorete Spit, which it leases for grazing to help fund Lake Forsyth (Wairewa) lake openings. Council administers several small reserves in the vicinity of Kaituna Lagoon (see Figure 4 and Appendix 2).

As local authorities, district councils are also bound by the Treaty provisions, the Local Government Act 2002 and provisions for Māori participation in decision making. They must also provide for the relationship of Ngāi Tahu with Te Waihora as a matter of national importance under section 6(e) of the Resource Management Act 1991. In achieving the purposes of the Act, they must “*take into account*” the Joint Management Plan as a relevant planning document recognised by an iwi authority when preparing or changing a district plan, as well as “*have regard to*” the Joint Management Plan as a plan prepared under another Act, under sections 74(2A) and 74(2)(b)(i) of the Resource Management Act respectively.

Ministry of Fisheries

The Ministry of Fisheries is the Government agency whose primary focus is the sustainable management of fisheries. The Ministry's primary purpose under section 8 of the Fisheries Act 1996 is “*to provide for the utilisation of fisheries resources while ensuring sustainability.*” Utilisation means conserving, using, enhancing, and developing fisheries resources to provide for the social, economic, and cultural wellbeing of people. Fisheries management has to be conducted in a manner consistent with the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.

The main fisheries associated with Te Waihora include those for freshwater eel, flounder and yellow-eyed mullet.

The New Zealand Historic Places Trust *Pouhere Taonga*

The purpose of the Historic Places Act 1993 (section 4(1)) is “*to promote the identification, protection, preservation, and conservation of the historical and cultural heritage of New Zealand.*”

The general functions of the New Zealand Historic Places Trust *Pouhere Taonga* under section 39 of the Historic Places Act 1993 are:

- “(a) *To identify, record, investigate, assess, register, protect, and conserve wāhi tapu areas, historic places, and historic areas or to assist in doing any of those things, and to keep permanent records of such work:*
- “(b) *To advocate the conservation and protection of wāhi tapu areas, historic places, and historic areas:*

- (c) *To foster public interest and involvement in historic places and historic areas and in the identification, recording, investigation, assessment, registration, protection, and conservation of them:*
- (d) *To furnish information, advice, and assistance in relation to the identification, recording, investigation, assessment, registration, protection, and conservation of wāhi tapu areas, historic places, and historic areas:*
- (e) *To manage, administer, and control all historic places, buildings, and other property owned or controlled by the Trust or vested in it, to ensure the protection, preservation, and conservation of such historic places, buildings, and other property.”*

While the Department of Conservation is responsible for the maintenance and management of historic resources on land that it administers, all archaeological sites⁶ are protected under the Historic Places Act 1993. Permission to destroy, damage, or modify the whole or any part of an archaeological site is required from the Trust.

4.4 Relevant statutory and other documents *Tuhinga-ā-ture me ētahi atu tuhinga e pā ana ki Te Waihora*

The following statutory and other policy documents relevant to Te Waihora were studied during the preparation of this Joint Management Plan. They have a variety of legislative or policy relationships to the JMP, as set out under the organisation sub-headings. The documents were also studied for their resource information and to assist in understanding their parent organisation’s attitudes towards Te Waihora, during the preparation of policies and methods, including those for advocacy directed towards the various organisations.

Ngāi Tahu

(The documents below are “non-derogation” (i.e. nothing in the JMP derogates from them) iwi management plans in terms of section 179(b) NTCSA, for the Ngai Tahu lakebed.)

◆ *Te Whakatau Kaupapa - Canterbury (1990)*

Note: While this document is a planning document recognised by an iwi authority for the purposes of the Resource Management Act, the provisions of subsequent legislation including the Resource Management Act, the Ngāi Tahu Claims Settlement Act, the Local Government Act 2002 and the documents below developed by Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga have superseded many of the policies in this document.

◆ *Ngāi Tahu Freshwater Policy (1999)*

◆ *Ngāi Tahu 2025 (2001)*

⁶“Archaeological site” means any place in New Zealand that— (a) Either— (i) Was associated with human activity that occurred before 1900; or (ii) Is the site of the wreck of any vessel where that wreck occurred before 1900; and (b) Is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand.” (section 2, Historic Places Act 1993).

- ◆ *Te Taumutu Rūnanga Natural Resource Management Plan (2003)*

Department of Conservation

(These documents are “non-derogation” (i.e. nothing in the JMP derogates from them) documents in terms of section 179(a) NTCSA, for the land administered by the Department.)

- ◆ *Conservation General Policy (2005)*
- ◆ *Canterbury Conservation Management Strategy (2000)*

Fish and Game Council

(These documents are “non-derogation” (i.e. nothing in the JMP derogates from them) documents in terms of section 179(a) NTCSA, for the land administered by the Department.)

- ◆ *North Canterbury Fish and Game Management Plan (1999)*
- ◆ *Canada Goose Management Plan (1995)*

Regional and district councils

(Some provisions within these documents are binding on the Minister and/or Te Rūnanga in terms of the Resource Management Act 1991 or the Biosecurity Act 1993. “Proposed” plans will become operative and “transitional” plans expire, during the life of this first Joint Management Plan.)

- ◆ *Canterbury Regional Policy Statement (1998)*
- ◆ *Canterbury Regional Council Transitional Regional Plan (1991)*
- ◆ *Canterbury Regional Coastal Environment Plan (2005)*
- ◆ *Canterbury Regional Pest Management Strategy 2005 – 2015 (2005)*
- ◆ *Proposed Canterbury Natural Resources Regional Plan (2002), Chapters 1 to 3*
- ◆ *Proposed Canterbury Natural Resources Regional Plan (2004), Chapters 4 to 8*
- ◆ *Transitional Banks Peninsula District Plan, Wairewa Section (1974)*
- ◆ *Proposed Banks Peninsula District Plan (2002)*
- ◆ *Transitional Selwyn District Plan, Ellesmere Section (1982)*
- ◆ *Proposed Selwyn District Plan, Volume 2 – Rural Areas (2001)*

Ministry of Fisheries

(These are non-statutory policy documents.)

- ◆ *South Island Eel Management Plan* (1996)
- ◆ *Te Waihora Eel Management Plan* (1999)

National Policy

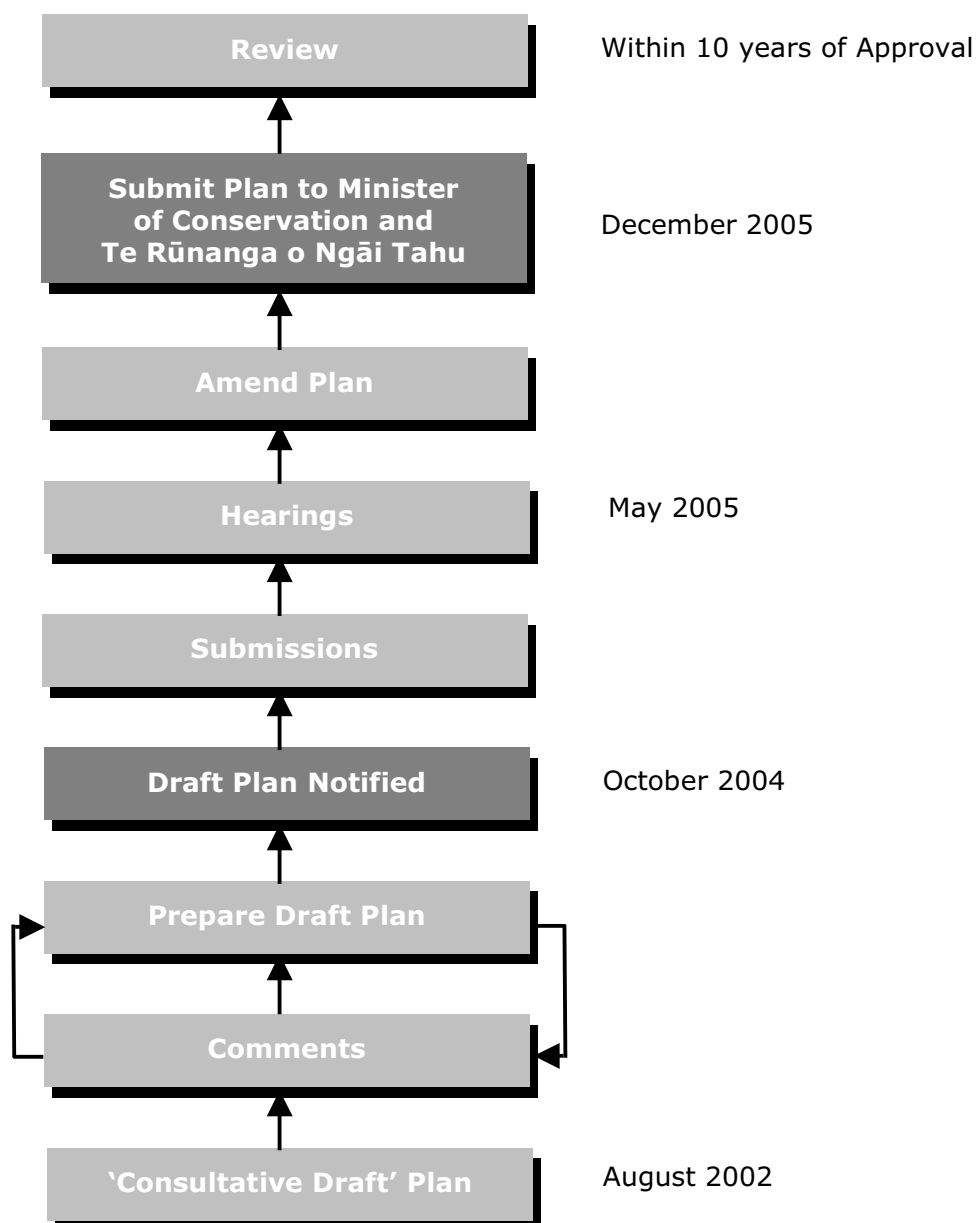
(These documents are expressions of Government policy and as such the Department needs to have regard to them in as far as they are consistent with the Conservation Act and the Acts listed in the First Schedule to that Act. The Coastal Policy Statement relates to the coastal environment, which includes Te Waihora and is primarily given effect through the above regional and district plans under the Resource Management Act.)

- ◆ *New Zealand Coastal Policy Statement* (1994)
- ◆ *Environment 2010* (1994)
- ◆ *The NZ Biodiversity Strategy 2000*.

5 TIMEFRAME FOR THE JOINT MANAGEMENT PLAN *TE ROANGA O TE MAHERE*

The Joint Management Plan has been prepared for a ten-year period. It can be reviewed or amended, in whole or part at any time by agreement between Te Rūnanga and the Department. The Joint Management Plan should be reviewed, in whole, within ten years of final approval (i.e. before 2015 approx). See Part 4: Plan Implementation and Review for further information.

Figure 5: Timeframe for the Te Waihora Joint Management Plan



PART 2:
VALUES OF TE WAIHORA
NGĀ UARA



1 SUMMARY OF VALUES

TE WHAKARĀPOPOTANGA O NGĀ UARA

The following is a brief summary of the cultural, natural, historic, recreational and commercial values of Te Waihora and the Te Waihora environment as set out in the following sections of Part 2 of this Joint Management Plan.

Te kete ika

The management and sustainable use of quality traditional food and other cultural resources of Te Waihora maintains and enhances the rangatiratanga and kaitiaki role of Ngāi Tahu in recognition of this tribal taonga. This section encompasses whakapapa, mauri, rangatiratanga and mana, kaitiakitanga, rāhui, and cultural use, gathering methods and opportunities.

Landforms and landscapes *Te matawhenua*

The flat, spread out nature of Te Waihora is a prominent feature of the Canterbury Plains/Ngā Pākihi Whakatekateka o Waitaha. The waters of Te Waihora have sustained generations of Ngāi Tahu and the resultant cultural landscape continues to bind Ngāi Tahu to the area.

Te Waihora, which is a large brackish coastal lake, is a distinctive landform type in New Zealand but one that is rare internationally. So is Kaitorete Spit, the shingle barrier that separates Te Waihora from the sea. This section encompasses geological landforms, natural character, visual distinctiveness, scenic values and the associated place names.

Wildlife habitat and biodiversity

Ngā toi whenua me ngā tūmomo koiora

Te Waihora is a storehouse for wetland biodiversity. It comprises a habitat possibly unrivalled in New Zealand for a recorded 166 different species of birds including waterfowl, wading and migratory types. It also provides habitats for a wide diversity of plant and invertebrate species. Many species are mahinga kai species that have sustained Ngāi Tahu customary use of the area. This section encompasses their protection for their intrinsic value and for their use. It also encompasses habitat and ecological values, species diversity, threatened/rare species, taonga and other species of importance to Ngāi Tahu, wetland size and representativeness.

Historic Resources *Taonga puri mahara*

Historic Māori occupation around Te Waihora and subsequent Māori and European settlement and their associated use of natural resources positioned Te Waihora as an integral part of Canterbury's heritage. This section encompasses human contribution, historic Māori Pā and settlement activities, the historic European timber trade, former railway embankment, historic Fishermans Point/Whakamātakiuru, WWII use and the associated place names.

Recreational use and public access

Mahi-ā-tākaro hoki me te whai wāhi o te hāpori

Te Waihora provides a high quality recreational area for many user groups including fishers, game bird hunters, water based recreationalists, bird watchers and those enjoying the wide-open spaces. This section encompasses recreational fishing and game bird hunting, some of which involves customary use, as well as water sports, recreational hut settlements and other public use of land administered by the Department and of the Ngāi Tahu lakebed.

Commercial and other activities

Ngā mahi arumoni me ētahi atu mahi

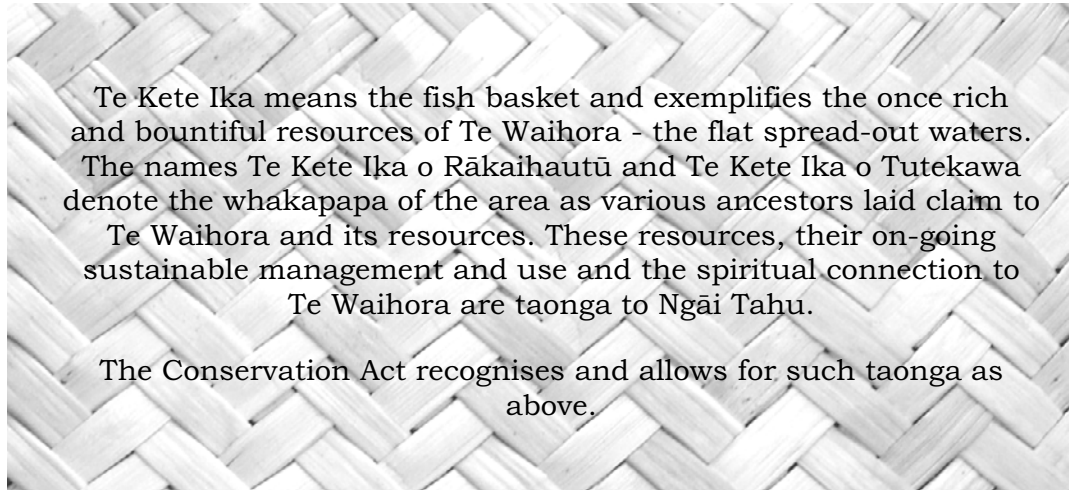
Commercial uses occur within Te Waihora, such as fishing and stock grazing along with other, generally public activities and other agency activity. The lake community values these commercial activities which are based on the natural and ecological values of Te Waihora. This section encompasses commercial fishing of freshwater eels, mullet and flounder, grazing, accommodation, eco-tourism activities, utilities and research.

2 TE KETE IKA

“Waihora, Te Kete Ika o Rākaihautū and also Te Kete Ika o Tutekawa sometimes it is called. I have seen it recorded somewhere as Tutekawa but mostly it’s more popularly known as Rākaihautū.

Tutekawa was of course at Waikākahi. That’s where he was killed.”

Riki Ellison



2.1 Whakapapa

In a traditional Māori sense, whakapapa is the backbone that determines who is allowed to interact and manage natural resources. In its most basic meaning, “whakapapa is the principle from which order and chaos may be understood. It places order upon space and time. It is the binding agent between opposite fields and connects the living with the dead, atua with humankind, and the intangible with the tangible.” (Tau, 1999).

Whakapapa lies at the core of Māori knowledge and understanding, involving both mātauranga and wānanga knowledge. As whakapapa derives from atua, it provides an unbroken link and chain of descent between the spiritual and the material, the inanimate and the animate. When understood in its fullest sense, it incorporates and describes the entire fabric of the universe from the beginnings of time through to the present. In scientific terms, it provides a grand, unifying theory of the cosmos because it is derived from and under the protection of atua. To interfere with whakapapa is to interfere with things sacred or tapu.

In a more general context, the meaning of whakapapa is, “to lay one thing upon another” (Barlow, 1991), for example, to lay one generation upon another. Everything has a whakapapa: birds, fish, animals, trees and every other living thing; soil and rocks and mountains also have a whakapapa. It is this sense of connectedness between spirit, humans and nature that forms the basis for managing environmental resources, “as it emphasises the links to others rather than the individuality of members of a group. Whakapapa is used as a political, cultural and economic tool in practices such as betrothal. It helps resolve disputes

between groups, determines standing in society, and is the ultimate test of heritage.” (Gibbs, 1996). Early tīpuna, “imposed whakapapa upon the Southern landscape” and “virtually consecrated the land by ritual with their whakapapa” (Tau, 1999, p.138). This was a means of ordering the landscape in the minds of the Polynesian colonists, which, among other things, provided for a utilitarian management framework for managing mahinga kai resources (Tau, 1999).

From a traditional Ngāi Tahu perspective, following the wreckage of Te Waka o Aoraki (the canoe of Aoraki) that became the South Island/*Te Wai Pounamu*, Rakinui (Sky Father) sent a number of his mokopuna (grandchildren) from the heavens to transform the waka into land that would sustain human life. One of these demi-gods was Tūterakihaunoa whose job was to carve the keel of the upturned waka into mountains and valleys and who remains the atua tiaki of Te Waihora. Two others were Kahukura who forested the bare landscape and filled it with animals, and Marokura who carved bays, inlets and estuaries, and populated them with fish of many varieties.

The first people to arrive in the central Canterbury area were those on the Uruao waka under the captaincy of Te Rakihouia. Te Rakihouia had been instructed by his father Rākaihautū to seek out the rich resources of the coastal area (ki tai) while he traversed the mountain regions identifying the resources of land (ki uta). During these journeys, Te Rakihouia discovered the wetland of Te Waihora teeming with fish and birds. Upon reuniting with his father, Te Rakihouia took him to the lake where Rākaihautū proclaimed Te Waihora as Te Kete Ika a Rākaihautū – The Fish Basket of Rākaihautū.

Subsequent to this, waves of other iwi and hapū inhabited the Te Waihora area. Two prominent ancestors that held mana to the area were Tutekawa, a Ngāti Māmoe Chief, and Te Ruahikihiki, the eponymous ancestor of the hapū Ngāi te Ruahikihiki who inhabited the Orariki Pā at Taumutu. Te Ruahikihiki was a close relation to all the prominent chiefs of the Banks Peninsula/*Horomaka* and the North Canterbury region which therefore gave rights to those chiefs and their hapū having whakapapa that links them to Te Waihora.

In today’s management terms for Te Waihora, the resultant kaitiaki roles and responsibilities of all hapū with areas surrounding Te Waihora have been recognised through the establishment of the Te Waihora Management Board (see Part 1, section 4.1.2).

2.2 Mauri and wairua

All things are considered to have the qualities of wairua (spiritual dimension) and mauri (life force), to be living and have a genealogical relationship with one another. For Ngāi Tahu, mauri is the life force that flows from wairua - the spirit or source of existence and all life. Mauri is the life force in the physical world as perceived and interpreted by the tāngata whenua.

As a life principle mauri implies health and spirit. In the environment, mauri can be used to describe the intrinsic values of all resources and the total ecosystem. It is of paramount importance to the well-being of the people. The protection of mauri is enhanced by the use of mahinga kai and the resultant knowledge of the natural resources and their interactions with the wider environment. The preservation of the mauri of all natural resources is essential to Ngāi Tahu to ensure that natural

and physical resources may be used sustainably by present and future generations.

For Te Waihora, mauri can be tangibly represented in terms of elements of the physical health of the ecosystem. While there are also many intangible qualities associated with the spiritual presence of Te Waihora, tangible elements, such as the presence of indigenous flora and fauna, life-supporting capacity, fitness for cultural usage, ecosystem robustness and productive capacity, can be used to reflect the status of mauri.⁷

Mauri should not be desecrated. Although Te Waihora continues to be a productive environment, its mauri has been degraded since human settlement by introduced species, substantially reduced water inflows, increased sediment and nutrient inflows from the catchment and a decreasing availability of mahinga kai resources. Further degradation of the mauri of Te Waihora would remove its capacity to support traditional practices and values.

2.3 Rangatiratanga

Rangatiratanga is customary tribal authority. The Crown “*acknowledges Ngāi Tahu rangatiratanga and mana over the South Island lands within its boundaries, and, in fulfilment of its Treaty obligations, the Crown recognises Ngāi Tahu as the tangata whenua of, and as holding rangatiratanga within, the Takiwā of Ngāi Tahu Whānui.*” (Section 6, NTSCA 1998). For Ngāi Tahu, rangatiratanga incorporates the right to make, alter and enforce decisions pertaining to how their resources and taonga are used and managed, and by whom. Rangatiratanga is carried out in accordance with kawa and tikanga and is about Ngāi Tahu continuing to exercise their mana or authority to affect the relationship between themselves, their culture and traditions, and the natural world. Rangatiratanga is traditionally embodied within the concept of mana.

Manaaki

Effective rangatiratanga enables Ngāi Tahu to manaaki (welcome) manuhiri and mataawaka (visitors) to the area with the provision of local foods. Kai hau kai, the exchange of local food and resources, similarly asserts an authority over those resources as well as enabling manaakitanga and the provision of koha. The use and trade of mahinga kai resources helps transfer knowledge and values about natural resources while providing for personal needs and the needs of hapū and whānau.

Rangatiratanga and manaaki are closely linked to kaitiakitanga.

2.4 Kaitiaki

Whakapapa and the link between all living things is reflected in traditional attitudes towards the natural world and resource management. Ngāi Tahu were dependent on their immediate environment for survival, on their knowledge of mahinga kai and their ability to sustainably gather resources from Te Waihora for their endurance in this area. This, coupled with a long history of settlement,

⁷ The *Ngāi Tahu Freshwater Policy* (1999) identifies factors and activities that affect the mauri of waterbodies.

occupation, travel and resource use, results in the diverse mātauranga accumulated about Te Waihora and its natural resources.

Traditionally kawa and tikanga were established to govern the use of natural resources and ensure that mauri was protected from human actions. These systems of traditional management, or kaitiakitanga, were the means by which Ngāi Tahu sought the sustainable management of Te Waihora.

Kaitiaki is derived from the verb tiaki (to guard, to protect, to keep, to watch for, to wait for). Kaitiakitanga is the act of guardianship. To be kaitiaki is an important responsibility. The kaitiaki system is based on whakapapa lineage and is an inherited responsibility that is traditional and strongly held. Ngāi Tahu preserves the mana of kaitiaki to ensure that the mauri or life force of their taonga is healthy and strong.

Kaitiakitanga entails an active exercise of power in a manner beneficial to the resource. In today's management terms for Te Waihora this is carried out by kaitiaki rūnanga, including their representation on the Te Waihora Management Board (see Part 1, section 4.1.2).

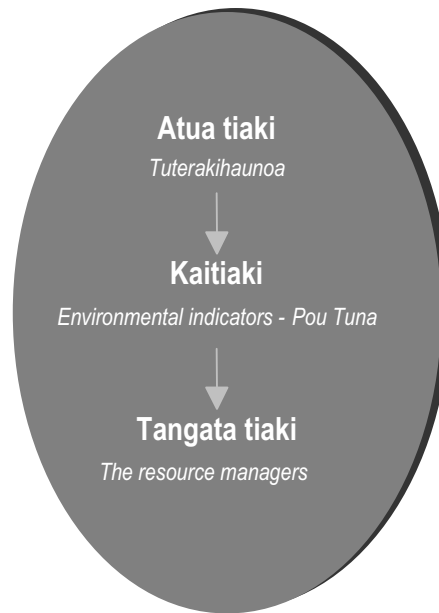
At times, rāhui were used to safeguard the well-being of people and for the purposes of conservation, restricting use and assuring sustainability. Wakawaka, or family gathering sites, also regulated access and assisted resource management and sustainability. These systems ensured that the needs of present generations were met while protecting the overall health and availability of the resource to meet the needs of future generations.

Within the spiritual world Atua Tiaki oversee the balance and management of vast areas and resources. As recalled by Rewi Koruarua of Taumutu circa 1900, Tūterakihaunoa is the Atua that guards Te Waihora. The resting hole of this Atua is near Fishermans Point/ *Whakamātakiuru*, Taumutu. In the old days, certain domestic duties were not undertaken in the waters of Te Waihora as this could enrage the Atua and cause him to lie on the top of the water. If this happened, the people could not drink the water and it could also cause tuna (eel), īnaka (whitebait) and pātiki (flounder) to die. When excavating the lake opening, all the inhabitants and resources of the pā were blessed to ensure the opening would be pushed through. If anyone acted thoughtlessly at this time, Tūterakihaunoa would lie across the cut-out channel and prevent the lake from opening. If this happened, the tohunga would perform rituals to placate the Atua.

The Atua Tiaki came in many forms and often expressed its will through the actions of the resources of Te Waihora. The Pou Tuna were such messengers. These eels were very large and their arrival at the end of the tuna heke (eel migration) marked the close of mahinga tuna (eel gathering). These natural signs were regarded as the kaitiaki of the resource. In this way, kaitiaki or spiritual guardians protected mauri and wairua. Kaitiaki are the interface between the physical and spiritual worlds.

Tangata tiaki are the human element in the chain of kaitiaki and environmental management. The tangata tiaki were acutely aware of the indicators and signs of the Atua Tiaki and kaitiaki that commenced and concluded the mahinga kai systems of the hapū and whānau. The mātauranga that the tangata tiaki held ensured the ongoing sustainable management of all natural resources and sustained those

who had a right to access and use them. The system of kaitiaki at Te Waihora can be summarised as follows:



Many customary practices have been maintained today through the continued preference for traditional food and customs. Many of these practices however, are in jeopardy of being lost due to unsustainable practices in other sectors of the community and through actions that have resulted in a degraded environment. This impacts on the health and well-being of the waterways and natural resources and the ability of Ngāi Tahu to access the life sustaining resources.

2.5 Ngā wai

In the management of any natural resource, it is important to understand the significance of water to Ngāi Tahu. Water is the essence of all life, akin to the blood of Papatūānuku (Mother Earth) who supports all people, flora and fauna. Without water, no living thing, plant, fish, or animal can survive.

Wai, or water, is the medium in which the dead travel to and from this world. This is illustrated by the practice of waiwhakaheketūpāpaku (water burials). Wai is the lifeblood of Papatūānuku that falls upon her from the heavens of Ranginui the Sky Father. In death our spirit returns to our earth mother. Thus water maintains two specific roles within Ngāi Tahu culture; firstly to provide the sustenance of life and secondly the medium in which the spirit moves freely from one world to the next.

Water is also central to the Ngāi Tahu resource management philosophy “ki uta ki tai - from the mountains to the sea.” As water flows from the mountains to the sea so too should resource management. For Ngāi Tahu this requires an holistic view of the world and integration and co-operation between agencies, legislation and management frameworks. For Te Waihora this is particularly important as this Joint Management Plan deals with specific land parcels around Te Waihora, including the lakebed itself, but does not include the water overlying the lakebed nor the waters feeding Te Waihora from the surrounding catchment and mountains (see Part 1).

Water is a taonga. Ensuring the health and well-being of water is a prerequisite for ensuring the continued health and well-being of mahinga kai resources and ultimately the people. It is those things that threaten the health of the resources of Te Waihora that are of the greatest concern to Ngāi Tahu. Part 2, section 4.2, outlines how this affects water management for Te Waihora.

2.6 Mahinga kai and customary use

As proclaimed by Rākaihautū, Te Waihora was the greatest inland fish basket found on the Te Waipounamu landscape. The enormity of the resource has led to Ngāi Tahu considering it to be one of their most precious taonga. In its own right Te Waihora was a major limb of the nine tall trees of the Ngāi Tahu Claim.⁸

The ability of Te Waihora to sustain people as a mahinga kai is upheld in the whakataukī (tribal proverb) from Taumutu:

Ko ngā hau ki ētahi wāhi, ko ngā kai ki Orariki

No matter which way the wind blows you will always eat at the pā of Orariki, Taumutu

Simply stated, this whakataukī proclaims that no matter the season, you could always procure food from the Te Waihora environment.

Te Waihora is a tribal taonga, a resource traditionally used by the whole of Ngāi Tahu Whānui. The rights to these resources were shared by many different hapū, each with access to the shore of the lake closest to their takiwā, through wakawaka (family gathering sites) and the traditional practices of manaaki, kai hau kai and networks of whakapapa. Resource use was (and continues to be) regulated through the protocols of tikanga and kawa, in accordance with the lifecycles of the mahinga kai species and encouraging sustainable resource use.

As a mahinga kai, Te Waihora provided fish and shellfish, was a birding ground for many species and was the gathering place for numerous plant and other natural materials. The swamps provided raupō and harakeke and Kaitorete Spit provided fish, pingao and other plant species. Mahinga kai resources include trees for whare and waka (buildings and canoes); plants and animals used as tohu (signs) for fishing and planting times; rongoā species (medicines) and kai (food); feathers and plant fibre for weaving; mud and soils, tree bark and berries for dyes; and plant seeds for oil. Materials such as bone, shells, wood and stone were also used to produce taonga and other everyday tools. The resources are taonga because they enabled and sustained life in the harsh southern environment and constituted a major food source of the area. Of all the resources gathered at Te Waihora, the plentiful fish, particularly tuna and pātiki, were most valued.

Mahinga kai encompasses the social and educational elements of food gathering. It includes customs practised in accordance with rangatiratanga, kaitiaki and whakapapa. Particularly with regard to kaitiaki, tangata tiaki have a role to implement and pass down customs and associated sustainable management methods, including the use of animal and plant species as tohu. In this way, mahinga kai ensures the continuation of traditional practices and the passing down of values to children and grandchildren, ensuring the survival of the practices

⁸ See Chapter 17, *The Ngāi Tahu report, 1991 (Wai 27)*.

through the generations. Mahinga kai includes the way resources are gathered, the places they are gathered from and the actual resources themselves.

The principal mahinga kai species of Te Waihora are outlined in Table 1. Many of these species are recorded in an 1880 document (Tairaroa, 1880) that identifies the food and natural materials gathered at that time and those that were used as tohu. The special relationship Ngāi Tahu has with some of these species is recognised through the NTCSA and the recognition of Taonga Species (see Part 2, section 4.3).

Te Waihora remains a mahinga kai of great importance to Ngāi Tahu. Participation in mahinga kai activities maintains the same importance today as in the past. This encourages the provision of continued availability and use of resources and customary areas to maintain the traditional associations of Ngāi Tahu with Te Waihora. Availability involves both physical access to Te Waihora and to healthy resources within it, as well as legal access to those resources and sites. Many mahinga kai species are less able to be gathered today for a number of reasons including:

- their populations are no longer able to sustain being gathered
- they are considered by some to be culturally unfit for consumption
- the species has been lost from the area
- legislative constraints
- limited access to areas where mahinga kai is successful.

Customary use by Ngāi Tahu has changed in response to issues of scarcity, sustainability and cultural developments, such as technological advances and changed catch methods. It will continue to evolve with culture and the environment. A commitment to customary use implies sustainable use and the need to manage, protect and restore species, habitats and ecosystems to enable such use to occur. As far as threatened species are concerned, Ngāi Tahu now focus their relationship on protection and enhancement of those species to the point that they can again, or continue to support, Ngāi Tahu use.

Ngāi Tahu understanding is that Article 2 of the Treaty of Waitangi recognised the customary right to engage in mahinga kai activity subject to the Crown's right to govern and expressions of that right, including the Conservation Act 1987 and the relevant Acts listed in the First Schedule to that Act, as well as fisheries legislation.

Table 1: Mahinga kai resources of Te Waihora

Kai whenua (from the land)		Manu (birds)	
Māori name	English name	Māori name	English name
aruhe/tauhinu	fern root*	hua kakī ānau	black swan eggs ^o
harakeke	flax*	hua manu	other bird eggs
kākaho	reeds	kakī ānau	black swan ^o
kiore	rat ⁹	karoro	black-backed gull*
kōwhitiwhiti	watercress (introduced)	kererū	wood pigeon**+
kūmara	kumara	kōau	black**+, pied*, little shag*
mānia	sedge*	kōtuku	white heron**+
paru	mud	kuruwhengi/ pāteke	New Zealand shoveller*
pīngao	sand sedge*	matuku	Australasian bittern ⁺
pūhā	sour thistle	pākura/pūkeko	pukeko* ^o
raupō	bullrush/raupo*	pāpango/ raipo	New Zealand scaup/ black teal ⁺
rongoā	medicinal plants	pateke/ tarawhatu	brown teal**+
tī kouka	cabbage tree*	pārera /māunu	grey duck* ^o
tororaro	wiggy wig	pūtakitaki	paradise shelduck**+
wīwī/whiwhi/ wewe	rushes*	rīrīwaka	bar-tailed godwit ⁺
Ika (fish)		ruru koukou	morepork**+
aua	yellow-eyed mullet	tarāpuka	Red-billed gull ⁺
īnanga, mata/ua	whitebait	tete	grey teal**+
kanakana/ piharau	lamprey	whiowhio	blue duck ⁺
kōkopu	kōkopu		
mohoao	black/common flounder		
pāraki	smelt		
pātiki	3-corner flounder/ whitebelly		
pātiki totara	yellow-belly flounder		
tuna	eel		
ūpokororo	grayling		
kākahi	freshwater mussels		
waikōura	freshwater crayfish		
tuaki	cockles*		

A number of other marine fish species also intermittently inhabit Te Waihora and are sourced as mahinga kai.

⁺ Protected under the Wildlife Act 1953.

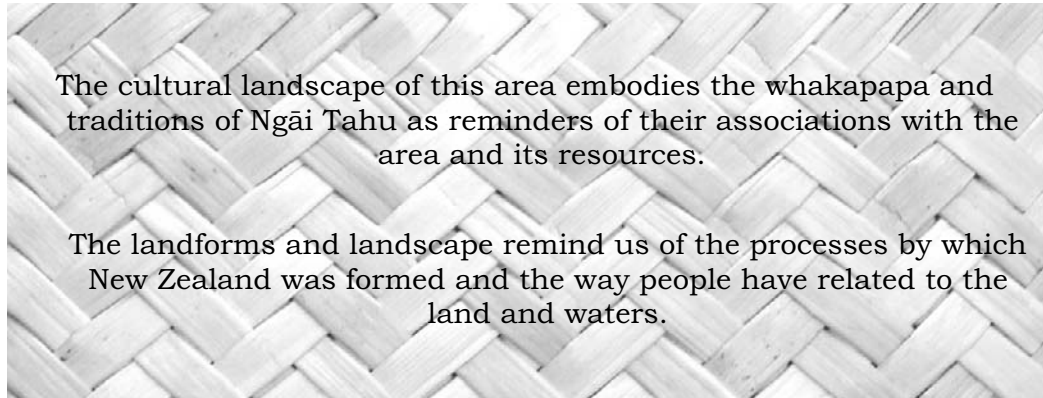
^{*} Customary fisheries "Shellfish species" under the Ngāi Tahu Claims Settlement Act 1998.

^{*} Taonga Species under the Ngāi Tahu Claims Settlement Act 1998.

^o Game birds under the Wildlife Act 1953

⁹ While recognising that kiore are a valued mahinga kai species, it is now recognised that they were a significant predator on indigenous wildlife species and their food sources.

3 LANDFORMS AND LANDSCAPES *TE MATAWHENUA*



3.1 Physical description *Te āhua o te whenua*

Te Waihora lies beside two major landforms, Banks Peninsula/*Horomaka* and the Canterbury Plains/*Ngā Pākihi Whakatekateka o Waitaha*.

Te Waihora is a large, shallow brackish coastal lake. It is New Zealand's fifth largest lake covering approximately 20, 000 ha with approximately 75 kilometres of shoreline. These figures change markedly however, with lake level changes. The lake is up to 3.6 metres deep with an average depth of 2.1 metres at the average lake level of 0.9 metres above mean sea level (m amsl). The generally highest lake level is around 1.2 m amsl.

A significant feature of Te Waihora is Kaituna Lagoon. Situated at the eastern end at the mouth of the Kaituna River, it is only distinct from the open waters of Te Waihora at low lake levels. The lagoon is particularly shallow and provides an important refuge for wildlife with its sheltered waters during storms. It is the area of Te Waihora most seen by the public as viewed from the Christchurch-Akaroa State Highway 75. Kaituna Lagoon is the area of Te Waihora that brings together all of the rūnanga of mid Canterbury, namely Te Ngāi Tūāhuriri, Wairewa, Koukourarata, Ōnuku, Te Taumutu and Te Hapū o Ngāti Wheke (Rāpaki)¹⁰. Ngāi Tahu from Banks Peninsula/*Horomaka* accessed the resources of Te Waihora via Kaituna Valley.

3.1.1 Climate

The weather pattern of Te Waihora generally comprises a cycle of southerly winds (storm) followed by coastal sea breezes (cool on-shore), northerly and then nor-westerly (warm foehn) airflows.

Although long-term climate records for the Te Waihora area have not been kept, much information can be gained from nearby stations at Lincoln, Leeston and Southbridge. Average rainfall for the area is about 650 mm per year. Although rainfall is generally well distributed throughout the year, droughts occur frequently in summer and autumn as soil moisture is generally exhausted by late December because of the high evaporation rate and low rainfall. High evaporation (twice the rainfall in a low rainfall year) also results in decreasing water

¹⁰ See Appendix 8 for schedule of Rūnanga takiwā.

levels during much of the summer months, as evaporation exceeds total inflows.

Winters at Te Waihora are cool with some frosts, despite the proximity to the sea. Snowfalls are infrequent. Summers are warm and sunshine hours average 2000 per year. Mean air temperatures range from 6°C in July to 16.7°C in January.

3.1.2 Hydrology

Te Waihora has a catchment of 276, 000 ha, including hill and high country, downs and plains. It receives inflows from surface runoff, groundwater-fed tributaries, groundwater percolation, seawater inflows, and artesian springs. The groundwater hydrology of the area is complex and poorly understood, as is the connection between groundwater, spring flow and lake levels.

Approximately 40 rivers, streams and artificial drains feed Te Waihora from the surrounding catchment. Major waterways are the Selwyn River/*Waikirikiri*, flowing directly from the foothills, the Irwell River/*Waiwhio*, *LII/Ararira*, Halswell River/*Huritini* and Harts Creek/*Waitatari*, all originating within 19 km of Te Waihora and the Kaituna River from Banks Peninsula/*Horomaka*.

Maintaining natural flows in the rivers and springs that feed Te Waihora and the quantity and quality of these waters is important for maintaining and improving the mauri/health of Te Waihora. Te Waihora has no permanent outlet to the sea. Historically, the lake would naturally breach Kaitorete Spit at a lake level of about 4 m amsl. At this level, the lake would stretch inland to Taitapu/*Tai Tapu* and into Kaituna and Gebbies Valleys. The lake is now mechanically opened to the sea at a lake level of about 1.1m amsl (see Part 2, section 4.2.2).

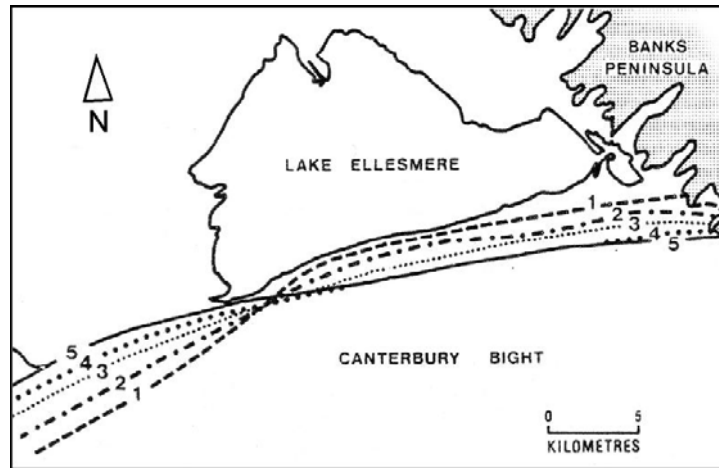
3.1.3 Geology and geomorphology

Geologically, Te Waihora is a very recent feature. The physical origins of Te Waihora include the changing interaction of rivers and the sea, as climate and sea level altered over the past several thousand years.

Initially, Te Waihora was part of an interfan depression on the Canterbury Plains/*Ngā Pākihi Whakatekateka o Waitaha*. It then became a bay as sea level rose. Erosion along the coastline south of Te Waihora, in conjunction with the drift of sediment from the southern rivers, transported large quantities of sediment northward across the face of the bay, resulting in the formation of a barrier system (Kaitorete Spit), which eventually enclosed the bay. Subsequent breaches of the barrier then resulted in the development of a lagoon environment which is part-way between an estuary and a freshwater lake.

The geological history of the area, the ages of the surface layers and the material that they are composed of, determine the soil types and ultimately the nature of the habitat. The many geological landforms and landscapes created by these processes are visible today and contribute to the natural character and landscape values of the area.

Figure 6: Successive shoreline positions during the development of Kaitorete Spit



Armon, 1974

3.1.4 Soils

The soils within the catchment of Te Waihora can be divided into three main categories, those of the high country and foothills, Banks Peninsula/*Horomaka* and the plains. In the lower plains around Te Waihora, soils are mostly derived from alluvial, marine and estuarine sediments of low permeability, but differ among themselves in depth, texture, moisture content and fertility.

Soils immediately around Te Waihora are saline gley recent soils, with areas of yellow brown sands on the seaward side of Kaitorete Spit and around the western side near Taumutu. Gley soils have developed on alluvial sediments in low-lying areas and often support swamp plant associations. Gleying is a process of soil development under high water table/high moisture conditions. Where water tables are close to the surface, salt content in the soils is high. This reduces with distance from and height above Te Waihora. Such saline soils become anoxic and the resultant black mud is used for dyeing harakeke and wood materials, giving the black colour of many traditional Māori arts.

The combination of non-saline and saline soils is of considerable botanical interest and value as they provide for a series of graded habitats. This creates complex vegetation patterns such as those on the Greenpark Sands. Impeded drainage, periodic inundation and high salinity levels affect the productivity of the soils near Te Waihora for agricultural activities.

Figure 7: Historic extent of Te Waihora adjoining Banks Peninsula/*Horomaka*



3.2 Landscape *Te mata o te whenua*

A landscape is generally a broad area that has a unique combination of natural, physical and cultural elements, which combine together in a coherent way to create a whole. Landforms, waterways, wildlife, vegetation and the human interaction with the place combine to form a variety of landscapes. Landscapes can be interpreted as expressions of the evolving relationships between land and people, and as expressions of the values, beliefs and visions of the cultures that inhabit them.

Cultural landscapes embody our evolving relationship with the natural world. The natural resources of Te Waihora have sustained generations of people who have lived on the land and who have maintained a strong affinity with this unique landscape. For Ngāi Tahu their association and activities have resulted in many stories and traditions tied to the landforms and resources of the area. These traditions reveal the Ngāi Tahu understanding as to the origins of these features and the way in which the landforms and resources were developed and used for day to day life.

Management of landscape and landscape values, acknowledges the wider context in which natural and historic resources sit. It is an holistic approach where resources cannot be separated from one another but rather, are considered as a whole. This is akin to ecological approaches to management and the Ngāi Tahu philosophy 'ki uta ki tai – from the mountains to the sea'. These approaches account for changes beyond an immediate site, across time, as well as taking into account the quality of our relationship with the landscape and the mauri of the resources or an area.

Te Waihora has been identified as a regionally outstanding landscape (Boffa Miskell Limited and Lucas Associates, 1993); it is also identified as an outstanding natural feature in the *Proposed Selwyn District Plan 2001*. The wide-open spaces, open skies and a sense of place are often identified as the important landscape values of Te Waihora. Its location within the Canterbury Plains/ *Ngā Pākihi Whakatekateka o Waitaha* and at the base of Banks Peninsula/ *Horomaka*, both distinctive landscape themselves, creates a visually distinctive area of scenic value and natural character. This is added to by the presence of significant geological landforms and the rich cultural/human history of the area.

The landscape values of Te Waihora are situated within the existing rural landscape and historic built features contribute to the landscape values. For example, the Motukarara to Birdlings Flat section of the Christchurch to Little River Railway embankment, which skirts the open waters of Te Waihora at the Kaituna end, provides both a visual and historic feature in itself, as well as a viewing platform from which to view Te Waihora to the west and the foothills towards the Southern Alps/ *Kā Tiritiri o te Moana* beyond. Maimai are another built feature contributing to the landscape values of Te Waihora.

While Te Waihora can only occasionally be viewed from distant places on the plains, it forms an important part of the experience of contrasting landscapes in the journey from Akaroa to Christchurch, or from higher routes on the Port Hills and Banks Peninsula/ *Horomaka*. From State Highway 75, Te Waihora forms a vast and visually uncomplicated foreground to the open views of the foothills and to changing weather patterns and cloud formations over both the

Canterbury Plains/*Ngā Pākihi Whakatekateka o Waitaha* and the Pacific Ocean/*Te Moananui a kiwa*.

Views from Te Waihora across the wide expanse of the spread out water and views across Te Waihora towards Banks Peninsula/*Horomaka*, as well as ‘view shafts’ from distinct places surrounding Te Waihora, are significant features contributing to the landscape values of the area.

3.3 Natural features and landforms

Ngā tohu whenua

Natural features are the natural components of the environment that occur within the wider landscape. Natural features are important for reasons of rarity or representativeness of their landscape. They are also tied to natural and cultural processes and historic occupation.

Te Waihora itself, as a landscape feature and unusual landform, is important in both the New Zealand and international context. The Te Waihora area has attracted considerable scientific interest because of its geomorphic processes and the clear visual evidence of them. There are a variety of geomorphic features around Te Waihora.

Kaitorete Spit is considered of national importance from an earth science perspective as the largest landform of its type in New Zealand.

The “birds-foot delta” formed by the Selwyn River/*Waikirikiri* into Te Waihora since its enclosure is also an impressive landform in the area. This delta is a consequence of a sediment-laden river discharging into a comparatively quiet waterbody.

The Motukarara sea stack, now covered with loess, periodically formed an island within Te Waihora, as indicated by its name (see Part 2, section 3.4). This area provided high ground and shelter for people and wildlife when the lake waters rose. The spurs of Banks Peninsula/*Horomaka* that run into Te Waihora are prominent features on the eastern shores. These spurs reveal wave cut platforms, sea stacks and boulder fields, with stranded beach ridges between the spurs. They provided high ground for early Ngāi Tahu and others, as is evidenced by several pā and other occupation sites.

