

New Zealand Government

# National Policy Statement for Freshwater Management 2020

August 2020

This National Policy Statement was approved by the Governor-General under section 52(2) of the Resource Management Act 1991 on 3 August 2020, and is published by the Minister for the Environment under section 54 of that Act.

This National Policy Statement replaces the National Policy Statement for Freshwater Management 2014 (as amended in 2017), which came into force on 7 September 2017.

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# Part 1: Preliminary provisions

## 1.1 Title

- (1) This is the National Policy Statement for Freshwater Management 2020.

## 1.2 Commencement

- (1) This National Policy Statement comes into force on 3 September 2020.
- (2) See Part 4 for provisions about the timing of the implementation of this National Policy Statement.

## 1.3 Fundamental concept – Te Mana o te Wai

### *Concept*

- (1) Te Mana o te Wai is a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water, the wider environment, and the community.
- (2) Te Mana o te Wai is relevant to all freshwater management and not just to the specific aspects of freshwater management referred to in this National Policy Statement.

### *Framework*

- (3) Te Mana o te Wai encompasses 6 principles relating to the roles of tangata whenua and other New Zealanders in the management of freshwater, and these principles inform this National Policy Statement and its implementation.
- (4) The 6 principles are:
  - (a) *Mana whakahaere*: the power, authority, and obligations of tangata whenua to make decisions that maintain, protect, and sustain the health and well-being of, and their relationship with, freshwater
  - (b) *Kaitiakitanga*: the obligation of tangata whenua to preserve, restore, enhance, and sustainably use freshwater for the benefit of present and future generations
  - (c) *Manaakitanga*: the process by which tangata whenua show respect, generosity, and care for freshwater and for others
  - (d) *Governance*: the responsibility of those with authority for making decisions about freshwater to do so in a way that prioritises the health and well-being of freshwater now and into the future
  - (e) *Stewardship*: the obligation of all New Zealanders to manage freshwater in a way that ensures it sustains present and future generations
  - (f) *Care and respect*: the responsibility of all New Zealanders to care for freshwater in providing for the health of the nation.

- (5) There is a hierarchy of obligations in Te Mana o te Wai that prioritises:
- (a) first, the health and well-being of water bodies and freshwater ecosystems
  - (b) second, the health needs of people (such as drinking water)
  - (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

## 1.4 Interpretation

- (1) In this National Policy Statement:

**Act** means the Resource Management Act 1991

**attribute** means a measurable characteristic (numeric, narrative, or both) that can be used to assess the extent to which a particular value is provided for

**baseline state**, in relation to an attribute, means the best state out of the following:

- (a) the state on the date it is first identified by a regional council
- (b) the state on the date on which a regional council set a freshwater objective for the attribute under the National Policy Statement for Freshwater Management 2014 (as amended in 2017)
- (c) the state on 7 September 2017

**commencement date** means the date on which this National Policy Statement comes into force

**compulsory value** means the 4 values described in Appendix 1A, being: ecosystem health, human contact, mahinga kai, and threatened species

**degraded**, in relation to an FMU or part of an FMU, means that as a result of something other than a naturally occurring process:

- (a) a site or sites in the FMU or part of the FMU to which a target attribute state applies:
  - (i) is below a national bottom line; or
  - (ii) is not achieving or is not likely to achieve a target attribute state; or
- (b) the FMU or part of the FMU is not achieving or is not likely to achieve an environmental flow and level set for it; or
- (c) the FMU or part of the FMU is less able (when compared to 7 September 2017) to provide for any value identified for it under the NOF

**degrading**, in relation to an FMU or part of an FMU, means that any site or sites to which a target attribute state applies is experiencing, or is likely to experience, a deteriorating trend (as assessed under clause 3.19)

**environmental outcome** means, in relation to a value that applies to an FMU or part of an FMU, a desired outcome that a regional council identifies and then includes as an objective in its regional plan(s) (see clause 3.9)

**Freshwater management unit, or FMU**, means all or any part of a water body or water bodies, and their related catchments, that a regional council determines under clause 3.8 is an appropriate unit for freshwater management and accounting purposes; and **part of an FMU**

means any part of an FMU including, but not limited to, a specific site, river reach, water body, or part of a water body

**kaitiakitanga** has the meaning given in the Act but includes the principle referred to in clause 1.3(4)(b)

**limit** means either a limit on resource use or a take limit

**limit on resource use** means the maximum amount of a resource use that is permissible while still achieving a relevant target attribute state (*see* clauses 3.12 and 3.14)