3.4 Place names *Ngā ingoa o ngā wāhi*

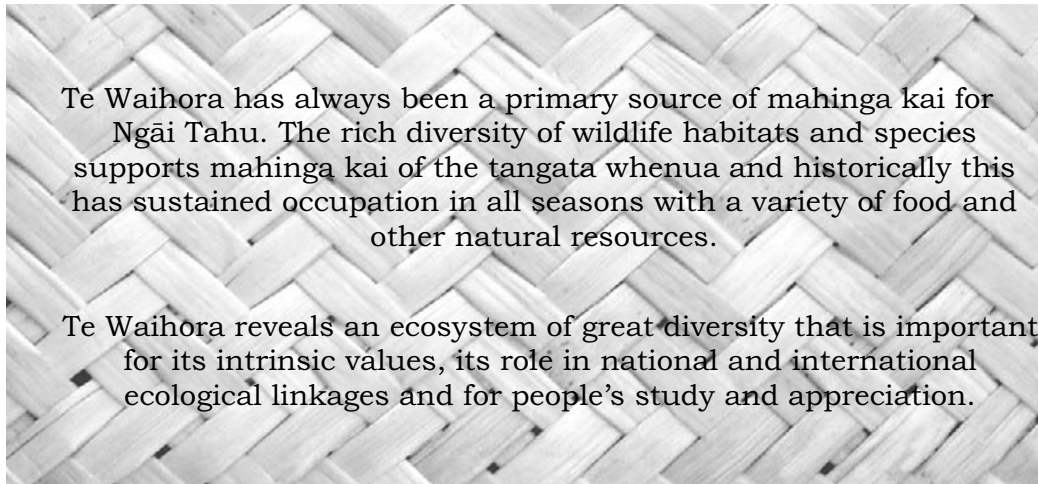
Landscapes include place names which link people and their language and concepts to the land.

Place names reflect the preferred places for abundant or traditional foods, describe a natural feature or an activity, or recall a person who claimed the area, or had an historic association with an area. Places and their names form vast oral maps that are an integral part of culture. Their continued use helps to form and maintain mātauranga/knowledge and associations of an area and its resources. Although European names predominate in the Te Waihora area, a wealth of Māori names also exists (see Figure 11, Part 2, section 5.1.1).

Te Waihora area names include:

- ◆ *Te Kete Ika a Rākaihautū* the fish basket of Rākaihautū, a Waitaha ancestor.
- ◆ *Te Kete Ika a Tutekawa* - the fish basket of Tutekawa, a Ngāi Tahu/Ngāti Māmoe ancestor.
- ◆ Birdlings Flat - named after the prominent local land family who settled the area.
- ◆ Lake Ellesmere – named after Lord Ellesmere, a prominent member of the Canterbury Association that encouraged early European settlement.
- ◆ Kaituna – a place where eels were plentiful/eaten.
- ◆ *Waikākahi* (Pā of Tutekawa) - place of the freshwater mussel.
- ◆ *Orariki* - the place of life-giving creatures/a reference to biodiversity.
- ◆ Motukarara - the ‘island of lizards’ later called *Rabbit Island* for similar reasons during European land subdivision.
- ◆ Te Waihora – spread-out waters.
- ◆ *Te Koraha* - open area of shallow water covering extensive mud flats.
- ◆ Taumutu - the high ridge of land.
- ◆ Ellesmere Arm Hotel – an old name for the Tai Tapu Hotel reflecting the historic extent of the Halswell River ‘arm’ of Te Waihora.
- ◆ *Whakamātakiuru* - the lookout/ to look outwards; later received the European name Fishermans Point as a name for the fishing settlement.
- ◆ Taitapu/*Tai Tapu* - impenetrable place, or sacred tide.
- ◆ Ahuriri – A prominent eel fishing lagoon; the name of a funnel-shaped fishing net of great size, used like a hīnaki in tidal rivers (Williams, 1991).

4 WILDLIFE HABITAT AND BIODIVERSITY *NGĀ TOI WHENUA ME NGĀ TŪMOMO KOIORA*



The Te Waihora ecosystem includes all the vegetation, plants and animals of the lake and its margins and their interactions. For Ngāi Tahu, wildlife habitat and biodiversity are explained through whakapapa, which accounts for the way in which the earth, the sky, oceans, rivers, elements, minerals, plants, animals and people have been created (see Part 2, section 2.1). The creation of tuna (eel), one of the most important aspects of the biodiversity of Te Waihora, is outlined below, an example of how traditional pūrākau (stories) created an 'oral map' and an explanation of the biodiversity of an area. It demonstrates the connection between the atua and natural resources.

Creation of Tuna

Tuna was a person from the heavens. The heaven in which he lived was close to the sun and very dry, so he came to this world. His name was Tuna o Runga i te Raki.

When he arrived here he went straight into the water. The name of that lake was Muriwai o Whata. He dwelt there for many years. One day Hine Te Kaere went out to fetch water from the lake. As she gathered her water, Tuna swam between her thighs making her rush ashore in fright. She returned to the pā to tell her husband Maui Tikitiki a Te Raka and the other people of the marae that there was a tipua in the lake waters. Hine Te Kaere went back with the people of the pā to the lake so they could see this tipua.

When they arrived, Hine Te Kaere went to the place where she had felt the tipua. Tuna saw her and came towards her. The people on the shore then saw Tuna. The people said, "It looks human but lives in the water". They then decided that they had to devise a way to kill this tipua so they could continue to fish and gather water from the lake.

They gathered a tororaro vine that was seen growing on the bare land of Nuku Tawhatawhata. Hine Te Kaere's people prepared the vine, drying it and weaving it into a hīnaki (eel basket) to catch Tuna. The name of this hīnaki was Te Papa a Kura o Takaroa. When it was finished it was taken to the lake where Tuna had first appeared. The

people looked for the best place to put the hīnaki; a place where the water was fast flowing. A deep drain was dug to put the hīnaki in and this was called Te Ahuhu. The hīnaki was put in the middle of the drain and when the water was flowing fast and the current was strong, Tuna appeared.

Tuna was caught in the hīnaki and the people pulled it ashore. Tuna was then killed by the people and he was cut into pieces. Tuna's head was thrown out to sea and this became the koiro or conger eel. Tuna's tail was also thrown out to sea and this became the kanakana and the tuere or the lamprey and the blind eel. The body of Tuna was thrown inland to the lakes and rivers and became tuna and his children (long-finned and short-finned eels).

At the time of the Hinapōuri, Tuna and his children migrate, to the sea to be one with their parent Kukurū Tai Moana (the rumbling sea waters), that is Takaroa (God of the Oceans).

4.1 Ecosystem Assessment *Aromatawai o te taiao*

The habitats, species and natural processes present in an area determine its ecological character. Te Waihora is a wetland of predominantly open water, with swampland, saltmarsh and other lake-margin habitats influenced by fluctuating lake levels and wind-induced water movement. Agricultural plant and animal species and processes dominate the environment surrounding the wetland margins.

Wetlands occupy an ecological transition zone between terrestrial and aquatic ecosystems and have specialised plants and animals associated with them. Te Waihora is a complex system, not fully understood. It is sufficiently distinctive to have its own "Ellesmere" ecological district, as part of the Canterbury Plains ecological region (McEwen, 1987).

Historically, the lake and its wetland margins were much more extensive than they are today, with a mosaic of swampland and forest extending to present-day Christchurch. Dominant forest species included kahikatea, red beech, mataī and tōtara. Charred logs, pollen and other plant fragments preserved in peat indicate that fire destroyed much of the early vegetation by about 500 years ago. This was replaced by harakeke dominant swamp. Drier lands were tussock dominated, with scattered trees and shrubs including tī kōuka, kōwhai, matagouri/*tūmatakuru* and mānuka.

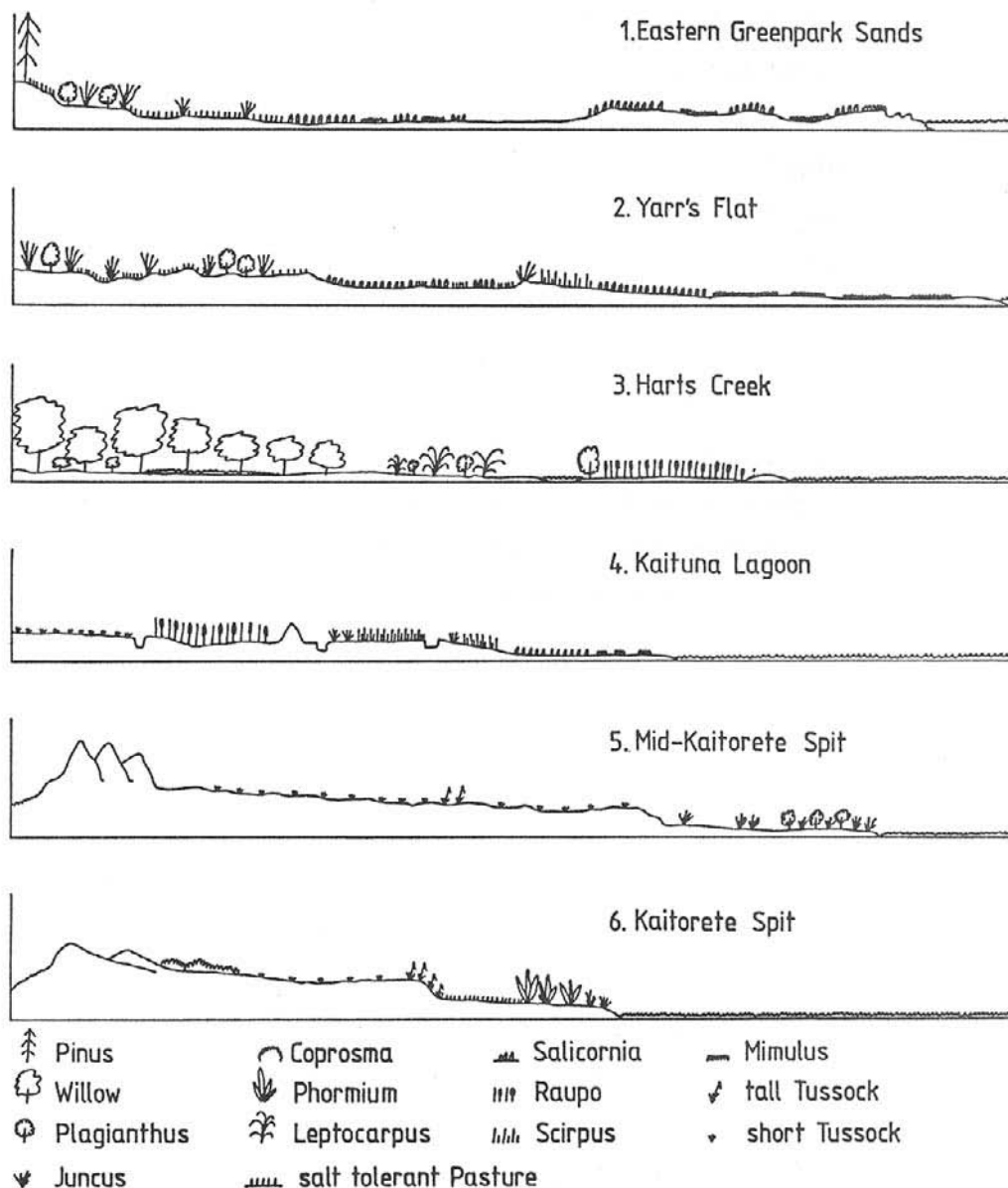
Te Waihora (Lake Ellesmere), while a lake by its European name, differs from most other New Zealand lakes because it is a bar type lake, technically a lagoon, separated from the sea by a barrier of deposited sediment, Kaitorete Spit. As this barrier is intermittently breached, seawater is able to enter, making Te Waihora neither entirely freshwater nor estuarine in character. Marine life enters the lake and contributes to the diversity of plants and animals making up the ecosystem.

Most indigenous wildlife habitat at Te Waihora is located below the 2 metre amsl contour around the open lake waters. It is very low-lying and vulnerable to long-term sea level rise. This area provides an extremely rich biological environment supporting a large assemblage of native and introduced species of plants and animals. The principal factors controlling the abundance and diversity of wildlife habitats and biodiversity in and around Te Waihora are the lake water levels, water

surface area, elevation in relation to inundation, salinity, nutrients, turbidity, dissolved oxygen, lakebed sediment movement, substrate composition and human disturbance.

While Te Waihora is primarily a brackish-water environment, there are areas of vegetation typical of more freshwater wetlands. These areas are almost independent of the lake and are a result of localised groundwater springs and tributaries flowing into Te Waihora and provide habitat for species that otherwise would not occur in the brackish lake waters.

Figure 8: Vegetation zones



O'Donnell, 1985

Clark and Partridge (1984) undertook a comprehensive vegetation survey of the lake margin, including detailed mapping of the lakeshore vegetation and a description of the vegetation patterns. Fifty-four vegetation types were identified and mapped (extending from the lakeshore (at low lake level) to an upper boundary between the 1.0 and 2.0 metre contours). Wetland areas of botanical importance were identified.

The large number of vegetation types and the many more combinations of these reflects the great diversity of habitat around the shoreline of Te Waihora. These vegetation types were revised down to 30 types by Partridge et al. (1999) to match a national standardised wetland classification system. These are recorded in the Department's GIS database, allowing comparisons with land ownership and the assessment of vegetation type representativeness within the JMP Area and other protectively managed lands. These wetland vegetation types are shown on Figure 9.

Figure 9: Te Waihora wetland vegetation types

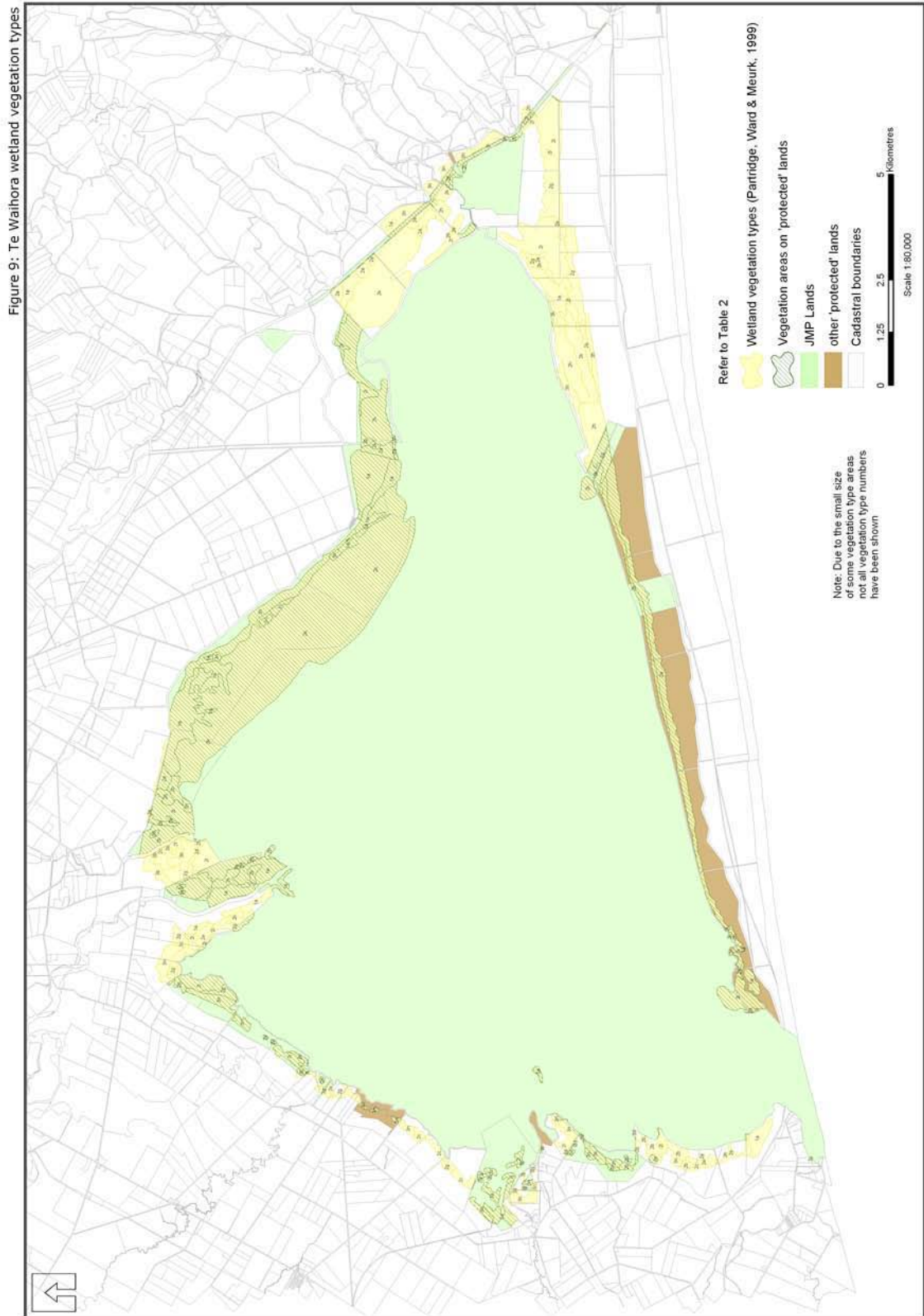


Table 2: Te Waihora wetland vegetation types¹¹ and areas

Vegetation type number	Vegetation type (species details in the Report)	Area (ha) in total	Area (ha) in JMP area	% of total in JMP area	Area (ha) in JMP area & "other" ⁺ lands	% of total in JMP area & "other" ⁺ lands
1a	Saline herbfield – <i>Sarcocornia quinqueflora</i> – <i>Hordeum marinum</i> *	496	366	74	380	77
1c	Saline mud flat - <i>Sarcocornia quinqueflora</i> – <i>Puccinellia stricta</i>	12	12	100	12	100
2a	Brackish shrubland – <i>Plagianthus divaricartus</i>	229	52	23	203	89
2b	Brackish rushland – <i>Juncus maritimus</i>	183	94	51	133	73
2c	Brackish rushland – <i>Leptocarpus similis</i>	39	4	10	4	10
2d	Brackish rushland – <i>Schoenoplectus validus</i>	1	0	0	0	0
2e	Brackish rushland – <i>Schoenoplectus pungens</i>	82	11	13	11	13
2f	Brackish rushland – <i>Bolboschoenus caldwellii</i>	16	4	24	4	24
2g	Brackish herbfield – <i>Agrostis stolonifera</i> *	316	56	18	56	18
2h	Brackish herbfield - <i>Agrostis stolonifera</i> * - <i>Hordeum marinum</i> *	144	10	7	10	7
2i	Brackish herbfield - <i>Agrostis stolonifera</i> * – <i>Selliera radicans</i>	10	1	12	1	12
2k	Brackish mud flat - <i>Sarcocornia quinqueflora</i> – <i>Mimulus repens</i>	1622	1280	79	1287	79
2l	Brackish mud flat - <i>Mimulus repens</i>	463	178	38	202	44
3a	Freshwater forest – <i>Salix fragilis</i> *	37	33	89	33	89
3b	Freshwater forest - <i>Salix cincerea</i> *	64	41	63	41	63
3c	Freshwater forest - <i>Salix fragilis</i> * - <i>Salix cincerea</i> *	4	2	44	2	44
3d	Freshwater shrubland – <i>Ulex europaeus</i> *	3	1	41	1	41
3h	Freshwater rushland - <i>Juncus maritimus</i> / <i>Agrostis stolonifera</i> *	266	142	53	147	55
3j	Freshwater rushland – <i>Typha orientalis</i>	15	11	78	11	78
3k	Freshwater rushland - <i>Typha orientalis</i> / <i>Agrostis stolonifera</i> *	14	11	79	11	79
3l	Freshwater rushland – <i>Phormium tenax</i> – <i>Juncus spp.</i>	23	18	80	20	87
3n	Freshwater rushland – <i>Juncus gregifforus</i> / <i>Agrostis stolonifera</i> *	116	51	44	56	48

⁺ "other" lands are those areas where wetlands are currently reasonably well managed (F&G 001, SDC 001 & 002 and CRC 002, see Figure 4 and Appendix 2).

* While these species are introduced they are mixed with indigenous species. The vegetation type represents a distinct type that, if the introduced species were not present, or prior to them being present, would be of a similar nature in indigenous species e.g. the type 3c *Salix* (willow) freshwater forest would likely be podocarp (kahikatea etc) forest.

¹¹ For simplicity within this Table, where there are multiple vegetation types for a particular area, the types shown are those first listed on the Report's maps (Partridge et al. 1999). While this introduces some data error, it does not significantly influence the ha and % results.

Analysis of Table 2 reveals:

- ◆ Brackish shrubland/herbfield (types 2a & 2b) are not well represented within the JMP area, although they are significantly better represented when including the “other” lands as a result of Environment Canterbury’s Kaitorete Spit endowment lands.
- ◆ Brackish shrublands and herbfields (types 2c to 2i) are not well represented within the JMP Area, or the JMP Area & “other” lands.
- ◆ Brackish mud flat (type 2l) is not well represented within the JMP Area, or the JMP Area & “other” lands.
- ◆ Some freshwater rushlands (types 3h and 3n) are not well represented within the JMP Area, or the JMP Area & “other” lands.

O’Donnell (1985) assessed the wildlife values of “foreshore” (sic) study areas for Te Waihora during 1981-1982 and mapped these areas for wader, waterfowl and swamp bird species. Non-bird wildlife was also assessed. Value ratings were given to identified areas, using the then New Zealand Wildlife Service rating system under which “outstanding” signifies very high national and international values and “high” signifies national importance for native species and high numbers of introduced species (black swan was listed as an introduced species¹²). “Moderate-high”, “moderate” and “potential” rankings indicate regional to local importance. O’Donnell (ibid) also notes that at a national level “Lake Ellesmere” as a whole was rated as outstanding.

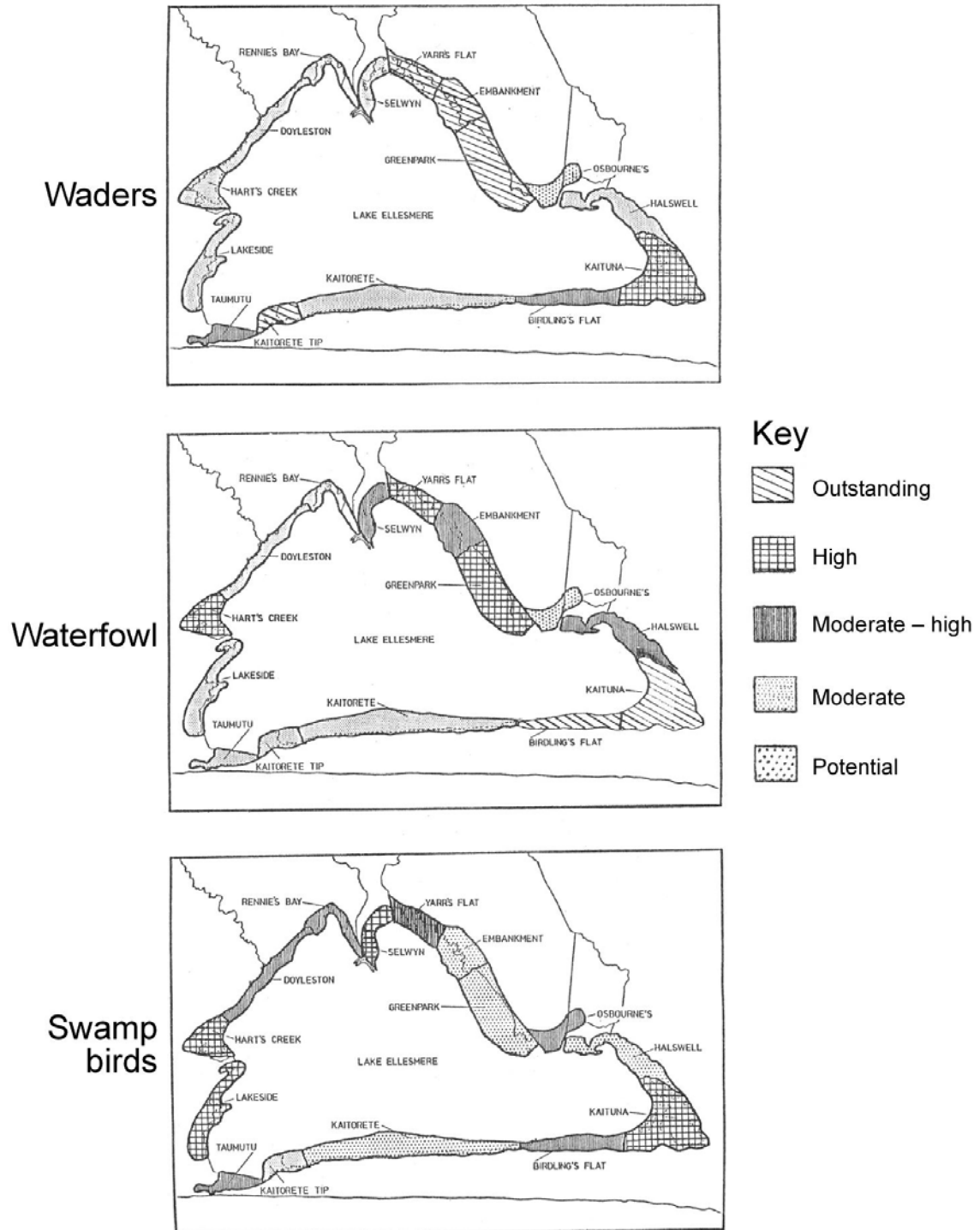
While there has been some change, both positive and negative, in the condition of the vegetation zones and wildlife areas since these surveys, the survey data still remains the best current, overall information on the importance of the various areas within the Te Waihora ecosystem/ecological district. While the whole of Te Waihora is part of a nationally threatened ecosystem it is possible by combining the above vegetation zones and wildlife values data to describe the most important areas within it.

For the adjoining Kaitorete Spit the Department has prepared a *Kaitorete Spit Biodiversity Action Plan for Coastal Conservation Land* (2003) setting out restoration and other management aims for the coastal lands administered by the Department and methods for working with other landowners, to protect the area's indigenous flora, fauna and habitats.

Specific plants and animals within Te Waihora are identified in more detail in Part 2, sections 4.4 and 4.5.

¹² Black Swan are considered an indigenous species within this Plan, see Part 2, section 4.5.2.

Figure 10: Wildlife values around Te Waihora



O'Donnell, 1985

4.1.1 Most important areas

Greenpark Sands

Greenpark Sands extends along 13 kilometres of lakeshore from the LII River / *Ararira* to the Halswell River / *Huritini*. The Sands contain a range of wetland vegetation within saline to freshwater habitats, identified as nationally significant. The lower sand flats have particular value because of their size and essentially undisturbed combination of halophyte and freshwater plant species. Most of the area is of outstanding importance for wader birds, especially migrant species, and of high importance for waterfowl.

Vegetation patterns on the Greenpark Sands in 2002 remain more or less as described by Clark and Partridge (1984) with the abundance of the native shrub, saltmarsh ribbonwood, having increased within the searush-creeping bent community that occupies the upper zone of Greenpark Sands. Overall, Greenpark Sands retains the range of indigenous wetland vegetation that gave rise to the “outstanding” rating in the 1980s.

The area is held as the Greenpark Sands Conservation Area, Yarrs Flat Wildlife Management Reserve and Ngāi Tahu lakebed.

Kaituna Lagoon

Kaituna Lagoon, at the extreme east of Te Waihora, has permanent shallow water even during low lake levels, with small islands, sand spits, mudflats, raupō and rushes. It provides sheltered waters for wildlife during storms. The areas of mud-flats, rushes and raupō are of botanical interest. The Lagoon is of “outstanding” importance for waterfowl, and of high value for wader and swamp birds.

The Lagoon has changed little since the 1980s. The central part is Ngāi Tahu lakebed, with an adjoining Conservation Area along and beside the historic railway embankment, some unformed legal roads, and the substantial balance is freehold land.

Lake side of Kaitorete Spit

This large area of low salinity lagoon-edge native vegetation is more continuous than elsewhere around Te Waihora. The extent of sea rush and saltmarsh ribbonwood present makes this area one of regional botanical importance. The area is of “outstanding” importance for waterfowl at the eastern end and for waders at the western end.

Since the 1980s the eastern end has lost quality, but the balance is of similar or better quality.

The area is predominantly held by Environment Canterbury in accordance with a management plan for the wetlands (Grove, 2004). Christchurch City Council administers the eastern end, along with some lands within the Joint Management Plan Area and the unformed legal roads.

Taumutu Commonage and Lakeside

This is an area of mudflats, saltmarsh and localised freshwater swamp areas, with small offshore islands. The area is of “high” value for swampbirds.

Of the total area since the 1980s, the Commonage part (Māori freehold land under long-term lease) has lost quality, but the balance retains its value as the Lakeside Wildlife Management Reserve, with some unformed legal road.

Harts Creek/Waitatari

Although this area has been largely invaded by willow species over recent years, there are remaining areas of botanical interest, especially the understory species to the willow canopy. Extensive raupō beds fringe the lake-edge. The area is of “high” value for waterfowl and swampbirds.

Despite the spread of willow the area has retained its values and is the Harts Creek Wildlife Management Reserve with an overlying wildlife refuge status.

Area north of Lake Road South, Irwell River/*Waiwhio*

This is a narrow area of undisturbed native freshwater vegetation that is of regional botanical importance.

The area has retained its values in some parts but has suffered from grazing pressure in others, and is held within Wildlife Management Reserve, with some unformed legal road.

Selwyn River/*Waikirikiri* to west bank of LII/*Ararira* River

This area contains extensive stands of native freshwater vegetation including taller raupō and tall sedge. It is of regional botanical importance and of “high” importance for swampbirds.

The area is partly the Selwyn Wildlife Management Reserve, and partly freehold land and unformed legal road.

4.2 Water *Ngā wai*

4.2.1 Water quality and sedimentation

In its life Te Waihora has experienced a progression from a higher-flushed, lower nutrient and sediment inflow, higher water quality system to a lesser-flushed, higher nutrient and sediment inflow, lower water quality system. In part this is a natural ecological process for a coastal lagoon, leading to greater sediment infilling and the gradual replacement of open water by vegetated wetlands. Human-induced change in the catchment, more so since European settlement, has hastened this process, particularly the decline of water quality.

As a coastal lake and wetland Te Waihora has several natural characteristics. At the ‘bottom’ of the catchment it is in part a nutrient and sediment trap. Its wetland vegetation edge acts as a nutrient and sediment filter, a role of wetlands in maintaining water quality that is well recognised as important within the natural environment. When the lake-edge weed beds were in place (see Part 2, section 4.4.1) the lake-edge waters had less wave-induced sediment disturbance and were generally clear, unlike the sediment discoloured lake-centre waters.

Te Waihora has exhibited some of the features of a highly eutrophic lake since at least the 1970s. However, many of the expected features of a eutrophic condition, such as deoxygenation of bottom waters and sediments, regular blooms of toxic phytoplankton and the absence of salmonid fish, do not appear in Te Waihora. The lake’s shallowness and wind exposure combine to minimise these eutrophic features by keeping the waters mixed and oxygenated.

In pre-European settlement times the lack of land development and the huge network of surrounding swamp and rush lands provided much greater protection for the lake waters, although some impact would have resulted from the pre-European fire clearance of catchment forests. Land development has since taken its toll and 80% of these swamp and rushlands have now been lost through drainage and surrounding drain systems that fast-track water from the plains to Te Waihora and to the sea. The lake’s own drainage has also altered the

nature and extent of lake-edge habitats, vital links in the Te Waihora ecosystem.

Deposition and erosion of sediment from the lake margins during lake level movements can be an important ecological process affecting lake margin vegetation, as plants are covered and re-emerge from the fine sediments. Induced sedimentation through the loss of lake edge vegetation, aquatic vegetation and the resultant accelerated erosion, can affect these species as well as fish survival. It can also impact on water clarity as sediments are suspended in the water column, and water quality as nutrients contained within the sediments are released into the lake waters. Riparian management along tributaries and lake margins is therefore important to reduce these adverse affects.

The Te Waihora user community, including tangata whenua, have observed a decline in lake water quality over time, especially since the early 1970s, although in part this may be an observation of lake-edge water clarity changes rather than nutrient changes. The community has also known of the discharge of contaminants to the tributaries of Te Waihora, the discharge of human sewage effluent being of particular concern to Ngāi Tahu. These matters affect Ngāi Tahu as they impact on the mauri of Te Waihora and the fisheries, and some mahinga kai species are considered unfit for consumption. Water quality also affects recreational activity as people's use of Te Waihora and their sense of connection to its waters can decline with an observed or perceived decline in water quality.

Water quality, especially the parameters of water colour and clarity, has affected the growth and productivity of aquatic plants and algae. The limited regeneration of the 'weed beds' in Te Waihora since the Wahine storm of 1968 is partly attributed to a decline in water quality.

Current catchment aspects and land management practices affecting Te Waihora water quality and sedimentation include:

- ◆ 'Natural' sediment and nutrient inputs from soils within the Selwyn River/Waikirikiri catchment, primarily during times of flood.
- ◆ Contamination of inflowing streams by urban point and non-point sources, such as sewerage systems and stormwater run-off from hard surfaces.
- ◆ Contamination of inflowing streams by rural point and non-point sources, such as animal effluent from dairy sheds and other stock-holding facilities, stock water races and stormwater run-off from farmland.
- ◆ Increased sediment input from housing developments in the Halswell River/*Huritini* and other catchment activities.
- ◆ Stock access to waterways, including the lake-edge, causing bank collapse or ground disturbance and releasing sediment, soil nutrients and stock effluent to the water body.
- ◆ Drain location, design, edge-use and maintenance methods.
- ◆ Surface water and groundwater abstractions reducing spring and tributary inflows to Te Waihora.
- ◆ Soil erosion within the Kaituna and Selwyn River /Waikirikiri catchments hill country and banks of Te Waihora tributaries.
- ◆ Riparian land-use and vegetation types.

For Ngāi Tahu, ensuring the health and well being of water is a prerequisite for ensuring the same for mahinga kai and the people. It is for the present generation, as tangata tiaki, to do their best to ensure that the taonga of Te Waihora is in better condition than it is today, for the future generations.

Ngāi Tahu is also concerned about the unnatural mixing of waters and oppose the discharge of waters with the mauri of a river such as the Rakaia into a river with a different mauri such as the Selwyn/Waikirikiri. Situations of the mixing of waters in Te Waihora tributaries however, have existed in some cases for over 100 years, e.g. the Selwyn stock-water race which flows from the Kowai River (a Waimakariri River tributary) to the Selwyn River/Waikirikiri. Whilst Ngāi Tahu do not condone this water mixing, they do recognise that parts of these systems now support a diverse range of aquatic life that is a valued part of the Te Waihora ecosystem.

Lake salinity

Salinity is determined by the duration and frequency of lake openings hence by seawater inflows, other seawater inflows through and over Kaitorete Spit and by the relative inflows from surface water and groundwater, which are in turn affected by water abstraction rates and hydrological factors, including evaporation, in the catchment. Records of salinity in the lake range from just below 3 ppt (parts per thousand) to over 27 ppt, pure seawater being 35 ppt. Most readings however, are between 5 and 10 ppt.

Salinity affects both wildlife habitat and water quality. It is a critical factor in the distribution and pattern of lake margin plant species as well as the growth of potentially toxic blue-green algae. Salinity also affects the growth and establishment of aquatic macrophytes. Variations in salinity gradients are a major factor in determining the wide range of habitats that Te Waihora provides for its biological communities and hence the diversity of flora and fauna and mahinga kai.

4.2.2 Lake opening and lake level management

Lake openings and the resultant lake level fluctuations are major influences on the wildlife habitat and biodiversity values of Te Waihora. Lake opening levels and the duration of openings with the resultant changes in salinity and water level influence the composition and abundance of plant communities present in and around Te Waihora. They also affect fish migration into and out of the lake, animal species diversity and abundance and mahinga kai. Water levels also influence water temperature and thus habitat, as well as wave fetch and the temporary wind-induced submergence of lake margins.

Lake level management has resulted in progressively lower lake levels from historic times to today. Table 3 shows, from documented lake opening levels in Harris (1947), the lowering of average lake-opening levels since the early 1900s from changing opening methods.

In the early 1900s the lake was opened by horse drawn scoops. In 1904, engineer Arthur Dudley Dobson designed an outlet culvert, which, with modifications by Pannett *circa* 1910, operated relatively successfully maintaining the lake at an average level of 1.53 metres amsl until 1925 when the culvert was destroyed in a storm. The Ellesmere Land Drainage Board then again opened the lake with horse

drawn scoops, requiring a minimum lake level of 4 feet (1.2 metres) before a lake opening could be attempted. From 1932 increasing technology, including the purchase of power scoops and later dozers, and improved methods for lake openings, resulted in quicker lake openings and further lowering of lake opening levels.

Table 3: Te Waihora lake opening levels 1901-1960

Years	Opening technique	Average opening level
1901-04	Horse-drawn scoops	1.85 m amsl
1905-25	Pannett's culvert	1.53 m
1926-31	Horse-drawn scoops	1.66 m
1932-40	Power scoops	1.54 m
1941-49	Power scoops & dozers	1.35 m
1950-59	Power scoops & dozers	1.19 m

From Harris, 1947 and ECan records

The 'current' lake opening levels¹³ were agreed between the North Canterbury Catchment Board (NCCB) and the Ellesmere Land Drainage Board in the 1940s when the NCCB took over the functions of the Drainage Board, based on historic practice. Target levels were established based on farming interests to avoid inundation of as much of the lake margin as possible and the practical difficulties of opening the lake at lower levels. The resultant lake level was the lowest possible level that the lake can be held at, consistent with engineering realities and costs, albeit subsidised by Environment Canterbury's general rate.¹³

The National Water Conservation (Lake Ellesmere) Order 1990 was sought by the then New Zealand Wildlife Service, subsequently the Department, to define and protect the wildlife habitats of Te Waihora and to shift the basis of lake level management from agricultural to wider ecological requirements. The Order prevents further reclamation of the lake edge, restates the historic minimum lake opening levels, but allows for higher levels. It also allows for other lake openings and closings (not yet attempted) that may serve to achieve higher average summer lake levels. The Order, gazetted in 1990 before the advent of the sustainable management requirements and recognition of matters of national importance clauses of the Resource Management Act 1991, still recognises that Te Waihora provides an outstanding wildlife habitat. Considering the above matters under the Resource Management Act 1991, it could be argued that greater attention in lake level management is need for the following matters:

- ◆ Ngāi Tahu relationship with Te Waihora.
- ◆ Ngāi Tahu kaitiaki role.
- ◆ Summer dry-out of lake edges.
- ◆ Fish migration and recruitment.

¹³ See Appendix 7. The levels are 1.05 m amsl during August-March and 1.13 m amsl during April – July. Te Waihora is currently opened by the Environment Canterbury under a transitional provision of the RMA (s.386(1)(b) - Existing rights and authorities under the Water and Soil Conservation Act 1967). Resource consents under the RMA are currently (2006) being sought by Environment Canterbury to set the conditions for continuing to open the lake.

- ◆ Recognition of dynamic coastal processes including rising sea levels.
- ◆ Adverse impacts on the coastal environment.
- ◆ Adverse algal growth.
- ◆ Landscape values.
- ◆ Natural landform processes.
- ◆ Facilitation of indigenous macrophytic vegetation regeneration.
- ◆ Habitat requirements of migratory bird species.
- ◆ Natural cycles and fluctuations over long time frames and multiple lake openings.
- ◆ Allowing lake level fluctuations that would give greater flexibility to achieve openings at times to optimise all values.

4.3 Taonga species and other species of importance to Ngāi Tahu *Ngā tū taonga me ētahi atu momo e nui ake ki a Ngāi Tahu*

Taonga species are culturally significant species of animals and plants that are treasured by Ngāi Tahu. Although all natural resources are considered taonga by Ngāi Tahu, specific species are identified as “taonga species” or “taonga fish species” in the Ngāi Tahu Claims Settlement Act 1998. The Crown acknowledged the cultural, spiritual, historic and traditional association of Ngāi Tahu with these taonga species and made provisions to enable Ngāi Tahu to participate in their management. These include species of birds, plants, marine mammals and fish (see Appendix 5).

In addition to these taonga species there are other species of importance to Ngāi Tahu, as identified in Tables 1, 4, 7 and 8. Many of these taonga species and the other species of importance are found in and around Te Waihora (see Part 2, sections 4.4, 4.5 and Appendix 5).

4.4 Plants *Ngā otaota*

As identified in Part 2, section 4.1, the remnant vegetation of Te Waihora remains significant from both a regional and national perspective. Within this vegetation reeds and sedges are the dominant indigenous plant species found within the Joint Management Plan Area. These include a number of regionally rare species and species found at their distribution limits.

The shoreline plants fall into four natural groupings based largely on the degree of lake water inundation and salinity, soil substrate composition and the effects of human disturbance:

1. Submergent species e.g. *Mimulus repens* (native musk), as in brackish mudflats vegetation¹⁴.
2. Halophytes (salt tolerant species) e.g. *Sarcocornia quinqueflora* (glasswort), as in saline herbfields and mudflats¹⁴.
3. Freshwater wetland species, e.g. *Typha orientalis* (raupō), as freshwater rushlands¹⁴.
4. Agricultural species, e.g. *Argostis stolonifera* (creeping bent), as in brackish herbfields and freshwater rushlands¹⁴.

¹⁴ See Part 2, section 4.1, Table 2.

That part of Kaitorete Spit within the Joint Management Plan Area, near Taumutu, supports different plant species from the mostly wetland areas managed by this Plan as they are located on the sand dune/shingle beach ridge system. This area supports marram with patches of pingao and other coastal species.

Table 4 lists the significant indigenous plants within the Joint Management Plan Area under the following criteria:

- ◆ The plant's current status according to their threat or otherwise of extinction (Molloy et al. 2001),
- ◆ iwi significance including taonga species under the NTCSA and other species of importance to Ngāi Tahu (see Part 2, section 0),
- ◆ plants at their distribution limit, or if locally rare.

Table 4: Significant indigenous plants within the Joint Management Plan Area

Common Name	Māori Name	Botanical Name	Significance
akeake	akeake	<i>Dodonea viscosa</i>	at its distribution limit
bog rush		<i>Schoenus pauciflorus</i>	important to Ngai Tahu
bullrush	raupō	<i>Typha angustifolia</i>	taonga species
cabbage tree	tī rākau/ tī kōuka	<i>Cordyline australis</i>	taonga species
club rush	wīwī	<i>Bolboschoenus caldwellii</i>	important to Ngai Tahu
common rush	wīwī	<i>Juncus gregiflorus</i>	taonga species
coprosma	karamū	<i>Coprosma robusta, coprosma lucida, coprosma foetidissima</i>	taonga species
fernroot (bracken)	aruhe	<i>Pteridium aquilinum var. esculentum</i>	taonga species
giant umbrella sedge	toetoe	<i>Cyperus ustulatus</i>	rare in Canterbury
jointed wire rush	oioi	<i>Leptocarpus similis</i>	important to Ngai Tahu
knobby clubrush	wīwī	<i>Isolepis nodosa</i>	important to Ngai Tahu
kōwhai	kōwhai /kōhai	<i>Sophora microphylla</i>	taonga species
lake clubrush / tall sedge	kuta	<i>Schoenoplectus validus</i>	important to Ngai Tahu
NZ flax	harakeke	<i>Phormium tenax</i>	taonga species
ngāio	ngāio	<i>Myoporum laetum</i>	taonga species
NZ broom	maukoro	<i>Carmichaelia appressa</i>	important to Ngai Tahu
orchid	māikaika	<i>Spiranthes sinesis</i>	rare native
pīngao	pīngao	<i>Desmoschoenus spiralis</i>	taonga species
pukio	pukio	<i>Carex secta</i>	important to Ngai Tahu
purple mimulus		<i>Mimulus repens</i>	uncommon (Sparse)
ruatahi	toetoe/ ruatahi	<i>Carex coriacea</i>	important to Ngai Tahu
saltmarsh ribbonwood		<i>Plagianthus divaricatus</i>	
sea rush	wīwī	<i>Juncus maritimus</i>	taonga species

Common Name	Māori Name	Botanical Name	Significance
sedges	mānia	<i>Carex flagellifera</i>	taonga species
silver tussock	wī	<i>Poa cita</i>	taonga species
sundew	wahu	<i>Drosera binata</i>	
swamp nettle		<i>Urtica linearifolia</i>	nationally threatened (gradual decline)
toetoe	toetoe	<i>Cortaderia richardii</i>	taonga species

4.4.1 Aquatic plants

Te Waihora once had extensive beds of *Ruppia megacarpa* and *Potamogeton pectinatus*, commonly referred to as ‘weed beds’. These were an important food source for some bird species and provided food and shelter for many fish species. They also reduced the effect of wave action on the shores and stabilised the mud substrate, reducing lakeshore erosion and water turbidity, resulting in increased water clarity. Aquatic plants play a role in nutrient recycling within ecosystems as they take up and release dissolved nutrients from both water and the sediments.

Decline in the weed beds was reported in the 1920s and the beds disappeared in the 1940s. There was a significant recovery in the 1950s that continued until the “Wahine Storm” of 1968 when most of the beds were destroyed. Scattered patches of the plants remained through to the 1970s and early 80s, but the beds have never regained their earlier extent. Today, some natural regeneration is occurring and small beds exist within Te Waihora, particularly in the more freshwater areas around the mouths of various tributaries such as Boggy Creek on the western side of the lake. Many factors have been attributed to limiting the re-establishment of the weed beds in Te Waihora, specifically water clarity, water temperature and salinity.

Gerbeaux (1989) demonstrated that re-establishment of these aquatic plants is possible in Te Waihora with the selection of favourable sites coupled with favourable lake conditions. This however, is likely to be at a substantial cost and the possible short and medium term effects on the health of Te Waihora are not well known.

A number of aquatic plant species (both indigenous and introduced) are present in the tributaries of Te Waihora. The plants are regularly cut and the majority removed as part of drainage maintenance. Because they are freshwater species they do not spread into the brackish waters of Te Waihora.

4.4.2 Algae

Algae are an important part of the food chain at Te Waihora and a vital indicator of water quality. The presence of green and blue-green algae in the water gives the lake its greenish colour, which is more intense at times of increased algae. There have been 38 species of algae recorded in Te Waihora; 10 blue-green and 28 green algae. *Microcystis minutissima* is the most abundant species.

Table 5: Major phytoplankton species of Te Waihora

Division	Species
Chlorophyta (Green)	<i>Dictyosphaerium primarium</i>
	<i>Dictyosphaerium pulchellum</i>
	<i>Oocystis parva</i>
	<i>Oocystis lacustris</i>
	<i>Planctonema lauterbornii</i>
Cyanophyta (Blue-green)	<i>Microcystis minutissima</i>

When the blue-green alga *Nodularia* is abundant, i.e. a 'bloom', it is potentially toxic to stock and can kill fish. Although this species is present in Te Waihora, algal blooms are reported infrequently, as in March 1981 and autumn 1990. Traditionally these 'blooms' were explained through the actions of the Kaitiaki, Tūterakihaunoa, who would stop the people of the surrounding kāinga using Te Waihora and its resources by lying on top of the waters at these times. The infrequency of the blooms in Te Waihora, as opposed to those in neighbouring Lake Forsyth/*Wairewa*, is attributed to the 'windiness' of Te Waihora and the resultant oxygenation of its waters.

4.4.3 Introduced plants and plant pests

Introduced plants impact on the wildlife habitat and biodiversity of Te Waihora by displacing indigenous species and altering habitat qualities. The highly modified environment surrounding Te Waihora has aided the introduction of many plants, such as pasture grasses, willow and gorse. Some introduced plant species have become pests. As well as biodiversity effects, there can be a reduction in species diversity or population size and the consequent availability of resources for Ngāi Tahu customary use.

Introduced plants can impact on landscape values and impede access and recreational use. For example excessive aquatic plant growth can impact on boat access and use in Te Waihora and its tributaries, and tall terrestrial species such as willow overgrow smaller rushes and sedges, changing the character of an area and the views from and to Te Waihora. Invasion occurs most often through grazing, burning, drain clearance, disposal of drain spoil and the use of unclean machinery.

When plants are removed during drain maintenance, there are direct impacts on species such as eels, impacts on habitats and nutrient cycles. Other impacts occur as cut weed that isn't removed, moves down the tributaries and into Te Waihora. While there is a need to provide for drain maintenance, there is a need to do so using techniques that recognise the mahinga kai and conservation values of the waterway.

Table 6: Commonly occurring introduced and plant pest species within the Te Waihora environment

Common Name	Scientific Name	Status	Present in the JMP Area	Present in the Te Waihora environment
boxthorn	<i>Lycium ferocissimum</i>	surveillance	✓	✓
buck's horn plantain	<i>Plantago coronopus</i>	no pest status	✓	✓
gorse	<i>Ulex europaeus</i>	containment Control	✓	✓
marram	<i>Ammophila arenaria</i>	no pest status	✓	✓
purple loosestrife	<i>Lythrum salicaria</i>	unwanted organism		✓
salt barley grass	<i>Hordeum marinum</i>	no pest status	✓	✓
Scotch thistle Californian thistle	<i>Cirsium vulgare</i> <i>Cirsium arvense</i>	no pest status	✓	✓
nodding thistle	<i>Carduus nutans</i>	containment Control		✓
tall fescue	<i>Schedonorus phoenix</i>	no pest status	✓	✓
tree lupin	<i>Lupinus arboreus</i>	no pest status	✓	✓
willow; grey, crack	<i>Salix cinerea</i> , <i>S. fragilis</i>	unwanted organism (grey willow)	✓	✓
yellow flag	<i>Iris pseudacorus</i>	unwanted organism	✓	✓

Currently, eradication of many of the introduced plants around Te Waihora is effectively impossible. It is necessary to determine what is feasible in terms of resources and effort to control and prevent their further spread. For some introduced plants, or potential pest/weed species, it may be more desirable to eradicate them or to prevent their establishment in the Te Waihora area because of the substantial threat they pose to the natural, historic and mahinga kai resource values. For introduced plants such as pasture species and woody weeds, stock grazing can be an effective management tool to reduce growth and facilitate natural regeneration of indigenous species.

Two aquatic species pose a threat to the Te Waihora environment. *Egeria*, present in Christchurch's Avon River, and *Phragmites*, which although not currently present in the region, is favoured by some as a wetland filtering species, could both threaten the aquatic ecosystem if allowed to establish within the Te Waihora environment.

The *Canterbury Regional Pest Management Strategy* (1998) identifies pests for eradication or management, including *phragmites*, *egeria* and yellow flag as "Surveillance Plant Pests", and gorse as a "Plant Pest".

4.5 Animals *Ngā kararehe*

The outstanding value of Te Waihora to wildlife is essentially a consequence of its unusual physical characteristics and water level fluctuations. The extremely rich biological environment supports a large assemblage of indigenous and introduced animal species, especially birds, as is distinctive of New Zealand.

4.5.1 Lizards

There are four species of lizard present around Te Waihora: the common gecko (*Hoplodactylus maculatus*), two species of common skinks (*Leiopisma maccanni* and *Leiopisma nigriplantare polychroma*) which are widely distributed in the South Island and the far rarer spotted skink (*Leiopisma lineocellatum*). Although none of these species is considered threatened, they comprise an important part of the natural heritage of Te Waihora.

4.5.2 Birds

“There are more than 158 species of birds recorded at the lake and bird watchers have added eight more to that, so there are 166 species on record now.”

Colin Hill

The bird life is one of the most distinctive natural features of Te Waihora. Its lake and wetland habitat is possibly unrivalled in New Zealand for the numerous kinds of waterfowl, wading and migratory bird species. Up to 98, 000 birds may be at Te Waihora at one time.

A 1981 review (O'Donnell, 1985) recorded 158 species of birds at Te Waihora, including 133 indigenous species. Te Waihora has the most diverse bird population of any locality in New Zealand representing over half of the total number of bird species recorded in New Zealand. Te Waihora supports significant proportions of New Zealand populations of at least 20 bird species, either all year round or in some seasons. Around 80 species are regular inhabitants of Te Waihora (i.e. recorded at least once a year).

Table 7 lists the significant bird species of Te Waihora under the following criteria:

- ◆ migrant species subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (1979) (see Part 2, section 4.6.3),
- ◆ species' current status according to their threat or otherwise of extinction (Molloy et al. 2001),
- ◆ iwi significance, including taonga species under the NTCSA and other species of importance to Ngāi Tahu (see Part 2, section 0),
- ◆ gamebird species (First and Third schedules, Wildlife Act 1953).

A full list of bird species observed at Te Waihora is included in Appendix 10.

The Canterbury Branch of the New Zealand Ornithological Society is involved in monitoring and bird counts at Te Waihora, including annual winter and summer counts of the wading birds.

Table 7: Significant bird species of Te Waihora

Common Name	Māori Name	Scientific Name	Significance
Australasian bittern	matukuhurepo	<i>Botaurus poiciloptilus</i>	nationally endangered
Australasian/New Zealand shoveler	kuruwhengi	<i>Anas rhynchotis</i>	game bird taonga species
banded dotterel	powhera, tuturiwhatu	<i>Charadrius bicinctus bicinctus</i>	gradual decline taonga species
bar-tailed godwit	kuaka	<i>Limosa lapponica</i>	migrant
black shag	kōau	<i>Phalacrocorax carbo novaehollandiae</i>	sparse taonga species
black stilt	kakī	<i>Himantopus novaezelandiae</i>	nationally critical taonga species
black swan	kakī anu	<i>Cygnus atratus</i>	game bird important to Ngāi Tahu
black-billed gull	akiaki, katatē	<i>Larus bulleri</i>	serious decline
black-fronted tern	tara	<i>Sterna albobriata</i>	serious decline taonga species
black-tailed godwit	kuaka, rakakao	<i>Limosa limosa</i>	migrant
broad-billed sandpiper		<i>Limicola falcinellus</i>	migrant
brown teal	pateke/ tarawhatu	<i>Anas aucklandica chlorotis</i>	taonga species
Canada goose		<i>Branta canadensis</i>	game bird
caspian tern	taranui	<i>Sterna caspia</i>	nationally vulnerable taonga species
curlew sandpiper		<i>Calidris ferruginea</i>	migrant
great knot		<i>Calidris tenuirostris</i>	migrant
grey duck	pārera	<i>Anas superciliosa superciliosa</i>	taonga species game bird
grey phalarope		<i>Phalaropus fulcarius</i>	migrant
grey teal	tete	<i>Anas gracilis</i>	taonga species
kingfisher	kōtare	<i>Todiramphus sanctus</i>	taonga species
little shag	kawaupaka kōau	<i>Phalacrocorax melanoleucos brevirostris</i>	taonga species
little stint		<i>Calidris minuta</i>	migrant
little tern	tara	<i>Sterna albifrons</i>	taonga species
mallard duck		<i>Anas platyrhynchos</i>	game bird
marsh crake	koitareke	<i>Porzana pusilla affinis</i>	sparse
marsh sandpiper		<i>Tringa stagnatilis</i>	migrant
paradise shelduck	pūtakitaki	<i>Tadorna variegata</i>	taonga species game bird
pied stilt	poaka	<i>Himantopus himantopus leucocephalus</i>	taonga species

Common Name	Māori Name	Scientific Name	Significance
pukeko	pūkeko	<i>Porphyrio melanotus</i>	game bird
	pākura		taonga species
red-necked phalarope		<i>Phalaropus lobatus</i>	migrant
sanderling		<i>Sterna albifrons</i>	migrant
Southern black-backed gull	karoro	<i>Larus dominicanus dominicanus</i>	taonga species
spotless crane	pūtoto	<i>Porzana tabuensis plumbea</i>	sparse
turnstone		<i>Arenaria interpres</i>	migrant
white heron	kōtuku	<i>Egretta alba modesta</i>	nationally critical taonga species
white-fronted tern	takitaki, tara	<i>Sterna striata striata</i>	gradual decline
wrybill	ngutu-parore	<i>Anarhynchus frontalis</i>	nationally vulnerable

4.5.3 Gamebirds

Certain bird species are declared to be game under section 4 of the Wildlife Act 1953. Those species present at Te Waihora are identified in Table 7 and include Canada goose, paradise shelduck/pūtakitaki, pūkeko, black swan, grey duck, Mallard duck (including any cross of those duck species with any other species, variety, or kind of duck), New Zealand shoveler and paradise duck. Canada goose and mallard duck are introduced. Black swan, once considered an introduced species, is now generally accepted as an indigenous species whose population was enhanced by Acclimatisation Society introductions from Australian populations (Holdaway, Worthy & Tennyson, 2001).

4.5.4 Fish

Te Waihora is rich in both abundance and species of fish life. Many of the fish are migratory and spend only part of their life in Te Waihora and its tributaries and the rest at sea. Consequently, access to the sea and river tributaries and timings and duration of lake openings, play an important role in fish species diversity in Te Waihora.

In species numbers and probably also in biomass, fish in Te Waihora are dominated by indigenous species. There are 15 indigenous and five exotic species of fish recorded in Te Waihora. Additional species are occasionally present or transitory and others are found in the near tributaries. Coarse fish such as perch, tench and goldfish are also present. Significant fish species within Te Waihora for cultural, ecological, recreational and commercial purposes are listed in Table 8, including threat extinction rankings from Molloy, J. et al. (2001). Visiting marine species are occasionally present and include basking shark, elephant fish, red cod, sunfish and seahorses. Marine mammals such as elephant seals have also been seen in the lake. Two pest fish species are also present (see Part 1, section 4.5.6).

Table 8: Fish species of Te Waihora and tributaries

Common Name	Māori Name	Scientific name	Present in Lake	Present in Tributaries	Significance ¹⁵
banded kōkōpu		<i>Galaxias fasciatus</i>	✓	✓	important to Ngāi Tahu recreational catch not threatened
black flounder	mohoao	<i>Rhombosolea retiaria</i>	✓	✓	important to Ngāi Tahu commercial not threatened
brook char		<i>Salvelinus fontinalis</i>		✓	introduced
brown trout		<i>Salmo trutta</i>	✓	✓	introduced recreational sports fish
Canterbury galaxies		<i>Galaxias vulgaris</i>		✓	not threatened
Canterbury mudfish	kōwaro	<i>Neochanna burrowsius</i>		✓	taonga fish species nationally endangered
cattfish		<i>Ameiurus nebulosus</i>	✓	✓	introduced pest fish
common bully	kokopara	<i>Gobiomorphus cotidianus</i>	✓	✓	not threatened
common shrimp			✓	✓	taonga fish species
common smelt	paraki/ ngāiore	<i>Retropinna retropinna</i>	✓	✓	taonga fish species not threatened
common sole	pātiki rori	<i>Peltorhamphus novaezeelandiae</i>	✓		occasional visitor
freshwater crayfish	waikōura	<i>Paranephrops</i>		✓	possibly locally threatened
freshwater mussels	kākahi	<i>Hyridella</i>		✓	possibly locally threatened important to Ngāi Tahu
giant bully	kokopara	<i>Gobiomorphus gobioides</i>		✓	taonga fish species not threatened
goldfish		<i>Carassius auratus</i>	✓	✓	introduced
greenback flounder	pātiki	<i>Rhombosolea tapirina</i>	✓		important to Ngāi Tahu commercial occasional visitor
hake		<i>Merluccius australis</i>	✓		introduced occasional visitor
īnanga	īnanga	<i>Galaxias maculatus</i>	✓	✓	important to Ngāi Tahu recreational catch not threatened
kahawai		<i>Arripis trutta</i>	✓		not threatened

¹⁵ Including threat extinction rankings from Molloy, J (et al.) 2001.

Common Name	Māori Name	Scientific name	Present in Lake	Present in Tributaries	Significance ¹⁵
koaro		<i>Galaxias brevipinnis</i>	✓	✓	important to Ngāi Tahu recreational catch not threatened
lamprey	kanakana	<i>Geotria australis</i>	✓	✓	important to Ngāi Tahu transitory not threatened
long-finned eel	tuna	<i>Anguilla dieffenbachia</i> and <i>A. dieffenbachii</i>	✓	✓	important to Ngāi Tahu commercial nationally threatened (gradual decline)
perch		<i>Perca fluviatilis</i>	✓	✓	coarse fish recreational sports fish
quinnat/ chinook salmon		<i>Oncorhynchus tshawytscha</i>	✓	✓	introduced recreational sports fish occasional visitor
rudd		<i>Scardinius erythrophthalmus</i>	✓	✓	introduced noxious pest fish
sand flounder	pātiki	<i>Rhombosolea plebeia</i>	✓		important to Ngāi Tahu commercial
short-finned eel	tuna	<i>Anguilla australis</i>	✓	✓	important to Ngāi Tahu commercial not threatened
sprat		<i>Sprattus antipidum</i>	✓		introduced occasional visitor
tench		<i>Tinca tinca</i>	✓	✓	coarse fish Recreational sports fish`
torrentfish	piripiripōhatu	<i>Cheimarrichtys fosteri</i>	✓	✓	taonga fish species
upland bully		<i>Gobiomorphus breviceps</i>		✓	not threatened
yellowbelly flounder	pātiki tōtara	<i>Rhombosolea leporina</i>	✓		important to Ngāi Tahu commercial
yellow-eyed mullet	aua	<i>Aldrichetta forsteri</i>	✓		important to Ngāi Tahu commercial not threatened

Tuna : Eels

There are two species of freshwater eel in Te Waihora: the long-finned eel and the short-finned eel. Both species are indigenous and while the short-finned eel is also found in Australia, the long-finned eel is endemic to New Zealand. Eels prefer water with plentiful cover such as raupō, weedbeds, overhanging grasses and other vegetation, as well as undercut banks and submerged debris. Eels feed on invertebrates, bullies and other small fish. There has been a shift in diet as small eels now feed predominantly on midge fly larvae as opposed to the snails that were present on the weedbeds (see 4.4.1). Of all the fish species in Te Waihora, eels are the most valued by Ngāi Tahu (see page 42 for the creation story of Tuna).

Although it is likely that short-finned eels would have always dominated Te Waihora, the proportion of long-finned eels has substantially reduced over the years¹⁶. This is a concern for biodiversity, mahinga kai and other cultural values, and is a reflection of the health of the fishery. The Department has recently identified the species as being “nationally threatened (gradual decline)”¹⁷ because there is a predicted national decline of five to thirty percent in the total population in the next ten years.

Decline is thought to be due to fishing-related impacts nationwide, leading to higher mortality and reduced numbers of large females. Other factors influencing the predicted continued decline include national recruitment decline, fish passage blockages reducing available habitat and sex ratio biases (increasing abundance of male eels). This is a significant concern to Ngāi Tahu as long-finned eels are an important customary species and a kaitiaki (see Part 2, section 2.4).

Pātiki : Flounder

Pātiki belong to the flatfish family, of which five species are recorded in Te Waihora. The three species commonly found are the black flounder/mohoao (most common), yellow-belly flounder/pātiki tōtara and the sand flounder/pātiki. These species form an important customary fishery for Ngāi Tahu (see Part 2, section 2.6) and are also commercially fished (see Part 2, section 7.1.1).

Recruitment of flounder into Te Waihora and the relative abundance of each species is dependent on lake opening times and durations coinciding with periods of fish immigration.

Īnanga : Whitebait

Whitebait enter Te Waihora when or if the lake is open to the sea during spring and early summer. There are five species of endemic fish that make up what is commonly known as whitebait in New Zealand: īnanga, koaro, banded kōkōpu, giant kōkōpu and shortjaw kōkōpu. Īnanga is the most common species in whitebait catches in Canterbury. Koaro and banded kōkōpu are the next most common. Giant kōkōpu and shortjaw kōkōpu are rarely caught in Canterbury and no adults of shortjaw kōkōpu have been found in Canterbury.

Most īnanga spawn in autumn when adults migrate downstream to estuarine areas during the highest spring tides. It is possible that within Te Waihora the variations in lake level that occur as a result of

¹⁶ Jellyman, Chisnall and Todd (1995).

¹⁷ Molloy et al (2001).

wind replace the spring tides that usually initiate the spawning. Eggs are laid among submerged rushes and grasses. The only known spawning site in the Te Waihora catchment is in the lower reach of Waikekewai Creek.

The whitebait fishery is of importance to Ngāi Tahu as mahinga kai. Whitebait is an important recreational fishery and some are caught and sold commercially. Its abundance made it part of the staple diet and features prominently in many stories and traditions regarding fishing. The effects of drainage, lack of co-ordinated management, fishing pressure and limited knowledge of the fishery have led to serious decline in the whitebait fishery.

Trout

Brown trout were introduced to the catchment in the 1870s by the North Canterbury Acclimatisation Society as a sport fish. The fishery quickly flourished in the Selwyn River/Waikirikiri to become one of the finest trout fisheries in New Zealand. Although they have co-existed with indigenous freshwater fish species for many years now, trout do compete with the indigenous species, such as the kōkōpu (and once with the now extinct grayling), and feed commonly on smaller fish species. Both trout and indigenous fish however, have been adversely affected by deteriorating environmental conditions; trout more so.

4.5.5 Invertebrates

A fairly simple aquatic community of invertebrates exists in Te Waihora. The dominant species are the larvae and pupae of the large chironomid *Chloronomus zelandicus* and the larvae of the damselfly. There is a super-abundance of adult midges during the spring and summer after they emerge. They are then available as food for fish and birds and also contribute to the landscape values of the area (see Part 2, section 2.6).

Also present, living on the bottom of the lake or attached to the stems and leaves of larger plants, are amphipods, snails (primarily *Potamopyrgus antipodarum*), isopods, ostracods, Trichoptera, Coleoptera, Lepidoptera and Odonata. Little is known about the invertebrate fauna of Te Waihora, or the terrestrial invertebrate fauna, apart from insects that have aquatic larvae, such as midges. The role these invertebrates play in the food supply for other species present at Te Waihora, such as eels, other fish and bird species requires further research.

4.5.6 Introduced animals and animal pests

Introduced animals within the Joint Management Plan Area include rabbits and hares, hedgehogs, ferrets, weasels, stoats, cats, rats and possums. These species impact on indigenous plants and animals through predation and disturbance. Rabbits are identified as an “animal pest” in the *Canterbury Regional Pest Management Strategy* (1998).

Domestic animals, primarily sheep and cattle, are also present. Domestic animals can impact on indigenous plants and animals, especially lake margin vegetation through grazing and trampling. They can cause lake and stream bank instability, increasing erosion and reducing biodiversity.

Good land management removes or reduces domestic stock impacts on sensitive areas and their indigenous flora and fauna. Grazing sheep can play a role in managing introduced plant species, such as pasture grasses, by preventing their invasion and displacement of indigenous plant species, or by allowing indigenous species to recover sufficiently to dominate the introduced species.

Pest fish species such as rudd, koi carp, gambusia and catfish are an increasing concern for waterways in New Zealand. Rudd are present in Te Waihora and surveys are needed to confirm the likely presence of catfish. Although koi carp and gambusia have not yet been detected in Te Waihora, they remain a significant potential threat.

4.6 Te Waihora significance - within the takiwā, nationally and internationally *Te hiranga o Te Waihora ke te takiwā o Ngāi Tahu, Aotearoa me te ao*

4.6.1 Ngāi Tahu takiwā

Within the Ngāi Tahu takiwā, Te Waihora is a mahinga kai of great tribal importance. This is highlighted through the Ngāi Tahu Claim, the recommendations of the Waitangi Tribunal and the resultant Settlement legislation. Te Waihora is important for its historic abundance of food and other resources. These resources have sustained Ngāi Tahu for generations (see Part 2, section 2.6).

To recognise the importance of sites such as Te Waihora, Te Rūnanga o Ngāi Tahu has proposed in its tribal vision *Ngāi Tahu 2025* the creation of mahinga kai cultural parks. This concept is based on Papatipu Rūnanga taking a lead in producing natural resource management plans, undertaking their own monitoring of the environment, protecting and restoring their connection with significant sites and managing and/or owning such areas.

4.6.2 National significance

Recognition of the national significance of Te Waihora has occurred through several processes.

O'Donnell (1985) identified Te Waihora as being nationally important for many reasons, including:

- ◆ The total number of birds at any one time.
- ◆ The number of bird species.
- ◆ The presence of significant proportions of New Zealand's populations of some 20 bird species.
- ◆ Habitat provision for endemic bird species that have restricted distributions.
- ◆ Habitat provision for other indigenous species that are migratory within New Zealand.

In 1990 the National Water Conservation (Lake Ellesmere) Order was made in recognition of the outstanding wildlife habitats provided by Te Waihora.

The New Zealand Biodiversity Strategy 2000 says “our indigenous biodiversity - our native species, their genetic diversity and the habitats and ecosystems that support them - is of huge value to New Zealand and its citizens; to our economy, our quality of life and our sense of identity as a nation”. The Strategy also reflects New Zealand’s commitment to help stem the loss of biodiversity worldwide. The Strategy recognises that the most threatened ecosystems at a national level are those in lowland areas. Remnants include lowland wetlands such as Te Waihora.

Based on this previous work, the *Canterbury Conservation Management Strategy* (2000) recognises Te Waihora as the most important wetland habitat of its type in New Zealand. Te Waihora has long featured in unpublished government department lists of nationally important waterbodies, dating back to the introduction of Water Conservation Order legislation through the Water and Soil Conservation Amendment Act 1981. It remains on the Department’s list of nationally important water bodies.

4.6.3 International significance

The international significance of Te Waihora is highlighted by its relevance within New Zealand in respect of a number of international conventions:

Ramsar Convention on Wetlands of International Importance

The Ramsar Convention on Wetlands is an intergovernmental treaty that provides a framework for national action and international co-operation for the conservation and wise use of wetlands and their resources. The Convention was signed at Ramsar, Iran, in 1971 and was ratified by the New Zealand Government in December 1976.

The purpose of the Ramsar Convention is *“The wise use of wetlands and their sustainable utilization for the benefit of humankind in a way compatible with the maintenance of the natural properties of the ecosystem”*, as measured according to established criteria.

Compliance with any one of the criteria justifies designation as a “Wetland of International Importance” under the Ramsar Convention. Although Te Waihora meets all of the Convention’s criteria it is not a designated wetland. Especially relevant criteria for Te Waihora relate to:

- ◆ Waterfowl and other bird life.
- ◆ Indigenous lakeshore wetland vegetation, including the diversity of species permanently or frequently resident.
- ◆ The variety of available micro-habitats.
- ◆ The importance of Te Waihora as a staging ground for transient visitors.
- ◆ The large numbers of endemic species for which Te Waihora provides habitat.

The Convention on Migratory Species of Wild Animals

This Convention promotes co-operation between signatory parties to identify, understand and conserve endangered migratory species and their habitats, and to take action to prevent other migratory species becoming endangered. The Government signed the Convention in

September 1999 and it came into effect for New Zealand on 01 October 2000.

There are a number of migratory bird species present at Te Waihora that are subject to this convention (see Table 7).

Convention on Biological Diversity

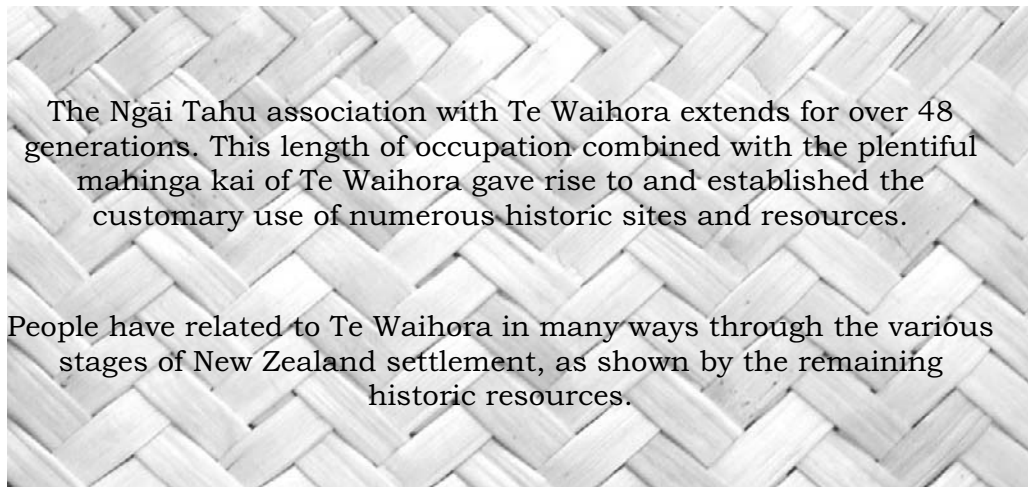
New Zealand ratified the Convention on Biological Diversity in 1994. In response to the convention the Government produced *The New Zealand Biodiversity Strategy 2000* (see 4.6.2 above).

The Convention has three main aims:

- ◆ The conservation of biological diversity.
- ◆ The sustainable use of its components.
- ◆ The fair and equitable sharing of benefits arising from the use of genetic resources.

5 HISTORIC RESOURCES

TAONGA PURI MAHARA



Historic resources include both the physical reminders of our history such as archaeological sites, buildings and structures and the stories and place names associated with that history. The historic area of Te Waihora includes both the Joint Management Plan Area and other areas connected to those lands and their resources in some way.

5.1 Māori history *Ki tā te tangata whenua*

The date of the first settlement of New Zealand has been widely debated, although it is now acknowledged that first settlement from central Polynesia is unlikely to have occurred before about A.D 1200 (*State of New Zealand's Environment*, 1997).

The story of Te Waihora starts with that of the habitation of *Te Wai Pounamu*, the South Island, and begins with the arrival of the Waitaha people on the Uruao waka. Ngāi Tahu oral traditions tell of Rākaihautū, the captain of this waka, who beached his canoe at *Whakatū* (Nelson) and divided the new arrivals in two, with his son Te Rakihouia taking one party to explore the east coastline and Rākaihautū taking another southwards by an inland route over the Southern Alps/Kā Tiritiri o te Moana. On his inland journey southward, Rākaihautū used his famous *kō* (digging stick) to dig the principal lakes of *Te Wai Pounamu*. Te Rakihouia discovered the coastal lake (now Te Waihora) on his coastal journey south and in doing so claimed the abundant resources of the area for his father and hence named the lake *Te Kete Ika a Rākaihautū* - the fish basket of Rākaihautū.

Te Rakihouia set about building eel weirs in the lake and thus named the barrier (Kaitorete Spit) that divided the lake from the sea, *Kā Poupou o Te Rakihouia*, its narrowing shape from Horomaka channelling eels towards Taumutu where they crossed the barrier to migrate to sea. Subsequent eel weirs around the lake and their associated settlements became occupation sites.

Generations later, the Ngāti Māmoe people arrived from *Te Ika a Maui* (the North Island), settling among the Waitaha. A prominent man of this tribe was Tutekawa, who in establishing his home at *Waikākahi* (Birdlings Flat), pronounced Te Waihora as his own hence the lake's second name, Te Kete Ika a Tutekawa - the fish basket of Tutekawa.

After Tutekawa killed two senior Ngāi Tahu women, Ngāi Tahu came from the north in pursuit of Tutekawa and his people. It was during these migrations that Te Ruahikihiki at his pā, Ōmihi, in Goose Bay Kaikōura, came to hear of the large lake in the south and its plentiful resources and mahinga kai. He proclaimed Orariki, Taumutu his home and thus the resources of the lake as his own.

The site of Te Ruahikihiki's Orariki pā is the Hone Wetere Church at Taumutu and its associated urupā. Kaikanohi, a fishing camp and settlement on Kaitorete Spit provided a place to reside when travelling down the Spit if the lake was open. Evidence of tool making, pounamu working and bird and fish preservation have been found at the site, which is now subject to erosion from the sea. Te Pā o Moki, was established as an outpost for the son of Te Ruahikihiki and the current whare, Ngāti Moki, was built on native reserve at Taumutu as a rūnanga hall in 1893. The earth mound defences at both Orariki and Ngāti Moki Marae remain clearly visible today.

These historic travels symbolise the links between the cosmological world of the gods and present generations, reinforce tribal identity, solidarity and continuity between generations, and document the events that shaped the environment of *Te Wai Pounamu* and Ngāi Tahu as an iwi.

5.1.1 Wāhi taonga

With this history of settlement, occupation and resource use, places of importance to the tribe, local hapū and whānau were shaped. For Ngāi Tahu, the term wāhi taonga refers to places that hold the respect of the people in accordance with kawa and tikanga. Some sites are of tribal significance while others are important to the hapū and whānau who visited, lived at, or had special affiliations to that area. Prominent hills, landforms, springs, remaining areas of indigenous vegetation and archaeological sites are examples of physical taonga. Recorded Māori archaeological sites around Te Waihora include pā sites (fortified settlements), kāinga (undefended settlements), urupā (burial grounds and single burial sites), borrow pits (small quarries from which sand or gravel was removed and added to gardens to improve the soil for kumara growing), shell middens, cooking ovens, storage pits and isolated artefact findspots.

Other taonga can include wāhi tapu (sacred sites), pūrākau (stories), wāhi ingoa (place names) or other associations that those living today have with the tūpuna (ancestors) who have gone before. Places and their names formed vast oral 'maps' that were an integral part of the culture of Ngāi Tahu. Figure 11 shows the wealth of Ngāi Tahu place names as recorded by Riki Ellison, a Ngāi Tahu elder, in 1979. Knowledge of traditions, whakapapa and histories associated with places and their names helped to guide Ngāi Tahu in their travels throughout the takiwā. Wāhi ingoa continue to tie Ngāi Tahu to the land and reinforce tribal identity and associated histories (see Part 2, section 3.4).

Wāhi tapu is a term applied to all sacred sites associated with tapu (sacredness), or areas held in reverence according to tribal custom and history. Of all wāhi tapu, urupā (burial sites) are the most significant. Wāhi tapu areas may also be associated with the creation stories of tangata whenua or a particular event such as a battle or ceremony. It may also be a place where whenua (placenta) is buried or a place where a certain valued resource is found.

Kaituna Lagoon is an area of importance for many Ngāi Tahu as this area provided access to the vast resources of Te Waihora from Banks Peninsula/*Horomaka*. Similarly, Kaitorete Spit provided an important access way between Banks Peninsula/*Horomaka* and the Canterbury Plains/*Ngā Pākihi Whakatekateka o Waitaha*.

5.2 European history *Ki tā te pākehā*

5.2.1 Settlement and agriculture

The name “Ellesmere,” the European name given to both Te Waihora and formally the county within which it is situated, comes from the Earl of Ellesmere. He was a member of the Canterbury Association who promoted the early settlement of Canterbury, but he never came to New Zealand. Sealers and whalers were probably the first European visitors to see Te Waihora, with William Gilbert, an Englishman from an American whaler, being in 1838 the first recorded European visitor to Taumutu. An Australian party of eight with stores and stock, led by Herriot and McGillivray and accompanied by surveyors, passed through Taumutu in 1840 enroute from Goashore (Oashore Bay, Banks Peninsula) to settle on the plains. Bishop Selwyn in 1844 also passed through as he made his well-recorded walk from Peraki to Otago.

Prominent Māori settlements of the time were used to mark the land purchases in the area. For example, although long debated, the area of Kemps purchase was defined by a straight line from Mount Grey/*Maungatere* to Kaiapoi to Otumatua (a spur on the Port Hills) and then to Taumutu. Although this line transects Te Waihora, the whole of Te Waihora was taken to be part of the purchase in 1848 and the swamp and tussock lands surrounding Te Waihora were taken up in large farming runs.

The wetlands surrounding Te Waihora (Lake Ellesmere) were gradually drained for agriculture and the vast tracts of forest that still covered much of Banks Peninsula/*Horomaka* were felled for timber and to provide land for sheep grazing, dairying and cocksfoot growing. Variations in lake level have been a concern to adjacent landusers since early Māori occupation when the lake was first artificially opened to the sea, using digging sticks (*kō*) and scoops (*tākoko*), to prevent the flooding of the adjacent *pā* at Taumutu and other lake edge settlements. By the 1860s, lake-shore landowners wanted lake level control and a number of parties were involved in opening the lake to the sea, initially using shovels and horse drawn scoops near where Ngāi Tahu had traditionally opened the lake, albeit at higher lake levels, for defence and protection of the surrounding land. European settlers proposed a permanent lake opening as early as 1867. However, as this was unattainable, the Selwyn County Council first let tenders in 1877 to artificially open the lake using horse drawn scoops and a subsequent lake opening/lake levels’ regime was established by the Ellesmere Lands Drainage Board in 1903 (see Part 2, section 4.2.2).

Drainage of the surrounding area became a focus with the building of the Halswell Canal in 1889 and the straightening and stopbanking of the Selwyn River/Waikirikiri from the late 1940s. From the 1860s the large runs around Te Waihora were subdivided and in 1894 further Crown Land was balloted for farming.

The 1930s saw the establishment of the Lake Settlers’ Association to give a united voice on lake edge farming issues. The Association was (and is today) made up of farmers whose properties are rated to fund the lake opening. During this period, various schemes to prevent flooding and improve drainage were also developed by individuals and

agencies, including Nutt's stopbanking and Osborne's pumping schemes hence Nutt's and Osborne's drains.

Transport networks slowly developed to link the area and its new industries to the Christchurch urban area.

5.2.2 Transport and the timber industry

The extensive wetlands of Te Waihora, hard against Banks Peninsula/*Horomaka*, were a barrier to early land transport. Consequently a main travel route for Māori and Europeans was Kaitorete Spit and the river flats to the west and north of Te Waihora.

Boat transport became important on the lake waters and rivers. Farmers William Birdling and Joseph Price used boats in the 1850s to travel between their farm lands beside the lake. In 1864, White & Co established a sawmill at Little River for Christchurch and the nearby timber markets. The sawn timber was punted along Lake Forsyth/*Wairewa* and, depending on the lake level of Te Waihora, taken by tramline to *Birdlings Point* or *Stony Point*. At very low lake levels, drays were used to transport the timber down to a wharf at the Timber Depot and Landing Reserve (see Figure 4, unit M36 486). From the lakeshore, shallow-draught paddle steamers carried and rafted the timber to Taumutu, Harts Creek/*Waitatari* and the Selwyn River/*Waikirikiri* - a major timber yard developed at Harts Creek (Timber Yard Point). Although there is no remaining physical evidence at the site, the name reflects this historic use. Historically lake depth facilitated the use and enjoyment of sailing boats within the lake, particularly around the lake opening site.

An early conflict regarding Te Waihora occurred between farmers wanting low lake levels and the saw millers favouring high lake levels for shipping.

In conjunction with Coop's sawmill, William White was authorised¹⁸ to construct a tramline from Little River to Prices Long Point and from Christchurch to *Ahuriri Point*. A linking tramway was required should water transport not suffice, but it never eventuated. Development of other Little River area sawmills prompted the construction of the Little River branch railway.

The Ellesmere and Forsyth Reclamation and Railway Trust Act 1876 was introduced to provide for the survey of Lakes Ellesmere and Forsyth and the constitution of a corporation body for the purposes of draining and reclaiming the lakes and constructing the railway (opened in 1882). The "Ellesmere and Forsyth and Akaroa Trust" was formed so that half of the proceeds from the sale of the first 50, 000 acres of Crown "wastelands" (Te Waihora/Lake Ellesmere and Lake Forsyth/*Wairewa*) sold after the passing of the Act would be paid to the Trust for the construction and maintenance of the line.

As a result of the development of better roads (the roadway from Christchurch to Little River was opened for traffic about 1870) and the relaxation of restrictions on road transport, the use of the line declined and passenger services ceased on 12 April 1951. The line was finally closed to traffic on 30 June 1962. The Little River Railway embankment remains today as a reminder of this history.

¹⁸ White's Little River Tramway Ordinance, 1866

The significance of this built landscape feature and the changes that the associated land reclamation and railway construction brought to the Te Waihora/Lake Ellesmere area are worthy of emphasis in the history of the area.

5.2.3 Fishing

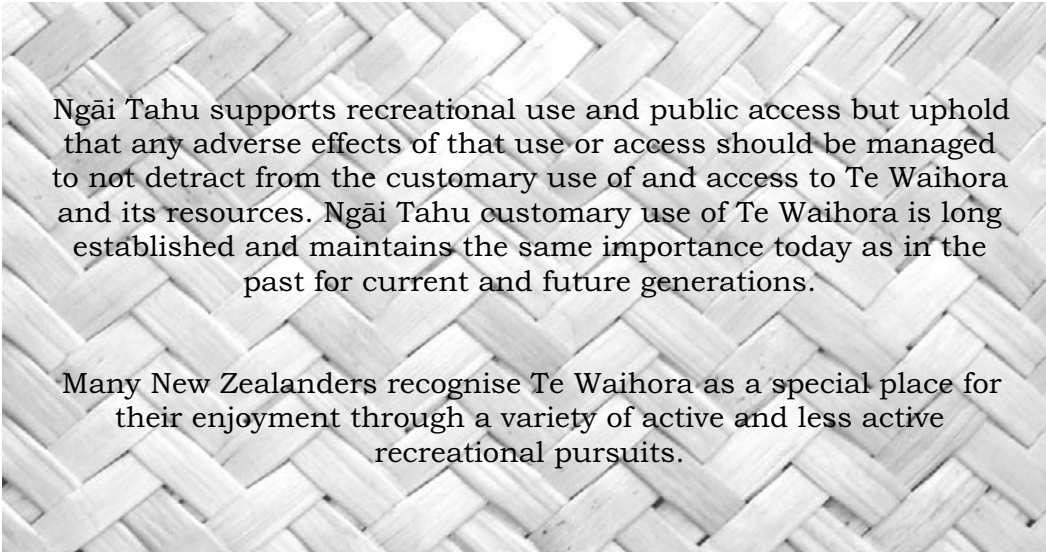
Hapū at Te Waihora were undertaking extensive trade in fish before European settlement. This continued with the supply of various fish to the early Christchurch market. In 1864, European fishing of flounder began and in 1865, Thomas Robelli, an Italian, settled at Te Waihora as a commercial fisherman. At one time, as many as 250 men and 20 boats were fishing from Taumutu.

Brown trout, after their introduction by the then North Canterbury Acclimatisation Society, were also commercially harvested from Te Waihora and its tributaries, particularly Selwyn River/Waikirikiri, for sale in the Christchurch markets in the late 1880s.

Commercial flounder and freshwater eel fisheries later flourished. In 1979, flounder from Te Waihora provided around 5 percent of the total New Zealand flounder catch. The peak catch in 1978 was 216 tonnes. The commercial eel fishery grew rapidly in the 1970s in response to overseas demand. During this time, Te Waihora was the most important commercial eel fishery in the country. The commercial catch of eel peaked in 1976 at 846 tonnes. Yellow-eyed mullet also formed a locally important fishery.

This strong presence of fishing activity at Te Waihora can be seen through the presence of Fishermans Point/*Whakamātakiuru* as a lookout and fishing nohoanga for Ngāi Tahu and later as a more permanent settlement and base for European fishing activity on the lake.

6 RECREATIONAL USE AND PUBLIC ACCESS *MAHI-Ā-TĀKARO HOKI ME TE WHAI WĀHI O TE HĀPORI*



Ngāi Tahu supports recreational use and public access but uphold that any adverse effects of that use or access should be managed to not detract from the customary use of and access to Te Waihora and its resources. Ngāi Tahu customary use of Te Waihora is long established and maintains the same importance today as in the past for current and future generations.

Many New Zealanders recognise Te Waihora as a special place for their enjoyment through a variety of active and less active recreational pursuits.

6.1 Recreational use *Ngā mahi tākaro*

Te Waihora is appreciated as a high quality recreational area by many of the people who use it. It is an ecosystem type not usually favoured for high levels of recreational activity. With a growing national recognition of wetland values however, and the provision of facilities and information to help enjoy them, the levels of use of such wetland areas will likely increase.

Te Waihora has some strong recreational features, such as the opportunities to observe rare migratory wader bird species, extensive game bird shooting and fishing. While it is easily accessible from Christchurch the regional community's knowledge of the area seems to be limited. Accessibility of the lake margin is good in terms of legal provisions but variable on the ground and there are few visitor facilities, such as signage.

A large part of the recreational attraction of Te Waihora is the undeveloped, semi-remote experience it offers, similar to that on the hill top areas of the Port Hills and Banks Peninsula/*Horomaka*, in close proximity to Christchurch. In part this is aided by the wide, open landscape of Te Waihora. In terms of the approach in *The Recreation Opportunity Spectrum Guidelines for Users* (1993) used by the Department in recreation planning, Te Waihora is clearly a "front country" area, but it also exhibits characteristics seen in "backcountry" areas. Recreation management by the Department involves the retention where appropriate of the range of recreation opportunities of an area.

Recreational activity also encompasses some customary use, especially extractive uses such as game bird hunting and recreational fishing. While these activities are considered as recreation, and in certain circumstances require a permit, Ngāi Tahu regard them as customary use. This is particularly the case where a Fish and Game hunting permit is obtained for the gathering of native gamebirds. Section 2.6 outlines mahinga kai activities in more detail.

6.1.1 Recreational activities

Game bird shooting

Te Waihora is the most popular single area in the region and in New Zealand for game bird hunting. It regularly supports in excess of 30 000 waterfowl. Mallard ducks are the most hunted game bird during the hunting season months of May and June. Canada goose, black swan and shoveler duck are also present and hunted from July to November. There is a special Canada goose season in February and March, with Te Waihora providing the best goose hunting in New Zealand at this time.

Shooters' maimai have become a feature of the Te Waihora landscape (see Part 2, section 3.2). This high use and importance for gamebird shooting in part resulted in the Maimai Agreement (see Part 1, section 4.3.1).

Recreational fishing

Recreational fishing encompasses a range of different motivations, including sport and sustenance. Recreational fishing also encompasses some customary fishing. Where customary catches are within recreational bag limits or regulations and therefore do not require a customary permit¹⁹, they continue to be managed as recreation. While these activities are considered as recreation, Ngāi Tahu regard them as customary use.

Recreational fishing in Te Waihora and its tributaries includes fishing of brown trout, flounder, eel, coarse fish species such as perch, and seasonal whitebaiting when the lake is open to the sea. Good numbers of sea-run trout are present when the lake is open to the sea and brown trout fishing in the lower reaches and at the mouths of inflowing streams can be excellent. These rivers are known to contain very large fish.

Bird watching/ ornithology

Te Waihora provides an internationally important area for bird watching because of the potential to view relatively rare, mostly migratory, bird species. The only New Zealand sighting of a number of species has been at Te Waihora. Although there are low numbers of people who use the area for bird watching, it is internationally recognised and visited. Popular areas include the Greenpark Sands, Kaituna Lagoon and Harts Creek/ *Waitatari*.

Water based recreation

Parts of Te Waihora are used for water sports, including water skiing, power boating, jet skiing (personal water craft), windsurfing, kitesurfing and kayaking, although these activities are at considerably lower levels than in past years. This is probably because of the availability of alternative waterbodies. The Ellesmere Aquatic Club is based at Lakeside Domain.

Other recreational activity

Other recreational activity at Te Waihora includes low environmental impact activities such as walking, photography, enjoying the wide-open spaces and picnicking.

¹⁹ Under the Kaimoana (Māori Customary Non-Commercial Fishing) Regulations 1998.

6.1.2 Recreational areas

Game bird hunting

Game bird shooting occurs right around the lake, with mai mais generally in water less than 600 millimetres deep at high lake levels, primary areas are:

- ◆ Adjoining Lower Selwyn Huts, within the Joint Management Plan Area.
- ◆ Greenpark Sands, within the Joint Management Plan Area.
- ◆ Yarrs Flat Wildlife Management Reserve and adjoining Joint Management Plan Areas.
- ◆ 'Wards' and 'Williams' Wildlife Management Reserves, within the Joint Management Plan Area.
- ◆ Irwell River/*Waiwhio* mouth, within the Joint Management Plan Area.
- ◆ The Boggy Creek area, on North Canterbury Fish and Game Council land, Selwyn District Council lakebed and within the Joint Management Plan Area.
- ◆ Lakeside Wildlife Management Reserve, within the Joint Management Plan Area.
- ◆ Adjoining Harts Creek Wildlife Refuge, within the Joint Management Plan Area and on adjoining freehold lands.
- ◆ Kaitorete Spit shoreline, within the Joint Management Plan Area and on council endowment leasehold land.
- ◆ Kaituna Lagoon and adjoining areas within the Joint Management Plan Area, legal roads and freehold lands accessed from Rocky Point and Willow Point off SH75.

Recreational fishing

Primary areas currently used for recreational fishing are:

- ◆ The Selwyn River/Waikirikiri lower reaches, adjacent to Selwyn Wildlife Management Reserve.
- ◆ The LII River/Ararira, adjacent to Yarrs Flat Wildlife Management Reserve.
- ◆ The mouth of Harts Creek/Waitatari, Harts Creek Wildlife Management Reserve.
- ◆ Halswell River/Huritini and canal mouth, bordered by conservation area.
- ◆ Irwell River/*Waiwhio* mouth, bordered by conservation area.
- ◆ Lake opening area, Ngāi Tahu lakebed.
- ◆ The Kaituna River lower reaches and mouth.
- ◆ Various lake areas for eel, flounder, mullet and whitebait.

Bird watching/ornithology

Primary areas currently used for bird watching are:

- ◆ Greenpark Sands off Embankment Road and Jarvis Road.
- ◆ Yarrs Flat Wildlife Management Reserve.
- ◆ Harts Creek Wildlife Refuge.
- ◆ Kaituna Lagoon.
- ◆ The western end of Kaitorete Spit.

November to February is the preferred time for bird watching on the lake, although it also occurs in March/April and September/October. These times mostly relate to the presence of migratory wading birds. Bird watching by the general public is likely to occur throughout the year from a few vantage points, especially those along State Highway 75.

Other recreational activities

Other recreational activities, such as picnicking, photography and generally enjoying the wide-open spaces, also occur around Te Waihora at various places. The Harts Creek walkway provides access to part of the western shore of Te Waihora and the bird hide. Areas commonly used include the Selwyn delta, Kaituna Lagoon from the State Highway, Lakeside Domain, Fishermans Point/*Whakamātakiuru*, Kaitorete Spit and Greenpark Sands, especially from the end of Embankment Road.

A walking/cycling “Railtrail” is being developed between Christchurch and Little River. The Railtrail will follow the historic railway embankment between Motukarara and Little River, will improve access and could significantly increase recreational use of this part of the Joint Management Plan Area.

Water based recreation

Most water sports on Te Waihora take place around Timber Yard Point/Lakeside Domain, a recreation reserve administered by the Selwyn District Council. The Ellesmere Aquatic Club is situated here. Waterski, personal watercraft and yachting areas are specified under Environment Canterbury’s navigational safety bylaws for inland waters. Windsurfing and kitesurfing also occur from the Domain. A low level of kayaking, canoeing and rowing occurs on and near the lower reaches of the Selwyn/Waikirikiriri, LII/*Ararira* and Halswell/*Huritini* Rivers. Boats are also used by some gamebird shooters and fishers.

Huts

Recreational huts around Te Waihora provide bases for people mainly involved in fishing and gamebird shooting. While there are a few individual huts within the Joint Management Plan Area and adjoining freehold and other lands, most huts are in settlements located at:

- ◆ Selwyn Huts (98 huts) on Selwyn District Council administered Recreation Reserve.
- ◆ Lower Selwyn Huts (58 huts) within the Joint Management Plan Area.
- ◆ Greenpark Huts (32 huts) on Ngāi Tahu freehold land. A few are permanent dwellings.
- ◆ Fishermans Point/*Whakamātakiuru* near Taumutu (17 huts) on Ngāi Tahu freehold land. Most are permanent dwellings.
- ◆ Kaituna huts (6 huts) on Christchurch City Council administered reserve.

Potential conflicts between recreational activities on and around Te Waihora are avoided or minimised at present as different activities are focused in different areas and/or are seasonal in nature. The various recreational activities have the potential to impact on management for mahinga kai and conservation.

6.1.3 Recreational facilities and information

The few recreational facilities, or facilities able to be used by recreationalists, within the Joint Management Plan Area include:

- ◆ Defined watercraft activity areas by Lakeside Domain.
- ◆ The Lower Selwyn Huts, as above.
- ◆ Harts Creek Walkway and bird hide.
- ◆ Boat ramp and ‘wharf’ on lower Halswell Riverbank.
- ◆ Vehicle access track and boat launching site at Irwell River mouth.
- ◆ The walking/cycling Railtrail along the Motukarara to Birdlings Flat historic railway embankment (operational 2006).

Facilities adjoining the Joint Management Plan Area include:

- ◆ The Selwyn Huts, Greenpark Huts and Fishermans Point/ *Whakamātakiuru* huts.
- ◆ Springston South Domain; toilets, camping.
- ◆ Lakeside Domain; camping, toilets, boat ramp.
- ◆ Vehicle/boat access at Fishermans Point/ *Whakamātakiuru*.
- ◆ Boat ramp to lower Selwyn River/Waikirikiri by Lower Selwyn Huts.
- ◆ Various roads and vehicle tracks to the edge of the Joint Management Plan Area.