**long-term vision** means a long-term vision developed under clause 3.3 and included as an objective in a regional policy statement

**Māori freshwater values** means the compulsory value of mahinga kai and any other value (whether or not identified in Appendix 1A or 1B) identified for a particular FMU or part of an FMU through collaboration between tangata whenua and the relevant regional council

**national bottom line** means an attribute state identified as such in Appendix 2A or 2B

**naturally occurring process** means a process that occurs, or would occur, in the absence of human activity

**natural inland wetland** has the meaning in clause 3.21

**National Objectives Framework, or NOF**, means the framework for managing freshwater as described in subpart 2 of Part 3

**outstanding water body** means a water body, or part of a water body, identified in a regional policy statement, a regional plan, or a water conservation order as having one or more outstanding values

**over-allocation**, in relation to both the quantity and quality of freshwater, is the situation where:

- (a) resource use exceeds a limit; or
- (b) if limits have not been set, an FMU or part of an FMU is degraded or degrading

**primary contact site** means a site identified by a regional council that it considers is regularly used, or would be regularly used but for existing freshwater quality, for recreational activities such as swimming, paddling, boating, or watersports, and particularly for activities where there is a high likelihood of water or water vapour being ingested or inhaled

**publish**, in relation to an obligation on a local authority to publish material, means to make the material freely available to the public on the local authority's internet website or another web-based platform

**receiving environment** includes, but is not limited to, any water body (such as a river, lake, wetland or aquifer) and the coastal marine area (including estuaries)

**take limit** means a limit on the amount of water that can be taken from an FMU or part of an FMU, as set under clause 3.17

**Te Mana o te Wai** has the meaning set out in clause 1.3

**threatened species** means any indigenous species of flora or fauna that:

- (a) relies on water bodies for at least part of its life cycle; and
- (b) meets the criteria for nationally critical, nationally endangered, or nationally vulnerable species in the *New Zealand Threat Classification System Manual*

- (2) Terms defined in the Act and used in this National Policy Statement have the meanings in the Act, except as otherwise specified.

## 1.5 Application

- (1) This National Policy Statement applies to all freshwater (including groundwater) and, to the extent they are affected by freshwater, to receiving environments (which may include estuaries and the wider coastal marine area).

## 1.6 Best information

- (1) A requirement in this National Policy Statement to use the best information available at the time is a requirement to use, if practicable, complete and scientifically robust data.
- (2) In the absence of complete and scientifically robust data, the best information may include information obtained from modelling, as well as partial data, local knowledge, and information obtained from other sources, but in this case local authorities must:
- (a) prefer sources of information that provide the greatest level of certainty; and
  - (b) take all practicable steps to reduce uncertainty (such as through improvements to monitoring or the validation of models used).
- (3) A person who is required to use the best information available at the time:
- (a) must not delay making decisions solely because of uncertainty about the quality or quantity of the information available; and
  - (b) if the information is uncertain, must interpret it in the way that will best give effect to this National Policy Statement.

## 1.7 Application of section 55(2A) of Act

- (1) The changes to regional policy statements and regional plans required by the following provisions of this National Policy Statement are amendments referred to in section 55(2) of the Act (which, because of section 55(2A) of the Act, means that the changes must be made without using a process in Schedule 1 of the Act):
- (a) clause 3.22(1) (Natural inland wetlands)
  - (b) clause 3.24(1) (Rivers)
  - (c) clause 3.26(1) (Fish passage).
- (2) See clause 4.3(3) about changes that merely update wording or terminology.

## 1.8 Incorporation by reference

- (1) Clause 2(1) of Schedule 1AA of the Act does not apply to any material incorporated by reference in this National Policy Statement.
- (2) All material incorporated by reference in this National Policy Statement is available at: [www.mfe.govt.nz/fresh-water/npsfm/documents-incorporated-by-reference](http://www.mfe.govt.nz/fresh-water/npsfm/documents-incorporated-by-reference).



## Part 2: Objective and policies

### 2.1 Objective

- (1) The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:
- (a) first, the health and well-being of water bodies and freshwater ecosystems
  - (b) second, the health needs of people (such as drinking water)
  - (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

### 2.2 Policies

**Policy 1:** Freshwater is managed in a way that gives effect to Te Mana o te Wai.

**Policy 2:** Tangata whenua are actively involved in freshwater management (including decision-making processes), and Māori freshwater values are identified and provided for.