Ngāti Moki Marae at Taumutu hosts many visitors for educational and cultural purposes and provides information and instils respect for many of the values of Te Waihora. The Department has published information pamphlets relating to the Harts Creek Walkway/bird hide and Kaitorete Spit. They have also produced education resources about Te Waihora and Kaitorete Spit for school children. Education institutions such as local universities and schools use Te Waihora for field trips and studies.

6.2 Public access *Te whai wāhi o te hapori*

Public access to and around Te Waihora is used for customary, recreational and commercial purposes. Different user groups tend to have different access sites and means of access, e.g. access to favoured fishing, bird watching, or walking areas and/or access through the Joint Management Plan Area by boat, foot, motor vehicle, bicycle or horse. Existing (lawful) public access to, and recreational use and enjoyment of the bed of Te Waihora remains unaffected by the change in ownership and is provided for by section 173 of the Ngāi Tahu Claims Settlement Act 1998.

Existing public access to Te Waihora is mostly by way of formed and unformed roads and over lands within the Joint Management Plan Area. Unformed legal roads are sometimes difficult to identify or navigate. Key access points are related to the various recreational activities, as well as to landscapes and the various wildlife habitats around Te Waihora. See Figure 12.

7 COMMERCIAL AND OTHER ACTIVITIES *NGĀ MAHI ARUMONI ME ĒTAHI ATU MAHI*



7.1 Commercial activities *Ngā mahi arumoni*

7.1.1 Fishing

Fishing commercially, in the sense of trading fish for other goods, has been a feature of Te Waihora since pre-European times. Large scale commercial fishing, mainly for flounders, commenced at an early stage of European settlement, while commercial eel fishing grew in popularity in the early 1970s. Today there are three main commercial fisheries in Te Waihora – freshwater eel, flounder and yellow-eyed mullet. These fisheries are all managed under the Quota Management System (QMS) by the Ministry of Fisheries, under a mandate to ensure that the fisheries are used sustainably within healthy aquatic ecosystems.

The commercial fishery is economically and socially important to the area, giving employment in fishing, fish processing and related service industries.

Customary fishing also encompasses a development right to participate in commercial activity. These customary rights were recognised in the Sealords Settlement and Ngāi Tahu have re-established their position in the Te Waihora commercial fishery. While these activities are considered as commercial, Ngāi Tahu regard them as customary use.

Eel

The Te Waihora freshwater eel fishery has been managed under the Quota Management System (QMS) since 2000. The management area “Anguilla 13” encompasses all of the catchments north of the Rakaia River to Te Waihora, although almost all of the fishing pressure is concentrated at Te Waihora. There are 12 permit holders authorised to fish the area, with a total allowable commercial catch (TACC) of 122 tonnes per year. As a result of the ‘Sealord Settlement’²⁰ Te Rūnanga holds 20% of this quota, which it on-leases to fishers.

Eels are caught in fyke nets held in place by stakes driven into the bed of Te Waihora. The nets sometimes have ‘wings’ either side to direct fish

²⁰ Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.

into them. Nets vary in dimensions and size according to fishers' preferences and can extend some twenty metres in width.

A non-statutory *Te Waihora Eel Management Plan* (1999) was developed by the Te Waihora Eel Management Committee, to encourage the introduction of freshwater eels into the QMS. The Committee comprised representatives from tangata whenua and commercial fishers.

Flat fish

Three of the five flat fish species present in Te Waihora are caught commercially: black, yellow-bellied and sand flounder. The Quota Management Area (QMA) for flounder, "FLA 3", extends from north of the Clarence River in North Canterbury around the south of the South Island and along the West Coast. Te Waihora is only a small part of this QMA although black flounder, the main commercial flat fish sourced from Te Waihora, are caught almost exclusively within Te Waihora.

Flounder are caught either in set nets anchored to the bed of Te Waihora or in drag nets dragged along the bottom. There are relationships between the duration and timing of lake openings, catch and flatfish species composition within Te Waihora.

Mullet

Most of the east coast South Island fishery for yellow-eyed mullet is caught within Te Waihora, although the QMA is the same as that for flat fish. The TACC is set at 8 tonnes. Yellow-eyed mullet, commonly called "herring", provides a supplementary fishery to the commercial eel fishery in Te Waihora.

Whitebait

Whitebait, while primarily a recreational fishery, are also caught and sold commercially, especially when the lake is open to the sea.

Aquaculture

Interest has been expressed by fishers in developing commercial aquaculture in Te Waihora, specifically for whitebait, flounder and eels.

7.1.2 Grazing and farming

Some lands administered by the Department around Te Waihora are licenced for grazing in accordance with the Conservation Act 1987 and the Reserves Act 1977. A small part of the Ngāi Tahu lakebed is also leased.

Some grazing, primarily by sheep, is allowed for introduced plant species control. Grazing is also permitted of higher previously developed lands acquired or being retained as buffer zones for lake level rises caused by long-term, sea level rises. Through 2003/05 the Department is reviewing all grazing licences to introduce best management practices. Some grazing will be progressively reduced as indigenous vegetation re-establishes itself, for example in the brackish shrubland and rushland areas.

Drainage, stopbanking and irrigation

Since early European settlement parts of the Te Waihora landscape have been reclaimed, primarily for farming, through stopbanking, drainage, pumping and irrigation. Some of this activity has occurred on or has affected the Joint Management Plan Area. Drains and embankments remain to the east of Greenpark Huts.

Stopbanking on the eastern fringes of Te Waihora has been used to protect lake edge farmland from the effects of wind-lashed and high lake levels. While this improves agricultural production, it can modify the lake edge environment to the detriment of indigenous vegetation and wildlife. Some of the historic drainage works have resulted in modified but still ecologically valuable wetland habitats.

On the dry Canterbury Plains abstraction of groundwater and surface water for irrigation has steadily increased to supply agricultural desires. Water abstraction for residential and industrial uses is also increasing. Irrigation water use in the Te Waihora catchment has increased five-fold since 1985. Such abstraction reduces fresh water inflows to Te Waihora, affects salinity levels and the provision of freshwater habitats, and reduces water availability for flushing the lake. Coupled with increased leaching of nutrients from the soil it increases nutrient concentrations in the lake. Abstraction has also meant that, additional to the effects of seasonal rainfall and drainage, some tributary streams and springs no longer flow or are ephemeral.

7.1.3 Gravel and Sand extraction

There has been interest shown in extracting sand and gravel resources from the lake opening area on Kaitorete Spit. Sand from this area is valued for sandblasting and other uses because of its even grain size and angular nature.

7.1.4 Tourism opportunities

There is a small amount of tourism associated with Te Waihora, such as small-scale ecotourism (primarily bird-related), gamebird shooting and passive viewing from State Highway 75. The activities are mostly linked to the natural environment and the recreational uses and opportunities identified in Part 2, section 5.

7.2 Utilities, huts and other activities

Ngā whaipanga, ngā momo whare me ngā mahi kē

There are additional activities occurring within the Joint Management Plan Area, not included in the commercial activities above, which are not directly associated with management for “mahinga kai, conservation and other purposes”.

7.2.1 Utilities

These activities include environmental monitoring structures used by Environment Canterbury for lake level and coastal erosion monitoring, an underground telephone cable running the length of the historic railway embankment and Ministry of Fisheries signs and marker poles.

7.2.2 Huts and hut settlements

The Lower Selwyn Huts settlement was established as a recreational fishing and game bird shooting base in the late 1880s with the advent of the successful brown trout fishery in the Selwyn River/Waikirikiri. The hut settlement, which is within the Joint Management Plan Area, is administered by the Department and leased to the hut owners. The leases were reviewed (2004) with lease conditions put in place to avoid any adverse effects from the settlement on the adjoining Joint

Management Plan Area and the Te Waihora environment and to ensure its use for recreational purposes only.

Other small settlements and individual huts around Te Waihora provide private accommodation for Te Waihora visitors, but have the potential to impact on mahinga kai and conservation through effects such as sewage disposal and localised pressures for vehicle use within the Joint Management Plan Area. The management responsibility of these huts varies (see Part 2, section 6.1.2).

7.2.3 Other

There are a few private jetties and moorings within the Joint Management Plan Area. These are currently unauthorised.

Because of the importance of Te Waihora to some people, they request that after their death they have their ashes spread over the lake or within some part of the Joint Management Plan Area. This practice can be offensive to Ngāi Tahu and may affect the cultural availability of mahinga kai species for consumption.

7.3 Research *Rangahau*

Scientific use of the area is high because of its proximity to Lincoln and Christchurch and their research and educational institutions, including Lincoln University and the University of Canterbury. Research, including co-operative or joint research ventures with Ngāi Tahu and/or the Department, can benefit mahinga kai and conservation management within the Joint Management Plan Area.

8 JOINT MANAGEMENT PLAN OBJECTIVES

NGĀ PAETAE O TE MAHERE

The following objectives have been developed by Te Rūnanga and the Department. They are statements of a future situation that is sought through the management of the Joint Management Plan Area and through advocacy to other agencies and individuals with roles and responsibilities in the management of the Te Waihora environment. The objectives evolved from the values of Te Waihora, as described throughout Part 2 of this Joint Management Plan. Many of them are long-term in their focus and will not be achieved in the ten-year timeframe of this first Te Waihora Joint Management Plan.

The details of how the objectives can be achieved and which agencies, groups or individuals are involved in achieving them, are outlined in the policies and methods that follow.

The relevant objectives are repeated at the start of each section in Part 3: Management.

8.1 Te kete ika

- (1) The rangatiratanga and kaitiaki of Ngāi Tahu are upheld by Ngāi Tahu and respected by the Department within the management of Te Waihora.
- (2) Ngāi Tahu management within Te Waihora is in accordance with tikanga and kawa.
- (3) Te Waihora is recognised and supported as a mahinga kai.
- (4) Ngāi Tahu have access to and use of a plentiful supply of high quality mahinga kai from Te Waihora.

8.2 Landforms and landscapes *Te matawhenua*

- (1) Operations within the Joint Management Plan Area conform to high standards of environmental design and are managed to conserve landscape integrity.
- (2) The landscapes of Te Waihora, including their scenic, landform and other natural features, are protected and enhanced.
- (3) The particular cultural landscape that reflects the long association of Ngāi Tahu resource use within the area is maintained.

8.3 Wildlife habitat and biodiversity

Ngā toi whenua me ngā tūmomo koiora

- (1) Indigenous plant and animal communities of Te Waihora and the ecological processes that ensure their survival, are restored and protected to maintain and improve indigenous wetland biodiversity.
- (2) Indigenous biodiversity, mahinga kai and taonga species are protected through the identification and management of significant plant and animal pests.

- (3) The habitats and wider needs of threatened species, taonga species and other species of importance to Ngāi Tahu are protected.
- (4) The national and international significance of Te Waihora is recognised.
- (5) The cultural, spiritual, historic and traditional associations of Ngāi Tahu are recognised when managing indigenous plants and animals within the Joint Management Plan Area.
- (6) Public and community awareness and participation in protecting Te Waihora indigenous wetland biodiversity, natural systems, values and processes are increased.
- (7) The mauri of Te Waihora is improved and the natural balance required to safeguard the life-supporting capacity of the water and associated ecosystems is achieved through Ngāi Tahu and the Department working together and with other agencies.

8.4 Historic resources *Taonga puri mahara*

- (1) The historic values of Te Waihora are recognised and protected within the Joint Management Plan Area.
- (2) Historic resources associated with Te Waihora, but outside of the Joint Management Plan Area, are recognised and protected.
- (3) Ngāi Tahu are able to exercise their role as kaitiaki over their historic taonga according to tikanga.

8.5 Recreational use and public access

Mahi-ā-tākaro me te whai wāhi o te hapori

- (1) Public access opportunities and recreational use and enjoyment of the Joint Management Plan Area are identified and provided for where there are no likely adverse effects on mahinga kai, other cultural values, or conservation values.
- (2) Recreational opportunities at Te Waihora are enhanced through information provision and working with other agencies and recreational groups.

8.6 Commercial and other activities

Ngā mahi arumoni me ētahi atu mahi

- (1) The mahinga kai status of Te Waihora and the Ngāi Tahu ownership of the Ngāi Tahu lakebed are recognised in evaluating activities that require a concession or permit within the Joint Management Plan Area.
- (2) All activities that require a concession or permit within the Joint Management Plan Area are compatible with the other objectives and policies of this Plan.

PART 3: MANAGEMENT
KIA ARORAKI



1 INTERPRETATION OF POLICIES AND METHODS *NGĀ WHAKAMĀRAMATANGA O NGĀ KAUPAPA ME TE RITENGA*

1.1 Integrated management

Te whakahaere ngatahi

The policies and methods of this Plan recognise that the Joint Management Plan Area includes various lands administered by the Department under the Conservation and Reserves Acts, as well as the Ngāi Tahu lakebed. While recognising the different legislative purposes for which the various lands are held this Joint Management Plan is prepared “for the **integrated management** of natural and historic resources within the areas covered by the plan for...”(Clause 11.6.19(a)(i), Schedule 12 NTCSA) “mahinga kai, conservation and other purposes”.

This integrated management of natural and historic resources within the JMP Area has resulted in policies and methods that recognise the need to:

- ◆ Where appropriate, address all lands covered by the plan, with any legislative differences emerging from the purposes for which the lands are held being addressed at the method level.
- ◆ Ensure that the outcome of individual concession, permit or other decisions is not pre-judged by restricting the possibilities provided for in the legislation.
- ◆ Recognise the roles of the Crown (through the Director General of Conservation) and Te Rūnanga o Ngāi Tahu as signatories to the agreement to prepare this Joint Management Plan and their respective roles for the integrated management of those areas and resources subject to the Plan.
- ◆ Ensure that the interpretation and application of particular policies and methods are consistent with other policies in this Plan, other policies of Te Rūnanga or any approved iwi management plan which relate to the Ngāi Tahu lakebed, and other policies of the Crown with a bearing on the management of land administered by the Department.
- ◆ Achieve the outcomes sought by both Te Rūnanga and the Department as set out in the *Protocols on the Department of Conservation’s interaction with Ngāi Tahu on Specified Issues* (1997) and included in Appendix 6.

1.2 Policy and method conventions

Ngā kawa-ā-kaupapa, ā-ritenga hoki

With these needs in mind, the following conventions, with respect to the Department and/or Te Rūnanga implementing policies or methods, have been used in this Joint Management Plan:

- ◆ Where legislation provides no discretion for the Minister’s decision-making, or Te Rūnanga o Ngāi Tahu wishes to restrict its discretion for decision making, policies and methods state that a particular action or actions ‘will’ be undertaken;

- ◆ Policies and methods that provide for strong guidance on decision-making, without diminishing the roles of the Minister or Te Rūnanga, state that a particular action or actions ‘should’ be undertaken; and
- ◆ Policies and methods specifically intended to allow flexibility in decision-making state that a particular action or actions ‘may’ be undertaken, or are written to allow for either or both parties to advocate for a particular action or actions to other parties or decision makers.
- ◆ Where action will/should/may be undertaken by either the Minister or Te Rūnanga, that party is specified.
- ◆ Where no party is specified, action will/should/may be undertaken jointly by Te Rūnanga and the Department.

1.2.1 Cross referencing

With these conventions in mind and recognising the large number of policies and methods within this Plan, cross references have been inserted in square italic brackets in the left hand margin of Part 3. These reference other policies with particular relevance to the policy alongside which it is noted, or methods with particular relevance to the method alongside which it is noted.

1.3 Non derogation *Kaua e takahi te ture*

The policies and methods in Part 3 of this Joint Management Plan are required to be consistent with section 179 Non-derogation from legislation and other matters (NTCSA). See Part 1, section 4.4.

1.4 Bylaws and regulations for the Joint Management Plan Area

Ngā ture e hāngai ana ki te Mahere

References within the methods of Part 3 of this Plan to seeking bylaws and regulations are references to bylaws under section 106 Reserves Act 1977 and section 182 Ngāi Tahu Claims Settlement Act 1998 and to regulations under section 48 Conservation Act 1987. Because the activities that the bylaws/regulations will seek to control could occur on either reserves, the “bed of Te Waihora” or conservation areas (the boundaries between which are not easily discernible on the ground) there is a need to have uniform bylaw/regulation coverage across all such lands and consistent development of them.

Bylaws and regulations will be sought collectively if they are considered to be required after a period of monitoring of public use activity from the time the Plan is approved.

1.4.1 Bylaws for the “bed of Te Waihora”

All methods in Part 3 of this Joint Management Plan seeking bylaws constitute a recommendation of Te Rūnanga o Ngāi Tahu in terms of section 182(2) NTCSA. After this Plan has come into effect specific wording for any proposed bylaws will be jointly developed and agreed to by Te Rūnanga and the Department for approval by the Minister.

1.4.2 Bylaws and regulations for lands administered by the Department

After this Plan has come into effect specific wording for any proposed bylaws and regulations will be developed by the Department in consultation with Te Rūnanga for approval by the Minister under section 108 Reserves Act for the bylaws and by the Governor-General by Order in Council under section 48 Conservation Act for the regulations.

1.5 Policies Ngā kaupapa

- 1 To interpret and apply all objectives, policies and methods in this Joint Management Plan consistently with all other objectives, policies and methods in the Plan.**
- 2 To consider and apply, where appropriate, all statutory and non-statutory policies with a bearing on the management of lands administered by the Department or of the Ngāi Tahu lakebed.**
- 3 To read all objectives, policies and methods as being subject to their applicable legislation.**

2 TE KETE IKA

“The lake was known as the fish basket of Rākahautū... Rākahautū claimed the lake because it was so full of fish that he claimed it as a food source for all his hapū. It really became an important food source, not only for the hapū of Ruahikihiki but for the tribe of Ngāi Tahu.”

Cath Brown

Relevant Objectives *Ngā Paetae*

(Repeated from Part 2, 8.1)

- (1) The rangatiratanga and kaitiaki of Ngāi Tahu are upheld by Ngāi Tahu and respected by the Department within the management of Te Waihora.
- (2) Ngāi Tahu management within Te Waihora is in accordance with tikanga and kawa.
- (3) Te Waihora is recognised and supported as a mahinga kai.
- (4) Ngāi Tahu have access to and use of a plentiful supply of high quality mahinga kai from Te Waihora.

2.1 Whakapapa and rangatiratanga

Policies *Ngā kaupapa*

- 2.1.1 To recognise the rangatiratanga of Ngāi Tahu, and the roles and responsibilities of the Department, both of which are initially given effect to by the preparation of this Plan, and the co-operative management of Te Waihora and its resources.**
- [5.2 and 7.3.4] **2.1.2 To maintain and respect the whakapapa and mātauranga of Te Waihora.**
- 2.1.3 To maintain Te Waihora as a tribal taonga in perpetuity through ownership of the Ngāi Tahu lakebed being held by Te Rūnanga on behalf of Ngāi Tahu Whānui.**
- 2.1.4 To recognise and support the roles of Te Taumutu and the surrounding Ngāi Tahu kāinga with kaitiaki interests in Te Waihora.**
- [2.4.1 - 2.4.5] **2.1.5 To ensure that Te Waihora can provide the resources required to manaaki.**

2.1.6 To recognise the accompanying rights and obligations resulting from Ngāi Tahu fee simple ownership of the bed of Te Waihora.

Explanatory note *Te kupu whakamāhukihuki*

Whakapapa, "that's the only way you can maintain links. We've got our whakapapa, they can never take it away from you, ...we're here forever and we've always been there and always will be there."

Rangatiratanga, "has to be expressed by us, ... a leadership role in looking at how we can use the lake, what we can do on it, what sort of role we can play... that we know the expectations, and that we need to be recognised that we do have the knowledge and that's the importance of rangatiratanga."

Cath Brown

Whakapapa connects people to each other, to their ancestors, to the land and natural resources. Ngāi Tahu history and whakapapa is embedded in the landscape and resources of Te Waihora. Traditions represent the values and beliefs of the land, of the tribe, and of the hapū and whānau, who by whakapapa retain the customary rights and responsibilities associated with ngā taonga tuku iho a ngā tūpuna (treasures handed down from the ancestors, including flora, fauna, and natural resources). These rights and responsibilities include rangatiratanga and kaitiakitanga (see Part 2, section 2).

A tangata tiaki system has been established by Te Rūnanga and the Ministry of Fisheries for the management of those customary fisheries that come under the Fisheries Act 1996. Representatives (tangata tiaki) are appointed by the tangata whenua to manage the customary fishery in their area of authority. Tangata tiaki authorise tangata whenua to undertake customary fishing, keep records of authorisations and fish taken, and maintain the knowledge and information about the health of the fisheries. A tangata tiaki system can be applied to natural resources under other legislation to enable Ngāi Tahu to practise their roles and responsibilities derived from their whakapapa right to, and ongoing rangatiratanga of, Te Waihora.

Ownership of the "bed of Te Waihora" is vested in Te Rūnanga o Ngāi Tahu under the NTCSA, this ownership subject to section 171 (see Part 1, section 3.2.2).

Methods *Ngā ritenga*

- 2.1a The Department will give effect, where possible, to the Crown's duty of active protection through the relationship between Ngāi Tahu and the Department in the implementation, monitoring and review of this Plan.
- 2.1b The Department should recognise and promote Ngāi Tahu tikanga and kawa in their management, where appropriate.

- [2.4f, 5a, 7.3a - 7.3c] 2.1c Ngāi Tahu will maintain, record and disseminate where appropriate, mātauranga Māori as it relates to Te Waihora, and:
- (a) Investigate the feasibility of establishing a Te Waihora database of mātauranga.
 - (b) Hold wananga.
 - (c) Encourage rūnanga involvement in the area.
 - (d) Conduct research, including the gathering of oral histories.
 - (e) Develop educational material for Ngāi Tahu Whānui, for example on traditional management mechanisms and kōhanga areas.
- [6.1b] 2.1d Retain and promote traditional place names and their connections to the landscape by encouraging their use in all publications, signage and educational material.
- 2.1e The Department will provide for and support an on-going forum between Ngāi Tahu and the Department for the implementation of the Joint Management Plan and other catchment and operational issues.
- 2.1f Te Rūnanga will support the ongoing role of the Te Waihora Management Board as an advisory body to Te Rūnanga for the management of Te Waihora and implementation of the Joint Management Plan.
- 2.1g Maintain the existing relationships between the Department and the respective Papatipu Rūnanga with kaitiaki interests in Te Waihora.
- [8a] 2.1h Make visible Ngāi Tahu mana and kaitiaki through continued involvement in community events, education, interpretation and active management within the JMP Area.
- [4.3h, 2.4e, 2.4n, 2.4s] 2.1i Support the development and implementation of a complementary system of tangata tiaki to enable Ngāi Tahu to assist in the expression of rangatiratanga over Te Waihora in the gathering of food and other natural materials.
- [2.2g, 2.4o] 2.1j Ngāi Tahu will advocate to, and educate the district, city and regional councils about the relationship between whakapapa, rangatiratanga, and environmental quality.

- 2.1k As the fee simple owner of the bed of Te Waihora, Ngāi Tahu will:
- (a) Consider themselves an affected party for applications for resource consent within the Te Waihora catchment.
 - (b) In the management of this tribal taonga, assert ownership rights that do not conflict with section 171 of the NTCSA.
 - (c) Oppose any discharge of cut, or otherwise removed, aquatic weed to Te Waihora and its tributaries where it may settle on Ngāi Tahu lakebed.
- 2.1l Promote the formalisation of Māori place names to the New Zealand Geographic Board.
- 2.1m Ngāi Tahu will consult with adjoining landowners to seek agreement for Ngāi Tahu vehicular or other access to the Ngāi Tahu lakebed for management purposes where required.

2.2 Mauri, wairua and kaitiaki

Policies *Ngā kaupapa*

- 2.2.1 To seek an end to the desecration of, and to improve the wairua and mauri of Te Waihora.**
- [2.4.6, 7.3.4] **2.2.2 To recognise and foster the Ngāi Tahu kaitiaki role and responsibilities in the management of Te Waihora and its resources.**
- [2.3.1, 2.3.2, 3.1, 5.1, 5.3, 7.3.3] **2.2.3 To recognise and promote the importance of wāhi tapu, wāhi taonga, and their connection to Te Waihora.**
- [2.3.3, 4.1.7] **2.2.4 To encourage “ki uta ki tai” management of Te Waihora, its catchment, and its resources.**
- 2.2.5 To discourage the spreading of human ashes within the JMP Area.**
- 2.2.6 To improve the mana of Ngāi Tahu and the health of the community by improving the quality of the Te Waihora environment.**

Explanatory note *Te kupu whakamāhukihuki*

“Taumutu are the kaitiaki of Te Waihora. The role really means that we should be looking after it. We should be looking after it so that it is able to maintain its role that it had as a food source for all of us... and it is actually looking after the lake and maintaining it as a food source again and making it plentiful again for everybody to make use of it and having it so that we can eat from it without feeling that we can catch but we can't eat it”.

Cath Brown

Mauri may be described as the life force, present in all objects living and inanimate, a force that stems from the beginnings and a value that is distinguished by the qualities of health, abundance, vitality, the pristine and unpolluted. The maintenance of the mauri of natural resources is important for the health and well-being of the people, to maintain the vitality of culture, practices, values and beliefs. This is a responsibility enshrined in whakapapa, through kaitiakitanga, an obligation to safeguard the well-being and mauri of ancestral land, water, sites, wāhi tapu, valued flora and fauna and other taonga for future generations – mō tātou, ā, mō kā uri a muri ake nei, for us and our children after us.

The mauri of Te Waihora is currently perceived as ‘desecrated’ because the area no longer holds the qualities of health, abundance or vitality. It is no longer pristine and is perceived to be polluted; it no longer supports many of the valued flora and fauna or associated traditions of mahinga kai at levels expected of this great fish basket – Te Kete Ika a Rākaihautū.

Kaitiakitanga is the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori. Part of this responsibility is the integrated management of all natural resources, recognising that through whakapapa relationships all things are connected and interdependent. This management philosophy has been adopted by Ngāi Tahu as ki uta ki tai - from the mountains to the sea.

In order to recognise these kaitiaki roles and responsibilities, there is a need to work with other agencies with management responsibilities within the Te Waihora environment and with adjoining lake-edge landowners to advise and encourage management actions to improve the mauri and health of Te Waihora.

The spreading of human ashes instils a tapu status. This status then restricts the type of activities that can take place from a tangata whenua perspective, for example food gathering and swimming. As a mahinga kai, it is undesirable to spread human ashes within Te Waihora without the knowledge and/or approval of the tangata whenua.

At times, rāhui may be put in place by the tangata whenua as kaitiaki, in accordance with tikanga to close an area, or restrict certain activities, to safeguard the well being of people and/or for the purposes of conservation and the sustainability of a resource or an area. For example, mahinga kai activities may be inappropriate where a death has occurred, where there has been contamination of water/food resources, or where fish stocks are limited or depleted in a specific area. Rāhui may also be put in place in support of Community and Public Health actions and restrictions on public use.

A rāhui primarily relates to Ngāi Tahu Whānui and voluntary compliance by the public can be sought and is usually respected. Ngāi Tahu and the

Department can seek this public respect for rāhui through public education and information provision. Permitted commercial activities can be required to observe any such restrictions as a condition of their permit. The Department in giving effect to the Treaty will also respect such rāhui.

Methods *Ngā ritenga*

- [2.1b, 2.2d, 2.4, 2.2g] 2.2a Ensure that Ngāi Tahu protocols are established for activities and management action within the JMP Area, and implement such protocols for activities concerning Te Waihora in general, including, but not limited to:
- (a) The introduction of new species.
 - (b) The placement of rāhui.
 - (c) Cultural use.
 - (d) The improvement of mauri.
- [7.1.1, 7.1b] 2.2b Seek bylaws and regulation control, if necessary, for the spreading of human ashes within the JMP Area, the control being that there is no spreading of ashes without site approval from Papatipu Rūnanga or the Department, for Ngāi Tahu lakebed and lands administered by the Department respectively.
- [4.1g, 4.1j] 2.2c The Department will recognise associations with Te Waihora of the lands it administers on Kaitorete Spit, in Kaituna Valley and adjoining Coopers Lagoon/*Muriwai*.
- [6.1b, 2.2e, 7.1j] 2.2d Ngāi Tahu may put in place rāhui on the Ngāi Tahu lakebed and seek public and Department respect for the rāhui.
- 2.2e Ngāi Tahu permits authorising commercial activities will contain a requirement that rāhui be observed and respected.
- [6.2d, 6.2g] 2.2f Support Community and Public Health in the communication of risks to the public for water recreation at Te Waihora through the use of rāhui and advocate for joint signage.
- [8c] 2.2g Support the Waihora Ellesmere Trust, Environment Canterbury and Resource Care landowner groups whose work assists in improving mauri and wairua consistent with the philosophy of kaitiakitanga.

- [2.3f] 2.2h Work with other agencies, to improve the environmental health and mauri of Te Waihora through the following processes:
- (a) Regional, city and district council annual planning processes.
 - (b) Statutory advocacy through the RMA processes.
 - (c) Joint Department/Ngāi Tahu action.
 - (d) Joint action with other agencies/community groups with common goals and desired outcomes.
 - (e) Community involvement and education, and
 - (f) Encouraging “ki uta ki tai” management of Te Waihora and its resources.

2.3 Ngā wai

Policies *Ngā kaupapa*

(see also 4.2)

- [2.2.3, 5.3] **2.3.1 To seek effective water management that provides for the relationship of Ngāi Tahu with their ancestral lands, water, sites, wāhi tapu, wāhi taonga, and other taonga of Te Waihora.**
- [2.2.3, 5.1, 5.3, 5.4] **2.3.2 To protect important sites such as waiwhakaheketūpāpaku and Te Waihora tributary waterways.**
- [4.1.7] **2.3.3 To recognise the link between land and water and in particular the link between the JMP Area and the wider catchment.**

Explanatory note *Te kupu whakamāhukihuki*

“It’s life. You can’t have life without water”.

Cath Brown

Water is taonga. Ensuring the health and well-being of water and important sites such as waiwhakaheketūpāpaku is a prerequisite for ensuring the continued health and well-being of mahinga kai resources and the people.

This Joint Management Plan is essentially a land management plan and therefore does not apply to the water. Water quality and quantity however, are key issues in the health of the Te Waihora environment and Ngāi Tahu and the Department will work together and with other agencies and landowners to both educate and advocate for water management that recognises the importance of water to Ngāi Tahu and the connection between land and water.

Section 4.2 includes policies and methods relating to the desired management of water quality and quantity of Te Waihora and its catchment.

Methods *Ngā ritenga*

- 2.3a Ngāi Tahu will develop cultural water quality standards for Te Waihora and its tributaries and advocate these to Environment Canterbury.
- 2.3b Ngāi Tahu will work with Environment Canterbury to develop and carry out cultural monitoring of Te Waihora waterways.
- 2.3c Be kept informed of the results of water quality and quantity monitoring undertaken by Environment Canterbury. Te Rūnanga will disseminate this information to the Te Waihora Management Board, and/or as requested by Papatipu Rūnanga.
- [2.1] 2.3d Ngāi Tahu will advise other agencies and landowners of the cultural offensiveness of the discharge of contaminants to water, the diversion of waterways and the unnatural mixing of waters sourced from different waterbodies, all consistent with the Ngāi Tahu policy across the whole Ngāi Tahu takiwā.
- 2.3e Encourage Environment Canterbury to have particular regard to water sites of significance associated with Te Waihora and keep information up to date, and to reflect this in planning policy and processes.
- 2.3f Advocate:
- a) The restoration of wetlands and riparian margins in recognition of their purification role and for the improvement and protection of mauri.
 - b) The retention and restoration of water flows in Te Waihora tributaries and springs for the maintenance of water quality and freshwater habitats.
 - c) That minimum flows are set in Te Waihora tributaries to maintain the natural character and appearance of the waterway as well as to maintain the suitability of the waterways and Te Waihora for cultural purposes, including wāhi tapu, wāhi taonga, and the habitat requirements of taonga and other important species.
 - d) No discharge of contaminant into water, or onto land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water.
 - e) That there be no drainage of, or discharge of contaminants to, water burial sites, and
 - f) Restriction on the unnatural mixing of waters sourced from different waterbodies.

- 2.3g Work with Councils, landowners and water users,, in respect to activities that may affect the waters of and flowing to Te Waihora through the following processes:
- (a) Regional, city and district council annual planning.
 - (b) Statutory advocacy through the RMA.
 - (c) Joint Department/Ngai Tahu action,
 - (d) Joint action with other agencies/community groups with common goals and desired outcomes, and
 - (e) Community involvement and education.

2.4 Mahinga kai and customary use

Policies Ngā kaupapa

- [4.1.3, 4.1.5, 4.2.1, 4.2.5, 4.3.6, 4.3.4, 2.4.6] **2.4.1 To improve mahinga kai resources at Te Waihora to enable successful customary use.**
- [4.3.3] **2.4.2 To recognise Ngāi Tahu associations with taonga and other species of importance within the Te Waihora environment.**
- [2.3.1] **2.4.3 To seek that all mahinga kai species sourced from Te Waihora are culturally fit for human consumption.**
- 2.4.4 To provide for the use of kāinga nohoanga around Te Waihora.**
- [6.2.4, 6.2.1, 4.3] **2.4.5 To provide access to and the customary taking or use of indigenous plants and animals and other natural materials from Te Waihora, subject to the consent of the Minister where required.**
- [9.3] **2.4.6 Ngāi Tahu will implement a Mahinga Kai Cultural Park status for the Ngāi Tahu lakebed and other Ngāi Tahu lands, in accordance with *Ngāi Tahu 2025* and consistent with the other policies and methods of this Plan.**

Explanatory note *Te kupu whakamāhukihuki*

“We were all pretty fascinated with the materials that the lake provided us with, as well as the traditional foods - the fish, the flounder, the eel, the herring, there would be all sorts of other fish that it provided. It provided shellfish as well.”

Cath Brown

Mahinga kai underpins Ngāi Tahu culture. It is central to the relationships with places, species and resources, to the cultural, spiritual, social and economic well-being of Ngāi Tahu. Mahinga kai is the customary gathering of food and natural materials, which includes the practices and customs involved in such gathering and the places where those resources are gathered. It is a vehicle for the transfer of traditional knowledge from

generation to generation and is the cornerstone of manaakitanga, the tikanga of providing hospitality to manuhiri.

Nohoanga²¹ traditionally referred to areas used by Ngāi Tahu in pursuit of food and other natural resources. They provide areas to camp or sit, process resources and share knowledge. Over time, however, the availability of such areas for use and the availability and quality of resources to be gathered has declined, particularly as a direct consequence of the drainage of the Te Waihora wetland systems that continue to be artificially managed today.

Improved availability and use of mahinga kai resources by Ngāi Tahu Whānui can be achieved by identifying sites and species for enhanced cultural use, increasing the awareness of the resources of Te Waihora through education and dissemination of information and facilitating access to and use of those resources, as well as by working with other agencies for improved environmental quality. Ngāi Tahu can apply a tangata tiaki system for the gathering of mahinga kai resources and to authorise and establish systems for recording and monitoring the health of those resources (see explanatory 2.1).

There are provisions in the Wildlife Act 1953, Reserves Act 1977 and the Conservation Act 1987 that allow for the consideration of the gathering and use of freshwater fish, plants and some animals for customary use by Māori.

The Department and Te Rūnanga are working together with the Te Waihora Management Board on the implementation of *Protocols on the Department of Conservation's interaction with Ngāi Tahu on Specified Issues* (1997), see Appendix 6. The methods below build on this work in respect of cultural materials. The management of customary freshwater fisheries under the Freshwater Fisheries Protocol, and the culling of species under the Culling of Species of Importance to Ngāi Tahu Protocol is dealt with in Part 3, section 0.

Access to identified mahinga kai places and resources is necessary to enable customary use for kaumātua and other Ngāi Tahu Whānui to facilitate the passing down of tikanga and mātauranga (the knowledge of natural resources and traditional practices) as it relates to Te Waihora. Many of the access requirements will be provided by the public access provisions as set out in Part 3, 6.2 Public Access, but in other cases access may be desired to or through parts of Te Waihora not within the JMP Area. In some cases, vehicle access will be desired to enable easier kaumātua access and to carry fishing or other equipment and gathered customary resources.

For the Ngāi Tahu lakebed and other mahinga kai areas on lands owned or administered by Ngāi Tahu within the Te Waihora environment, Ngāi Tahu can consider the application of a “Mahinga Kai Cultural Park” status as identified in *Ngāi Tahu 2025*. This concept is currently being developed in conjunction with Papatipu Rūnanga for potential application to Ngāi Tahu owned or managed areas within the takiwā of Ngāi Tahu. Any application of the status to Te Waihora and the Joint Management Plan Area must be in a manner consistent with the NTCSA and this Joint Management Plan.

²¹ Refer to glossary definition.

Because of the all encompassing nature of mahinga kai to Ngāi Tahu, many of the policies and methods throughout this Joint Management Plan will also impact on mahinga kai and help to achieve the objectives above.

Methods *Ngā ritenga*

- [7.1h] 2.4a Ngāi Tahu will set aside areas of the Ngāi Tahu lakebed for improved customary use.
- [6.2h, 6.1d] 2.4b Identify nohoanga, including those for camping sites, within the JMP Area.
- 2.4c Identify mahinga kai places and species for protection, improvement or restoration. When areas are being secured through method 4.1a then consideration should also be given to mahinga kai values.
- 2.4d Seek bylaw and regulation provisions for the control of public access and use, consistent with methods 2.2b, 4.1g, 4.4j, 6.1n, 6.1o, 6.2e, 6.2f and 6.2n.
- [2.1i, 4.3j] 2.4e Seek to establish systems between Papatipu Rūnanga, the Department, and North Canterbury Fish and Game Council to enable the consideration of cultural use of identified resources through collection permits to Papatipu Rūnanga. These permits will preferably be administered using a tangata tiaki system and will be sought for:
- (a) Game species including eggs and juveniles.
 - (b) Plant materials such as raupō, harakeke and pingao.
 - (c) Protected species on a case by case basis.
- 2.4f Te Rūnanga may distribute information to Ngāi Tahu Whānui on mahinga kai species present at Te Waihora, mahinga kai places, and the legislative requirements for customary use within the JMP Area.
- [2.3b, 4.3b, 4.3h] 2.4g Ngāi Tahu should monitor the health of established mahinga kai places and species.
- [4.3k] 2.4h Ngāi Tahu will promote the research and monitoring of the success of customary catch methods and harvest.
- 2.4i Recognising the importance of the Te Waihora fishery in the Ngāi Tahu takiwā, any committee of Te Rūnanga, appointed to provide advice to the Minister of Fisheries, consistent with the *Deed of Settlement* Clause 12.14.7 & 8 on all matters concerning the management and conservation of fisheries, under the Fisheries Act 1983 and Fisheries Act 1996, should include member(s) of the Te Waihora Management Board.
- 2.4j Recognise the *Te Waihora Eel Management Plan* (1999) to the extent that it is consistent with the policies and other methods of this Plan.

- 2.4k Ngāi Tahu will continue to advise North Canterbury Fish and Game Council on native gamebird regulations as provided for in section 278 of the NTCSA.
- 2.4l Advise and encourage Ngāi Tahu Whānui to access gamebirds through systems established with North Canterbury Fish and Game Council.
- 2.4m Advise users of Te Waihora that indigenous birds found dead, and marine mammal parts, should be placed in a cultural materials bank to be distributed to those requiring materials for cultural use, in accordance with protocols established between Ngāi Tahu and the Department.
- [2.1i, 6.1o] 2.4n The Department will recognise, and Ngāi Tahu will facilitate the customary gathering of whitebait within the JMP Area through a tangata tiaki system.
- 2.4o Work with other agencies, to improve environmental health and associated mahinga kai activities at Te Waihora through the following processes:
- (a) Regional, city and district council annual planning..
 - (b) Statutory advocacy through the RMA.
 - (c) Joint Ngāi Tahu/Department action, and
 - (d) Community involvement and education.
- [6.2a, 6.2b] 2.4p The Minister or Ngāi Tahu, depending on the land involved, may allow on a case by case basis, vehicular access for customary use within the JMP Area by Ngāi Tahu Whānui, where this is consistent with the policies and other methods of this Plan.
- [6.2b] 2.4q Where necessary, Ngāi Tahu will approach landowners to seek access to cultural sites and resources, additional to any public access provisions.
- 2.4r Where applicable, Ngāi Tahu will seek advice and/or support from Federated Farmers of NZ (Inc) in approaching landowners to arrange access to cultural sites and resources.
- [2.1j] 2.4s Ensure access and appropriate information is available to Ngāi Tahu Whānui to access mahinga kai places around Te Waihora.
- [2.1j] 2.4t Where access provisions are specifically provided for Ngāi Tahu Whānui to access mahinga kai a tangata tiaki system should specifically address the means and route for access.
- [9d, 9e] 2.4u Where additional lands are being sought for incorporation within the JMP Area (see Part 3, section 9) Papatipu Rūnanga will be consulted regarding access for Ngāi Tahu Whānui.

3 LANDFORMS AND LANDSCAPES

TE MATAWHENUA

“Some of the finest perspectives in Canterbury are obtained from either Kaitorete Spit looking out into the Alps in the evening or from Taumutu or down the coast perhaps at the Rakaia River mouth looking back to the peninsula over the lake in the early morning. It is just a magical environment.”

Martin Clements

Relevant Objectives *Ngā Paetae*

(repeated from Part 2, 8.2)

- (1) Operations within the Joint Management Plan Area conform to high standards of environmental design and are managed to conserve landscape integrity.
- (2) The landscapes of Te Waihora, including their scenic, landform and other natural features, are protected and enhanced.
- (3) The particular cultural landscape that reflects the long association of Ngāi Tahu resource use within the area is maintained.

Policies *Ngā kaupapa*

- 3.1 **To maintain the values and the range of natural and cultural landscapes of the JMP Area by:**
 - (a) **Maintaining the wide open vistas as well as the intimate spaces.**
 - (b) **Encouraging the maintenance of the distinct distant views of Te Waihora from the surrounding area.**
 - (c) **Avoiding the intrusion of structures with unnatural lines and shapes.**

- 3.2 To retain the natural landscapes of the JMP Area and its wider environment as far as possible, including by:**
- (a) Recognising and allowing that some natural features may migrate inland as the result of dynamic coastal processes, including sea level rise.**
 - (b) Recognising and allowing the ‘natural’ daily and seasonal movements and changes in the waters and vegetation of Te Waihora.**
 - (c) Avoiding induced lake edge erosion.**
 - (d) Seeking controls on landuses that negatively impact on significant landform features, including Kaitorete Spit, the Selwyn River/Waikirikiri delta, Banks Peninsula/Horomaka spurs and the Kaituna embayment.**
- 3.3 To maintain and promote the use of names that are connected to and/or describe the landscape.**
- 3.4 To recognise and protect the landscape values of the historic built features of the JMP Area.**
- 3.5 To maintain and protect soil diversity.**
- 3.6 To recognise the role of wildlife habitat and biodiversity in the landscape values of Te Waihora.**
- 3.7 To protect natural features that reveal the natural history of the area.**
- 3.8 To retain the natural quietness and natural night-time darkness of Te Waihora and seek its maintenance.**

Explanatory note *Te kupu whakamāhukihuki*

“Lake Ellesmere is quite a unique place because it’s a lake that is very shallow. So the wind blows it back and forth. There’re not many lakes that do that. I’ve seen that lake move for half a mile up with the wind and when it blows back there’s all these mudflats and that’s what the birds feed on. It brings the food up in the mudflats. So that’s why it’s so special. It’s because of the movement of the water whereas in most mudflats it’s either the tide that moves it or there aren’t mudflats because the water stays where it is.”

Sheila Patch

Landscape is made up of natural, cultural and physical elements. Place names link people and history to the land. Wildlife also make a contribution, for example, large flocks of birds and the columns of midge flies seen in various formations above Te Waihora and surrounding areas. The view of Te Waihora from the Christchurch to Akaroa State Highway 75 is an important part of the Te Waihora landscape.

Outside of the JMP Area landowners, community groups and district councils all have a role in the management of landscape. Te Rūnanga and the Department can work with these groups to promote the consideration of landscape values in the Te Waihora environment.

Areas of common concern between the Department and Te Rūnanga in respect of the effects of activities controlled and managed under the Resource Management Act are outlined in the Protocol for Resource Management Act 1991 as included in Appendix 6. The methods below build on the Protocol issues.

Nationally, the values of natural night-time darkness and natural quietness are under increasing threat. There is an increasing awareness of the need to protect and maintain these values. At Te Waihora, natural darkness is important for the mahinga kai practices that rely on night-time activities and/or moon cycles. Natural darkness at Te Waihora is increasingly threatened by the south-west urban spread of Christchurch City and off-shore fishing boat lights.

Methods *Ngā ritenga*

- [7.2a] 3a Ensure that any adverse effects on landscape values of existing structures within the JMP Area are avoided, mitigated or remedied, including by structure removal.
- 3b Discourage or mitigate fence lines running into Te Waihora in favour of 'ring fences'.
- [7.2a] 3c Ensure that any new structures within the JMP Area are necessary, and if so, are designed and built in sympathy with the landscape values of Te Waihora.
- [7.2b] 3d The Lower Selwyn Huts lease agreement should be maintained with building standards that ensure that any adverse effects on the landscape of Te Waihora by the settlement are avoided, remedied or mitigated.
- [6.1e] 3e Ensure the placement and design of new maimai, in association with North Canterbury Fish and Game Council, are sympathetic as far as reasonable, given the purposes of maimai, with the landscape values of Te Waihora (see Appendix 4 for Maimai Agreement).
- [4.1k] 3f Pay particular attention to landscape values when undertaking habitat restoration work.
- 3g Work with lease and licence holders within the JMP Area to ensure that landscape values and natural features are protected.
- 3h Advocate:
 - (a) The maintenance of wide open vistas of Te Waihora.
 - (b) The maintenance of 'view shafts' from the surrounding area to Te Waihora.
 - (c) The maintenance of natural landscape and landform features of Te Waihora by ensuring that subdivision and use do not adversely affect the existing landscape and landform values.
 - (d) That landuse management recognises and allows for natural coastal and lake level changes.

- 3i Work with other agencies, to recognise and protect the landscape and landform values of Te Waihora through the following processes:
- (a) Regional, city and district council annual planning
 - (b) Statutory advocacy through RMA
 - (c) Joint Department/Ngāi Tahu action.
 - (d) Joint action with other agencies/community groups with common goals and desired outcomes.
 - (e) Community involvement and education.
 - (f) Ongoing contact with adjoining landowners, and
 - (g) Continuing the implementation of the Maimai Agreement with North Canterbury Fish and Game Council.
- [6.1e] 3j Continue to work with North Canterbury Fish and Game Council to remove derelict maimai and rubbish, and to undertake other mutually agreed projects for, amongst other things, landscape protection through the Maimai Agreement.

4 WILDLIFE HABITAT AND BIODIVERSITY NGĀ TOI WHENUA ME NGĀ TŪMOMO KOIORA

Te Waihora “really stands out as having the values of vegetation and all other values as well, predominantly bird life.”

Trevor Partridge

“Lake Ellesmere is very special. It’s probably the best place in New Zealand for migratory waders. Migratory waders are birds that come from the high Arctic and they breed in the high Arctic... We get a selection, a good selection of birds. There’s not one species; we probably get about ten species and we get rarities that nobody’s ever seen before in New Zealand.”

Sheila Patch

Relevant Objectives *Ngā Paetae*

(repeated from Part 2, 8.3)

- (1) Indigenous plant and animal communities of Te Waihora and the ecological processes that ensure their survival, are restored and protected to maintain and improve indigenous wetland biodiversity.
- (2) Indigenous biodiversity, mahinga kai and taonga species are protected through the identification and management of significant plant and animal pests.
- (3) The habitats and wider needs of threatened species, taonga species and other species of importance to Ngāi Tahu are protected.
- (4) The national and international significance of Te Waihora is recognised.
- (5) The cultural, spiritual, historic and traditional associations of Ngāi Tahu are recognised when managing indigenous plants and animals within the Joint Management Plan Area.

- (6) Public and community awareness and participation in protecting Te Waihora indigenous wetland biodiversity, natural systems, values and processes are increased.
- (7) The mauri of Te Waihora is improved and the natural balance required to safeguard the life-supporting capacity of the water and associated ecosystems is achieved through Ngāi Tahu and the Department working together and with other agencies.

4.1 Ecosystems *Te taiao*

Policies *Ngā kaupapa*

- 4.1.1 To maintain the full range of indigenous vegetation and habitat diversity of Te Waihora while recognising natural change.**
- 4.1.2 To recognise that, irrespective of likely natural change happening in the future, Te Waihora will remain a significant wetland.**
- [5.6] **4.1.3 To restore habitats and indigenous vegetation through threat removal, natural regeneration, and the re-establishment of indigenous vegetation and species.**
- 4.1.4 Genetically modified organisms should not be released or, if self-established, not be allowed to remain within the JMP Area.**
- [4.4.1 – 4.4.5] **4.1.5 To identify, assess and where necessary or required, control unwanted plants and animals that threaten the ecological values and processes of Te Waihora.**
- 4.1.6 To prevent or extinguish, where possible, all fires within or threatening the JMP Area, other than those permitted by any JMP bylaws and regulations and that are not a fire hazard.**

- 4.1.7 To recognise and promote the integrated management of Te Waihora through:**
- (a) Promoting the importance of integrated areas and corridors of indigenous vegetation and habitats from the mountains to the sea.**
 - (b) Recognising the associations of other Te Rūnanga and Department owned and administered areas in the vicinity with the JMP Area.**
 - (c) Acknowledging and encouraging sustainable management of wetlands within Te Waihora outside of the JMP Area.**
 - (d) Enhancing the physical and cultural linkages between Banks Peninsula/*Horomaka*, Kaituna Valley and the Kaituna lagoon, and between Waikewai stream and Te Korua.**
 - (e) Promoting a ki uta ki tai philosophy and ecosystems approach to management.**
 - (f) Advocating integrated catchment management.**
 - (g) Recognising the indigenous biodiversity role of Te Waihora in the chain of coastal lagoons and wetlands throughout New Zealand and their importance for international migratory bird species.**

Explanatory note *Te kupu whakamāhukihuki*

“You can’t separate one part from another, and that’s where people go astray. They try to think we can look after one bit and we can’t. It’s looking after all the bits, and all bits are interlinked.”

Cath Brown

Te Rūnanga and the Department can protect and improve the extent and diversity of habitats and species. While using a range of methods for restoration and protection it is recognised that the nature of wetlands, especially saline environments, habitats and species is to naturally regenerate once pressures and threats are removed. Management efforts can therefore focus on identifying existing vegetation patterns and threats and removing pressures and threats on the wetland environments. This can include the removal of exotic vegetation, inappropriate boundary lines and fencing, and vehicle use and stock grazing in sensitive areas. Key areas for restoration and active management can be identified and restored.

The Te Rūnanga o Ngāi Tahu policy on genetically modified organisms (GMOs) (1999) states: *“Te Rūnanga o Ngāi Tahu opposes the release of any genetically modified organism into the environment. Te Rūnanga o Ngāi Tahu opposes the granting of any application for the development of genetically modified organisms. This opposition will continue until Te Rūnanga has concluded the impact such genetic modifications will have upon critical social and cultural concerns related to Whakapapa, Kaitiakitanga and Rangatiratanga are addressed to its satisfaction.”* This policy can be applied to the Ngāi Tahu lakebed and the release of GMOs and the removal of any self established GMOs from the land. The

Department can, in recognising its relationship with Ngāi Tahu through the JMP, recognise and acknowledge this stance by Ngāi Tahu.

Outside of the Joint Management Plan Area landowners, district and regional councils and other agencies all have a role in the management of natural resources on their lands.

Fires, especially during warm dry weather, are a hazard not just for the JMP Area, but also for adjoining land. All fires, whether lit naturally, accidentally or deliberately, can seriously damage the Te Waihora environments, especially the rushlands and shrublands.

The overall responsibility for the control and extinguishing of outdoor fires on lands administered by the Department, or other state-owned areas or within 1km of their boundaries, lies with the Department as a Fire Authority under the Forest and Rural Fires Act 1977. Permits for fires in these areas are required and restricted or prohibited fire seasons can be declared. Outside of the Department controlled area the district councils are the fire authorities and they can also declare restricted and prohibited fire seasons. In addition, the lighting of fires within the JMP Area can be subject to controls set out in by-laws and regulations. These controls may allow for the appropriate use of fireplaces and approved cooking equipment.

As can be seen in Figure 12 there are numerous unformed legal roads that are physically part of the Te Waihora wetlands. Vehicle use on these roads can be inappropriate in terms of protecting mahinga kai and conservation values. The removal of the legal road status (by “stopping” the road under the Local Government Act 1974) and the merging of their areas within the JMP Area can allow for better management of the land and simplify or remove any boundary management issues. By becoming part of the JMP Area public access can still be assured.

Methods *Ngā ritenga*

- [2.4c, 9e] 4.1a Secure a margin of protected wetland for Te Waihora by:
- (a) Identifying areas that if protected, would add to the ecological values of Te Waihora.
 - (b) Continuing, where opportunities exist, the Department programme of exchanging conservation lands of low conservation value, or grazing rights over such lands, for freehold lands or for covenant protection of lands of high conservation value.
 - (c) Negotiating land purchases, covenants, or other protective agreements with landowners.
 - (d) Seeking legal road stopping where the land involved is physically part of the Te Waihora wetland and adjoining natural habitat system (see method 4.1k).
- [8b] 4.1b Remove fences within the JMP Area that restrict the natural transitions between indigenous vegetation types/zones, and seek integrated management with adjoining landowners and the removal of boundary fences where appropriate.
- 4.1c Adopt land management methods to reduce/avoid induced lake edge erosion within the JMP Area.

- [4.2a & b] 4.1d Trial and monitor different grazing regimes, subject to concession or permit approval, to determine effective weed control methods to protect ecological values.
- 4.1e Identify areas for natural or assisted restoration of indigenous vegetation and habitats and undertake or assist restoration projects.
- 4.1f Seeds and plants for restoration projects within the JMP Area should be sourced from Te Waihora, subject to collection approval being obtained as necessary.
- 4.1g Encourage the use of appropriately sourced plants for restoration and beautification purposes adjacent to or surrounding the JMP Area through the provision of advice.
- 4.1h Seek bylaw and regulation provisions for fire enforcement within the JMP Area, in addition to the Department's restricted and prohibited fire seasons and its response to all smoke reports in its rural fire authority area. The bylaw and regulation provisions should include:
- (a) The types of fire allowed and not allowed in types of locations; use of constructed fireplaces and/or surrounding clear ground requirements.
 - (b) Not lighting fires in circumstances where it is likely to present a fire hazard.
 - (c) Keeping fires under continuous supervision until completely extinguished.
 - (d) Not discarding materials that may start a fire.
 - (e) The non-exemption from any requirement to obtain permission to light a fire in the open air in accordance with the Forest and Rural Fires Act 1977.
- [2.2c] 4.1i Work in conjunction with the *Kaitorete Spit Biodiversity Action Plan for Coastal Conservation Land* (2003) to achieve a lake to the sea biodiversity management corridor.
- [8a, 8c] 4.1j Protect and enhance habitats important to individual species, or for a range of species, through covenants, advocacy, education, and other appropriate mechanisms.

[2.2c]

- 4.1k The management of the following lands should recognise the ecological linkages to Te Waihora in respect of water flows, fisheries, wildlife movement and genetic diversity:
- (a) Kaituna Valley and Mt Herbert Scenic Reserves.
 - (b) Kaitorete Spit coastal lands administered by the Department.
 - (c) Appropriate future lands acquired by Te Rūnanga or the Department.
 - (d) Te Rūnanga o Ngāi Tahu freehold and leasehold properties including Waikirikiri, Pakōau, and Greenpark Huts.
 - (e) Coopers Lagoon/Muriwai and the connected spring Te Awapunapuna.

- 4.1l Seek the stopping of legal roads and the subsequent transfer of the land to Te Rūnanga or the Department as appropriate, to be included in the JMP Area where the land transfer will enhance the mahinga kai and conservation values of Te Waihora, or aid in the management of the existing JMP Area and its values. Where legal road stopping is sought, it will be in accordance with the following criteria:

[9e(vi)]

- (a) Consultation with interested parties is undertaken,
- (b) Public access along the legal road route is maintained, and
- (c) The legal road is currently unformed, and
- (d) The road stopping legal and survey process is cost/benefit efficient, and
- (e) Either
 - i. the legal road lies between lands administered by the Department and Ngāi Tahu lakebed, or runs through or is surrounded by lands administered by the Department, or
 - ii. the legal road lies between lands administered by the Department and Crown riverbed, or
 - iii. the legal road is physically part of the lakebed and lies between the JMP Area and other lands being managed for wetland habitat protection, or
 - iv. a significant adverse effect within Te Waihora is being caused by activities that are legal on legal road and other remedies are not sufficient to avoid the adverse effect, or
 - v. the legal road is part of the physical lakebed in the Kaituna Lagoon area and the road stopping would allow for better management of the area as a kōhanga.

- 4.1m Enable community groups to partake in ecological restoration activities within the JMP Area with approval and advice from Ngāi Tahu and the Department.

- 4.1n Encourage the use of locally sourced plants for restoration projects outside of the JMP Area.

- 4.1o Advocate, :
- (a) Riparian protection and management of indigenous riparian vegetation around Te Waihora and within the catchment to reduce sediment discharge and introduced aquatic weed growth.
 - (b) The importance of existing areas of indigenous vegetation around Te Waihora and within the catchment.
 - (c) The management of unformed legal roads around Te Waihora and alongside its tributaries in recognition of their conservation and mahinga kai values, including access.
 - (d) The removal of boundary fences and lines that restrict the natural transitions between indigenous vegetation types and areas.
 - (e) The adoption of land management methods to reduce or avoid lake edge erosion.
 - (f) The use of locally sourced plants for restoration and planting activities.
 - (g) Ki uta ki tai management.
- 4.1p Work with Councils and landowners to recognise and protect the ecosystem values of Te Waihora through the following processes:
- (a) Support for community Landcare Trust, Resource Care and other like group action for riparian and indigenous vegetation protection.
 - (b) Regional, city and district council annual planning.
 - (c) Statutory advocacy through the RMA.
 - (d) Joint Department/Ngai Tahu action.
 - (e) Joint action with other agencies/community groups with common goals and desired outcomes.
 - (f) Community involvement and education.
 - (g) Promotion of the Department's Motukarara Nursery and other appropriate nurseries.
 - (h) Encouraging "ki uta ki tai" management of Te Waihora and its resources.

4.2 Water *Ngā wai*

Policies *Ngā kaupapa*

- 4.2.1 **To protect and improve the freshwater ecosystem and habitats of Te Waihora.**
- 4.2.2 **To prevent further wetland reclamation and promote wetland creation and improvement.**

- 4.2.3 To recognise the link between water quantity and water quality, and the maintenance of surface water and spring flows to protect mahinga kai and conservation values, particularly wildlife habitat, biodiversity and mauri.**
- 4.2.4 To improve water quality in waterways (including streams, rivers, springs and drains) and lake-edge habitats.**
- 4.2.5 To achieve lake level management that:**
- (a) Minimises summer dry-out of lake edges.**
 - (b) Avoids adverse algal growth.**
 - (c) Provides for fish migration to and from Te Waihora, especially during September and October.**
 - (d) Enables continued authorised maimai use.**
 - (e) Allows for lake level fluctuations that give greater flexibility to achieve openings at times to optimise mahinga kai and conservation values.**
 - (f) Recognises landscape values and natural landform processes.**
 - (g) Facilitates indigenous macrophytic vegetation regeneration.**
 - (h) Recognises dynamic coastal processes including rising sea level.**
 - (i) Minimises adverse impacts on the coastal environment.**
 - (j) Recognises natural cycles and fluctuations over long time frames and multiple lake openings.**
 - (k) Recognise habitat requirements of migratory bird species.**

[2.4.1]

It is recognised that not all of (a) to (k) above may necessarily be optimised at every lake opening event or at the same time.

Explanatory note *Te kupu whakamāhukihuki*

"Its health isn't all that bad. If you were to go out and just look at the nutrient levels in the water and match them with other places around the world, you would come to the conclusion that it was highly nutrified and virtually dead. The reason that this has managed to survive is because it's shallow, because it's extremely windy, and because it's shallow it's got a high surface area to volume ratio, so it's constantly being stirred. So, although it may look muddy, that's just a consequence of the stirring and also that stirring raises the oxygen levels."

Trevor Partridge

"The health of the lake is not as good as it was back in the 1960s because the water was a lot purer and cleaner than what it is now..."

Murray Stephens

Although this Joint Management Plan has no statutory control over water management, it is important to recognise the link between water, land and ecosystems. For example, there are many freshwater springs on the western shores of Te Waihora whose flows maintain freshwater ecosystems in an otherwise brackish environment. These areas present important biodiversity values for Te Waihora. Water, the quality of water and related water quantity, are of immense importance to Ngāi Tahu.

Te Rūnanga and the Department can work with Environment Canterbury, other agencies and landowners to advocate the importance of water quality and quantity in the management of mahinga kai and conservation values of Te Waihora.

Te Waihora lake levels are artificially managed by Environment Canterbury in accordance with the Water Conservation (Lake Ellesmere) Order 1990, the Resource Management Act 1991 and the appropriate resource consents. Lake levels however, are managed to the same ‘trigger’ levels as they have been since the 1940s, pre-dating the Part II requirements of the Resource Management Act 1991. Lake levels and lake openings should be managed in recognition of the natural system, each lake opening considered within longer timeframes and the natural cycles of indigenous species and habitats within Te Waihora. Optimal times for each lake opening need to be considered in terms of the impact on the values of Te Waihora, including mahinga kai and conservation values.

Many drains from the Te Waihora environment cross the higher land of the JMP Area to discharge into the lake and at lower lake-levels some of these discharge directly onto the land. During the Lake Ellesmere National Water Conservation Order application process the issue of authorisations for these drains was raised and has not since been addressed. There may be a need for easements and permissions to discharge onto land in some cases. There is scope through these processes to seek improvements to the way drain maintenance is managed and to the quality of discharged waters.

Section 2.3 includes policies and methods relating to the desired management of water quality and quantity in order to protect the cultural values of water.

Methods *Ngā ritenga*

- 4.2a Advocate for improved water quality in all waterways and lake edge habitat through:
 - (a) No point source discharges of contaminants to Te Waihora or its tributaries.
 - (b) All discharges of contaminants to go through land.
 - (c) Lake-edge land and stock management to improve localised water quality.
 - (d) Riparian management, including fencing to exclude stock from waterways.
 - (e) Controlled use of agricultural and chemical spraying where it may adversely affect indigenous flora and fauna, including fish.
 - (f) Best practice effluent disposal systems from both community sewerage systems and dairy farms.

- [7.1d, 7.1e] 4.2b Work with grazing concession and permit holders within the JMP Area to encourage best management practices in respect of method 4.2a (a) to (f).
- [73f] 4.2c Encourage research to better understand the natural Te Waihora water and lake level cycles and the changes that have occurred through lake level management.
- 4.2d Advocate for:
- (a) Maintenance of spring flows around Te Waihora.
 - (b) Minimum flows to be established on Te Waihora tributaries, including recognition of cultural values.
 - (c) No further drainage of wetlands.
 - (d) Wetland improvement and creation.
 - (e) Efficient water application systems.
- 4.2e Work with councils and drainage district committees to:
- a) Ensure that drains crossing and/or discharging onto lands within the JMP Area are fully authorised and
 - b) Encourage best practice methodologies for drain maintenance to ensure beneficial effects on the ecology and mauri of waterways.
- 4.2f Work with councils and landowners, through the following processes:
- (a) Regional, city and district council annual planning processes.
 - (b) Statutory advocacy through the RMA.
 - (c) Joint Department/Ngāi Tahu action.
 - (d) Joint action with other agencies/community groups with common goals and desired outcomes.
 - (e) Community involvement and education.
 - (f) Ongoing contact with adjoining landowners.

4.3 Plants and animals *Ngā otaota me ngā kararehe*

"You've got everything through from pure fresh water to hyper-saline. With that combination of situations the natural vegetation patterns are going to be extremely diverse. None of the other lagoons match up to that."

Trevor Partridge

"Over the years I have noticed a vast difference in the quality and quantity of all species of fish in Lake Waihora and hope that the Rānanga that are part of this area will try to do something about it, a very big wish from someone who has very beautiful memories and happy days of a once beautiful Lake Waihora."

Maree Johnson

“Eels are a finite resource because nobody can breed them and they’re getting less and less all the time. So we need to be careful that we look after them and their habitat really well. They’re special.”

Trevor Gould

Policies *Ngā kaupapa*

- 4.3.1 To identify and protect areas of existing indigenous vegetation.**
- [7.3.6] **4.3.2 To monitor changes in the type and extent of areas of indigenous vegetation.**
- 4.3.3 To acknowledge the cultural, spiritual, historic, and traditional association of Ngāi Tahu with taonga species and other species of importance when managing indigenous plants and animals within the JMP Area.**
- [2.4.2] **4.3.4 To take special measures to protect threatened plant and animal species, and to protect taonga species and other species of importance to Ngāi Tahu, and ensure that the habitats and wider needs of all of these species are protected within the JMP Area.**
- 4.3.5 To consider the introduction and re-establishment of threatened species, taonga species, or other species of importance to Ngāi Tahu if the following criteria are met:**
- (a) They will survive, and**
 - (b) Suitable habitat is available, and**
 - (c) They will not adversely affect existing indigenous species.**
- [2.4.1] **4.3.6 Ngāi Tahu will seek the sustainable management of all indigenous Te Waihora fish species through and subject to:**
- (a) Ministry of Fisheries sustainable utilisation actions under the Fisheries Act 1996; and**
 - (b) Department preservation actions under the Conservation Act 1987; and**
 - (c) Ngāi Tahu actions under the Fisheries (South Island Customary Fishing) Regulations 1999.**
- 4.3.7 To give effect to section 4 of the Conservation Act as it applies to the work of the North Canterbury Fish and Game Council.**

- [2.4.5] **4.3.8 To support and facilitate cultural use as a method of managing gamebird numbers to protect the indigenous flora, fauna, soils, and water quality of Te Waihora.**
- [4.5.1 - 4.5.3] **4.3.9 To recognise the importance of bird species, species diversity, and population numbers that contribute to the national and international significance of Te Waihora.**
- 4.3.10 To protect bird species diversity through providing and maintaining habitat diversity and managing and where possible preventing habitat disturbance and bird disturbance during nesting and other critical lifecycle times (e.g. for migrant species).**

Explanatory note *Te kupu whakamāhukihuki*

"The size of fish have gone down. It has to be the amount of fishing, over fishing that's happening and the amount of food for the fish in the lake because you can't keep on getting big fish if there is no food there for the fish to eat."

Cath Brown

"I think the weed bed, the loss of it, had a really major impact on the lake. I don't know if that's to do so much with it, because they were knocked down and washed out and couldn't recover against the wave actions, or it's to do with water quality."

Trevor Gould

Te Waihora supports a high diversity of plant and animal species, including a number of rare or threatened species, as well as taonga species and other species of importance to Ngāi Tahu. For the majority of species at Te Waihora, it is not practical to address their needs directly through individual species management. Rather the maintenance and restoration of the full range of natural ecosystems is the principal means of conserving biodiversity (see Part 3, section 4.1). In some cases, individual species management, including recording and monitoring of species distribution may be necessary to ensure the protection of threatened or taonga species. This can be done consistent with the Department's national priorities for species management while also recognising Ngāi Tahu priorities.

Ngāi Tahu cultural, spiritual, historic and traditional association with indigenous plants and animals is recognised in part through the identification of "taonga species" and "taonga fish species" in the Ngāi Tahu Claims Settlement Act 1998 (see Appendix 5). In addition there are other species of importance to Ngāi Tahu that are not included as taonga species. The Department should, in accordance with section 4 of the Conservation Act 1987, where appropriate and to the fullest extent practicable, take action to protect Ngāi Tahu interests in these other species.

Protocols between the Department and Ngāi Tahu deal with the management of freshwater fisheries, the culling of species of interest to

Ngāi Tahu and various matters under the Resource Management Act 1991 that are likely to be relevant when managing indigenous plants and animals. These Protocols are given effect to through the policies and methods of this Plan.

Under the Conservation Act 1987 the Department has a responsibility for the protection of freshwater fish habitat and recreational freshwater fisheries. It is also responsible for the protection and management of indigenous fish species, including the protection of spawning grounds of freshwater fish and safeguarding migratory access. The North Canterbury Fish and Game Council manages introduced sports fisheries (brown trout, salmon and coarse fish species) and gamebird resources. Under the Fisheries Act 1996 the Ministry of Fisheries is responsible for providing for the utilisation of fisheries resources managed under the Quota Management System, including eel, flounder and yellow-eyed mullet within Te Waihora, while ensuring sustainability.

Te Rūnanga can act as an Advisory Committee to the Ministry of Fisheries (*Deed of Settlement*, Clause 12.14.7 & 8) to provide advice to the Minister of Fisheries on all matters concerning the management and conservation of fisheries within the Ngāi Tahu takiwā managed under the Fisheries Act 1983 and Fisheries Act 1996.

The Minister of Fisheries establishes Quota Management Areas (QMA) for individual fish species when they are introduced into the Quota Management System under the Fisheries Act 1996. Total Allowable Commercial Catches and Annual Catch Entitlements are then established for these areas. There would be benefit from managing Te Waihora as a distinct QMA with its own species quotas to better enable management of the in-lake fisheries (see Part 2 section 7.1.1 for an explanation of QMAs for commercial fisheries within Te Waihora).

Ngāi Tahu has a role in the management of native gamebird species at Te Waihora as a statutory advisor to the North Canterbury Fish and Game Council (sections 278-280, NTCSA), providing advice in relation to any decision to formulate and recommend to the New Zealand Fish and Game Council conditions for hunting seasons for native gamebirds and the preparation of game management plans which relate to native gamebirds. Te Rūnanga and the Department are working with North Canterbury Fish and Game Council in their management of sports fish and all gamebird species, including establishing cultural use as a method of population control. The control of black swan, although an indigenous species, is required because habitat and natural population control mechanisms have been substantially modified and/or removed. The North Canterbury Fish and Game Council also manages Canada goose in accordance with the *South Island Canada Goose Management Plan* (1995).

Scientific research and mātauranga Māori can improve understanding of natural processes and patterns and enhance management of the Joint Management Plan Area. Research and information gathering can focus on current information gaps, such as invertebrate populations and the role they play in the Te Waihora ecosystem, or address specific problems or management issues.

Te Rūnanga and the Department can continue to work with research bodies, including supporting the Canterbury branch of the New Zealand Ornithological Society in the ongoing monitoring and recording of bird species at Te Waihora. The customary use of plants and animals is addressed in Part 3 section 2.4.

Methods *Ngā ritenga*

- [2.2a] 4.3a Continue to undertake surveys to establish and reconfirm the status of indigenous plants and animals and to identify management requirements for their long term protection.
- 4.3b Record and monitor the distribution of threatened species, and taonga species and other species of importance to Ngāi Tahu.
- 4.3c Support and work with Ornithological Society (OSNZ) and North Canterbury Fish and Game Council in the recording and monitoring of bird populations.
- [2.1a] 4.3d Work within the Department’s national priorities for species management while also recognising Ngāi Tahu priorities for species management at Te Waihora.
- 4.3e Encourage or undertake the re-generation of indigenous macrophytic vegetation within Te Waihora.
- 4.3f Encourage further investigation and research of the invertebrates of Te Waihora.
- [6.1p] 4.3g Encourage further investigation and research into whitebait/*īnanga* spawning areas within the Te Waihora environment.
- [2.1i] 4.3h Ngāi Tahu will use a tangata tiaki system to monitor its customary use of plant and animal species, and will periodically report on the monitoring results.
- 4.3i Support the North Canterbury Fish and Game Council in the control of Canada goose numbers through the implementation and review of the *South Island Canada Goose Management Plan* (1995).
- 4.3j Work with the North Canterbury Fish and Game Council in relation to the application of Section 4 of the Conservation Act 1987 and the Protocol on the culling of species of interest to Ngāi Tahu, with respect to the Council’s roles at Te Waihora including:
- [6.1e, 2.4e] (a) The cultural use of some gamebird species and their eggs.
- (b) Providing advice consistent with the Ngāi Tahu Statutory Advisor role as set out in sections 277 to 280 of the NTCSA.
- [4.4h & i] (c) The illegal release and possible eradication of noxious fish species.
- (d) The illegal release of coarse fish species and management of existing species.
- (e) Improving the state of the indigenous species by reducing the impacts of introduced species on indigenous species at Waikekewai Stream.
- (f) The culling of game birds.

- [7.3d] 4.3k Promote collaborative research between the Te Rūnanga, the Department, Papatipu Rūnanga, the Ministry of Fisheries and research institutions to establish and monitor populations of long-finned eel at Te Waihora.
- 4.3l Promote the consideration of the Te Waihora freshwater eel fishery in any Ministry of Fisheries' strategy for managing environmental effects of fishing.
- 4.3m Advocate to the Ministry of Fisheries for ongoing investigations and monitoring programmes of Te Waihora fisheries, including the impact of commercial fisheries on customary fishing methods and success, and the monitoring and recording of all bycatch fish species from Te Waihora.
- [6.1k] 4.3n Support Ministry of Fisheries policy on the securing of in-lake nets to prevent their drift to sea and endangering Hector's dolphins and other marine species.
- [7.3c] 4.3o Promote Ministry of Fisheries research into the sustainability of the commercial fisheries of Te Waihora, including associated or dependent species and biodiversity.
- 4.3p Investigate, in conjunction with commercial fishers and the Ministry of Fisheries the establishment of a new Quota Management Area for flounder covering the same area as ANG13.
- [6.1o and 6.1p] 4.3q To enhance whitebait/īnanga populations at Te Waihora through co-ordinated management between Ngāi Tahu and the Department, including habitat protection and restoration and advocacy to other agencies.

4.4 Pests, exotic species, domestic animals and biosecurity *Ngā orotā, ngā momo rāwaho, ngā kararehe rarata, me te maru koiora*

Policies *Ngā kaupapa*

- 4.4.1 To control existing pest species, and strongly resist the invasion of new pest species, that have the potential to have an adverse effect on the following:**
- (a) Species diversity and diversity of habitat type.**
 - (b) Mahinga kai and cultural values.**
 - (c) Landscape values.**
 - (d) Recreational use and enjoyment (both in and out of the water).**
- 4.4.2 To promote the compatible management of pest and weed species on adjoining lands.**

4.4.3 To control and eradicate where possible exotic plant species within the JMP Area where they have the potential to have an adverse effect on mahinga kai and conservation values, in so far as this is consistent with the objectives and policies of this Plan.

4.4.4 Minimise biosecurity risks that would affect biodiversity and mahinga kai values.

[7.1.1] **4.4.5 To manage domestic animals within the JMP Area consistent with management for “mahinga kai, conservation and other purposes”.**

Explanatory note *Te kupu whakamāhukihuki*

It is not practical to eradicate all unwanted plant and animal species from the JMP Area, including pest and exotic species, because of its size and the large range of many of the species. Management of unwanted plants and animals therefore needs to focus on identifying key sites of biological, mahinga kai and cultural importance, and those infestations of certain species that have the greatest potential to threaten these values of Te Waihora. Pest inventories and control plans can be developed for identified areas of high mahinga kai and/or conservation value.

The Department’s *Strategic Plan for Managing Invasive Weeds* (Owen, 1998) describes from a national perspective, the long term approach to protecting indigenous species and natural communities from threats posed by invasive weeds. Within this context, an introduced plant at Te Waihora may not gain priority for extermination or control over plants on other lands administered by the Department. The Department has prepared an operational weed control plan for Harts Creek Wildlife Management Reserve.

As landowners and/or managers, Te Rūnanga and the Department may have obligations under the Biosecurity Act 1993 for the control of plant and animal pests identified in the relevant regional pest management strategy. Pest management within the JMP Area can be carried out in accordance with these strategies by agreement of the Crown for lands administered by the Department and by Te Rūnanga as owner and occupier of the Ngāi Tahu lakebed. Te Rūnanga and the Department can also control additional pest and exotic species through voluntary programmes in association with other agencies and landowners, such as yellow flag and purple loosestrife, to protect mahinga kai and conservation values and to facilitate public use and enjoyment of the JMP Area.

Introduced fauna include a variety of species with different agencies responsible for control under several statutes. The Department is responsible for the control on lands it administers, of animals such as cats, rodents, hedgehogs and mustelids (stoats, ferrets and weasels). The Department has the overall responsibility for the control of possums on lands it administers by virtue of the Wild Animal Control Act 1977. Environment Canterbury has management responsibilities for the control of possums, rabbits, rooks and mustelids on private land, and on Crown land with the Crown’s agreement, in accordance with the *Regional Pest Management Strategy* objectives developed under the Biosecurity Act 1993. Hare, rabbit, cat, mice, possum and mustelid populations are variable and need to be monitored as they can increase rapidly. There is no current

management of these pest animals within the JMP Area. For predator species with large ranges (e.g. cats and stoats) and where control may be needed to protect threatened species (e.g. invertebrates and lizards on Kaitorete Spit), then integrated pest management would be needed over the Spit, in the JMP Area and on adjoining lands. The North Canterbury Fish and Game Council is responsible for introduced fish, and the Department can manage pest fish species through the protection and management of indigenous fish species under the Conservation Act 1987.

Domestic animals (including pets) have the potential to adversely affect indigenous plants and animals and to conflict with other uses. It is necessary that any animals be controlled. If stray domestic animals (including stock) are found within the JMP Area, attempts can be made to identify the owner and have the animals removed. If animals are found persistently within the JMP Area, then after due warning to the owners if known, the animals may be dealt with as trespassing animals in accordance with section 36 Conservation Act 1987, section 96 Reserves Act, the Impounding Act 1955 and the Dog Control Act 1996 as appropriate.

Dogs for gamebird hunting purposes can be authorised by hunting permits, or provided for and/or controlled by the provisions of Part Vc Conservation Act 1987 for lands administered by the Department, or provided for or controlled by Ngāi Tahu for Ngāi Tahu lakebed. Dogs can be permitted for other purposes as appropriate.

Grazing has been identified as a suitable method for controlling exotic plants within the JMP Area and concessions and permits can be granted (see section 7.1). Monitoring and continual review of the effectiveness of grazing as a management tool can be carried out to identify any impacts of grazing on indigenous plant and animal communities and mahinga kai and conservation values generally.

Methods *Ngā ritenga*

- 4.4a Prepare pest inventories and control plans for priority pest species or sites within the JMP Area.
- 4.4b Regularly inspect areas for new infestations of pest or exotic species that may colonise the Te Waihora wetland and take necessary actions if they are considered a risk to mahinga kai or conservation values.
- ^[8b] 4.4c Fulfil responsibilities for pest control and maintain good neighbour relationships with adjoining landholders by co-operatively undertaking boundary pest control responsibilities.
- ^[7.1d & e] 4.4d Stringently enforce pest plant control conditions with grazing licences and permits within the JMP Area.
- 4.4e Control pests and other identified organisms within the JMP Area, as identified in approved Canterbury Regional Pest Management Strategies.
- ^[8c] 4.4f Work with Environment Canterbury, adjacent landowners, fishers and recreational users to reduce the threat of exotic weed invasion.

- 4.4g Have a precautionary approach to the use of herbicides, pesticides and biological control organisms, and allow their use within the JMP Area where there are no effective or efficient alternatives available, subject to strict controls for the protection of indigenous flora and fauna, and for the safety of people.
- 4.4h Monitor the effects of pest control operations on indigenous species and ecosystems, and if necessary cease or alter the operations to avoid, remedy or mitigate adverse effects on indigenous species.
- [4.3] 4.4i New species of exotic fish should not be introduced to Te Waihora.
- [4.3] 4.4j Monitor, search, and report any occurrence of pest fish species in Te Waihora or its tributaries, and eradicate where feasible.
- [7.1d & e] 4.4k Seek bylaws and regulations, if required, to prohibit domestic animals within the JMP Area, except as authorised for:
- (a) Grazing.
 - (b) Game bird or other authorised bird recovery, or the gathering of food or other natural materials, using dogs.
 - (c) Farm work.
 - (d) Other situations where any adverse effects that animals may have are avoided, remedied, or mitigated.
- [7.1d & e] 4.4l Manage sheep grazing within the JMP Area as a tool for the control of introduced plants.
- 4.4m Continue to work with Environment Canterbury, city and district councils, landowners, and lake users to eradicate purple loosestrife from the greater Te Waihora environment.
- [8a, 8c] 4.4n Participate in education programmes to raise awareness of plant and animal pest threats - in particular, the spread of environmentally damaging plant and fish pests, the passive movement of plant pests on clothing, cars, boats, nets and stock, and through maimai building.

4.5 Te Waihora significance – within the takiwā, nationally and internationally *Te hiranga o Te Waihora ke te takiwā o Ngāi Tahu, Aotearoa me te ao*

Policies *Ngā kaupapa*

- 4.5.1 To maintain the significance of Te Waihora within the Ngāi Tahu Takiwā and its national and international significance through the implementation of the other policies of this Plan.**
- 4.5.2 To see Te Waihora managed consistent with the objectives and other policies of this Plan, to the extent considered acceptable by both Te Rūnanga and the Department, before Wetland of International Importance status is sought.**
- 4.5.3 To promote public awareness of the significance of Te Waihora within the Ngāi Tahu takiwā and the national and international significance of Te Waihora.**

Explanatory note *Te kupu whakamāhukihuki*

“The national and international significance of the lake lies in its importance as a habitat for birds. The lake can have up to 100 redneck stints while other places in New Zealand only get a handful. The Little Stint and the Long-toed have only been seen here. It’s a good area for the smaller type of wading bird. The year before last [2001] I saw four species I hadn’t seen before.”

Colin Hill

Te Waihora is an area of national and international significance. It is recognised by the Department as a wetland and water body of national importance, and has long been recognised as meeting all of the criteria for a Wetland of International Importance. As a significant mahinga kai to Ngāi Tahu, it is also nationally important, based on the size of the Ngāi Tahu takiwā and the significance of Te Waihora within it. Te Rūnanga can recognise this through the establishment of a “Mahinga Kai Cultural Park” for Te Waihora (see Part 3 section 2.4).

Although Te Waihora currently meets the criteria for nomination as a Wetland of International Importance under the *Ramsar Convention on Wetlands* (1971), Ngāi Tahu is reluctant to have it nominated for formal recognition until there is clear action on the management of Te Waihora through the implementation of this Joint Management Plan, Resource Management Act planning processes and fisheries management, as acceptable to both Te Rūnanga and the Department.

The international significance of Te Waihora can be recognised through ongoing management in line with the *International Convention on Migratory Species of Wild Animals* (1999) to which New Zealand is a signatory, in recognition of the international migrant species that visit Te Waihora.

Methods *Ngā ritenga*

- [8c] 4.5a Work with councils, other agencies, and adjoining landowners to encourage better management of Te Waihora in recognition of its Ngāi Tahu takiwā, national, and international significance.
- [6.1a & b, 6.2d] 4.5b Provide information within the JMP Area highlighting the Ngāi Tahu takiwā, national, and international significance of Te Waihora.
- [6.1a & b, 4.1h] 4.5c Include the Ngāi Tahu takiwā, national, and international significance of Te Waihora in on-site interpretation and published material.
- 4.5d Review in the year 2010 and at first Plan review in 2015, the seeking of “Wetland of International Importance” status for Te Waihora.
- [4.1h, 4.3b] 4.5e Recognise the international *Convention on Migratory Species of Wild Animals* and the role of the JMP in conserving migratory species and their habitats, and take action appropriate to the Convention to avoid migratory species becoming endangered.

5 HISTORIC RESOURCES

TAONGA PURI MAHARA

“The history of the lake is important. It’s played a big part in history, particularly the early history of the area... It defined the boundaries in some ways, particularly for access and transport for the early European settlers, when access along the northern side of the lake was almost impossible because of the swampy areas. Kaitorete Spit allowed access from Banks Peninsula to the south. The timber trade across the lake had quite an effect. Once the railway came to Southbridge it stopped the timber trade... It’s always been important as the recipient of natural drainage and drainage schemes around the lake. To me it has always been part of the district and my appreciation of its importance has become more apparent as my knowledge of the lake and its history has increased.”

Roger Gilbert

“People who cut timber in the Little River Valley and elsewhere on Banks Peninsula brought it down to Waihora and they either assembled it into rafts of timber or they towed it by barge and they took it to Timberyard Point... I used to look at that place and think why the hell did they call it Timberyard Point for? That’s because that was where they took timber to.”

Daphne Jameson

Relevant Objectives *Ngā Paetae*

(repeated from Part 2, 8.4)

- (1) The historic values of Te Waihora are recognised and protected within the Joint Management Plan Area.
- (2) Historic resources associated with Te Waihora, but outside of the JMP Area, are recognised and protected.
- (3) Ngāi Tahu are able to exercise their role as kaitiaki over their historic taonga according to tikanga.

Policies *Ngā kaupapa*

[2.2.3, 7.3.5] **5.1 To acknowledge the cultural, spiritual, historic, and traditional association of Ngāi Tahu with Te Waihora and its associated wāhi tapu, wāhi taonga, and other places of historic significance, and give effect to the Department’s Protocols with Ngāi Tahu for historic resources.**

[2.2.1] **5.2 To identify, record, protect, manage and promote historic places and resources within and associated with Te Waihora and the heritage of Te Waihora, in conjunction with other agencies and community groups.**

- [2.2.2] **5.3 To recognise and respect Ngāi Tahu tikanga and kawa in the protection and maintenance of wāhi tapu and other places of historic significance.**
- 5.4 To preserve archaeological and historic resources within the JMP Area, including wāhi tapu and other sites or places of significance to Ngāi Tahu, and taonga artefacts or antiquities.**
- 5.5 To give effect to the Ngāi Tahu Kōiwi Tangata Policy.**
- 5.6 To prioritise the management of historic resources over natural resources or recreational management, in areas where historic values and/or threats to those values necessitate this.**
- 5.7 To acknowledge persons, sites or events of exceptional importance in New Zealand history or conservation, or people of importance to Ngāi Tahu on Ngāi Tahu land, by means of monuments, plaques, or pou whenua, sited where historically and culturally justifiable.**
- [8.1] **5.8 To work with the New Zealand Historic Places Trust, museums, historical societies, universities, the Christchurch Little River Railtrail Trust and other agencies to promote, manage, identify, and protect historic places and resources within and associated with the JMP Area.**
- [6.1.2, 6.1.4] **5.9 To raise public awareness of the historic resources and associated values of Te Waihora.**

Explanatory note *Te kupu whakamāhukihuki*

Traditional names are so important “because it tells you so much about the particular place and about what it was like and it tells you about the kind of food we had and I guess, how people lived, because if you’ve got those original names they tell you some of its stories.”

Cath Brown

“When you get back to the hard facts, I think it’s important to make sure that they’re as true as we can get them. There’s been more and more information that’s becoming more readily available - transcribing has been done recently. In a lot of ways the actual history becomes more readily available. That’s one of our aims as a historical society, to make that history more available.”

Roger Gilbert

Historic resources within the JMP Area are protected under the Historic Places Act 1993, the Antiquities Act 1975, the Reserves Act 1977 and the Conservation Act 1987. The Protocol for historic resources (included as Appendix 6) acknowledges the importance to Ngāi Tahu of their wāhi tapu, wāhi taonga and other places of historic significance. The methods below build on the Historic Resources Protocol, specifically the identification and

management of historic resources and use of Ngāi Tahu knowledge of those resources.

The Department has a role in managing historic resources on land it administers, while the New Zealand Historic Places Trust has the broader role “to promote the identification, protection, preservation and conservation of the historical and cultural heritage of New Zealand” under the Historic Places Act 1993. While there are known historic sites within the JMP Area, there are likely to be numerous additional sites both within and surrounding the JMP Area that can be identified and further protected. Management of Māori sites needs to be done in conjunction with the appropriate Papatipu Rūnanga.

Interpretation and education can help to raise awareness of the history of Te Waihora and the associated historic resources and recognise the importance to Ngāi Tahu of their cultural spiritual, traditional and historic values. The methods below build on the Protocol for Visitor and Public Information (see Appendix 6). See Part 3, section 6.1 for policies and methods relating to visitor information.

Methods *Ngā ritenga*

- [2.1c]
- 5a Carry out surveys in areas where there are gaps in historic information, including the gathering of oral histories.
 - 5b Establish and utilise appropriate recording methodologies, in consultation with Papatipu Rūnanga, for recording Ngāi Tahu historic sites and values.
 - 5c Ngāi Tahu will encourage, in conjunction with district councils, the Historic Places Trust and landowners, the protection by covenant or other methods of historic areas associated with Te Waihora, but not within the JMP Area.
 - 5d In the event of the discovery of any historic features, taonga/artefacts, or archaeological sites within the JMP Area, then ensure that:
 - (a) Any taonga/artefacts of significance found are reported in accordance with procedures under the Antiquities Act.
 - (b) Procedures requiring notification of the Historic Places Trust are followed.
 - (c) Papatipu Rūnanga are notified of the discovery of taonga/Māori artefacts and Māori archaeological sites, and are provided with the opportunity to participate in the recovery operations when they occur.
 - (d) Papatipu Rūnanga, wishes for the safe-keeping of any found taonga/artefacts are respected.
 - (e) Interpretation of taonga/Māori artefacts and Māori archaeological sites reflects the views and knowledge of Ngāi Tahu.

- 5e Encourage 5d(a) to (d) above in the event of discoveries of any historic features, artefacts, or archaeological sites outside of, but associated with the JMP Area.
- 5f Seek the involvement of Papatipu Rūnanga when undertaking work that may affect Māori archaeological sites or other sites of significance to Ngāi Tahu.
- [6.1a & b] 5g Acknowledge historic resources and values through interpretation and publications to raise public awareness, where appropriate, while recognising the matters set out in the Protocols between the Department and Ngāi Tahu, in particular the dissemination of information.
- 5h Ngāi Tahu and the Department with Ngāi Tahu advice, may choose to not disclose or to disclose to a “silent file” system, the location of wāhi tapu sites in order to preserve the sacredness of these sites and aid in their protection.
- 5i Maintain an awareness of potential archaeological sites during the carrying out of management activities within the JMP Area.
- 5j Proposals for monuments, plaques or pou whenua will be considered consistent with legislation and Ngāi Tahu tikanga as appropriate.
- 5k Any written report produced as a requirement of archaeological work within the JMP Area should be reviewed by Ngāi Tahu and/or the Department prior to publication. Which agency reviews the report will depend on the land and archaeological resources involved.
- 5l Work with New Zealand Historic Places Trust, councils, museums, historical societies, universities, the Christchurch Little River Railtrail Trust, landowners and other agencies, to recognise and protect the historic resources of Te Waihora through the following processes:
- c) Involvement in Historic Places Trust statutory action.
 - d) Historical society, university and museum research projects.
 - e) Christchurch Little River Railtrail Trust liaison and the Department’s approval role for Trust proposals.
 - f) District and city council annual planning.
 - g) District council property management systems, i.e. LIM Reports.
 - h) Statutory advocacy through the RMA.
 - i) Joint Department/Ngāi Tahu action.
 - j) Joint action with other agencies/community groups with common goals and desired outcomes and
 - k) Community involvement and education.

6 RECREATIONAL USE AND PUBLIC ACCESS *MAHI-Ā-TĀKARO ME TE WHAI WĀHI O TE HAPORI*

“I think it’s important for the public to be able to access the lake. Because I think, and this is a personal view, if the public of Christchurch understood both the beauty and the magic of the lake then I think there would be a much greater momentum to ensure that the lake is restored to its former state... not many Christchurch people know the lake exists. It’s just something they drive past. They’ve got no idea of the biodiversity that’s out there, the bird life that’s out there. Whether because people today are too busy or don’t want to I don’t know. For those of us who have taken the time to look it’s a magic place.”

Martin Clements

“The lake edge is not only important for birds. It is an important recreational area, especially for duck shooting, fishing (hobby and commercial) and for water sports.”

Colin Hill

Relevant Objectives *Ngā Paetae*

(repeated from Part 2, 8.5)

- (1) Public access opportunities and recreational use and enjoyment of the Joint Management Plan Area are identified and provided for where there are no likely adverse effects on mahinga kai, other cultural values, or conservation values.
- (2) Recreational opportunities at Te Waihora are enhanced through information provision and working with other agencies and recreational groups.

6.1 Recreational use *Ngā mahi tākaro*

Policies *Ngā kaupapa*

- [5.6] **6.1.1 To foster recreational use and enjoyment, in conjunction with recreational user groups, which acknowledges the special qualities and the range of recreational opportunities of Te Waihora, and which is consistent with the mahinga kai and conservation values of the Joint Management Plan Area, including the following activities:**
- (a) Game bird hunting.
 - (b) Fishing.
 - (c) Passive enjoyment.
 - (d) Appreciation from roadsides and State Highway 75.
 - (e) Art and craft.
 - (f) Water sports.
 - (g) Ornithology/ bird watching.
 - (h) Use of the Motukarara to Birdlings Flat Railtrail.
- 6.1.2 To ensure all signage is of a consistent nature and recognises Ngāi Tahu and Department roles, and where applicable those of the North Canterbury Fish and Game Council and other agencies.**
- [8.3] **6.1.3 To recognise and actively support the Maimai Agreement (see Appendix 4) and the relationship with North Canterbury Fish and Game Council.**
- [5.9] **6.1.4 To identify in public information the values set out in Part 2 of this Plan, with a focus on key themes.**

Explanatory note *Te kupu whakamāhukihuki*

"...to see all the users of this body of water relatively satisfied but realise that there are others as well and they can't all have it their own way. If we do that we will get the greatest appreciation of it and we'll get the greatest conservation of values that are there".

Trevor Partridge

The Aquatic Club has probably been going for 60 years. Might even be longer because it used to be called the Ellesmere Motorcross, they used to have bike racing down at the domain... Nowadays it is water-skiing, jet-skiing, windsurfing and basically people just wanting to go down there and wanting to paddle around in a canoe. Families go down there and use it. It's a source of family entertainment on a Sunday afternoon. Schools actually use it a bit for training, people use the yachts.

Murray Stephens

Further recreational use and enjoyment of Te Waihora can be encouraged, especially for the more passive pursuits, to increase and raise the awareness and understanding of the Te Waihora environment and to enhance the recreational use and enjoyment of the area.

It is important to consider the potential impacts of recreational use when providing recreational facilities in the area, especially activities that can disturb and fragment wildlife habitat and sites and activities of cultural importance to Ngāi Tahu.

Ngāi Tahu and the Department can monitor recreational activities and any effects on mahinga kai and conservation values. Some bylaw or regulation control may be needed to control high impact activities or those likely to disturb other visitors within the JMP Area. District and regional councils can regulate water-surface recreational activities through the Resource Management Act 1991 and the navigational safety provisions under the Local Government Act 2002.

The use of nets for recreational fishing is restricted in some areas of Te Waihora under the Fisheries (South East Area Amateur Fishing) Regulations 1986, including in any river or stream that flows into Te Waihora; areas of Te Waihora within a 1.2 kilometre radius of the mouths of the Irwell River/*Waiwhio*, Selwyn River/*Waikirikiri*, Halswell River/*Huritini*, Harts Creek/*Waitatari*, LII River/*Ararira* and within the waters of Te Korua, near Taumutu. These regulations however, do not apply to customary fishing authorised by a Tangata Tiaki/*Kaitiaki* under the Fisheries (South Island Customary Fishing) Regulations 1999.