**Policy 3:** Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.

**Policy 4:** Freshwater is managed as part of New Zealand's integrated response to climate change.

**Policy 5:** Freshwater is managed through a National Objectives Framework to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.

**Policy 6:** There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.

**Policy 7:** The loss of river extent and values is avoided to the extent practicable.

**Policy 8:** The significant values of outstanding water bodies are protected.

**Policy 9:** The habitats of indigenous freshwater species are protected.

**Policy 10:** The habitat of trout and salmon is protected, insofar as this is consistent with Policy 9.

**Policy 11:** Freshwater is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided.

**Policy 12:** The national target (as set out in Appendix 3) for water quality improvement is achieved.

**Policy 13:** The condition of water bodies and freshwater ecosystems is systematically monitored over time, and action is taken where freshwater is degraded, and to reverse deteriorating trends.

**Policy 14:** Information (including monitoring data) about the state of water bodies and freshwater ecosystems, and the challenges to their health and well-being, is regularly reported on and published.

**Policy 15:** Communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with this National Policy Statement.

## Part 3: Implementation

### 3.1 Overview of Part

- (1) This Part sets out a non-exhaustive list of things that local authorities must do to give effect to the objective and policies in Part 2 of this National Policy Statement, but nothing in Part 3 limits the general obligation under the Act to give effect to the objective and policies in Part 2 of this National Policy Statement.
- (2) Nothing in this Part:
  - (a) prevents a local authority adopting more stringent measures than required by this National Policy Statement; or
  - (b) limits a local authority's functions and duties under the Act in relation to freshwater.
- (3) In this Part:
  - (a) subpart 1 sets out how local authorities must implement this National Policy Statement, particularly in relation to giving effect to Te Mana o te Wai
  - (b) subpart 2 sets out the National Objectives Framework for managing freshwater
  - (c) subpart 3 set out additional requirements on regional councils relating to freshwater management.

## Subpart 1 Approaches to implementing the National Policy Statement

### 3.2 Te Mana o te Wai

- (1) Every regional council must engage with communities and tangata whenua to determine how Te Mana o te Wai applies to water bodies and freshwater ecosystems in the region.
- (2) Every regional council must give effect to Te Mana o te Wai, and in doing so must:
  - (a) actively involve tangata whenua in freshwater management (including decision-making processes), as required by clause 3.4; and
  - (b) engage with communities and tangata whenua to identify long-term visions, environmental outcomes, and other elements of the NOF; and
  - (c) apply the hierarchy of obligations, as set out in clause 1.3(5):
    - (i) when developing long-term visions under clause 3.3; and
    - (ii) when implementing the NOF under subpart 2; and
    - (iii) when developing objectives, policies, methods, and criteria for any purpose under subpart 3 relating to natural inland wetlands, rivers, fish passage, primary contact sites, and water allocation; and
  - (d) enable the application of a diversity of systems of values and knowledge, such as mātauranga Māori, to the management of freshwater; and

- (e) adopt an integrated approach, *ki uta ki tai*, to the management of freshwater (see clause 3.5).
- (3) Every regional council must include an objective in its regional policy statement that describes how the management of freshwater in the region will give effect to *Te Mana o te Wai*.
- (4) In addition to subclauses (1) to (3), *Te Mana o te Wai* must inform the interpretation of:
  - (a) this National Policy Statement; and
  - (b) the provisions required by this National Policy Statement to be included in regional policy statements and regional and district plans.

### 3.3 Long-term visions for freshwater

- (1) Every regional council must develop long-term visions for freshwater in its region and include those long-term visions as objectives in its regional policy statement.
- (2) Long-term visions:
  - (a) may be set at FMU, part of an FMU, or catchment level; and
  - (b) must set goals that are ambitious but reasonable (that is, difficult to achieve but not impossible); and
  - (c) identify a timeframe to achieve those goals that is both ambitious and reasonable (for example, 30 years after the commencement date).
- (3) Every long-term vision must:
  - (a) be developed through engagement with communities and *tangata whenua* about their long-term wishes for the water bodies and freshwater ecosystems in the region; and
  - (b) be informed by an understanding of the history of, and environmental pressures on, the FMU, part of the FMU, or catchment; and
  - (c) express what communities and *tangata whenua* want the FMU, part of the FMU, or catchment to be like in the future.
- (4) Every regional council must assess whether each FMU, part of an FMU, or catchment (as relevant) can provide for its long-term vision, or whether improvement to the health and well-being of water bodies and freshwater ecosystems is required to achieve the vision.

### 3.4 *Tangata whenua* involvement

- (1) Every local authority must actively involve *tangata whenua* (to the extent they wish to be involved) in freshwater management (including decision-making processes), including in all the following:
  - (a) identifying the local approach to giving effect to *Te Mana o te Wai*
  - (b) making or changing regional policy statements and regional and district plans so far as they relate to freshwater management
  - (c) implementing the NOF (see subclause (2))

- (d) developing and implementing mātauranga Māori and other monitoring.
- (2) In particular, and without limiting subclause (1), for the purpose of implementing the NOF, every regional council must work collaboratively with, and enable, tangata whenua to:
- (a) identify any Māori freshwater values (in addition to mahinga kai) that apply to any FMU or part of an FMU in the region; and
  - (b) be actively involved (to the extent they wish to be involved) in decision-making processes relating to Māori freshwater values at each subsequent step of the NOF process.
- (3) Every regional council must work with tangata whenua to investigate the use of mechanisms available under the Act, to involve tangata whenua in freshwater management, such as:
- (a) transfers or delegations of power under section 33 of the Act
  - (b) joint management agreements under section 36B of the Act
  - (c) mana whakahono a rohe (iwi participation arrangements) under subpart 2 of Part 5 of the Act.
- (4) To avoid doubt, nothing in this National Policy Statement permits or requires a local authority to act in a manner that is, or make decisions that are, inconsistent with any relevant iwi participation legislation or any directions or visions under that legislation.

### 3.5 Integrated management

- (1) Adopting an integrated approach, ki uta ki tai, as required by Te Mana o te Wai, requires that local authorities must:
- (a) recognise the interconnectedness of the whole environment, from the mountains and lakes, down the rivers to hāpua (lagoons), wahapū (estuaries) and to the sea; and
  - (b) recognise interactions between freshwater, land, water bodies, ecosystems, and receiving environments; and
  - (c) manage freshwater, and land use and development, in catchments in an integrated and sustainable way to avoid, remedy, or mitigate adverse effects, including cumulative effects, on the health and well-being of water bodies, freshwater ecosystems, and receiving environments; and
  - (d) encourage the co-ordination and sequencing of regional or urban growth.
- (2) Every regional council must make or change its regional policy statement to the extent needed to provide for the integrated management of the effects of:
- (a) the use and development of land on freshwater; and
  - (b) the use and development of land and freshwater on receiving environments.
- (3) In order to give effect to this National Policy Statement, local authorities that share jurisdiction over a catchment must co-operate in the integrated management of the effects of land use and development on freshwater.

- (4) Every territorial authority must include objectives, policies, and methods in its district plan to promote positive effects, and avoid, remedy, or mitigate adverse effects (including cumulative effects), of urban development on the health and well-being of water bodies, freshwater ecosystems, and receiving environments.

### 3.6 Transparent decision-making

- (1) This clause applies to decisions by regional councils relating to:
- (a) clause 3.4(3) (about mechanisms to involve tangata whenua in freshwater management); and
  - (b) clause 3.15 (about preparing action plans).
- (2) Every regional council must make decisions, record matters considered and the reasons for decisions reached, and publish this as soon as practicable after a decision is reached, unless publication would be contrary to any other legal obligation.
- (3) In this clause, **decision** includes a decision not to decide on, or to postpone deciding, any substantive issue and, in relation to decisions about mechanisms to involve tangata whenua in freshwater management, includes a decision to use or not use a mechanism.

## Subpart 2 National Objectives Framework

### 3.7 NOF process

- (1) At each step of the NOF process, every regional council must:
- (a) engage with communities and tangata whenua; and
  - (b) apply the hierarchy of obligations set out in clause 1.3(5), as required by clause 3.2(2)(c).
- (2) By way of summary, the NOF process requires regional councils to undertake the following steps:
- (a) identify FMUs in the region (clause 3.8)
  - (b) identify values for each FMU (clause 3.9)
  - (c) set environmental outcomes for each value and include them as objectives in regional plans (clause 3.9)
  - (d) identify attributes for each value and set baseline states for those attributes (clause 3.10)
  - (e) set target attribute states, environmental flows and levels, and other criteria to support the achievement of environmental outcomes (clauses 3.11, 3.13, 3.16)
  - (f) set limits as rules and prepare action plans (as appropriate) to achieve environmental outcomes (clauses 3.12, 3.15, 3.17).
- (3) The NOF also requires that regional councils:
- (a) monitor water bodies and freshwater ecosystems (clauses 3.18 and 3.19); and
  - (b) take action if degradation is detected (clause 3.20).