The *Canterbury Conservation Management Strategy* (2000) encourages the formation of a trust to help develop a trail along the old Little River – Motukarara railway line. The railway embankment is recognised as a key public access point in method 6.2a of this Plan.

The Department recognises the importance to Ngāi Tahu of their cultural, spiritual, traditional and historic values in the provision of public information and interpretation services and facilities for visitors on the land it administers. The Department and Te Rūnanga can work together to raise public awareness of positive conservation partnerships and consult on the provision of interpretation facilities consistent with the Protocol on Visitor and Public Information (see Appendix 6).

In the provision of signage within the JMP Area it may be necessary for a distinction to be drawn between interpretation and operational signs. For interpretation, both the Department and Ngāi Tahu logos (and that of the North Canterbury Fish and Game Council, where appropriate) can be shown. On operational signs, such as those giving visitor access guidance, including vehicle use conditions, Department and/or Ngāi Tahu logos (and that of the North Canterbury Fish and Game Council and other agencies, where appropriate) can be used, depending on the land involved and the activities being managed.

For policies and methods on structures for recreational and other purposes and organised sporting events, see Part 3, section 7.2.

Methods *Ngā ritenga*

- 6.1a The following themes will be emphasised in visitor information:
- (a) The outstanding natural resources of Te Waihora.
 - (b) Ngāi Tahu relationships with the area.
 - (c) Customary use of natural resources.
 - (d) Historic transport connections in the landscape.
 - (e) Fish and Game Council involvement in the area.
 - (f) The changing emphasis of wetland management.
- 6.1b Visitor information and interpretation will be developed to increase visitor enjoyment, safety, appreciation, knowledge, and understanding of Te Waihora and its values.
- [3], 4.3], 3e] 6.1c Visitor facilities and services will be managed to:
- (a) Protect and have minimal impact on the mahinga kai and conservation values of Te Waihora.
 - (b) Implement the Protocol on Visitor and Public Information.
 - (c) Meet all legislative requirements and standards regarding visitor safety.
 - (d) Harmonise with the landscape.
 - (e) Be compatible with the objectives and policies of this Plan.
- [2.4b] 6.1d Identify camping sites for public recreational use within the JMP Area.
- 6.1e Continue to work with the North Canterbury Fish and Game Council in the management of Te Waihora including:
- (a) The ongoing implementation of the Maimai Agreement, including through the development of processes, conditions, and standards for the siting, construction, use, maintenance and removal of Maimai.
 - (b) Determining conditions on hunting licences, particularly in respect of vehicle access and ground disturbances.
 - (c) Providing advice to the Council on the management of gamebird species, from the role of Ngāi Tahu Statutory Advisor.
 - (d) The development of public access, including signage.
- [6.2e(f)]
- 6.1f Keep under regular review all recreational activities and any effects they may have on the mahinga kai, conservation, and other cultural values of Te Waihora, and put in place a formal monitoring programme, if necessary.
- 6.1g Retain the existing no-boating restriction for Harts Creek Wildlife Refuge.

- 6.1h Advocate to district councils for surface water activity controls under their district plans, and to Environment Canterbury for navigational safety bylaws, if necessary to achieve the objectives and policies of this Plan.
- [4.3j, 6.2e & d] 6.1i Work with recreational users, groups and agencies including the North Canterbury Fish and Game Council, where appropriate, to identify recreational opportunities and to resolve any conflicting uses or impacts on mahinga kai, conservation and other cultural values.
- 6.1j Undertake periodic re-evaluations of recreational opportunities within the JMP Area and appropriate visitor facilities and services.
- 6.1k Support Ministry of Fisheries policy on the securing of recreational fishing nets, to prevent drift to sea when the lake is open and endangering Hector's dolphins and other marine species.
- 6.1l Support the development of a cycling/walking Railtrail along the Motukarara to Birdlings Flat former railway embankment and land within the JMP Area, consistent with the policies and methods of this Plan.
- 6.1m Establish, in consultation with North Canterbury Fish and Game Council, a suitable safety margin within the JMP Area alongside the Motukarara to Birdlings Flat Railtrail, including alongside the former Kaituna railway quarry (M36 163 on Figure 4), within which gamebird shooting or maimai should not be permitted.
- 6.1n Seek bylaw and/or regulation provisions, if required, for controlling the placement of moorings and marker buoys within the Joint Management Plan Area, and allowing the following:
- (a) Markers, including buoys, for waterbased sporting or recreational events, provided they are removed within twenty four hours of the completion of the events.
 - (b) Markers or buoys to identify boating activity areas under Canterbury Regional Council's Inland Waters Navigation Safety Bylaws (2000).
 - (c) Markers or buoys for fishing nets as required under Fisheries Regulations.
 - (d) Markers or buoys as erected by or on behalf of Te Rūnanga or the Department for land management purposes.
- [4.3q, 2.4n] 6.1o Ngāi Tahu will seek bylaw provisions, if required, for the control of public whitebaiting on the Ngāi Tahu lakebed, including the mouth of Te Waihora, in order to protect whitebait populations.

- [4.3g, 4.3q] 6.1p The Department may seek closed areas or restrictions on fishing under the Conservation Act for the protection of whitebait populations, including spawning areas and fish passage, within the Te Waihora environment.

6.2 Public access *Te whai wāhi o te hapori*

Policies *Ngā kaupapa*

(see Figure 12)

- [2.4.5, 8.1] **6.2.1 To provide, enhance and maintain key access points for pedestrian, vehicle and boat access to and within the JMP Area for customary, recreational and commercial users, in conjunction with councils, Transit New Zealand, and other agencies and interested groups.**
- 6.2.2 To provide information about public access to and within the JMP Area in consultation with the relevant road controlling authority.**
- 6.2.3 To allow public vehicular access within the JMP Area, subject to policies 6.2.4 and 6.2.5 below, only where:**
- (a) **There is an existing formed all-weather vehicle track, or one subsequently formed by Te Rūnanga and the Department, or**
 - (b) **Authorised access along a defined route to a defined end-point can occur without adverse effects on mahinga kai and conservation values.**
- 6.2.4 To allow vehicular access on the Ngāi Tahu lakebed (that extends to mhws on the coastline) at the Taumutu end of Kaitorete Spit only where access is:**
- (a) **For mahinga kai activities undertaken by Ngāi Tahu Whānui, or**
 - (b) **Provided for in the Canterbury Regional Council easement (*Deed of Settlement* Clause 11.6.5), or**
 - (c) **By vehicles keeping to the formed 4WD track running along this section of the Spit, only where such access can occur without adverse effects on mahinga kai and conservation values, or**
 - (d) **As otherwise approved by Te Rūnanga/ Te Taumutu Rūnanga.**
- 6.2.5 To allow access over Te Waiomākua by written agreement where there are no likely adverse effects on mahinga kai or other cultural values.**
- 6.2.6 To require aircraft landing and taking off in the JMP Area to have a concession or permit, but to note that aircraft landing and taking off is generally inconsistent with management for “mahinga kai, conservation and other purposes”.**

[8.1]

6.2.7 To identify and seek to provide any desired access additional to that which currently exists, in conjunction with councils, Transit New Zealand, other agencies, landowners and interested groups.

Explanatory note *Te kupu whakamāhukihuki*

“You’ve got to ask yourself where do you actually want to get to, how far down do you want to go. Do you want to stand at the edge and look out? In which case, defining the edge is the problem because of the water flow. So, what might be the edge one day is miles from it a number of weeks later.”

Trevor Partridge

“The main thing is that people don’t appreciate what it is and what is there. That’s the main factor why it’s not used.”

Murray Stephenson

Public recreational access to lands administered by the Department within the JMP Area is allowed by the Conservation and Reserves Acts, subject to provisions for the conservation and protection of natural and historic resources. All lawful rights of public access to the “bed of Te Waihora” existing on 21 November 1997 continue to be provided for by section 173 Ngāi Tahu Claims Settlement Act 1998. There is significant existing legal public access to the JMP Area by way of legal roads.

Together, lands within the JMP Area, other reserves and legal roads provide considerable public access opportunities to and within Te Waihora, although many of the legal roads are unformed and physical access on the ground can be difficult to determine and navigate.

While there is no right of public access to Te Waiomākua on Kaitorete Spit, Ngāi Tahu can allow access over the area by written or other agreement. The dry land part of Te Waiomākua can be recorded and managed by Ngāi Tahu as a nohoanga or campsite in accordance with this Plan, either for their exclusive use or use by others with permission.

Legal roads are administered by the Selwyn District and Christchurch City Councils and Transit New Zealand who provide, maintain, or approve formed vehicle or other access and associated facilities according to their policies. Te Rūnanga and the Department are able to work with the councils, Transit New Zealand and interested user groups to determine desired access points and appropriate facilities for public use and enjoyment of Te Waihora.

Ngāi Tahu and the Department can provide consistent site information and interpretation, in association with the angler and shooter access programme run by the North Canterbury Fish and Game Council, to increase public awareness of access to and use of Te Waihora.

Vehicle use within wetlands is generally not consistent with their conservation and can be an offence under the Conservation and Reserves Acts where damage is caused to natural and historic features. However, it can be appropriate to allow for vehicle use within the JMP Area in certain areas and during certain times where adverse effects on conservation values or mahinga kai are avoided. A “vehicle” is as defined in the Conservation Act 1987, which in turn comes from the Land Transport Act 1998 – see Glossary.

Vehicle use can be monitored to observe compliance with any conditions set to avoid adverse effects on mahinga kai or conservation values. If adverse effects are observed then more restrictive mechanisms can be instigated to regulate or prohibit vehicle use within the JMP Area.

Vehicle use for management purposes within the JMP Area can be authorised by Te Rūnanga and the Department but, in all cases, such vehicle use should only occur with discretion and should not adversely affect mahinga kai or conservation values. If it does cause adverse effects then remedying action should be undertaken.

Aircraft have been occasionally used at low levels at Te Waihora during gamebird counts and culls and maimai surveys. Their noise disturbance and the risk of bird-strike make other use undesirable and unlikely. Control can occur on a case-by-case basis, with bylaws/regulation support, including through advocacy to district councils and the Civil Aviation Authority for any proposed amphibious aircraft landings.

Methods *Ngā ritenga*

(see Figure 12)

- [6.1b,
6.1h,
7.1g]
- 6.2a Key points recognised for approaching the JMP Area by pedestrians and/or vehicles and at which signage and interpretation will be provided are:
- (a) Fishermans Point/ *Whakamātakiuru*.
 - (b) Timber Yard Point (Lakeside Recreation Reserve) and the Harts Creek wildlife observation hide.
 - (c) Selwyn River/Waikirikiri delta (true left of river).
 - (d) Greenpark Sands (adjoining Greenpark Huts and at Embankment Road).
 - (e) Kaituna 'Railtrail' (Motukarara to Birdlings Flat) from Seabridge and Jones Roads and from State Highway 75 at Ataahua, and Kaituna quarry site from State Highway 75.
 - (f) Kaitorete Spit at Reserve 682.
 - (g) Any additional areas identified through Policy 6.2.7.

- 6.2b Key points recognised for boat access, including for vehicles with boat trailers, but not necessarily providing a launching ramp and at which signage and interpretation will be provided are:
- (a) Fishermans Point/ *Whakamātakiuru* from the legal road.
 - (b) Johnstons Road end.
 - (c) Timber Yard Point (Lakeside Recreation Reserve).
 - (d) Irwell River/ *Waiwhio* mouth.
 - (e) Selwyn River/ Waikirikiri by Lower Selwyn Huts.
 - (f) LII River/ *Ararira* accessed from both Days Road and Wolfes Road.
 - (g) Halswell River/ *Huritini* at the Halswell Cut/ River junction (Greenpark Huts side).
 - (h) Kaituna River just upstream of State Highway 75 (this access point involves unformed legal road and Crown riverbed just outside the JMP Area).
 - (i) Any additional areas identified through Policy 6.2.7.
- 6.2c District and city council action and/or support will be sought to provide practical vehicle and/or pedestrian access along legal roads to and along the edge of the JMP Area, by the methods and at the localities shown on Figure 12 or at any additional areas identified through Policy 6.2.7.
- 6.2d Signage, interpretation material, fences and gates of a consistent nature will be provided within the JMP Area to identify public access and recreational opportunities, and to encourage appropriate visitor behaviour to avoid adverse effects on mahinga kai, other cultural values, conservation values, and on other visitors.
- 6.2e Seek bylaws and regulation provisions, if required, for the control of activities arising from public access and where adverse effects are occurring on mahinga kai or conservation values, or on other visitors. The bylaw and regulation provisions may include:
- (a) Not spilling any petrol, oil, or similar substance in the JMP Area.
 - (b) Not leaving or burying any refuse in the JMP Area.
 - (c) Complying with camping directions regarding locations, tidiness and maximum time periods for camping.
 - (d) The use of firearms other than in accordance with a hunting permit.
 - (e) Controls on the use of a spotlight for hunting, not including fishing.
 - (f) Controls on ground disturbance or natural material removal without authorisation, while allowing for eel weirs, *kōumu* and the use of *paru*.
- 6.2f Seek bylaws and regulation provisions, if required, to control or prohibit vehicle use within the JMP Area, in accordance with Policies 6.2.3 and 6.2.4 (and Methods 6.2g, 6.2h and 6.2i) and Method 2.4p and consistent with Method 6.2j.

- 6.2g Existing formed all-weather vehicle tracks in terms of Policy 6.2.3(a) are:
- (a) Within the unnamed conservation area (M36 500), from the northern end of Aitkens Road to the mouth of the Irwell River/ *Waiwhio*
 - (b) Within the Greenpark Sands Conservation Area, from the western end of Jarvis Road, 350 metres lake-ward.
- 6.2h Defined managed vehicle use routes and end points allowed in terms of policy 6.2.3(b), to be clearly marked on the ground and as marked on Figure 12 are:
- (a) Within Lakeside Wildlife Management Reserve, from Johnstons Road, approximately 550 metres along the western boundary of the reserve.
 - (b) Within Yarrs Flat Wildlife Management Reserve, to the lake-edge from Wolfes Road.
 - (c) Within Greenpark Sands Conservation Area:
 - (i) To the lake-edge south-east from Greenpark Huts
 - (ii) To the lake-edge south from Greenpark Huts
 - (iii) To the lake-edge south-west from Greenpark Huts.
 - (d) To the wetland edge from Clarks Road.
 - (e) To the lake-edge from Jarvis Road (2 routes)
 - (f) To the lake-edge from the legal road running west from Embankment Road.
 - (g) Or as additionally determined from time to time by Ngāi Tahu and the Department.
- 6.2i Any vehicle use under Method 6.2h should occur in accordance with the following conditions:
- (a) Vehicles remaining on the prescribed routes.
 - (b) Vehicle speeds not exceeding a walking pace (i.e. less than 10 km/h).
 - (c) Only when ground conditions on the vehicle use routes are dry and firm, and
 - (d) No chains or other means be used to enhance traction.
- 6.2j Should monitoring of vehicle use within the JMP Area identify that significant adverse effects are occurring, then review the vehicle use controls. If required, consider and implement additional controls including, but not limited to:
- (a) Seasonal use restrictions to protect migrant bird species
 - (b) Access by permit only or other restricted entry
 - (c) Fewer vehicle use routes
 - (d) No vehicle use within vulnerable areas.
- 6.2k Develop signage and interpretation materials consistent with method 6.2d above to enhance public access and promote the key access points in methods 6.2a and 6.2b.
- 6.2l In implementing policy 6.2.5 Te Rūnanga will consider all requests for access over Te Waiomākua on a case by case basis.

- 6.2m Work with other agencies to provide a co-ordinated approach to vehicle use and access along Kaitorete Spit.
- 6.2n Seek bylaws and regulation provisions for the control of aircraft within the JMP Area by requiring any aircraft landing, taking off or hovering to have specific authorisation.
- 6.2o Work with councils, Transit New Zealand, North Canterbury Fish and Game Council, Christchurch Little River Railtrail Trust, other agencies, landowners and interested groups, on the provision and control of public access to and within the JMP Area through the following processes:
 - a) Roading authority liaison.
 - b) Ongoing liaison and continuing the implementation of the Maimai Agreement with North Canterbury Fish and Game Council.
 - c) Christchurch Little River Railtrail Trust liaison and the Department's approval role for Trust proposals.
 - d) District, city and regional council annual planning.
 - e) Statutory advocacy through the RMA.
 - f) Joint Department/Ngai Tahu action.
 - g) Joint action with other agencies and community groups with common goals and desired outcomes.
 - h) Community involvement and education.

Figure 12: Te Waihora public access



7 COMMERCIAL AND OTHER ACTIVITIES ***NGĀ MAHI ARUMONI ME ĒTAHI ATU MAHI***

Relevant Objectives *Ngā Paetae*

(Repeated from Part 2, 8.6)

- (1) The mahinga kai status of Te Waihora and the Ngāi Tahu ownership of the Ngāi Tahu lakebed are recognised in evaluating activities that require a concession or permit within the Joint Management Plan Area.
- (2) All activities that require a concession or permit within the Joint Management Plan Area are compatible with the other objectives and policies of this Plan.

7.1 Commercial activities *Ngā mahi arumoni*

Policies *Ngā kaupapa*

- [4.4.5, 7.2.1] **7.1.1 To require where necessary, a permit from Te Rūnanga, or a concession from the Minister of Conservation, for any structure or use associated with commercial activity within the JMP Area.**
- 7.1.2 To consider all applications for a permit or concession, and manage permits and concessions, in accordance with the relevant legislation and the objectives and other policies of this Plan, and any other relevant policy documents of Ngāi Tahu and the Department as it relates to either the Ngāi Tahu lakebed or the lands administered by the Department respectively, and aim for consistency between these processes where possible.**
- 7.1.3 Within the JMP Area, all existing drains and stopbanks should be managed to best be consistent with management for “mahinga kai, conservation and other purposes”, and any new drains should be consistent with management for “mahinga kai, conservation and other purposes”.**
- 7.1.4 To avoid any adverse effects of agricultural landuse within the JMP Area on mahinga kai and conservation values.**

- 7.1.5 To encourage the sustainable management of commercial fisheries within Te Waihora in recognition of the importance of the mahinga kai and conservation values.**
- 7.1.6 Extraction of shingle, sand or soil from lands administered by the Department within the JMP Area should not be permitted.**
- 7.1.7 To not allow the commercial extraction of shingle, sand, or other minerals from the Ngāi Tahu lakebed.**
- 7.1.8 To ensure tourism activities within the JMP Area are consistent with the objectives and other policies of this plan and:**
 - (a) serve to increase awareness of the area through interpretation and sensitive use, and/or**
 - (b) are consistent with mahinga kai and conservation values of Te Waihora.**
- 7.1.9 Ngāi Tahu will further their involvement in commercial activities at Te Waihora based on environmental, cultural and commercial best practice.**
- 7.1.10 The Department will support Ngāi Tahu in the identification of concession opportunities that will help achieve conservation outcomes at Te Waihora**
- 7.1.11 To manage any aircraft use in accordance with policy 6.3.6.**

Explanatory note *Te kupu whakamāhukihuki*

“As far as the eel fishery goes, I’ve always seen other options apart from just a wild fishery. We’ve always been interested in aquaculture... I think it’s a very important industry. There should be allowances made for it, for local work and for the good of the fishery and everything else.”

Trevor Gould

“The numbers of eel in the lake have fallen. There was no commercial fishery back in those days so if you didn’t take a lot from the lake you didn’t harm the lake.”

Malcolm Wards

It is anticipated that only a low level of commercial activity will occur within the Joint Management Plan Area during the life of this Plan. This will primarily be fishing, limited grazing and to a lesser extent ecotourism and filming.

People use various lands administered by the Department to undertake commercial activities. Similarly the Ngāi Tahu lakebed is also currently used for commercial purposes, including grazing and fishing. There are also potential future commercial uses within the Joint Management Plan Area including aquaculture, filming and tourism ventures.

Amongst the lands administered by the Department, some are suitable for grazing for exotic vegetation control. Other lands are being retained as buffer zones for long-term, sea level induced lake level rise. These

developed pasture lands may be grazed by stock, including cattle, in the medium term.

The Conservation and Reserves Acts provide for commercial use where it is compatible with the conservation and protection of natural and historic resources and enjoyment by other people. The Ngāi Tahu Claims Settlement Act 1998 recognises Te Rūnanga as the owner and occupier of the “bed of Te Waihora” and confers the right to control any use of the bed for commercial activity, subject to the provisions of sections 171 and 174 of the NTCSA.

Commercial activity on the Ngāi Tahu lakebed is to be controlled through a permit system akin to the Department’s concessions process. The Ngāi Tahu permit can apply to all current and potential commercial activities. Every permit application will be assessed on the merits and potential effects of the proposed activity. Similarly, all concession applications to the Department are considered on their merits, potential effects, the relevant statutory framework and this Joint Management Plan. Consultation with Ngāi Tahu on each concession application is undertaken by the Department. Conditions can be imposed and enforced to avoid, remedy, or mitigate any adverse effects of the activity, structure, or facility within the JMP Area or on visitors to the area. Monitoring of concessions and permits will become more important if visitor use increases. Te Rūnanga and the Department need to be fully aware of any adverse effects of commercial activities, including cumulative effects, if they are to manage them effectively. For this reason any new concessions and permits granted for the JMP Area should include monitoring provisions which enable the terms and conditions of the concession or permit to be reviewed as necessary to ensure that any adverse effects can be avoided, remedied, or mitigated. Approved monitoring programmes can then be established to specifically address the issues of concern and provide a consistency of approach and to enable comparisons to be made with future monitoring.

Some areas can be managed as kōhanga or recreational and customary use areas only, by controlling the placement of fishing nets or associated stakes and anchors where they would be in contact with the Ngāi Tahu lakebed. Some areas of Te Waihora are already closed to commercial fishing under the Fisheries (South East Area Commercial Fishing) Regulations 1986, including in any river or stream that flows into Te Waihora; areas of Te Waihora within a 1.2 kilometre radius of the mouths of the Irwell River/*Waiwhio*, Selwyn River/*Waikirikiri*, Halswell River/*Huritini*, Harts Creek/*Waitatari*, LII River/*Ararira* and within the waters of Te Korua, near Taumutu.²²

Methods *Ngā ritenga*

- 7.1a Ensure that all commercial activities within the JMP Area are authorised.
- 7.1b Ngāi Tahu will implement a permitting system, akin to the Department’s concessions process, so that all commercial activities within the JMP Area are managed in an integrated manner, consistent with the objectives and policies of this Plan.

²² *Te Waihora Eel Management Plan* (1999) page 34.

- 7.1c Ensure all drainage and stopbank activities within the JMP Area, and seek that those outside of the area:
- (a) Avoid, remedy or mitigate adverse effects on mahinga kai and conservation values.
 - (b) Avoid the introduction or spread of exotic species.
 - (c) Adhere to best practice drain maintenance methods that are consistent with management for “mahinga kai, conservation and other purposes”, as far as practical.
- 7.1d For areas that are not fenced, developed pasture, then licences or permits where appropriate may be granted to graze sheep.
- 7.1e For areas that are fenced, developed pasture away from the wetland edge and held by the Department for long-term lake level or wetland boundary change, then licences where appropriate may be granted to graze sheep or other stock.
- 7.1f Require as a condition of grazing concessions/permits, the erection and maintenance of fences to exclude stock from areas of significant mahinga kai, conservation, or other cultural value.
- 7.1g Any grazing licences or leases granted by Te Rūnanga/the Department respectively, should permit non-vehicular public access, except that where such licences include part of the Christchurch Little River Railtrail then bicycles should also be permitted.
- 7.1h Ngāi Tahu and the Department, the latter to the extent that land administered by the Department is involved, will manage the two areas identified on **Error! Reference source not found.** as customary and recreational use areas and/or kōhanga by controlling the placement of fishing nets, associated stakes and anchors, or other commercial activities where they would be in contact with the Ngāi Tahu lakebed.
- 7.1i Support Ministry of Fisheries gazetted areas closed for commercial fishing, including the rivers and streams flowing into Te Waihora and the waters of Te Korua.
- 7.1j Commercial fishing on lands administered by the Department, except within Harts Creek Wildlife Management Reserve and Waihora Scientific Reserve and on those areas shown on **Error! Reference source not found.**, may be allowed where the commercial fisher holds a permit from Ngai Tahu for fishing on the adjoining Ngāi Tahu lakebed.
- 7.1k Te Rūnanga o Ngāi Tahu will request that the Ministry of Fisheries seeks its approval for any new fishing methods that may impact on the bed of Te Waihora.

- 7.1l For activities affecting the Ngāi Tahu lakebed the issuing of a permit is at the discretion of Te Rūnanga and if approving a permit, appropriate conditions should be imposed to avoid, remedy, or mitigate any potential effects that the permitted activity may have on the Ngāi Tahu lakebed and on mahinga kai, other cultural uses, or conservation values.
- 7.1m Ngāi Tahu will require the appropriate marking of commercial fishing stakes on Ngāi Tahu lakebed, and advocate to the Ministry of Fisheries enforcement of this under fisheries legislation.

7.2 Other activities *Ngā mahi kē*

Policies *Ngā kaupapa*

- [7.1.1] **7.2.1 To consider all applications for utilities, structures and easements within the JMP Area in accordance with the relevant legislation and the objectives and policies of this Plan where:**
- (a) **Their purposes are essential for the public good and cannot reasonably be achieved outside of the JMP Area.**
 - (b) **Their adverse effects can be avoided, remedied or mitigated.**
- 7.2.2 The Minister should not permit any buildings for exclusive private use on lands administered by the Department, except as provided for at the Lower Selwyn Huts.**
- [4.2.5] **7.2.3 To ensure that allowing the Lower Selwyn Huts settlement to remain on site does not constrict or restrain Te Waihora lake levels or management for “mahinga kai, conservation and other purposes” within the JMP Area.**
- 7.2.4 Ngāi Tahu will consider any applications for buildings and structures on Ngāi Tahu lakebed consistent with the other policies and methods of this Plan, where applicable.**
- 7.2.5 To permit organised sporting and other competitive events within the JMP Area where they are consistent with:**
- (a) **The ability of Ngāi Tahu to undertake mahinga kai**
 - (b) **The protection of indigenous plants and animals and their habitats**
 - (c) **Other use of the JMP Area**
 - (d) **The legislative purposes for which the land is held.**

Explanatory note *Te kupu whakamāhukihuki*

Along with the use of the Joint Management Plan Area for commercial purposes, use can occur for other purposes not necessarily associated with the conservation of natural and historic resources or management for mahinga kai purposes. Other activities currently occurring within the Joint Management Plan Area are outlined in Part 2, 7.2.

The erection of structures on reserves or conservation land requires the approval of the Minister under the Reserves or the Conservation Acts. The erection of structures on Ngāi Tahu land within the JMP Area requires the authority of Te Rūnanga as the landowner.

Section 174 of the NTCSA provides that *“rights of ownership, use and occupation of the structures in or upon the bed of Te Waihora, existing on 21 November 1997... continue in effect for as long as, and to the extent that, such rights otherwise remain lawful.”* Such existing structures are listed in Schedule 10 of the NTCSA. The lawful nature of some of these structures is uncertain and some are regarded as essential for good management of Te Waihora by other agencies.

Methods *Ngā ritenga*

- [6.1d] 7.2a Ensure that all structures within the JMP Area are authorised and develop a G.I.S mapping record of all such structures, markers and buoys allowed in accordance with method 6.1n
- [3d] 7.2b Manage the Lower Selwyn Huts in accordance with the objectives and policies of this Plan.
- 7.2c Consider all applications to conduct or engage in any competitive sporting event within the JMP Area in accordance with relevant legislation and the policies and other methods of this Plan.
- 7.2d Allow for the continued use of existing ECan lake-level gauges and coastal erosion monitoring poles, Ministry of Fisheries commercial fishing restriction markers, Community and Public Health signage and monitoring activity of those agencies within the JMP Area.
- 7.2e Recognise the easements in favour of Environment Canterbury to enable the opening and closing of Te Waihora to the sea, and the maintenance of the Selwyn River/Waikirikiri delta spoil banks and channel.

7.3 Research and Monitoring

Rangahau me te aroturuki

Policies *Ngā kaupapa*

- 7.3.1 To encourage and undertake research, in accordance with relevant legislation, for the benefit of the management of the JMP Area and/or mahinga kai and conservation knowledge in general about Te Waihora, provided that such research does not detract from management for “mahinga kai, conservation and other purposes” within the JMP Area and is consistent with the objectives and other policies of this Plan.**
- 7.3.2 Ngāi Tahu may develop contractual arrangements with researchers where the research, either in whole or in part, is commercially oriented.**
- 7.3.3 To acknowledge the cultural, spiritual, historic and traditional association of Ngāi Tahu with taonga species and cultural materials, and have particular regard to the Protocol for cultural materials.**
- 7.3.4 To recognise and respect the Ngāi Tahu whakapapa and kaitiaki relationship with natural resources when considering research and scientific use within the JMP Area and take a cautious approach to scientific use of the area.**
- [5.1] 7.3.5 Ngāi Tahu will protect the intellectual property rights of Ngāi Tahu Whānui and the Department will acknowledge and take account of these where Ngāi Tahu has advised the Department of them.**
- 7.3.6 To monitor the JMP Area to improve management for “mahinga kai, conservation and other purposes”.**
- 7.3.7 Recognise and respect the use of cultural monitoring practices and traditional Ngāi Tahu knowledge when designing and implementing research and monitoring programmes.**

Explanatory note *Te kupu whakamāhukihuki*

Research can fill gaps in knowledge of the natural and historic resources of Te Waihora, natural processes at work and use of the area by visitors. Where this research has little or no impact on the environment, it may be carried out in accordance with the objectives and policies of this Joint Management Plan. This can assist management, public safety and interpretation of the features of the Te Waihora environment to visitors.

Researchers require prior approval where impacts on JMP Area values are likely, such as through collecting samples or erecting structures within the JMP Area. The taking of samples for scientific purposes could have adverse effects on the values of Te Waihora. Applications for collecting purposes are best assessed through the permit or concession process as this allows for an assessment to be made of possible adverse effects. It also

allows conditions to be placed on the activity to avoid, remedy, or mitigate any potential adverse effects. If the effects of collecting samples become unacceptable in specific areas, further requests to collect samples from these areas can be declined.

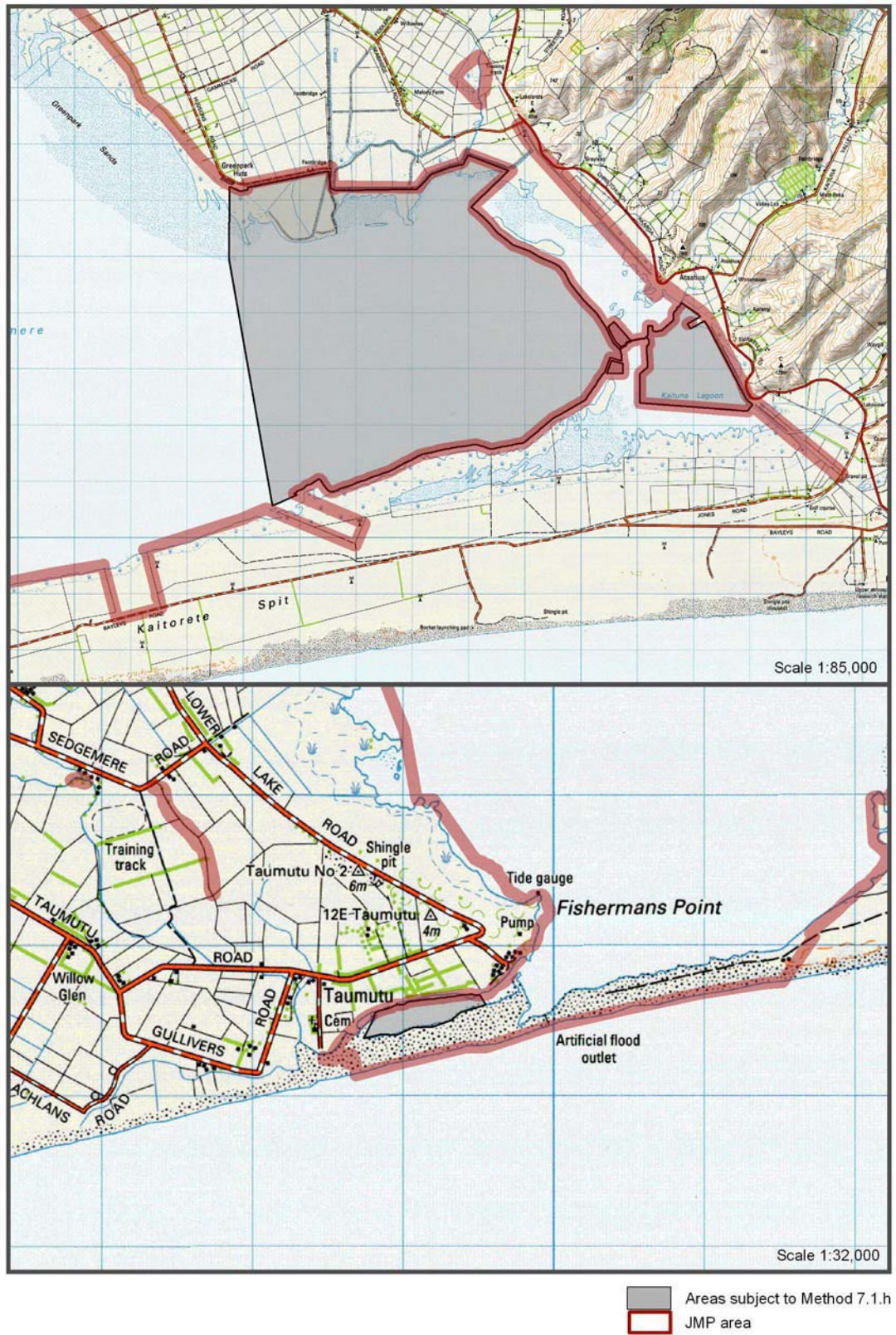
The Protocol for managing cultural materials includes provisions requiring consultation in respect of any competing request for plant and animal cultural materials, such as for research (see Appendix 6, clause 4.3(d)).

Applications to undertake research should be lodged with Te Rūnanga and the Department at least two months before the proposed research commences. This enables the proposal to be assessed to ensure that it can be undertaken within the Joint Management Plan Area without causing an adverse effect on the natural, historic, or cultural values, or on visitors to the area. Where a permit or a concession is required, the applicant should check about processing requirements with Te Rūnanga and/or the Department as appropriate, depending on the lands involved. Te Rūnanga and/or the Department may wish to receive copies of all reports on research undertaken within the Joint Management Plan Area.

Methods *Ngā ritenga*

- 7.3a Ngāi Tahu will request that they are consulted on all research undertaken at Te Waihora.
- 7.3b Require permits or concessions from Te Rūnanga or the Minister respectively, for research within the JMP Area, where impacts on JMP Area values are likely.
- 7.3c Require applications to undertake research to be lodged with Te Rūnanga and/or the Department as appropriate, for the lands involved, at least two months before the proposed research commences.
- [4.3k] 7.3d Ngāi Tahu will seek involvement in collaborative research relationships where appropriate.
- 7.3e As a condition of approval for research undertaken within the JMP Area a copy of the research report should be provided to Te Rūnanga and/or the Department as the respective approving authorities or authority.
- 7.3f Develop relationships with education providers and encourage educational research in the area where such research improves understanding of Te Waihora.
- 7.3g If any cultural materials are subject to a research application the Department will consult with Te Rūnanga in accordance with the Protocol for cultural materials.
- 7.3h Encourage researchers to consider using cultural monitoring practices, and to include traditional Ngai Tahu knowledge in their research programmes.

Figure 13: Customary and recreational use areas / kōhanga



8 COMMUNITY RELATIONS NGĀ RARATA-Ā-HAPORI

In carrying out the objectives and policies outlined in sections 1 to 7 of this part of the Joint Management Plan, there is a need for on-going work with the community.

Policies *Ngā kaupapa*

- 8.1 To establish and maintain effective working relationships with those communities, individuals, and organisations that have statutory roles or who are interested in:**
- (a) the preservation and protection of natural, historic, and landscape values within the JMP Area, and/or**
 - (b) the protection and enhancement of mahinga kai and Ngāi Tahu cultural values, and/or**
 - (c) compatible recreational use and enjoyment of Te Waihora, and/or**
 - (d) the sustainable management of natural and physical resources on land not within the JMP Area but adjoining the JMP Area.**
- 8.2 Provide advice in the development of education material about Te Waihora and its mahinga kai and conservation values.**
- 8.3 Work with North Canterbury Fish and Game Council, the Waihora Ellesmere Trust, community groups, recreational groups and adjoining landowners to achieve shared objectives and promote the mahinga kai and conservation values of Te Waihora.**

Explanatory note *Te kupu whakamāhukihuki*

This Joint Management Plan is primarily a land management plan. The primary community relations focus is therefore with communities using the lands. Although Te Rūnanga and the Department can appropriately manage the Joint Management Plan Area, it is recognised that the area does not exist in isolation from the waters of Te Waihora, or from the surrounding catchment, tributaries and the sea. In acknowledging the integrated nature of management through the Ngāi Tahu ki uta ki tai philosophy and the ecological approach adopted by the Department, it is important to work with the community and other agencies involved in the management of these wider resources.

The Maimai Agreement and the process in the NTCSA for developing this Joint Management Plan recognise the North Canterbury Fish and Game Council as a key party.

The Department has a *Conservation with Communities Strategy* (2002) that promotes policies and methods such as those included in this section as an effective way of achieving good conservation outcomes. Ngāi Tahu similarly works with the community to aid better understanding of Ngāi Tahu values and to promote environmental outcomes that recognise and support these values.

Through establishing and maintaining effective working relationships with adjoining landowners, managers and key interest groups, Ngāi Tahu and the Department may learn new management practices and be able to advocate for practices that will avoid, remedy, or mitigate adverse effects on the Joint Management Plan Area. Mutual benefits may be found with groups such as the Waihora Ellesmere Trust, Lake Settlers Association, Lake Ellesmere Fishers Association, Ornithological Society of New Zealand, Lincoln and Canterbury Universities, Landcare Trust and Resource Care landowner groups, and the Christchurch Little River Railtrail Trust.

The Waihora Ellesmere Trust was established in 2003 from the Lake Ellesmere/Te Waihora Issues Group, a group representing a wide range of interests, including many of those mentioned above. The group initially formed to prepare a Community Strategy²⁴ for Te Waihora and its lower catchment, assisted by Environment Canterbury and is now implementing that strategy.

It is important to keep interested parties informed of any activities or works that may affect their interests within the JMP Area. Such activity would include, for example, public access provisions affecting gamebird hunting. It is also important to be available to the community to assist in the provision of advice and education on mahinga kai, conservation, and other cultural values of Te Waihora.

Methods *Ngā ritenga*

- 8a Use a variety of community relations methods, including direct consultation, electronic and other newsletters, public notices and field days, to enable interested parties to be kept informed about the management of the JMP Area, and to promote understanding of Te Waihora and its values generally.
- 8b Maintain good neighbour relations with adjoining landowners, including by:
 - [4.4c] (a) Undertaking boundary control plant pest responsibilities in accordance with regional pest management strategies.
 - [4.1b] (b) Meeting boundary fencing responsibilities.
 - [6.2c] (c) Identifying access routes along unformed legal roads.
- 8c Work with community groups, including those representing landowner, commercial, recreational and environmental interests, as well as universities and other organisations where their work would assist in the protection and enhancement of the mahinga kai and conservation values of Te Waihora.

- 8d Work with the Lake Ellesmere Fishermen's Association and Ministry of Fisheries in regard to the *Te Waihora Eel Management Plan* (1999), the permit system and other fisheries matters.

9 STATUTORY LAND MANAGEMENT

WHAKAMANA-Ā-TURE I TE WHENUA ME TE WHAKAHAERE MAHERE

In carrying out the objectives and policies outlined in sections 1 to 8 of this part of the Joint Management Plan, there is a need for on-going land administrative actions.

Policies *Ngā kaupapa*

- 9.1 To seek protected area categorisations or re-categorisations that best reflect the purposes for which the lands administered by the Department will be managed under this Plan.**
- 9.2 To investigate conservation park status as a collective categorisation for the lands administered by the Department within the Te Waihora environment.**
- [2.4.6] **9.3 To devise and use a collective name for the Joint Management Plan Area, while still recognising the distinct legal entities and land management within the Area.**
- 9.4 To seek the management of adjoining Crown riverbeds and other Crown lands consistently with the management of Te Waihora for “mahinga kai, conservation and other purposes”, or the transfer of those lands or their land management to Te Rūnanga and/or the Department.**
- 9.5 To include within the area to which this Joint Management Plan applies, where appropriate, all future land acquired by Te Rūnanga or the Department within 500 metres of the bed of Te Waihora (or as otherwise agreed by Te Rūnanga and the Department).**
- 9.6 To seek, by agreement with the owners, that additional areas associated with the JMP Area be managed to the extent accepted by the owner(s) in accordance with this Joint Management Plan.**

Explanatory note *Te kupu whakamāhukihuki*

The area for which this Joint Management Plan has been prepared (the JMP Area) involves lands administered by the Department under the Reserves and Conservation Acts, as well as Te Rūnanga freehold land (see Part 1, section 3 and Appendix 1). Additional lands can be added to the JMP Area by agreement of the Minister and Te Rūnanga or other landowners under sections 177(2)(c) and (d) of the NTCSA.

The lands administered by the Department have a variety of protected area categories i.e. reserve classifications or conservation area status. This variety in part reflects earlier management aims that may or may not apply today and largely does not reflect an integrated view for the management of all the lands. Both these matters need consideration in view of the objectives of this Plan. The Department has a formal procedure for the categorisation or re-categorisation of protected areas and this needs to be followed. However, in considering the categorisation of new lands administered by the Department or when looking at reserve classification changes, preference can be given to using a uniform "conservation area" status, unless there is a particular value for the land that is clearly best protected through a specific reserve classification or other categorisation.

There can be merit in having a collective categorisation for all or most of the Te Waihora protected areas. Conservation park status under section 19 of the Conservation Act is one means of doing this, but would require that reserves be re-categorised to conservation area status. Alternatively a collective name for the protected areas may suffice.

In addition, for the Ngāi Tahu lakebed and other mahinga kai areas on lands owned or administered by Ngāi Tahu within the Te Waihora environment, Ngāi Tahu can consider the application of a "Mahinga Kai Cultural Park" as outlined in Part 3 section 2.4. The establishment of both a conservation park and a Mahinga Kai Cultural Park, with a combined name, could help reflect the integrated management of the JMP Area.

Five Crown riverbed areas (Kaituna, Halswell/*Huritini*, LII/*Ararira*, Selwyn/*Waikirikiri*, Irwell/*Waiwhio*) and two drain reserves adjoin the Joint Management Plan Area (see Figure 4 and Appendix 2). Little active management occurs within these areas other than for local authority drainage works and weed and pest control by the Department and Environment Canterbury for biodiversity protection reasons. There is considerable potential to better manage these areas for mahinga kai and conservation purposes while still recognising their drainage functions, in conjunction with their adjoining unformed legal roads, by working with the district councils that administer the legal roads and with landowners who adjoin and generally utilise the unformed legal roads. A management plan (Grove, 2004) has been prepared for the wetlands on the Kaitorete Spit which recommends that management of this area should be consistent with the aims of the Joint Management Plan in terms of grazing and pest control and conservation management.

Ecosystems method 4.1k also provides for road stopping actions and the land being added to the JMP Area.

Procedures for reviewing and amending this Joint Management Plan are set out in Part 4 of this Plan. It is not considered that it would be necessary to review the Plan should re-categorisations of lands administered by the Department occur, as their purposes for management would still be consistent with the objectives of the Plan.

Methods *Ngā ritenga*

- 9a Review the categorisations of the lands administered by the Department within the JMP Area.
- 9b The Department will investigate and seek submissions under section 18 of the Conservation Act, and if supported, request the Minister of Conservation to gazette the conservation areas within the JMP Area as a conservation park.
- [2.4.6] 9c To consider using the name "Te Waihora Mahinga Kai and Conservation Park" should a "Mahinga Kai Cultural Park" and a conservation park be approved.
- [Figure 4] 9d Seek the transfer of the lands, or the transfer of management responsibility, for those lands marked "CR" in Appendix 2, from Land Information New Zealand to Te Rūnanga or the Department.
- 9e Work with district, city and regional councils, landowners and interested parties, to:
- (a) incorporate additional lands into the JMP Area with ownership passing to the Crown and/or Te Rūnanga, or
 - (b) incorporate additional land into the JMP Area with ownership staying as at present, or
 - (c) seek that additional lands are managed, whether by covenant agreement, management agreement, or informally, consistent with the objectives of the JMP,
- with attention being given to the following specific areas (see Figure 4 and Appendix 2):
- (i) Selwyn District Council Esplanade Reserve near Te Waihora (SDC 002).
 - (ii) Christchurch City Council reserve near Te Waihora (CCC 001).
 - (iii) Christchurch City Council endowment land on Kaitorete Spit (CCC 002).
 - (iv) ECan endowment land on Kaitorete Spit (CRC 001).
 - (v) North Canterbury Fish and Game Council freehold Boggy Creek 'reserve' (F&G 001).
 - (vi) Any stopped legal roads in accordance with method 4.1k.

PART 4:
IMPLEMENTATION
AND REVIEW
TE WHAKATINANATANGA
ME TE AROMATAWAI



1 HOW WILL THE JOINT MANAGEMENT PLAN BE IMPLEMENTED?

ME PĒHEA TE WHAKATINANA I TE MAHERE?

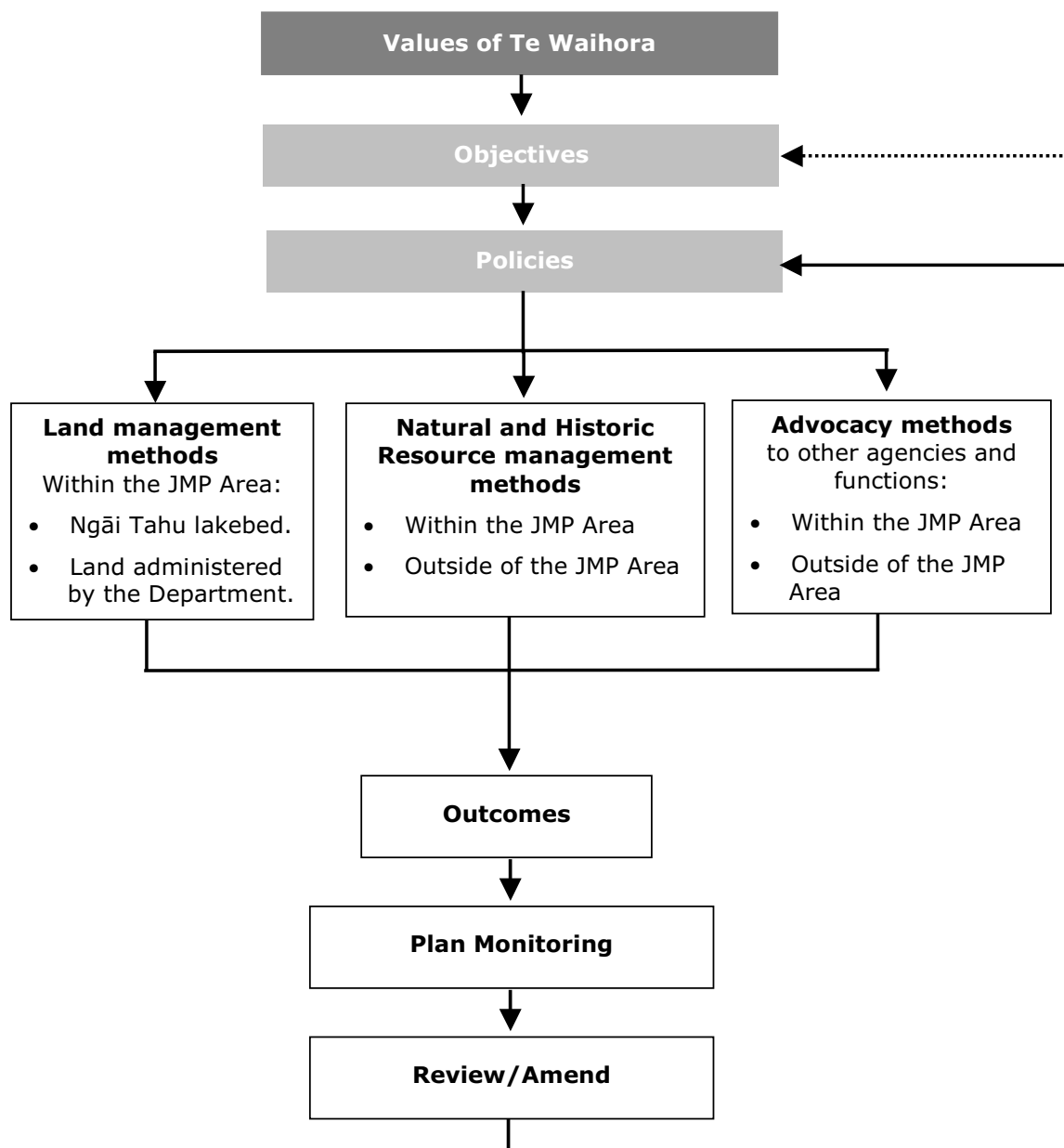
This Part of the Joint Management Plan outlines how Te Rūnanga and the Department will work, both together and individually, to realise the stated objectives and implement the policies and methods outlined in Part 3 of this Plan.