### 3.8 Identifying FMUs and special sites and features

- (1) Every regional council must identify FMUs for its region.
- (2) Every water body in the region must be located within at least one FMU.
- (3) Every regional council must also identify the following (if present) within each FMU:
  - (a) sites to be used for monitoring
  - (b) primary contact sites
  - (c) the location of habitats of threatened species
  - (d) outstanding water bodies
  - (e) natural inland wetlands.
- (4) Monitoring sites for an FMU must be located at sites that are either or both of the following:
  - (a) representative of the FMU or relevant part of the FMU
  - (b) representative of one or more primary contact sites in the FMU.
- (5) Monitoring sites relating to Māori freshwater values:
  - (a) need not comply with subclause (4), but may instead reflect one or more Māori freshwater values; and
  - (b) must be determined in collaboration with tangata whenua.

### 3.9 Identifying values and setting environmental outcomes as objectives

- (1) The compulsory values listed in Appendix 1A apply to every FMU, and the requirements in this subpart relating to values apply to each of the 5 biophysical components of the value Ecosystem health.
- (2) A regional council may identify other values applying to an FMU or part of an FMU, and must in every case consider whether the values listed in Appendix 1B apply.
- (3) The regional council must identify an environmental outcome for every value that applies to an FMU or part of an FMU.
- (4) The regional council must include the environmental outcomes as an objective, or multiple objectives, in its regional plan(s).
- (5) The environmental outcomes must:
  - (a) describe the environmental outcome sought for the value in a way that enables an assessment of the effectiveness of the regional policy statement and plans (including limits and methods) and action plans in achieving the environmental outcome; and
  - (b) when achieved, fulfil the relevant long-term visions developed under clause 3.3 and the objective of this National Policy Statement.

### 3.10 Identifying attributes and their baseline states, or other criteria for assessing achievement of environmental outcomes

- (1) For each value that applies to an FMU or part of an FMU, the regional council:
  - (a) must use all the relevant attributes identified in Appendix 2A and 2B for the compulsory values listed (except where specifically provided otherwise); and
  - (b) may identify other attributes for any compulsory value; and
  - (c) must identify, where practicable, attributes for all other applicable values; and
  - (d) if attributes cannot be identified for a value, or if attributes are insufficient to assess a value, must identify alternative criteria to assess whether the environmental outcome of the value is being achieved.
- (2) Any attribute identified by a regional council under subclause (1)(b) or (c) must be specific and, where practicable, be able to be assessed in numeric terms.
- (3) Every regional council must identify the baseline state of each attribute, using the best information available at the time.
- (4) Attribute states and baseline states may be expressed in a way that accounts for natural variability and sampling error.

### 3.11 Setting target attribute states

- (1) In order to achieve the environmental outcomes included as objectives under clause 3.9, every regional council must:
  - (a) set a target attribute state for every attribute identified for a value; and
  - (b) identify the site or sites to which the target attribute state applies.
- (2) The target attribute state for every value with attributes (except the value human contact) must be set at or above the baseline state of that attribute.
- (3) The target attribute state for the value human contact must be set above the baseline state of that attribute, unless the baseline state is already within the A band of Tables 9 or 10 in Appendix 2A, as applicable.
- (4) Despite subclauses (2) and (3), if the baseline state of an attribute is below any national bottom line for that attribute, the target attribute state must be set at or above the national bottom line (see clauses 3.31, 3.32, and 3.33 for exceptions to this).
- (5) Every target attribute state must:
  - (a) specify a timeframe for achieving the target attribute state or, if the target attribute state has already been achieved, state that it will be maintained as from a specified date; and
  - (b) for attributes identified in Appendix 2A or 2B, be set in the terms specified in that Appendix; and
  - (c) for any other attribute, be set in any way appropriate to the attribute.
- (6) Timeframes for achieving target attribute states may be of any length or period but, if timeframes are long term:



- (a) they must include interim target attribute states (set for intervals of not more than 10 years) to be used to assess progress towards achieving the target attribute state in the long term; and
  - (b) if interim target attribute states are set, references in this National Policy Statement to achieving a target attribute state can be taken as referring to achieving the next interim target attribute state.
- (7) Every regional council must ensure that target attribute states are set in such a way that they will achieve the environmental outcomes for the relevant values, and the relevant long-term vision.
- (8) When setting target attribute states, every regional council must:
- (a) have regard to the following:
    - (i) the environmental outcomes and target attribute states of any receiving environments
    - (ii) the connections between water bodies
    - (iii) the connection of water bodies to receiving environments; and
  - (b) use the best information available at the time; and
  - (c) take into account results or information from freshwater accounting systems (*see* clause 3.29).

### **3.12 How to achieve target attribute states and environmental outcomes**

- (1) In order to achieve the target attribute states for the attributes in Appendix 2A, every regional council:
- (a) must identify limits on resource use that will achieve the target attribute state, and any nitrogen and phosphorus exceedance criteria and instream concentrations set under clause 3.13, and include the limits as rules in its regional plan(s); and
  - (b) may prepare an action plan; and
  - (c) may impose conditions on resource consents to achieve target attribute states.
- (2) In order to achieve the target attribute states for the attributes in Appendix 2B, every regional council:
- (a) must prepare an action plan for achieving the target attribute state within a specified timeframe; and
  - (b) may identify limits on resource use, and any nitrogen and phosphorus exceedance criteria and instream concentrations set under clause 3.13, and include them as rules in its regional plan(s); and
  - (c) may impose conditions on resource consents to achieve target attribute states.
- (3) In order to achieve any other target attribute state or otherwise support the achievement of environmental outcomes, a regional council must do at least one of the following:
- (a) identify limits on resource use and include them as rules in its regional plan(s)

- (b) prepare an action plan
  - (c) impose conditions on resource consents to achieve target attribute states.
- (4) Where the same attribute provides for more than one value, it is the most stringent target attribute state applying to those values that must be achieved.

### 3.13 Special provisions for attributes affected by nutrients

- (1) To achieve a target attribute state for periphyton, any other nutrient attribute, and any attribute that is affected by nutrients, every regional council must, at a minimum, set appropriate instream concentrations and exceedance criteria for dissolved inorganic nitrogen (**DIN**) and dissolved reactive phosphorus (**DRP**).
- (2) Where there are nutrient-sensitive downstream receiving environments, instream concentrations and exceedance criteria for DIN and DRP must be set for the upstream contributing water bodies to achieve the environmental outcomes sought for the downstream receiving environments.
- (3) In order to determine instream concentrations and exceedance criteria for DIN and DRP, for upstream contributing water bodies, every regional council must apply the following process, in the order given:
- (a) either:
    - (i) if the FMU or part of an FMU supports, or could support, conspicuous periphyton, derive instream concentrations and exceedance criteria for DIN and DRP to achieve the periphyton target attribute state; or
    - (ii) if the FMU or part of an FMU does not support, or could not support, conspicuous periphyton, consider the instream concentrations (or instream loads) and exceedance criteria for nitrogen and phosphorus needed to achieve any other target attribute state
  - (b) if there are nutrient-sensitive receiving environments, derive the relevant instream concentrations (instream loads) and exceedance criteria for nitrogen and phosphorus needed to achieve the environmental outcomes sought for those receiving environments
  - (c) compare instream concentrations and exceedance criteria for nitrogen and phosphorus derived in steps (a) and (b) and adopt those necessary to achieve the relevant target attribute state and the environmental outcomes sought for the nutrient-sensitive receiving environments as instream concentrations and exceedance criteria for DIN and DRP for the upstream contributing water bodies.
- (4) Examples of attributes affected by nutrients include dissolved oxygen (Appendix 2A, Table 7 and Appendix 2B, Tables 17, 18, and 19), submerged plants (invasive species) (Appendix 2B, Table 12), fish (rivers) (Appendix 2B, Table 13), macroinvertebrates (Appendix 2B, Tables 14 and 15), and ecosystem metabolism (Appendix 2B, Table 21).