Implementation will be dependent on the legislative and other functions of the two bodies and, within any given timeframe, dependent on the available funding and stated priorities of the two organisations.

Implementation will require action from both Te Rūnanga and the Department, as well as other agencies and landowners.

The methods within Part 3 are of three types:

- 1. Land management methods** within the Joint Management Plan Area including:
 - a. Te Rūnanga o Ngāi Tahu management on Ngāi Tahu lakebed.
 - b. Department of Conservation management on land administered by the Department.
 - c. Joint management on either land where agreed.
- 2. Natural and historic resource management methods** within or beyond the JMP Area, including:
 - a. Department management of protected species.
 - b. Department management within its Rural Fire Authority Area.
- 3. Advocacy and working with methods** within or beyond the JMP Area, but which lie outside of the land or other natural and historic resource management functions of Te Rūnanga and/or the Department, including:
 - a. Encouraging other landowners to carry out particular management actions on their own lands.
 - b. Advocating for particular environmental outcomes
 - c. Working with other agencies with management roles and responsibilities within the Te Waihora environment, such as for water and fisheries management, to seek particular management action.
 - d. Working with other agencies and community groups to support their initiatives and policies where these will further the objectives of this Plan.



1.1 The Department will...

Mā Te Papa Atawhai e...

- ◆ Ensure the national and international significance of Te Waihora is considered when establishing national priorities.
- ◆ Work within established national priorities.
- ◆ Prepare annual business plans in consultation with Ngāi Tahu, with regard to the provisions of this Joint Management Plan.
- ◆ Notify Te Rūnanga and Papatipu Rūnanga/Te Waihora Management Board when undertaking works within the Joint Management Plan Area.

1.2 Te Rūnanga will...

Mā Te Rūnanga o Ngāi Tahu e...

- ◆ Fund implementation methods to directly benefit Ngāi Tahu Whānui and/or the wider Te Waihora environment.
- ◆ Prepare an implementation strategy for Te Rūnanga o Ngāi Tahu specific to the management of the tribal property.
- ◆ Prepare annual business plans with regard to the provisions of this Joint Management Plan.
- ◆ Maintain the Te Waihora Management Board as a forum for ongoing advice to Te Rūnanga for the management of the Ngāi Tahu lakebed.
- ◆ Nominate Ngāi Tahu representatives to the Canterbury Aoraki Conservation Board in recognition of the Board's role in the ongoing operation of the Plan.
- ◆ Apply any income from permits granted for the Ngāi Tahu lakebed to the Ngāi Tahu implementation of this Plan and to enhance Ngāi Tahu values of Te Waihora.

1.3 Working together we will...

Me mahitahi ki te...

- ◆ Provide for and support an ongoing forum between the Te Waihora Management Board, Te Rūnanga and the Department for the implementation of this Plan and other relevant catchment and operational issues.
- ◆ Develop and prepare joint operational plans, business plans, memoranda of understanding, or protocols as mutually agreed to implement this plan
- ◆ Develop and jointly administer any bylaws and regulations subsequently approved for the JMP Area.
- ◆ Keep each other informed of all requests for permits/concessions within the JMP Area, unless otherwise agreed.
- ◆ Use the resources generated by the Maimai Agreement to assist in the implementation of this Plan and any other mutually agreed projects between North Canterbury Fish and Game Council, the Department and Te Rūnanga.
- ◆ Request comment from the Canterbury Aoraki Conservation Board on the implementation of this Plan and on any proposed change in status or classification of any of the lands administered by the Department within the JMP Area.
- ◆ Undertake co-operative biodiversity actions, such as the purple loosestrife campaign with Environment Canterbury and the Christchurch City Council.
- ◆ Promote joint and co-operative research.
- ◆ Co-ordinate on RMA advocacy where appropriate.
- ◆ Work with the Waihora Ellesmere Trust, Christchurch Little River Railtrail Trust, Landcare and Streamcare Groups and if necessary, develop a memorandum of understanding and/or protocols for working together.

- ◆ Work with district and regional councils to coordinate on permit, concession and resource consent application requirements where multiple requirements occur for proposed activities within the Joint Management Plan Area.

1.4 Dispute resolution *Kōrerorero-ā-whare*

Should there be any dispute between Te Rūnanga and the Crown arising out of the implementation of the Joint Management Plan then Clause 11.6.23, Schedule 12, of the NTCSA provides formal provisions for resolving such a dispute, if it cannot be dealt with through the day-by-day working arrangements between Te Rūnanga and the Department.

2 PLAN MONITORING AND REPORTING ***TE AROTURUKI*** ***ME TE WHAKATAKOTORANGA***

2.1 Plan Monitoring *Te aroturuki*

The Plan will be monitored against the 21 objectives listed at the end of Part 2 and repeated at the beginning of each section of Part 3 of this Joint Management Plan.

Many of the objectives are long-term in their focus and will not be fully achieved in the ten-year timeframe of this first Te Waihora Joint Management Plan. Plan monitoring will measure the extent to which these objectives are being achieved and the degree to which effective relationships have developed with other agencies, groups or individuals similarly involved in achieving them.

The gathering of information through the monitoring of permit and concession conditions, environmental monitoring programmes and research ventures can help identify new information for Plan review or amendment.

2.2 Reporting *Whakatakotoranga*

Reporting on the plan objectives will assist in plan implementation and review and will include:

- ◆ Annual reporting to each other (Te Rūnanga and the Department).
- ◆ Annual reporting to the Canterbury Aoraki Conservation Board.
- ◆ Reporting, as requested, to the Office of Treaty Settlements.
- ◆ Reporting to the IUCN in accordance with New Zealand's requirements under the *Ramsar Convention on Wetlands* should Te Waihora be formally recognised as a Wetland of International Importance.

3 REVIEW *TE AROTAKE*

Procedures for reviewing and amending this Joint Management Plan are provided for in Clause 11.6.20, Schedule 12, of the Ngāi Tahu Claims Settlement Act. These procedures state:

- ◆ The Secretary of Te Rūnanga and the Director-General may at any time agree to initiate a review and/or amendment, in whole or in part, of the Joint Management Plan.
- ◆ The Joint Management Plan must be reviewed as a whole within 10 years after approval, although this can be extended by agreement of both parties.
- ◆ If the proposed amendment will not materially affect the objectives or policies expressed in the Joint Management Plan then it need not be publicly notified.

The Joint Management Plan will be reviewed at ten-yearly intervals from its date of first approval or as mutually agreed by Te Rūnanga and the Department.

APPENDICES
ĀPITIHANGA



APPENDIX 1: AREAS SUBJECT TO THE PLAN

Notes:

1. Areas are listed clockwise from Taumutu and by the DOC or NT reference on Figure 4.
2. “NYA” = number not yet allocated.
- 3 Hectare figures without decimal points are approximate only.

DOC or NT reference	Name/description	Land Status/ Reserve Classification	Legal description
NT 001	“bed of Te Waihora”	Te Rūnanga o Ngāi Tahu freehold	Lots 1, 2 & 3, DP 80021; Blks XV IV, VII & VIII Southbridge SD, Blks Blks I, II, III, V & VI Ellesmere SD.
M37 002	Unnamed island in Waikekewai Creek	Conservation area	Rural Section 35465, Blk VI, South
M37 003	Unnamed section of tributary of Waikekewai Creek	Conservation area	Rural Section 34868, Blks VI & VI
M37 001	Unnamed former Gravel Reserve	Conservation area	Reserve 2542, Blk VII, Southbridg
M36 192	Lakeside Wildlife Management Reserve	Government purpose (wildlife management) reserve	Section 1, X Res 959, Blk III, VII S
M36 194	Unnamed former Landing Reserve	Conservation area	Part Reserve 2951 Blk III Southbr
M36 180	Unnamed section of lakebed	Conservation area	Lot 3, DP 80707, Blk III, Southbric
M36 498	Unnamed former Drain Reserve	Conservation area	Crown Land, Blk III Southbridge S
M36 502	Unnamed lagoon beside Harts Creek/Waitatari	Conservation area	Pt Reserve 959, Blk III Southbridg
M36 190	Harts Creek Wildlife Management Reserve	Government purpose (wildlife management) reserve, with overlying wildlife refuge status.	Reserve 5121, Blks II & III Southb
M36 500	Unnamed area at Irwell River. <i>Waiwhio</i> mouth	Conservation area	Section 49, X Res 959, Blk XV Le
M36 471	Unnamed ‘Williams Wildlife Management Reserve’	Government purpose (wildlife management) reserve	Lot 1, DP 83600 & Section 2, SO
M36 470	Unnamed ‘Wards Wildlife Management Reserve’	Government purpose (wildlife management) reserve	Pt Lot 1, DP 10043 & Section 2, S XVI Leeston SD
M36 188	Unnamed area on Selwyn riverbank	Conservation area	Pt RES 4100, Blk XVI Leeston
M36 473	Lower Selwyn Huts	Conservation area	Part Reserve 4100, Blk XVI Leest

Appendix 1

Te Waihora Joint Management Plan

DOC or NT reference	Name/description	Land Status/ Reserve Classification	Legal description
M36 187	Unnamed area adjoining Lower Selwyn Huts	Conservation area	Part Reserve 4100, Blk XVI Leeston SD
M36 NYA	Unnamed area adjoining Lower Selwyn Huts	Conservation area	Part Reserve 959, Blk XVI Leeston SD
M36 186	Selwyn Wildlife Management Reserve	Government Purpose (Wildlife Management) Reserve	Sec 18, Blks XII & XVI Leeston SD
M36 507	Unnamed area adjoining LII/Ararira River	Conservation area	Crown land, Blk XII Leeston SD
M36 183	Yarrs Flat Wildlife Management Reserve	Government Purpose (Wildlife Management) Reserve	Section 50, X Res 959, Blks IX & X Leeston SD
M36 181	Greenpark Sands	Conservation area	Pt Reserve 4385 and Part Reserve 959, Halswell SD, Blk II Ellesmere SD
M36 NYA	Unnamed 'Lakelands' purchase area	<i>Conservation area</i>	Section 7, Blk VI, Reserve 959 & 960, XIV & XV Halswell SD, Blk II Ellesmere SD
M36 148, 149, 150	McQueens Lagoon	Conservation area	Crown land, Blk XV Halswell SD
M36 159	Former Motukarara - Little River railway	Conservation area	Crown Land, Blk III Ellesmere SD
M36 160	Former Kaituna railway station site	Conservation area	Section 15, Blk VII Ellesmere SD
M36 163	Former railway quarry at Kaituna	Conservation area	Reserve 2594, Blk III Ellesmere SD
M36 169	Former Motukarara - Little River railway	Conservation area	Crown Land, Blk III Ellesmere SD
M36 170	Closed Road, adjoining former Motukarara -Little River railway	Conservation area	Crown Land, Blks III & IV Ellesmere SD
M36 171	Former Motukarara - Little River railway	Conservation area	Crown Land, Blk IV Ellesmere SD
M36 486	Kaitorete Timber Depot and Landing Reserve	Conservation area	Pt Reserve 682, Blks II & IV Ellesmere SD
NT 002	Te Waiomākua	Te Rūnanga o Ngāi Tahu freehold	Lot 1, DP 79968, Blk VI Ellesmere SD
M37 010	Waihora Scientific Reserve	Scientific Reserve	Reserve 683, Blk V Ellesmere SD
Total Area			

Appendix 1

APPENDIX 2: CROWN RIVERBEDS, OTHER CROWN LANDS AND COUNCIL LANDS ADJOINING THE JMP AREA

(See Figure 4)

CR = Crown Land administered by Land Information New Zealand;

SDC = land administered by Selwyn District Council;

CCC = land administered by Christchurch City Council;

CRC = land administered by Canterbury Regional Council (Environment Canterbury);

F&G = land owned and administered by North Canterbury Fish and Game Council.

Reference on Figure 4	Location	Legal description	Extent and description of land
SDC 001	Lakeside Domain at Timber Yard Point	Recreation Reserve, being Section 51, Block X, Reserve 959, Blk III Southbridge SD.	12.34 ha of dry land, predominantly exotic vegetation, public and Lake Ellesmere boating facilities.
SDC 002	Adjoining Harts Creek/ <i>Waitatari</i>	Local Purpose Esplanade Reserve, being Lot 2, DP 80707, Blk III Southbridge SD	0.4199 ha lakeshore (approx 125 m frontage) adjoining conservation area M36 180.
F&G 001	"Boggy Creek", north of Collets Road	Lot 2, DP 70685, Blks XV Leeston SD & III Southbridge SD	28.0650 of lakeshore (approx 1050 m frontage)
SDC 003	North of Colletts Road, adjoining F&G 001	Lake Ellesmere lakebed (DP 70685), Blks XV Leeston SD & III Southbridge SD	16.7644 ha of lakebed (approx 1050 m frontage) excluded from title by 1994 subdivision.
SDC 004	North of Colletts Road, north of SDC 002	Lake Ellesmere lakebed (DP 75696), Blk XV Leeston SD	1.8514 ha of lakebed (approx 200 m frontage) excluded from title by 1997 subdivision.
CR 001	Irwell River/ <i>Waiwhio</i>	Irwell Riverbed	Upstream from the lake approx 800m to the first legal road.
CR 002	Selwyn River/ <i>Waikirikiri</i>	Selwyn Riverbed	From the lake to Selwyn Lake Road at Selwyn Huts.
CR 003	LII River/ <i>Ararira</i>	LII Riverbed	From the lake to where the river first meets Wolfes Road.
CR 004	Halswell River/ <i>Huritini</i>	Halswell Riverbed	From the lake to McQueens Lagoon.
CR 005	Adjoining former railway north of Kaituna Lagoon	Drain Reserve, Pt Reserve 959, SO 1322, Blk XV Halswell SD, III Ellesmere SD	Extends from Ngāi Tahu lakebed (NT 001) to railway embankment (M36 159); approx 2.9 ha.
CR 006	Adjoining Kaituna Lagoon	Drain Reserve, Pt Reserve 959, SO 1323, Blk IV Ellesmere SD	Runs SE then NE, from se corner of Kaituna Lagoon; approx 5ha.
CR 007	Kaituna River	Kaituna Riverbed	From railway embankment to SH 75, then the south-east half of the bed for about 4 km upstream.
CCC 001	Kaituna	Reserve 1105, Blk III Ellesmere SD	2.2257 ha sea-stack geomorphic feature extending from SH 75 to conservation area M36 169.
CCC 002	Kaitorete Spit	Reserve 3586, Blks II, III, VI & VII Ellesmere SD	412.4277 ha "Endowment for Drainage of Lake Forsyth" of which approx 40% is lakebed and lake-edge wetlands.
CRC 001	Kaitorete Spit	Reserves 3521 & 3522, Blks VII & VIII Southbridge SD, V & VI Ellesmere SD	890.3084 ha "Endowment" of which approx 15% is lakebed and lake-edge wetlands.

APPENDIX 3: PRINCIPLES GUIDING APPROACHES TO HONOURING THE TREATY OF WAITANGI

The principles set out below are those of the Department and Te Rūnanga respectively to guide their organisational approaches to honouring the Treaty of Waitangi.

3A: Department of Conservation Principles

In 1989 the Government published “Principles for Crown Action on the Treaty of Waitangi”. The principles are:

- ◆ The principle of government
- ◆ The principle of self management
- ◆ The principle of equality
- ◆ The principle of reasonable cooperation
- ◆ The principle of redress.

The way these principles are applied will depend on the particular circumstances of each case, including the statutory conservation framework and the significance to tangata whenua of the land, resource or taonga in question.

In the *Conservation General Policy* (2005) policies are set out that are developed from these principles. These policies are given effect throughout this Joint Management Plan.

3B: Te Rūnanga o Ngāi Tahu Principles

Principles of a Te Rūnanga o Ngāi Tahu Treaty framework, as approved January 2002:

1. The Treaty of Waitangi was signed between Ngāi Tahu Whānui and the Crown in 1840 at Akaroa (May 30), Ruapuke Island (June 9,10) and Ōtākou (June 13). Ngāi Tahu Whānui is, and was at the time of the signing of the Treaty, the Tangata whenua within the boundaries as confirmed in Te Rūnanga o Ngāi Tahu Act 1996. (Ngāi Tahu Claims Settlement Act 1998).
2. Te Rūnanga o Ngāi Tahu recognises the Crown's right and responsibility to provide good government and to make law on behalf of all citizens of New Zealand and to protect all customary rights, aboriginal title and other rights inherent in the rangitiratanga of Ngāi Tahu Whānui (Article I & II Treaty of Waitangi).
3. The Crown exercises Kāwanatanga in a manner which actively protects Ngāi Tahu rangitiratanga and mana over the land within its boundaries, as confirmed in Te Rūnanga o Ngāi Tahu Act 1996, and further recognises Ngāi Tahu Whānui as tangata whenua within the takiwā of Ngāi Tahu Whānui. (Article II Treaty of Waitangi, Ngāi Tahu Claims Settlement Act 1998).
4. The Crown recognises Ngāi Tahu as the sole Treaty partner within the takiwā of Ngāi Tahu Whānui.
5. The Crown recognises Te Rūnanga o Ngāi Tahu as the representative of Ngāi Tahu Whānui on all matters where any enactment requires consultation with respect to matters affecting Ngāi Tahu Whānui that consultation shall be held with Te Rūnanga o Ngāi Tahu. (Te Rūnanga o Ngāi Tahu Act 1996).
6. Te Rūnanga o Ngāi Tahu acknowledges that they are bound by section 15.3 (a) of the Te Rūnanga o Ngāi Tahu Act 1996 to consult with Papatipu Rūnanga.
7. Individual members of Ngāi Tahu Whānui have a right to expect equitable access to the benefits and services provided to all New Zealand citizens by the Government of New Zealand via social and public policy. (Article I & III of the Treaty of Waitangi).
8. Te Rūnanga o Ngāi Tahu seeks to hold the Crown/Government to exemplary standards of administration and leadership.
9. It is expected that the Crown/Government will also hold Te Rūnanga o Ngāi Tahu to its obligations as the Treaty partner.

APPENDIX 4: MAIMAI AGREEMENT

(Attachment 11.36, *Deed of Settlement* (1997))

THE USE AND MANAGEMENT OF MAIMAI

AN AGREEMENT made on September 23, 1997

BETWEEN:

- (1) TE RŪNANGA O NGĀI TAHU INCORPORATED pursuant to Te Rūnanga o Ngāi Tahu Act 1996 (“Te Rūnanga”);
- (2) THE MINISTER OF CONSERVATION at Wellington (“DoC”); and
- (3) NORTH CANTERBURY FISH & GAME COUNCIL established pursuant to the Conservation Act 1987 (the “Council”).

RECITALS:

- A The Crown and Te Rūnanga are negotiating a Deed of Settlement whereby, inter alia, the fee simple title to the Bed of Te Waihora and certain sites adjacent to it will vest in Te Rūnanga.
- B Pursuant to the Deed of Settlement, Settlement Legislation will be enacted so as to give effect to the matters the subject of the Deed of Settlement.
- C The Settlement Legislation will provide that all existing lawful rights of public access to, and of recreational use and enjoyment affecting, the Bed of Te Waihora (not including the use of Maimai) shall remain unaffected by the vesting of title to the Bed of Te Waihora in Te Rūnanga, for as long as such rights otherwise remain lawful.
- D The Settlement Legislation will provide that use of Maimai on the Bed of Te Waihora shall be at Te Rūnanga's discretion and will record that in the exercise of that discretion, Te Rūnanga has entered into this Agreement.
- E This Agreement reflects the wish of the parties to establish a durable long-term relationship so as to achieve integrated management of Te Waihora.
- F The Council wishes to secure the rights of Hunters to the continued use of Maimai for recreational hunting purposes and has agreed to undertake the management and control of all Maimai on the Land.
- G The Settlement Legislation will provide that the use of Maimai on specified areas of land administered by the Department of Conservation will be exempt from the concession requirements of the Conservation Act and the statutes specified in the Schedule 1 to that Act.
- H The Settlement Legislation will provide for the preparation by Te Rūnanga and the Director-General of Conservation, within 6 years from the Vesting Date, of a Joint Management Plan for the integrated management of the Land and the natural and historic resources within that Land. The Council will be involved at all relevant stages of the Joint Management Planning process as a key stakeholder.
- I The Deed of Settlement and the resulting Settlement Legislation will provide that when preparing the Joint Management Plan the Secretary of Te Rūnanga and the Director-General of Conservation are to have regard to the terms of this Agreement as far as they relate to the management of Maimai, and in turn this Agreement will be subject to the objectives of the Joint Management Plan.

J DoC and Te Rūnanga separately reserve their respective rights, solely at their discretion, to add additional areas of land that they may acquire from time to time to the area covered by the Joint Management Plan. If any lands are so added, the parties may by agreement extend the coverage of this Agreement to cover those areas.

IT IS AGREED:

Definitions

1.1 In this Agreement terms defined in the Deed of Settlement shall bear the same meaning when used in this Agreement and the following terms shall have the following meanings:

“Agreement” means this Agreement and the Schedule;

“Bed” means the Bed of Te Waihora as defined in the Deed of Settlement;

“Commencement Date” means the Settlement Date, being the date upon which title to the Bed of Te Waihora vests in Te Rūnanga;

“Hunters” means game-bird hunting licence holders;

“Land” means the land more particularly described in the Schedule;

“Maimai” means, for the purpose of this Agreement, any hide or shelter constructed on the Land for the purpose of game-bird hunting, and any wheeled mobile hide or shelter that is parked temporarily on the Land for this same purpose, but does not include portable hides or shelters that are built and removed on the same day.

Interpretation

1.2 In this Agreement, unless the context otherwise requires:

- (a) words importing the singular shall include the plural and vice-versa;
- (b) words importing a gender shall each include each other gender;
- (c) any reference to a statute or statutory provision shall be to a New Zealand statute or statutory provision and shall be deemed to include any statute or statutory provision which amends, extends, consolidates or replaces the same or which has been amended, extended, consolidated or replaced by the same and any orders, regulations, instruments or other subordinate legislation made thereunder;
- (d) headings are for reference only and shall not affect the interpretation of this Agreement; and
- (e) all references to clauses, recitals and schedules are to clauses, schedules and recitals to this Agreement.

Conditions Precedent

2.1 Entry into and performance of the terms and conditions of this Agreement are conditional upon the enactment and coming into force of the Settlement Legislation and the subsequent vesting of the fee simple title of the Bed of Te Waihora in Te Rūnanga.

Term and Right of Renewal

3.1 Subject to clauses 2, 3.2 and 8, this Agreement shall commence on the Vesting Date and shall have a term of 5 years.

3.2 Provided that the Council has complied with its duties as set out in clauses 5 and 6 of this Agreement the Council shall have the right to renew this Agreement for additional 5 year terms (by the Council giving to Te Rūnanga and DoC at least 3 months written notice prior to the end of each 5 year term). The terms and conditions for any renewal period shall be agreed between the parties (provided that, in the event that the parties fail to agree on terms and conditions, the terms and conditions applying

for the preceding contract period shall apply for the subsequent renewal period and clause 10.1 will not apply) and shall include a right of renewal for a further 5 year period exercised in the same manner and on the same basis as set out in this clause. If the Council fails to give notice by the specified time or before the expiry of any further period granted by Te Rūnanga and DoC this Agreement shall expire at the end of its term.

Rights of Fish & Game Council

- 4.1 During the term of this Agreement the Council shall have the right to use Maimai located from time to time on the Land. The Council shall also have the right to permit Hunters to use Maimai located on the Land.
- 4.2 During the term of this Agreement the Council shall have access to the Land for the purpose of carrying out its duties under this Agreement, and for the purposes of carrying out its statutory duties in relation to the management of game-birds, provided that the Council has given Te Rūnanga and DoC copies of its current Annual Operational Workplan outlining these activities once adopted. Otherwise, at least 25 Business days notice will be given by the Council before it takes such action.

Duties of Fish & Game Council

- 5.1 In consideration of the right to use Maimai the Council shall assume responsibility for the management, use and control of all Maimai located on the Land and the Council shall act in a manner consistent with the Joint Management Plan from time to time in draft or approved form. Without limiting the generality of the foregoing the Council shall:
 - (a) develop, in consultation with Te Rūnanga and DoC, conditions and standards for the siting, construction, use, maintenance and removal of Maimai. The conditions and standards shall also address such matters as the size, location, materials to be used, separation distances and removal of derelict Maimai;
 - (b) within 12 months of the date of this Agreement, create and then keep updated on an annual basis a register of Maimai from time to time on the Land by recording the approximate location of each fixed Maimai on a map, copies of which are to be provided to Te Rūnanga and/or DoC upon request, and using its best endeavours to register any mobile Maimai used that year;
 - (c) within an initial period of 15 months from the date of this Agreement, and in each calendar year thereafter, remove any Maimai the Council does not register (as provided in (b) above) or within 3 months of being advised in writing by Te Rūnanga and/or DoC to remove any derelict Maimai. The requirements of this clause are subject to weather and lake conditions allowing such removal;
 - (d) at all times take steps to ensure that it and hunters using the Maimai observe and comply with the reasonable requests of Te Rūnanga and/or DoC in relation to access across the Land to Maimai;
 - (e) control the siting, construction, use, maintenance and removal of Maimai through the enforcement of conditions and standards agreed pursuant to clause 5.1(a).
- 5.2 The Council agrees that management and control of Maimai by it will, in addition to the provisions of this Agreement, be subject to and consistent with the Joint Management Plan. It is not intended by either Te Rūnanga or DoC that the Joint Management Plan will have the effect of frustrating the general objectives of this Agreement.
- 5.3 For the avoidance of doubt, and without limiting clause 5.2, the Council agrees that where the Joint Management Plan designates from time to

time that Maimai should be removed from or not erected in any discrete area on the basis that the erection or use of Maimai would threaten the conservation and/or mahinga kai values of that area, and Te Rūnanga and/or DoC direct the Council to remove or not to erect Maimai in such areas of the Land, the Council will comply with such direction.

Contributions

- 6.1 In consideration of the rights given to the Council and Hunters under this Agreement, the Council agrees to contribute to the objectives of the Joint Management Plan where these are consistent with the purposes and objectives of the Council. The extent of the Council's obligation in this regard will be calculated by multiplying the number of registered Maimai, pursuant to clause 5.1(b), by a sum equalling 50% of the annual game-bird hunting licence fee (not including GST) as set by the Council from time to time. In addition, the Council will pay GST (if any) on the sum payable to Te Rūnanga under this clause.
- 6.2 The Council may discharge its obligations pursuant to clause 6.1 by the carrying out of annual projects agreed with Te Rūnanga and DoC that give effect to the purpose of the Joint Management Plan and the objectives identified within it, and are consistent with the purposes and objectives of the Council.
- 6.3 In the event that the parties cannot agree on projects to be carried out pursuant to clause 6.2, or that such projects do not fully discharge the Council's obligations under this Agreement, the Council will make good any shortfall by providing to Te Rūnanga and DOC either:
- (a) resources, by way of donation of materials, equivalent to the amount of the agreed shortfall;
 - (b) cash; or
 - (c) any combination of (a) and (b).
- 6.4 Any monetary contributions paid by the Council pursuant to this clause shall be paid to the bank account operated by Te Rūnanga for the purpose, or in any other manner directed by Te Rūnanga and DoC from time to time. Such contributions will, in respect of the period between the date of this Agreement and the end of the Council's financial year, be paid within 20 business days of the end of that financial year. Thereafter, any monetary contributions payable in respect of each subsequent 12 month period shall be paid within 20 business days of the expiration of such 12 month period.
- 6.5 Te Rūnanga and DoC agree that any contribution by the Council as provided for in this clause shall be devoted to projects relating to the Land and to give effect to the purposes of the Joint Management Plan and objectives identified within it or such other projects as may be agreed by the parties, consistent with the purposes and objectives of the Council.
- 6.6 In consideration of the contribution by the Council provided for in this clause Te Rūnanga and DoC undertake that they will not impose any fees on Hunters using Maimai on the Land, during the currency of this Agreement.

Accounting for Contributions

- 7.1 Te Rūnanga and DoC agree to account to the Council for any contributions paid pursuant to clause 6 and to provide the Council with an annual report detailing how the proceeds of those contributions have been applied.

7.2 The Council will report to Te Rūnanga and DoC on any projects carried out under clause 6, including details of the Council's contributions of time and materials.

7.3 Te Rūnanga will also account on an annual basis to DoC for any funds held by it pursuant to clause 6. That report will include the location of the funds, the amount held, and details of all deposits and withdrawals during the preceding year.

Termination

8.1 Te Rūnanga and DoC, following consultation and agreement between themselves shall have the right at any time by giving notice in writing to the Council to terminate this Agreement forthwith if the Council commits a material breach of any of the terms and conditions of this Agreement which breach if remediable is not remedied within 60 business days from receipt of notice in writing from Te Rūnanga and DoC jointly requesting its remedy. Notwithstanding the foregoing Te Rūnanga and DoC shall not be obliged to give such notice in the case of persistent and material breach, but may terminate the Agreement immediately.

8.2 Any waiver by Te Rūnanga and DoC of a breach of any provision of this Agreement shall not be considered as a waiver of any subsequent breach of the same or any other provision thereof.

8.3 The rights to terminate this Agreement given by this clause shall be without prejudice to any other right or remedy of either Te Rūnanga or DoC in respect of the breach concerned (if any) or any other breach.

Consequences of Termination

9.1 Upon the termination of this Agreement for any reason:

- (a) any monies held by Te Rūnanga pursuant to clause 6 above will be used for the purposes for which they were collected. Full reports will be made to all the parties to this Agreement showing the detail of that expenditure.
- (b) the Council shall have no claim against either Te Rūnanga or DoC for compensation for loss attributable to the termination of this Agreement;
- (c) subject as otherwise provided herein and to any rights or obligations which have accrued prior to termination, no party shall have any further obligation to the other under this Agreement; and
- (d) Te Rūnanga and DoC will resume complete discretion in relation to the management and use of Maimai on the Land, subject to existing legislation.

Dispute Resolution

10.1 In the event of any dispute arising from or in connection with this Agreement, the parties shall use their best endeavours to settle such dispute or difference in an amicable manner. If the parties are unable to resolve the dispute or difference in such a manner, the matter shall be referred to mediation. If the parties are unable to resolve the dispute or difference at mediation the matter shall be referred to arbitration pursuant to the provisions of the Arbitration Act 1996.

General

11.1 Non-Assignment: The Council shall not mortgage, charge or assign any rights or transfer, delegate or sub-contract the performance of any obligation under this Agreement without Te Rūnanga's and DoC's prior written consent, such consent not to be unreasonably withheld.

11.2 Delegation: All rights, powers, authorities and duties vested in or to be exercised by DoC under this Agreement and any notice required to be

given by DoC may be exercised and given by the Director-General of Conservation or the Regional Conservator, Canterbury Conservancy or any duly authorised officer, employee or agent of the Department of Conservation.

11.3 Notices: All notices and other communications provided for or permitted hereunder shall be sent by airmail with postage prepaid, by hand delivery or by facsimile as follows:

If to Te Rūnanga o Ngāi Tahu:

Attention: The Secretary
Te Rūnanga o Ngāi Tahu
PO Box 13-046
Christchurch
Telephone No: 064 03 366 4344
Facsimile No: 064 03 365 4424

If to the Minister of Conservation:

Attention: Conservator
Canterbury Conservancy
Department of Conservation
Private Bag 4715
133 Victoria Street
Christchurch
Telephone No: 064 03 379 9758
Facsimile No: 064 03 371 3770

If to the Fish and Game Council:

Attention: Manager
Fish and Game New Zealand
North Canterbury Region
3 Horatio Street
Christchurch
Telephone No: 064 03 366 9191
Facsimile No: 064 03 365 0612

or such other address or person as any party may specify by notice in writing to the others. All such notices or communications shall be deemed to have been duly given or made:

- (i) 2 days after being deposited in the mail with postage prepaid;
- (ii) when delivered by hand; or
- (iii) if sent by facsimile, when receipt is confirmed by dispatching facsimile.

11.4 Non-Waiver: No waiver of any rights arising under this Agreement shall be effective unless in writing and signed by a duly authorised signatory of the party against whom the waiver is to be enforced. No failure or delay by either party in exercising any right, power or remedy under this Agreement (except as expressly provided herein) shall operate as a waiver of any such right, power or remedy.

11.5 Non-Derogation: Except as expressly provided in this Agreement nothing in this Agreement is to derogate from any rights or powers of the parties under common law, statute or the Treaty of Waitangi.

11.6 Reconstruction: If any provision of this Agreement should become illegal or void for any reason, the validity of the remaining provisions shall not be affected and the parties shall enter into negotiations in good

faith to find a replacement for the provision which is of similar effect without illegality or being void.

11.7 Modifications: No addition to or modification of any provision of this Agreement shall be binding upon the parties unless made by a written instrument signed by a duly authorised signatory of each of the parties.

11.8 Entire Agreement: This Agreement sets out the entire agreement and understanding between the parties with respect to the subject matter hereof. This Agreement supersedes all previous agreements, arrangements and understandings between the parties with respect to the subject of this Agreement, which shall cease to have any further force or effect.

11.9 Counterpart Execution: This Agreement may be executed in counterpart each of which will be deemed an original but all of which together shall constitute one and the same instrument.

11.10 Governing Law: This Agreement shall be construed and interpreted and its performance shall be governed by New Zealand Law.

EXECUTED as an Agreement by the duly authorised representatives of each of the parties.

SIGNED by THE MINISTER OF CONSERVATION Nick Smith

In the presence of:

Signature: Nick Smith
Name of Witness: H.F.M. Logan
Address: Department of Conservation
Occupation: Director-General

THE COMMON SEAL of the NORTH CANTERBURY FISH AND GAME COUNCIL was affixed in the presence of:

in the presence of:

Signature: B F Webb Manager
Name of Witness: J N Curtis Councillor

THE SEAL of TE RŪNANGA O NGĀI TAHU was affixed in the presence of:

E. Ellison, Te Rūnanga Representative
[S. B. Ashton], Secretary
in the presence of:
Signature: CS Crofts
Name of Witness: CS Crofts
Address: c/- 127 Armagh Street, Christchurch
Occupation: Kaiwhakahaere Te Rūnanga o Ngāi Tahu

SCHEDULE:

1. The Bed of Te Waihora as described in Section 11 (Mahinga Kai Properties) of the Deed of Settlement.
2. The areas described in Attachment 11.32 of the Deed of Settlement as long as they are held, managed or administered under the Conservation Act 1987 or the statutes listed in the First Schedule to the Conservation Act 1987.
3. Any areas within 500 metres of the Bed of Te Waihora or as otherwise agreed by the Minister of Conservation and Te Rūnanga which may

subsequently be acquired, managed or administered under the Conservation Act 1987 or the statutes specified in the First Schedule to the Conservation Act 1987 (excluding any such areas held and managed under those Acts by Fish & Game Councils) for so long as they are so held, managed or administered.

APPENDIX 5: TAONGA SPECIES PRESENT AT TE WAIHORA

(Listed in Schedules 97 and 98A, Ngāi Tahu Claims Settlement Act 1998)

Birds

Name in Māori	Name in English	Scientific name
hoiho	yellow-eyed penguin	<i>Megadyptes antipodes</i>
kāhu	Australasian harrier	<i>Circus approximans</i>
kakī	black stilt	<i>Himantopus novaezelandiae</i>
kāmana	crested grebe	<i>Podiceps cristatus</i>
karoro	black-backed gull	<i>Larus dominicanus</i>
kōau	black shag	<i>Phalacrocorax carbo</i>
	pieb shag	<i>Phalacrocorax varius</i>
	little shag	<i>Phalacrocorax varius melanoleucos brevirostris</i>
kōparapara/ korimako	bellbird	<i>Anthornis melanura melanura</i>
kōtare	kingfisher	<i>Halcyon sancta</i>
kōtuku	white heron	<i>Egretta alba</i>
kūaka	bar-tailed godwit	<i>Limosa lapponica</i>
kūkupa/kererū	New Zealand wood pigeon	<i>Hemiphaga novaeseelandiae</i>
kuruwhengu/ kuruwhengi	New Zealand shoveller	<i>Anas rhynchotis</i>
matuku moana	reef heron	<i>Egretta sacra</i>
pākura/pūkeko	swamp hen/ pūkeko	<i>Porphyrio porphyrio</i>
pārera	grey duck	<i>Anas superciliosa</i>
pateke	brown teal	<i>Anas aucklandica</i>
pīhoihoi	New Zealand pipit	<i>Anthus novaeseelandiae</i>
pīpīwharauoa	shining cuckoo	<i>Chrysococcyx lucidus</i>
pīwakawaka	South Island fantail	<i>Rhipidura fuliginosa fuliginosa</i>
poaka	pieb stilt	<i>Himantopus himantopus</i>
pūtakitaki	paradise shelduck	<i>Tadorna variegata</i>
rīroriro	grey warbler	<i>Gerygone igata</i>
tara	terns	<i>Sterna spp.</i>
tete	grey teal	<i>Anas gracilis</i>
tītī	sooty shearwater/ muttonbird/ Hutton's shearwater	<i>Puffinus griseus and Puffinus huttoni</i>
	fairy prion	<i>Pachyptila turtur</i>
	broad-billed prion	<i>Pachyptila vittata</i>
toroa	albatrosses and mollymawks	<i>Diomedea spp.</i>

Plants

Name in Māori	Name in English	Scientific name
aruhe	fernroot (bracken)	<i>Pteridium aquilinum var. esculentum</i>
harakeke	New Zealand flax	<i>Phormium tenax</i>
karamū	coprosma	<i>Coprosma robusta</i>
kōwhai kōhai	kōwhai	<i>Sophora microphylla</i>
mānia	sedge	<i>Carex flagellifera</i>
ngāio	ngāio	<i>Myoporum laetum</i>
pīngao	pīngao	<i>Desmoschoenus spiralis</i>
raupō	bullrush	<i>Typha angustifolia</i>
tī rākau/ tī kōuka	cabbage tree	<i>Cordyline australis</i>
wī	silver tussock	<i>Poa cita</i>
wīwī	rushes	<i>Juncus all indigenous Juncus spp. and J. maritimus</i>

Fish

Name in Māori	Name in English	Scientific name
koeke	Common shrimp	<i>Palaemon affinis</i>
paraki/ngāiore	Common smelt	<i>Retropinna retropinna</i>
piripiripōhatu	Torrent fish	<i>Cheimarrichthys fosteri</i>

APPENDIX 6: PROTOCOLS ON THE DEPARTMENT OF CONSERVATION'S INTERACTION WITH NGĀI TAHU ON SPECIFIED ISSUES (1997)

(Clause 12.12, *Deed of Settlement* (1997))

NOTIFICATION OF THE ISSUE OF PROTOCOLS

Under Section 282 (4) of the Ngāi Tahu Claims Settlement Act 1998 the Minister of Conservation hereby notifies that she has issued Protocols on behalf of the Crown regarding the Department of Conservation's interaction with Ngāi Tahu on specified issues, and that the Protocols as set out in the Schedule hereto were issued on 22 October 1998.

Schedule

1 INTRODUCTION

- 1.1 The purpose of the Conservation Act 1987 is to manage natural and historic resources under that Act and the Acts in the First Schedule of the Conservation Act. Section 4 of the Conservation Act requires that the Act be so interpreted and administered as to give effect to the principles of the Treaty of Waitangi.
- 1.2 The Director-General has certain management responsibilities in terms of legislation and can only delegate or share responsibility for decisions s/he makes within the limits of his/her legislation. However, in making such decisions, the Director-General will provide Te Rūnanga the opportunity for input, consistent with section 4, in its policy, planning and decision-making processes on the matters set out in these Protocols.
- 1.3 These Protocols apply across the Ngāi Tahu Takiwā, which spans five conservancies, and the Southern and Central Regional Offices of the Department.
- 1.4 Both the Department and Te Rūnanga are seeking a relationship consistent with the Treaty principle of partnership that achieves, over time, the conservation policies, actions and outcomes sought by both Te Rūnanga and the Department, as set out in this document.

2 PURPOSE OF PROTOCOLS

- 2.1 These Protocols are issued pursuant to section 282 of the Ngāi Tahu Claims Settlement Act 1998 and clause 12.12 of the 1997 Deed of Settlement between the Crown and Ngāi Tahu, which specifies the following:

2.1.1 Definitions

Protocol means a statement in writing, issued by the Crown through the Minister of Conservation to Te Rūnanga, which sets out:

- (a) how the Department of Conservation will exercise its functions, powers, and duties in relation to specified matters within the Ngāi Tahu Claim Area; and

- (b) how the Department of Conservation will, on a continuing basis, interact with Te Rūnanga and provide for Te Rūnanga's input into its decision-making process.

2.1.2 Authority to Issue, Amend or Cancel Protocols

Pursuant to section 282 of the Ngāi Tahu Claims Settlement Act 1998, the Minister of Conservation may, from time to time issue, amend, and cancel Protocols.

2.1.3 Issue of Protocols

On the Settlement Date (as defined in section 8 of the Ngāi Tahu Claims Settlement Act 1998) the Crown has agreed through the Minister of Conservation to issue Protocols in this form on the following matters:

- (a) cultural materials;
- (b) freshwater fisheries;
- (c) culling of species of interest to Ngāi Tahu;
- (d) historic resources;
- (e) Resource Management Act 1991 involvement; and
- (f) visitor and public information.

2.1.4 Protocols subject to Crown Obligations

Pursuant to section 283 of the Ngāi Tahu Claims Settlement Act 1998, the Protocols are issued and amended, subject to, and without restriction upon:

- (a) the obligations of the Minister of Conservation and the Department of Conservation to discharge their respective functions, powers, and duties in accordance with existing law and Government policy from time to time; and
- (b) the Crown's powers to amend policy, and introduce legislation amending existing law.

This clause is not intended to indicate, and should not be interpreted as indicating, any agreement by Te Rūnanga to any amendment to policy which would adversely affect the redress provided by the Crown pursuant to the Settlement Deed or the ability of either party to fulfil its obligations expressed in the Settlement Deed.

2.1.5 Noting of Protocols on CMS

Pursuant to section 284 of the Ngāi Tahu Claims Settlement Act 1998:

- (a) The existence of Protocols, once issued, and as amended from time to time, including a definition of Protocols as set out in section 281 of the Ngāi Tahu Claims Settlement Act 1998 and a summary of the terms of issue of Protocols, must be noted in conservation management strategies, conservation management plans and national park management plans affecting the Ngāi Tahu Claim Area; and
- (b) Noting of Protocols pursuant to section 284(1) of the Ngāi Tahu Claims Settlement Act 1998 is for the purpose of public notice only and is not an amendment to the relevant strategies or

plans for the purposes of section 17I of the Conservation Act 1987 or section 46 of the National Parks Act 1980.

2.1.6 Enforceability of Protocols

Pursuant to section 285 of the Ngāi Tahu Claims Settlement Act 1998:

- (a) The Minister of Conservation must comply with a Protocol as long as it remains in force;
- (b) If the Minister of Conservation fails unreasonably to comply with a Protocol, Te Rūnanga may, subject to the Crown Proceedings Act 1950, enforce the Protocol by way of public law action against the Minister of Conservation;
- (c) Notwithstanding paragraph (b), damages are not available as a remedy for a failure to comply with a Protocol; and
- (d) This clause does not apply to any guidelines which are developed pursuant to a Protocol.

2.1.7 Limitation of Rights

Pursuant to section 286 of the Ngāi Tahu Claims Settlement Act 1998, except as expressly provided in the Deed of Settlement, the Ngāi Tahu Claims Settlement Act 1998, or in a Protocol, a Protocol does not, of itself, have the effect of granting, creating, or providing evidence of any estate or interest in, or any rights of any kind whatsoever relating to, land held, managed, or administered under the Conservation Act 1987 or a statute listed in the First Schedule of that Act.

3 IMPLEMENTATION AND COMMUNICATION

3.1 The Department will seek to establish and maintain communication with Te Rūnanga and its Papatipu Rūnanga on a continuing basis by:

- (a) maintaining at the conservancy level, with the assistance of Te Rūnanga, information provided on Papatipu Rūnanga, their office holders and addresses; and
- (b) providing reasonable opportunities for Te Rūnanga and Papatipu Rūnanga to meet with Department managers and staff.

3.2 The Protocols provide for ongoing implementation of a range of matters, as well as Specific Projects which will require resourcing. It is not intended that all of the Specific Projects listed in these Protocols will be implemented in any one year. Implementation will be over time. Where these Protocols refer to Specific Projects that require resourcing, their implementation will be subject to provision being made in the relevant conservancy business plan. The process for the Department implementing any particular Specific Project in a business year will be as follows:

- (a) The Department will meet with Te Rūnanga in each conservancy and at Regional level annually to identify priorities for undertaking Specific Projects as listed in these protocols for the upcoming business year;
- (b) The identified priorities will be taken forward by the Department into its business planning process at the conservancy and regional levels and considered along with other priorities;
- (c) The decision on whether any Specific Projects will be funded in any business year will be made by the Conservator and the Regional General Manager;

- (d) The Department will advise Te Rūnanga of the outcome of this process; and
- (e) Te Rūnanga and the Department will then meet again, if required, to finalise a work plan for implementation of the Specific Projects in that business year, in accordance with the resources which have been allocated in the business plan. The Department will apply the allocated resources to give effect to that work plan, subject to unforeseen management requirements which may arise from time to time, such as emergencies, adverse weather, staff shortages or reallocation of resources directed by the Minister.

3.3 The Department will:

- (a) Meet with Te Rūnanga to review implementation of these Protocols and to deal with the matters in clause 3.2; four times per annum, unless otherwise agreed, in each conservancy, twice per annum at regional level, and at least once per annum at Chief Executive level;
- (b) As far as reasonably practicable, train relevant staff on these Protocols and provide ongoing training as required; and
- (c) As far as reasonably practicable, brief Conservation Board and NZCA members on these Protocols and the Ngāi Tahu Settlement, and provide ongoing information as required.

4 CULTURAL MATERIALS

4.1 For the purpose of these Protocols, cultural materials are defined as:

- (i) plants, plant materials; and
 - (ii) materials derived from animals, marine mammals or birds,
- to the extent to which the Department holds and is responsible for them, and which are important to Ngāi Tahu in maintaining their culture.

4.2 Current legislation means that generally some form of concession or permit is required for any gathering of cultural materials.

4.3 The Department will:

- (a) Have particular regard to Te Rūnanga's cultural use policy (Kawa Hua Taiao) as it relates to the Department's activities, and other relevant Te Rūnanga statements of policy produced from time to time.
- (b) Consider requests from members of Ngāi Tahu Whānui for the customary use of cultural materials in accordance with the appropriate legislation.
- (c) Agree, where reasonably practicable, for Ngāi Tahu to have access to cultural materials which become available as a result of departmental operations such as track maintenance or clearance or culling of species.
- (d) Consult with Te Rūnanga in circumstances where there are competing requests from non-Ngāi Tahu persons or entities for the use of cultural materials, for example for scientific research purposes, to see if the cultural and scientific or other needs can be reconciled before the Department makes a decision in respect of those requests.

4.4 Specific projects

The Department will, subject to clause 3.2, work with Te Rūnanga to:

- (a) Develop and implement guidelines for each conservancy within the Ngāi Tahu Takiwā that help define levels of customary use of cultural materials, and set conditions, after consideration of tikanga, to be met for gathering;
- (b) Identify local sources of plants and provide advice to Te Rūnanga with respect to the establishment by Te Rūnanga of cultivation sites; and
- (c) Establish Departmental cultural materials banks for cultural materials which have come into the Department's possession, and guidelines for their use.

5 FRESHWATER FISHERIES

5.1 The Department has a statutory role in advocating the conservation of aquatic life and freshwater fisheries generally. Its advocacy for freshwater biota, aquatic habitats and fish passage in all areas is primarily taken via statutory planning processes provided by the Resource Management Act 1991.

5.2 Section 48B of the Conservation Act 1987 (inserted by section 305 of the Ngāi Tahu Claims Settlement Act 1998) provides the power to promulgate regulations providing for customary Māori fishing rights with respect to freshwater fisheries within South Island Fisheries Waters. Pursuant to clause 12.14.11(e) of the Deed of Settlement such regulations are to be promulgated as soon as practicable, and in any event no later than two years after Settlement Date. Besides generally consulting with Te Rūnanga and providing for its participation in the conservation and management of customary freshwater fisheries and freshwater fish habitats, the Department will consult with, and have particular regard to the advice of, Te Rūnanga in its capacity as an Advisory Committee appointed under section 56 of the Conservation Act in all matters concerning the management and conservation by the Department of Conservation of Taonga Fish Species (as defined in section 297 of the Ngāi Tahu Claims Settlement Act 1998) within the Ngāi Tahu Claim Area. This obligation does not derogate from the obligations of the Department under section 4 of the Conservation Act 1998 to give effect to the Treaty of Waitangi.

5.3 Advisory Committee

The Department will, in relation to the Taonga Fish Species and as far as reasonably practicable, provide the Advisory Committee with all relevant information to enable it to give informed advice, and will meet with the Advisory Committee at conservancy level as necessary to give effect to the Deed of Settlement and the Ngāi Tahu Claims Settlement Act 1998.

5.4 Customary freshwater fisheries regulations

The Department will work with Te Rūnanga at Regional and conservancy levels to:

- (a) Provide for Te Rūnanga participation in the development and promulgation of customary freshwater fishing regulations by:
 - (i) Establishing a joint working group;

- (ii) Setting terms of reference for that working group;
- (iii) Setting timelines for progress; and
- (iv) Providing information to Te Rūnanga in a timely manner and allowing Te Rūnanga an opportunity to comment.

5.5 Specific Projects

The Department will, subject to clause 3.2, work with Te Rūnanga to:

- (a) Develop and implement guidelines for the Department with respect to the promotion of compliance with customary freshwater fisheries regulations;
- (b) Develop and implement guidelines for the Department with respect to monitoring the efficacy of the customary freshwater fisheries regulations at regular intervals; and
- (c) Develop and implement guidelines for the Department with respect to sharing accumulated management information and research data on customary freshwater fisheries with Te Rūnanga.

5.6 Other matters

The Department will work with Te Rūnanga at Regional and conservancy levels to provide for active participation by Te Rūnanga in the conservation, management and research of customary freshwater fisheries and freshwater fish habitats by:

- (a) Seeking to identify areas for cooperation in advocacy, consistent with clause 9, focusing on fish passage, minimum flows, protection of riparian vegetation and habitats, water quality improvement and in the restoration, rehabilitation or enhancement of customary freshwater fisheries and their freshwater habitats; and
- (b) Consulting with Te Rūnanga in developing or contributing to research programmes that aim to improve the understanding of the biology of customary freshwater fisheries and their environmental and habitat requirements. The Department confirms that it regards Te Rūnanga as a possible science provider or collaborator for research projects funded or promoted by the Department in the same manner as other potential providers or collaborators.

5.7 Specific Projects

The Department will, subject to clause 3.2, work with Te Rūnanga to:

- (a) Conduct research to establish and address ecosystem threats to specified customary freshwater fisheries including barriers to migration, habitat loss and exotic species interaction;
- (b) Contribute to the resolution of eel management issues, in particular, the administration of the fish passage regulations in the Freshwater Fisheries Regulations, the promotion of the installation of effective fish passes where necessary and monitoring of their effects, by participating in discussions with Te Rūnanga and Te Waka a Māui me ōna Toka Mahi Tuna; and
- (c) Identify the need for, and where necessary prepare, management plans for freshwater fisheries management.

6 CULLING OF SPECIES OF INTEREST TO NGĀI TAHU

- 6.1 As part of an integrated management regime, or because a species population has risen to become an ecological pest, it may from time to time be necessary for the Department to carry out a cull of a

protected species under the Wildlife Act 1953. The Department recognises that Te Rūnanga is interested in such operations in the following ways:

- (a) the carrying out of such a cull where the species to be culled is causing or is likely to cause ecological damage to species or habitats of particular significance to Ngāi Tahu;
- (b) the methods to be used in such culls; and
- (c) cultural materials arising from the cull.

6.2 The Department will:

- (a) Have regard to any requests initiated by Te Rūnanga for the carrying out of culling operations;
- (b) Consult with, and have particular regard to the views of, Te Rūnanga before deciding to carry out a cull of protected species on land administered by the Department, in respect of the reasons for the cull and the method proposed to be used; and
- (c) In situations where either a Fish and Game Council or a Regional Council intend to carry out a cull of protected species or game bird and the Department has a statutory role in the process, request the relevant body to consult with Te Rūnanga before carrying out any such cull.

7 HISTORIC RESOURCES

7.1 The Minister acknowledges the importance to Ngāi Tahu of their wāhi tapu, wāhi taonga and other places of historic significance to them. Liaison with Te Rūnanga is important in the management of those places containing sites of historic and cultural significance to Ngāi Tahu, including places of settlement, horticulture, natural resource harvesting, warfare, communication, and places of cultural and spiritual connection.

7.2 The Department notes that non-disclosure of locations of places known to Ngāi Tahu is a practice used by Ngāi Tahu to preserve the sanctity of a place. Respecting the principle of confidentiality brings management difficulties of a particular kind. Where information is not available, management practices which (unintentionally) contravene the cultural value associated with a specific site, may be put in place. Where reasonably practicable, the Department will respect the principle of confidentiality that applies to wāhi tapu, wāhi taonga and places of historic significance to Ngāi Tahu. The primary responsibility for identifying and assessing Ngāi Tahu heritage values rests with Te Rūnanga.

7.3 The Department will work with Te Rūnanga at Regional and conservancy levels to:

- (a) Ensure, as far as reasonably practicable, that Ngāi Tahu values attaching to identified wāhi tapu, wāhi taonga and places of historic significance to Ngāi Tahu managed by the Department are respected by the Department, for example, by the Department giving consideration to impacts from visitor numbers, facilities and services;
- (b) Manage, as far as reasonably practicable, wāhi tapu, wāhi taonga and places of historic significance to Ngāi Tahu according to the standards of conservation practice outlined in the ICOMOS New Zealand Charter 1993;

- (c) Ensure, as far as reasonably practicable, that when issuing concessions giving authority for other parties to manage land administered by the Department, those parties manage the land according to the standards of conservation practice outlined in the ICOMOS New Zealand Charter 1993;
- (d) Have particular regard to relevant Te Rūnanga policies, including those relating to Kōiwi Tangata (unidentified human remains) and Archaeological and Rock Art Sites;
- (e) Ensure, as far as reasonably practicable, that it uses Ngāi Tahu's cultural information only with the consent of Te Rūnanga; and
- (f) When issuing concessions to carry out activities on the land administered by the Department, request that the concessionaire consult with Te Rūnanga before using Ngāi Tahu's cultural information.

7.4 Specific Projects

The Department will, subject to clause 3.2, work with Te Rūnanga at Regional and conservancy levels to:

- (a) Develop and implement guidelines for the identification, inventory and management by the Department of wāhi tapu, wāhi taonga and other places of historic significance to Ngāi Tahu that take into consideration the traditional uses and practices of Ngāi Tahu and are, where reasonably practicable, consistent with Ngāi Tahu tikanga;
- (b) Identify and actively protect specified wāhi tapu, wāhi taonga or other places of historic significance to Ngāi Tahu on land administered by the Department;
- (c) Develop and implement guidelines for the active protection of wāhi tapu, wāhi taonga and other places of historic significance to Ngāi Tahu;
- (d) Identify cooperative projects covering a range of options for the protection and management of wāhi tapu, wāhi taonga and other places of historic significance to Ngāi Tahu;
- (e) Develop and implement guidelines relating to the use of Ngāi Tahu's knowledge of wāhi tapu, wāhi taonga and other places of historic significance of Ngāi Tahu, including the use of this information by the Department; and
- (f) Consult with and seek participation from Te Rūnanga with respect to research, survey or inventory projects that relate specifically to wāhi tapu, wāhi taonga and other places of historic significance to them.

8 VISITOR AND PUBLIC INFORMATION

8.1 In providing public information and interpretation services and facilities for visitors on the land it manages, the Department recognises the importance to Ngāi Tahu of their cultural, spiritual, traditional and historic values.

8.2 The Department will work with Te Rūnanga at Regional and conservancy levels to encourage respect for Ngāi Tahu values by:

- (a) As far as reasonably practicable, seeking to raise public awareness of positive conservation partnerships developed between Te Rūnanga, the Department and other stakeholders, for example, by way of publications, presentations and seminars;

- (b) Consulting on the provision of interpretation and visitor facilities (if any) at wāhi tapu, wāhi taonga and other places of historic or cultural significance to Ngāi Tahu;
- (c) Ensuring, as far as reasonably practicable, that Department information on new panels, signs, and visitor publications includes Te Rūnanga perspectives and references to the significance of the sites to Ngāi Tahu, where appropriate, including the use of traditional Ngāi Tahu place names; and
- (d) Encouraging Te Rūnanga participation in the Department's volunteer and conservation events programmes.

8.3 Specific Projects

The Department will, subject to clause 3.2, work with Te Rūnanga at Regional and conservancy levels to:

- (a) Develop and implement guidelines on the provision of information and interpretation facilities and services for visitors, so as to identify and consider issues of concern to Te Rūnanga;
- (b) Consider possibilities for Te Rūnanga to contribute to visitor appreciation of the cultural value of sites of cultural and historic significance to Ngāi Tahu managed by the Department; and
- (c) Provide information to education providers, including kohanga reo and kura kaupapa Māori, for the development of educational resources on conservation issues and associated Ngāi Tahu values.

9 RESOURCE MANAGEMENT ACT

9.1 Te Rūnanga and the Department both have concerns with the effects of activities controlled and managed under the Resource Management Act. These include effects on:

- (a) wetlands;
- (b) riparian management;
- (c) effects on freshwater fish habitat;
- (d) water quality management;
- (e) protection of historic resources; and
- (f) protection of indigenous vegetation and habitats.

9.2 From time to time, Te Rūnanga and the Department will seek to identify further issues of mutual interest for discussion. It is recognised that their concerns in relation to any particular resource management issue may diverge and that each of them will continue to make separate submissions.

9.3 The Department will work with Te Rūnanga at Regional and conservancy levels to discuss the general approach that will be taken by each of Te Rūnanga and the Department in respect of advocacy under the Resource Management Act, and seek to identify their respective priorities and issues of mutual concern.

9.4 The Department will:

- (a) Have regard to the priorities and issues of mutual concern identified in clause 9.3(a) in making decisions in respect of advocacy under the Resource Management Act.

- (b) Make non-confidential resource information available to Te Rūnanga to assist in improving the effectiveness of Resource Management Act advocacy work at the Papatipu Rūnanga level.

10 AMENDMENT AND REVIEW PROVISIONS FROM THE DEED

10.1 Amendment and Cancellation of Protocols

Pursuant to section 282 of the Ngāi Tahu Claims Settlement Act 1998:

- (a) Protocols may be amended or cancelled by the Minister of Conservation, from time to time at the initiative of either the Crown or Te Rūnanga;
- (b) The Minister of Conservation may amend or cancel Protocols only after consulting Te Rūnanga and having regard to its views; and
- (c) As soon as reasonably practicable after the amendment, or cancellation of a Protocol, the Minister of Conservation must notify such amendment, or cancellation in the Gazette.

Dated at Wellington this 26 day of July 2001.

MATT ROBSON, for SANDRA LEE, Minister of Conservation.

(NZ Gazette 2001, page 2171)

APPENDIX 7: WATER CONSERVATION (LAKE ELLESMERE) ORDER 1990

The National Water Conservation (Lake Ellesmere) Order 1990
Paul Reeves, Governor-General
Order in Council
At Wellington this 2nd day of July 1990

Present:

His Excellency the Governor-General in Council

PURSUANT to section 20D of the Water and Soil Conservation Act 1967, His Excellency the Governor-General acting by and with the advice and consent of the Executive Council, hereby make s the following order.

ORDER

1. Title and commencement –

- (1) This order may be cited as the national water Conservation (Lake Ellesmere) Order 1990.
- (2) This order shall come into force on the 28th day after the date of this notification in the *Gazette*.

2. Interpretation – In this order, unless the context otherwise requires, “Act” means the Water and Soil Conservation Act 1967;

“Lake Ellesmere” means that variable body of water commonly known as Lake Ellesmere, otherwise known as Waihora, located at and about map reference NZMS 262 13:468714, and having an areas f about 20 000 hectares;

“Lake level” means the water level measured in calm conditions by the recorder at Taumutu (map reference NZMS 260 M37:599064) maintained by the Canterbury Regional Council; provided that the Canterbury Regional Council may, at its discretion and when necessary due to windy conditions, estimate the reading which would have been obtained in calm conditions;

“m.a.s.l.” means the elevation in metres above 1988 mean sea level at the Port of Lyttelton.

3. Outstanding features – it is hereby declared that Lake Ellesmere provides an outstanding wildlife habitat.

4. Restriction on lake openings and closings –

- (1) Subject to subclause (2) of this clause, because of the outstanding features specified in clause 3 of this order, a water right shall not be granted under section 21 of the Act allowing lake Ellesmere to be artificially opened to the sea or artificially closed from the sea.
- (2) A water right may be so granted –
 - (a) To allow the lake to be artificially opened to the sea whenever the lake level-
 - (i) Exceeds 1.05 m.a.s.l. during any period commencing on the 1st day of August and ending with the 31st day of March next following; or
 - (ii) Exceeds 1.13 m.a.s.l. during any period commencing on the 1st day of April and ending with the 31st day of July next following;

- (b) To allow the lake to be artificially opened to the sea at any time during any period commencing on the 15th day of September and ending with the 15th day of October next following;
- (c) To allow the lake to be artificially closed to the sea whenever the lake is level 0.6 m.a.s.l. during any period commencing on the 1st day of October and ending with the 31st day of March next following.

5. Right to dam or to drain land not to be granted -

- (1) Subjected to subclauses (2) to (4) of this clause, because of the outstanding features specified in clause (3) of this order, a water right shall not be granted under section 21 of the Act and a general authorisation shall not be made under section 22 of the Act allowing the damming, stopbanking, polderisation, or drainage of any part of Lake Ellesmere where the lake bed is below 1.13 m.a.s.l. in elevation.
- (2) A water right to polderise for fish farming or for research into fisheries may be so granted if there is no significant impact on the outstanding features of Lake Ellesmere specified in clause 3 of this order.
- (3) A water right may be so granted for any stopbanks, drains, and other uses of water which existed on the 27th day of June 1986.
- (4) A water right may be so granted for works associated with the maintenance of those outlets of rivers, streams, and drains, and those stopbanks, which existed on the 27th day of June 1986.

6. Restriction on grant of water rights -

- (1) A water right shall not be granted under section 21 of the Act and a general authorisation shall not be made under section 22 of the Act in respect of the waters of Lake Ellesmere if the effect of such a right or authorisation would not be that the provisions of this order could not be observed without those provisions being changed or varied.
- (2) Notwithstanding anything in this order, it shall be lawful for a water right to be so granted for research into, and enhancement of, wildlife habitats.

7. Scope of this order -

Nothing in this order shall be construed as limiting the effect of the second proviso to section 21 (1) of the Act relating to the use of water for domestic needs, for the needs of animals, and for or in connection with fire-fighting purposes.

EXPLANATORY NOTE

This note is not part of the order, but is intended to indicate its general effect.

This order declares that Lake Ellesmere provides an outstanding wildlife habitat.

This order also includes various provisions to preserve and protect the wildlife habitat.

Issued under the authority of the Acts and Regulations Publication Act 1989.

Date of notification in *Gazette*: 5 July 1990.

This order is administered in the Ministry for the Environment.

APPENDIX 8: RŪNANGA TAKIWĀ

Descriptions of Rūnanga Takiwā for Papatipu Rūnanga represented in the Te Waihora Management Board, from the Te Rūnanga o Ngāi Tahu Act (1996), Schedule 1:

Te Ngāi Tūāhuriri Rūnanga

The takiwā of Te Ngāi Tūāhuriri Rūnanga centres on Tuahiwi and extends from the Hurunui to Hakatere, sharing an interest with Arowhenua Rūnanga northwards to Rakaia, and thence inland to the Main Divide.

Rāpaki Rūnanga (Te Hapū o Ngāti Wheke)

The takiwā of Rāpaki Rūnanga centres on Rāpaki and includes the catchment of Whakaraupō and Te Kaituna.

Te Rūnanga o Koukourarata

The takiwā of Te Rūnanga o Koukourarata centres on Koukourarata and extends from Pōhatu Pā to the shores of Te Waihora including Te Kaituna.

Wairewa Rūnanga

The takiwā of Wairewa Rūnanga centres on Wairewa and the catchment of the lake Te Wairewa and the hills and coast to the adjoining takiwā of Koukourarata, Ōnuku Rūnanga, and Taumutu Rūnanga.

Te Rūnanga o Ōnuku

The takiwā of Te Rūnanga o Ōnuku centres on Ōnuku and the hills and coasts of Akaroa to the adjoining takiwā of Te Rūnanga o Koukourarata and Wairewa Rūnanga.

Te Taumutu Rūnanga

The takiwā of Taumutu Rūnanga centres on Taumutu and the waters of Te Waihora and adjoining lands and shares a common interest with Te Ngāi Tūāhuriri Rūnanga and Te Rūnanga o Arowhenua in the area south to Hakatere.

APPENDIX 9: ORIGIN OF QUOTES USED THROUGHOUT THE JOINT MANAGEMENT PLAN

Twelve people were interviewed to generate quotes or 'stories' in order to personalise the Te Waihora Joint Management Plan. In addition to these interviews, a search was conducted for already recorded material relating to Te Waihora. Quotes are included from a number of these sources throughout Part 3 of this Plan. A brief background of those people interviewed is outlined below:

Daphne Jameson has had an interest in Te Waihora since childhood and consolidated this interest with a geography degree, completed at the University of Canterbury in the 1940s. After completing her university training, Daphne maintained her interest in Te Waihora through conservation activities. In particular, her contact with Te Waihora has been maintained through the Forest and Bird Society. Daphne's knowledge about Te Waihora reflects her lifetime interest in the district and her practical, academic and conservationist activities in the area. Daphne was interviewed on 14 December 2002 at her home. Due to illness the interview was brief, lasting approximately 40 minutes.

Roger Gilbert's family has farmed in the Ellesmere area for generations and Roger carried on this tradition until his recent retirement. However, he maintains his interest in farming through Federated Farmers in conjunction with a lifetime interest in local history. Roger is President of the Ellesmere Historical Society, evidence of his interest in the history of the Ellesmere district. He is also a member of the Canterbury History Foundation and is on the committee of the Canterbury Historical Association. Moreover, Roger is involved in a new group established recently – the Ellesmere Issues Group. Roger was interviewed on 18 December 2002 at his home. The interview was recorded and was of 50 minutes duration.

Murray Stephens is a third generation farmer in the Irwell district. He and his wife, Marilyn, have transformed the family farm into a horticulture venture and business. Named 'Waipuna', Murray and Marilyn now produce blackcurrants and were recently named Lincoln Horticulturalists of the Year, winning a travel grant to Europe. Murray's link with Te Waihora has been not only as a farmer, but also as a recreationalist since the 1960s. Murray and his family have been members of the Aquatic Club for a number of decades and maintain their use of Te Waihora as a recreational area to this day, although on a more limited basis. Murray and Marilyn were interviewed at their home on 21 December 2002. The interview was recorded and was of 30 minutes duration.

Cath Brown was a Ngāi Tahu artist, weaver, teacher, former Head of Art at Christchurch College of Education, a JP and former Chair of Te Taumutu Rūnanga. Cath's family has had a long interest in Te Waihora. For generations the Brown family has lived and fished at Taumutu. Indeed, both her Ngāi Tahu and Pakeha grandfathers fished the lake and her father and brother maintained their links with Te Waihora as fishermen. Cath was linked to the lake through her membership of numerous committees relevant to Te Waihora, including the local historic society. She was also the Taumutu Rūnanga Te Rūnanga o Ngāi Tahu representative, a member of the Selwyn District Creative Communities Board and the Manaaki Whenua Animal Ethics Committee. Cath was

interviewed at her home on 21 December 2002. The interview was recorded, and because of illness, was restricted to 40 minutes in length. Sadly Cath passed away on 7th August 2004.

Francis Eggleston has lived in Greenpark since 1934. The Eggleston family were formerly residents of Motukarara where Francis's father was a farm labourer. One of four brothers, Francis has farmed at Greenpark his whole life and is now retired. He was formerly a councillor for the Greenpark area on the Selwyn District Council and remains heavily involved in community and farming concerns. Francis was interviewed on 11 of January 2003 at his home. The interview was of 80 minutes duration.

Colin Hill is English by birth, arriving in Christchurch in 1958. With his wife Cherry, a language teacher at Lincoln High School, Colin has lived and farmed at Greenpark for over thirty years. For about 20 of those years, Colin has had an interest in ornithology, with specialised knowledge of the bird life at Te Waihora and a particular focus on the migratory wading birds. In conjunction with ornithology, Colin has an interest in photography and would like to publish a book about the birds of Lake Ellesmere (Te Waihora). He is also active in a number of local committees, evidence of his passionate interest in Te Waihora, its habitat and the bird life it supports. Colin, with his wife Cherry also present, was interviewed on 12 January 2003, over a period of two hours. By request, the interview was not recorded. Instead, notes were taken and a reconstructed narrative based on those notes further edited by Colin.

Trevor Gould is a commercial fisherman at Lakeside, specialising in eel, flounder and mullet. Trevor does not have a family background in fishing, moving to Lakeside to become a commercial fisherman in 1969 from South Canterbury. His first season was a disaster, but 30 years later he now runs a very successful fishing business, employing up to 24 staff in a good year. Gould's Aquafarm exports eel to China and Japan, and markets this product nationwide. Trevor is very interested in seeing Te Waihora's commercial value in aquaculture investigated in the future, believing the potential of the area as a commercial resource is currently under-utilised. Trevor was interviewed at his home on 20 January 2003. The interview was recorded and was of 45 minutes duration.

Marea Johnson is of Ngāi Tahu and Greek descent. Marea was born at Taumutu in 1924 and she and her four sisters were raised by her parents, Hohepa Teihoka and Moana Sermous, along the shores of Te Waihora. Marea is currently involved in a number of community organisations as a volunteer and strongly believes in the need for rūnanga participation if Te Waihora is to be preserved for future generations. Indeed it is this approach to life, one centred on community and participation that has been the catalyst behind her involvement with the Taumutu Rūnanga, coupled with her strong family links with Te Waihora. Marea passed on a written statement for the project, believing that this statement best summed up her views about Te Waihora.

Trevor Partridge completed his postgraduate research on salt marshes at the University of Otago. It is from this research that he has developed an interest in the ecology and vegetation of Te Waihora. In 1981, Trevor moved to Christchurch to work for Landcare Research/Te Manaaki Whenua at Lincoln and has worked for this institution for over 20 years. In that time he has published a number of reports on vegetation and developed relationships with local users of Te Waihora, giving him a

unique understanding of the Te Waihora environment and the people who interact with it. Trevor was interviewed on 13 February 2003 in the History Department, University of Canterbury. The interview was of 40 minutes duration.

Malcolm Wards is of Ngāi Tahu descent. Through his mother Jane Wards nee Martin, Malcolm has ancestral links to Taumutu and Ōtākou. One of 13 children, Malcolm was born at Taumutu and was raised by the lake. Leaving the area in the late 1960s for the city and the Māori Affairs Trade Training Scheme, Malcolm trained and worked in the engineering sector until 4 years ago. It was at that time that he entered the commercial fishing sector at Te Waihora, fishing ACE quota leased from Ngāi Tahu Seafoods. Malcolm was interviewed at Taumutu 12 February 2003. The interview was conducted over two hours. Malcolm preferred not to be recorded; instead notes were taken.

Martin Clements is the current Chairman of the North Canterbury Fish and Game Council. Martin has had a long association with Te Waihora. Since childhood he has engaged with the Te Waihora environment and the lake margins when visiting his family who farmed in Little River. Martin also has a long association with the region through recreational fishing. His involvement with Fish and Game was instigated by seeing the degradation of Te Waihora over the past decade. It is through participation in such an organisation that Martin believes Te Waihora can be restored and enhanced for future users. Martin was interviewed at his home on 20 February 2003. Due to time constraints and other commitments the interview was brief and was of only 20 minutes duration.

Sheila Petch arrived in New Zealand 37 years ago from Yorkshire, England. For over 20 years she has had a strong interest in ornithology. As a member of the Canterbury Ornithological Society for the past 15 years she has been involved in birding at Te Waihora. A keen birder, she goes out to Te Waihora at least once a week and at other times takes groups of overseas visitors. Sheila was interviewed at her home on 21 February 2003. The interview was recorded and was of approximately 25 minutes duration.

APPENDIX 10: BIRD SPECIES RECORDED AT TE WAIHORA

Common Name(s)	Scientific Name	Māori Name
Antarctic prion	<i>Pachyptila desolata</i>	
Arctic skua	<i>Stercorarius parasiticus</i>	
Asiatic black-tailed godwit	<i>Limosa limosa melanuroides</i>	
Australasian bittern	<i>Botaurus poiciloptilus</i>	matuku
Australasian gannet	<i>Morus serrator</i>	takapu
Australasian harrier	<i>Circus approximans</i>	kāhu
Australasian pied stilt	<i>Himantopus himantopus leucocephalus</i>	poaka
Australian coot	<i>Fulica atra australis</i>	
Australian magpie	<i>Gymnorhina tibicen</i>	
Australian pelican	<i>Pelecanus conspicillatus conspicillatus</i>	
Australian red-necked avocet	<i>Recurvirostra novaehollandiae</i>	
Australian white ibis	<i>Threskiornis molucca strictipennis</i>	
banded dotterel	<i>Charadrius bicinctus bicinctus</i>	tuturiwhatu
banded rail	<i>Rallus philippensis assimilis</i>	moho-pereru
bellbird	<i>Anthornis melanura</i>	
black shag (black cormorant)	<i>Phalacrocorax carbo novaehollandiae</i>	kawau
black stilt	<i>Himantopus novaezelandiae</i>	kakī
black swan	<i>Cygnus atratus</i>	kakī ānau
black-billed gull	<i>Larus bulleri</i>	
blackbird	<i>Turdus merula</i>	
black-browed mollymawk	<i>Diomedea melanophrys melanophrys</i>	
black-faced cuckoo-shrike	<i>Coracina novaehollandiae</i>	
black-fronted dotterel	<i>Charadrius melanops</i>	
black-fronted tern	<i>Sterna albobriata</i>	tarapiroe
broad-billed prion	<i>Pachyptila vittata</i>	parara
broad-billed sandpiper	<i>Limicola falcinellus</i>	
brown teal	<i>Anas aucklandica chlorotis</i>	pateke/ tarawhatū
buff weka	<i>Gallirallus australis hectori</i>	
Buller's mollymawk	<i>Diomedea bulleri</i>	
Buller's shearwater	<i>Puffinus bulleri</i>	
California quail	<i>Callipepla californica brunnescens</i>	
Canada goose	<i>Branta canadensis maxima</i>	
cape pigeon	<i>Daption capense capense</i>	
caspian tern	<i>Sterna caspia</i>	taranui
cattle egret	<i>Bubulcus ibis coromandus</i>	
chaffinch	<i>Fringilla coelebs</i>	

Common Name(s)	Scientific Name	Māori Name
chestnut-breasted shelduck (Australian shelduck)	<i>Tadorna tadornoides</i>	
cirl bunting	<i>Emberiza cirlus</i>	
curlew sandpiper	<i>Calidris ferruginea</i>	
eastern bar-tailed godwit	<i>Limosa lapponica baueri</i>	kuaka
eastern curlew	<i>Numenius madagascariensis</i>	
eastern golden plover (pacific golden plover)	<i>Pluvialis fulva</i>	
erect-crested penguin	<i>Eudyptes sclateri</i>	
fairy prion	<i>Pachyptila turtur</i>	titi wainui
feral goose	<i>Anser anser</i>	
flesh-footed shearwater	<i>Puffinus carneipes</i>	
fluttering shearwater	<i>Puffinus gavia</i>	pakaha
glossy ibis	<i>Plegadis falcinellus</i>	
goldfinch	<i>Carduelis cardueli</i>	
great knot	<i>Calidris tenuirostris</i>	
greenfinch	<i>Carduelis chloris</i>	
greenshank	<i>Tringa nebularia</i>	
grey (red) phalarope	<i>Phalaropus fulicarius</i>	
grey duck	<i>Anas superciliosa superciliosa</i>	pāpera
grey partridge	<i>Perdix perdix perdix</i>	
grey petrel	<i>Procellaria cinerea</i>	
grey teal	<i>Anas gracilis</i>	tete
grey warbler	<i>Gerygone igata</i>	riroriro
grey-faced petrel	<i>Pterodroma macroptera gouldi</i>	oi
grey-headed mollymawk	<i>Diomedea chrysostoma</i>	
hedge sparrow (dunnock)	<i>Prunella modularis</i>	
house sparrow	<i>Passer domesticus</i>	
Hudsonian godwit	<i>Limosa haemastica</i>	
Hutton's shearwater	<i>Puffinus huttoni</i>	
intermediate egret (plumed egret)	<i>Egretta intermedia</i>	
Japanese snipe	<i>Gallinago hardwickii</i>	
large sand dotterel	<i>Charadrius leschenaultii</i>	
lesser knot	<i>Calidris canutus canutus</i>	huahou
lesser yellowlegs	<i>Tringa flavipes</i>	
light-mantled sooty albatross	<i>Phoebastria palpebrata</i>	
little black shag (little black cormorant)	<i>Phalacrocorax sulcirostris</i>	
little egret	<i>Egretta garzetta nigripes</i>	
little owl	<i>Athene noctua</i>	

Common Name(s)	Scientific Name	Māori Name
little shag	<i>Phalacrocorax melanoleucos brevirostris</i>	kawaupaka
little stint	<i>Calidris minuta</i>	
little tern	<i>Sterna albifrons</i>	
little whimbrel	<i>Numenius minutus</i>	
long-tailed cuckoo	<i>Eudynamys taitensis</i>	koekoea
long-toed stint	<i>Calidris subminuta</i>	
mallard	<i>Anas platyrhynchos platyrhynchos</i>	
marsh crake	<i>Porzana pusilla affinis</i>	koitareke
marsh sandpiper	<i>Tringa stagnatilis</i>	
Mongolian dotterel	<i>Charadrius mongolus mongolus</i>	
mottled petrel	<i>Pterodroma inexpectata</i>	korure
mute (white) swan	<i>Cygnus olor</i>	
nankeen night heron	<i>Nycticorax caledonicus</i>	
New Zealand dabchick	<i>Poliiocephalus rufopectus</i>	
New Zealand dotterel	<i>Charadrius obscurus</i>	tuturiwhatū
New Zealand fairy tern	<i>Sterna nereis davisae</i>	
New Zealand falcon	<i>Falco novaeseelandiae</i>	karearea
New Zealand kingfisher	<i>Halcyon sancta vagans</i>	kōtare
New Zealand pigeon	<i>Hemiphaga novaeseelandiae novaeseelandiae</i>	kererū
New Zealand pipit	<i>Anthus novaeseelandiae novaeseelandiae</i>	pīhoihoi
New Zealand scaup	<i>Aythya novaeseelandiae</i>	papango
New Zealand shoveler	<i>Anas rhynchotis variegata</i>	kuruwhengi
northern diving petrel (common diving petrel)	<i>Pelecanoides urinatrix urinatrix</i>	
northern giant petrel	<i>Macronectes halli</i>	
Oriental pratincole	<i>Glareola maldivarum</i>	
painted snipe	<i>Rostratula benghalensis</i>	
paradise shelduck	<i>Tadorna variegata</i>	pūtangitangi
pectoral sandpiper	<i>Calidris melanotos</i>	
pied shag (pied cormorant)	<i>Phalacrocorax varius varius</i>	karuhiruhi
pomarine skua	<i>Stercorarius pomarinus</i>	
pukeko (swamphen)	<i>Porphyrio porphyrio melanotus</i>	pūkeko/pākura
red-billed gull	<i>Larus novaehollandiae scopulinus</i>	tarapunga
red-capped dotterel	<i>Charadrius ruficapillus</i>	
red-necked phalarope	<i>Phalaropus lobatus</i>	
red-necked stint	<i>Calidris ruficollis</i>	
redpoll	<i>Carduelis flammea</i>	

Common Name(s)	Scientific Name	Māori Name
reef heron (blue heron)	<i>Egretta sacra sacra</i>	matuku-moana
ring-necked pheasant	<i>Phasianus colchicus</i>	
rock pigeon	<i>Columba livia</i>	
rockhopper penguin	<i>Eudyptes chrysocome</i>	
royal spoonbill	<i>Platalea regia</i>	kōtuku-ngutupapa
ruff	<i>Philomachus pugnax</i>	
Salvin's mollymawk	<i>Diomedea cauta salvini</i>	
Salvin's prion (lesser broad-billed prion)	<i>Pachyptila salvini</i>	
sanderling	<i>Calidris alba</i>	
sharp-tailed sandpiper	<i>Calidris acuminata</i>	
shining cuckoo	<i>Chrysococcyx lucidus lucidus</i>	pipiwharuroa
short-tailed shearwater (Tasmanian muttonbird)	<i>Puffinus tenuirostris</i>	
siberian (grey-tailed) tattler	<i>Tringa brevipes</i>	
silvereeye	<i>Zosterops lateralis lateralis</i>	
skylark	<i>Alauda arvensis</i>	
song thrush	<i>Turdus philomelos</i>	
sooty shearwater (muttonbird)	<i>Puffinus griseus</i>	tītī
south island fantail	<i>Rhipidura fuliginosa fuliginosa</i>	pīwakawaka
south island fernbird	<i>Bowdleria punctata punctata</i>	matata
south island pied oystercatcher	<i>Haematopus ostralegus finschi</i>	tōrea
southern black-backed gull	<i>Larus dominicanus dominicanus</i> <i>Lichtenstein</i>	karoro
southern giant petrel	<i>Macronectes giganteus</i>	
southern great skua (brown skua)	<i>Catharacta skua lonnbergi</i>	
spotless crake	<i>Porzana tabuensis plumbea</i>	pūweto
spotted shag	<i>Stictocarbo punctatus punctatus</i>	parekareka
spur-winged plover	<i>Vanellus miles novaehollandiae</i>	
starling	<i>Sturnus vulgaris</i>	
stilt sandpiper	<i>Micropalama himantopus</i>	
sulphur-crested cockatoo	<i>Cacatua galerita</i>	
terek sandpiper	<i>Tringa terek</i>	
turnstone	<i>Arenaria interpres</i>	
variable oystercatcher	<i>Haematopus unicolor</i>	tōrea; dark phase, toreapango
wandering albatross	<i>Diomedea exulans</i>	
welcome swallow	<i>Hirundo tahitica neoxena</i>	
white heron (white egret)	<i>Egretta alba modesta</i>	kōtuku
white-capped (shy) mollymawk	<i>Diomedea cauta cauta</i>	

Common Name(s)	Scientific Name	Māori Name
white-chinned petrel	<i>Procellaria aequinoctialis aequinoctialis</i>	
white-eyed duck (hardhead)	<i>Aythya australis</i>	
white-faced heron	<i>Ardea novaehollandiae novaehollandiae</i>	
white-flipped penguin, southern blue penguin	<i>Eudyptula minor</i>	
white-fronted tern	<i>Sterna striata</i>	tara
white-rumped sandpiper	<i>Calidris fuscicollis</i>	
white-winged black tern	<i>Chlidonias leucopterus</i>	
Wilson's phalarope	<i>Phalaropus tricolor</i>	
wrybill	<i>Anarhynchus frontalis</i>	ngutuparore
yellow-eyed penguin	<i>Megadyptes antipodes</i>	hoiho
yellowhammer	<i>Emberiza citrinella</i>	

GLOSSARY PAPA KUPU

Bed of Te Waihora	<i>“means the land described in schedule 10” of the Ngāi Tahu Claims Settlement Act (section 167).</i>
CMS	<i>Canterbury Conservation Management Strategy (2000).</i>
Community and Public Health	Means the division of the Canterbury District Health Board that delivers public health services or any of its predecessors.
Concession	A lease, licence, permit, or easement granted under Part IIIB of the Conservation Act 1987; and includes any activity authorised by a concession document. (Conservation Act 1987).
Conservation	<i>“means the preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations:”</i> (Conservation Act 1987).
Eel weir	A structure used in conjunction with hīnaki to catch tuna/eels.
Environment Canterbury (ECan)	The Canterbury Regional Council.
Freshwater eel	<i>“means the species Anguilla australis, Anguilla dieffenbachii, and Anguilla reinhardtii, in all areas in New Zealand fisheries waters”</i> (section 2 Fisheries Act 1983). Also referred to as “eel” or “tuna” in this Plan.
Game birds	All game species specified in the First Schedule of the Wildlife Act 1953.
GIS	Geographical Information System.
Hapū	Sub-tribe.
Heke	Migration (generally of eels in the context of Te Waihora).
Hīnaki	Eel pot.
Historic resource	Means a historic place within the meaning of the Historic Places Act 1993; and includes any interest in a historic resource. (Conservation Act 1987).
JMP	Te Waihora Joint Management Plan.
Joint Management Plan Area (JMP Area)	That part of the Te Waihora environment administered by the Department or owned by Te Rūnanga o Ngāi Tahu (Ngāi Tahu lakebed) as described in Part 1, section 3.2 and Appendix 1.

Kai hau kai	The ritual exchange of food resources generally as part of a joint hapū ceremony. These semi-competitive rituals are also an indication of mana. (<i>Ngāi Tahu 2025</i>).
Kawa	Rules or protocol/procedure.
Ki uta ki tai	A description of environmental policy and planning that takes a holistic ‘from the mountains to the sea’ approach and encapsulates rangatiratanga and kaitiakitanga. (<i>Ngāi Tahu 2025</i>).
Kōhanga	Breeding ground, seeding ground, nursery.
Kōiwi Tangata Policy	Te Rūnanga o Ngāi Tahu tribal policy (1993) on the accidental discovery and management of human remains.
Kōumu	Trenches constructed from the edge of the lake towards the sea to enable the customary take of migrating eels.
Lands administered by the Department	Those lands administered by the Department of Conservation within the Joint Management Plan Area.
m amsl	Metres above mean sea level.
Mahinga kai	For the purposes of the Joint Management Plan means, “... <i>the customary gathering of food and natural materials and places where those resources are gathered.</i> ” (Section 167, Ngāi Tahu Claims Settlement Act, 1998).
Mahinga Kai Cultural Park	“ <i>A concept used to refer to a natural area (either land or marine based) that is managed and/or owned by Ngāi Tahu (either at a tribal level by Te Rūnanga o Ngāi Tahu or by Papatipu Rūnanga or jointly) for mahinga kai. This area can be likened to a “national park” but managed for and by Ngāi Tahu.</i> ” (<i>Ngāi Tahu 2025</i>). For Te Waihora the concept would vary slightly and have to be applied consistent with the NTCSA to recognise the purposes set out in Part 1, section 1 of this Plan.
Mahinga kai, conservation and other purposes	Means the purposes of the Plan as set out in Schedule 12, Clause 11.6.19(a)(i) of the NTCSA.
Mahinga tuna	Eel fishing/gathering.
Maimai	“ <i>Any hide or shelter constructed for the purpose of game-bird hunting, and any wheeled mobile hide or shelter that is parked temporarily for this same purpose, but does not include portable hides or shelters that are built and removed on the same day.</i> ” (Attachment 11.36, <i>Deed of Settlement 1996</i>).

Maimai Agreement	An agreement between North Canterbury Fish and Game Council, the Department of Conservation and Te Rūnanga o Ngāi Tahu as part of the <i>Deed of Settlement</i> (1997), for the occupation, use and management of maimai within the JMP Area. (See Appendix 4).
Mana	Integrity, status, prestige, power. (<i>Pounamu Resource Management Plan</i> , 2002).
Manaaki	To show respect or kindness to; to entertain. (<i>Williams</i> , 1991).
Manawhenua	Integrity, status, prestige, power relating to, and over, the whenua (land). (<i>Pounamu Resource Management Plan</i> , 2002).
Manuhiri	Visitors and guests.
Mātauranga	Knowledge, to understand.
Mauri	Essential life force or principle; a metaphysical quality inherent in all things, both animate and inanimate. (<i>Ngāi Tahu Freshwater Policy</i> , 1999).
mhws	Mean high water springs.
Minister	The Minister of Conservation.
Natural character	The qualities of an area that taken together give it a particular, recognisable character. These qualities may be ecological, physical, spiritual or aesthetic in nature. (CMS).
Natural night-time darkness	The absence of night-time light created by humans.
Natural quiet	The absence of noise created by humans. (CMS).
Natural resources	“means – (a) <i>Plants and animals of all kinds; and</i> (b) <i>The air, water and soil in or on which any plant or animal lives or may live; and</i> (c) <i>Landscape and landform; and</i> (d) <i>Geological features; and</i> (e) <i>systems of interacting living organisms, and their environment; and includes any interest in a natural resource:”</i> (Conservation Act 1987).
Ngāi Tahu	The term is used throughout this Plan to refer to all Ngāi Tahu individual persons, Ngāi Tahu whānau, Ngāi Tahu hapū, Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga.
Ngāi Tahu lakebed	Those lands owned by Te Rūnanga o Ngāi Tahu within the Joint Management Plan Area.

Ngāi Tahu Whānui	<i>“the collective of the individuals who descend from the primary hapū of Waitaha, Ngāi Tahu and Ngāti Māmoe, namely Kāti Kuri, Kāti Irakehu, Kāti Huirapa, Ngāi Tūāhuriri, and Kāi Te Ruahikihiki.”</i> (Section 2, Te Rūnanga o Ngāi Tahu Act 1996).
Nohoanga	An area or place where food is gathered and/or processed and knowledge is transferred through social interaction and activity. (Note these are not Nohoanga entitlements in terms of section 255 of the NTCSA).
NTCSA	Ngāi Tahu Claims Settlement Act 1998.
Pā	Fortified place, stockade (<i>Williams</i> , 1991).
Papatipu Rūnanga	Marae-based councils administering the affairs of the hapū. The Papatipu Rūnanga of Ngāi Tahu Whānui as referred to in section 9 of the Te Rūnanga o Ngāi Tahu Act 1996.
Paru	Mud used for the dyeing of fibres.
Permit	A permit issued by Te Rūnanga o Ngāi Tahu to access and occupy the Ngāi Tahu lakebed.
Pou whenua/ whakairo	A marker, sign or post (carved or uncarved) to commemorate a person, place, or an event.
Protocol	<i>See reference: Protocols on the Department of Conservation’s Interaction with Ngāi Tahu on specified Issues</i> (1997).
Pūrākau	Stories, legend, a method of passing knowledge.
Rāhui	A restriction or control of specified activities put in place by the tangata whenua as kaitiaki to manage an area in accordance with tikanga.
Restoration	Means returning a place as nearly as possible to a known earlier state by reassembly, reinstatement and/or the removal of extraneous additions. (<i>ICOSMOS New Zealand Charter, 1993</i>)
RMA	Resource Management Act 1991.
Takaroa/Tangaroa	God of the sea.
Takiwā	Tribal or hapū district or area.
Tangata tiaki system	A system for Ngāi Tahu to manage natural resources and activities according to tikanga and under the various legislative requirements. Akin to the system established by Te Rūnanga and the Ministry of Fisheries for the management of those customary fisheries that come under the Fisheries Act 1996.
Taonga	Valued resources, treasures and possessions, both tangible and intangible.
Taonga fish species	<i>“means the species listed in Part A of Schedule 98”</i> of the NTCSA (section 297).

Taonga species	<i>“means the species of birds, plants, and animals described in Schedule 97 found within the Ngāi Tahu claim area”.</i> (Section 287, NTCSA).
Te Rūnanga o Ngāi Tahu	The body corporate, established under section 6 of the Te Rūnanga o Ngāi Tahu Act 1996, as the representative of Ngāi Tahu Whānui.
Te Waihora	The full physical extent of Lake Ellesmere (Te Waihora) and its wetlands, the “spread out waters”.
Te Waihora Environment	Te Waihora and the surrounding area that has a natural, physical or cultural relationship to Te Waihora.
Threatened (species)	A term used loosely to include rare, vulnerable, endangered and indeterminate species.
Tikanga	Custom, obligations and conditions. (<i>Pounamu Management Plan, 2002</i>).
Tipua	Revered being often associated with creation and discovery traditions. (<i>Pounamu Management Plan, 2002</i>).
Tīpuna/Tupuna	Ancestor.
Tohu	Species used as signs, or environmental indicators of planting and gathering times or methods.
Tuna heke	Eel migration.
Vehicle	<p><i>“(a) Means a contrivance equipped with wheels, tracks, or revolving runners on which it moves or is moved;</i></p> <p><i>(b) Includes a hovercraft, a skateboard, in-line skates, and roller skates;</i></p> <p><i>(c) Does not include</i></p> <ul style="list-style-type: none"> <i>(ii) A perambulator or pushchair:</i> <i>(iii) A shopping or sporting trundler not propelled by mechanical power:</i> <i>(iv) A wheelbarrow or hand-trolley:</i> <i>(v) A child's toy, including a tricycle and a bicycle, provided, in either case, no road wheel (including a tyre) has a diameter exceeding 355 mm:</i> <i>(vi) A pedestrian-controlled lawnmower:</i> <i>(vii) A pedestrian-controlled agricultural machine not propelled by mechanical power:</i> <i>(viii) An article of furniture:</i> <i>(ix) An invalid wheel-chair not propelled by mechanical power:</i> <i>(x) Any other contrivance specified by the rules not to be a vehicle for the purposes of this definition.”</i> <p>(Land Transport Act 1998, as referenced in the Conservation Act 1987).</p>

Wāhi tapu	<i>“places sacred to Māori in the traditional, spiritual, religious, ritual or mythological sense.”</i> (Historic Places Act 1993).
Wairua	Spirit, spiritual essence. (<i>Pounamu Management Plan</i> , 2002).
Wetland	<i>“includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions”.</i> (Resource Management Act 1991).
Wetland of International Importance	A wetland designated under the Convention on Wetlands (Ramsar, Iran, 1971) by reference to the Criteria for the Identification of Wetlands of International Importance as adopted by the 4th, 6th and 7th Meetings of the Conference of the Contracting Parties to the Convention on Wetlands.
Whakapapa	Genealogy, tribal ancestry and the interrelationship between of all things.

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