### 3.14 Setting limits on resource use

- (1) Limits on resource use may:
- (a) apply to any activity or land use; and

- (b) apply at any scale (such as to all or any part of an FMU, or to a specific water body or individual property); and
  - (c) be expressed as any of the following:
    - (i) a land-use control (such as a control on the extent of an activity)
    - (ii) an input control (such as an amount of fertiliser that may be applied)
    - (iii) an output control (such as a volume or rate of discharge); and
  - (d) describe the circumstances in which the limit applies.
- (2) In setting limits on resource use, every regional council must:
- (a) have regard to the following:
    - (i) the long-term vision set under clause 3.3
    - (ii) the foreseeable impacts of climate change; and
  - (b) use the best information available at the time; and
  - (c) take into account results or information from freshwater accounting systems.
- (3) Limits on resource use must ensure that the instream concentrations and instream nitrogen and phosphorus exceedance criteria determined under clause 3.13 are achieved.

### 3.15 Preparing action plans

- (1) Action plans prepared for the purpose of this National Policy Statement may:
- (a) be prepared for whole FMUs, parts of FMUs, or multiple FMUs; and
  - (b) set out a phased approach to achieving environmental outcomes; and
  - (c) be 'prepared' by adding to, amending, or replacing an existing action plan.
- (2) An action plan may describe both regulatory measures (such as proposals to amend regional policy statements and plans, and actions taken under the Biosecurity Act 1993 or other legislation) and non-regulatory measures (such as work plans and partnership arrangements with tangata whenua and community groups).
- (3) If an action plan is prepared for the purpose of achieving a specific target attribute state or otherwise supporting the achievement of environmental outcomes it must:
- (a) identify the environmental outcome that the target attribute state is aimed at achieving; and
  - (b) set out how the regional council will (or intends) to achieve the target attribute state.
- (4) Action plans:
- (a) must be published as soon as practicable; and
  - (b) may be published either by appending them to a regional plan or by publishing them separately.
- (5) Before preparing an action plan, or amending an action plan other than in a minor way, the regional council must consult with communities and tangata whenua.

- (6) Every action plan, or part of an action plan, prepared for the purpose of this National Policy Statement must be reviewed within 5 years after the action plan or part of the action plan is published.

### 3.16 Setting environmental flows and levels

- (1) Every regional council must include rules in its regional plan(s) that set environmental flows and levels for each FMU, and may set different flows and levels for different parts of an FMU.
- (2) Environmental flows and levels:
- (a) must be set at a level that achieves the environmental outcomes for the values relating to the FMU or relevant part of the FMU and all relevant long-term visions; but
  - (b) may be set and adapted over time to take a phased approach to achieving those environmental outcomes and long-term visions.
- (3) Environmental flows and levels must be expressed in terms of the water level and flow rate, and may include variability of flow (as appropriate to the water body) at which:
- (a) for flows and levels in rivers, any taking, damming, diversion, or discharge of water meets the environmental outcomes for the river, any connected water body, and receiving environments
  - (b) for levels of lakes, any taking, damming, diversion or discharge of water meets the environmental outcomes for the lake, any connected water body, and receiving environments
  - (c) for levels of groundwater, any taking, damming, or diversion of water meets the environmental outcomes for the groundwater, any connected water body, and receiving environments.
- (4) When setting environmental flows and levels, every regional council must:
- (a) have regard to the foreseeable impacts of climate change; and
  - (b) use the best information available at the time; and
  - (c) take into account results or information from freshwater accounting systems.

### 3.17 Identifying take limits

- (1) In order to meet environmental flows and levels, every regional council:
- (a) must identify take limits for each FMU; and
  - (b) must include the take limits as rules in its regional plan(s); and
  - (c) must state in its regional plan(s) whether (and if so, when and which) existing water permits will be reviewed to comply with environmental flows and levels; and
  - (d) may impose conditions on resource consents.
- (2) Take limits must be expressed as a total volume, a total rate, or both a total volume and a total rate, at which water may be:

- (a) taken or diverted from an FMU or part of an FMU; or
  - (b) dammed in an FMU or part of an FMU.
- (3) Where a regional plan or any resource consent allows the taking, damming, diversion or discharge of water, the plan or resource consent must identify the flows and levels at which:
- (a) the allowed taking, damming, or diversion will be restricted or no longer allowed; or
  - (b) a discharge will be required.
- (4) Take limits must be identified that:
- (a) provide for flow or level variability that meets the needs of the relevant water body and connected water bodies, and their associated ecosystems; and
  - (b) safeguard ecosystem health from the effects of the take limit on the frequency and duration of lowered flows or levels; and
  - (c) provide for the life cycle needs of aquatic life; and
  - (d) take into account the environmental outcomes applying to relevant water bodies and any connected water bodies (such as aquifers and downstream surface water bodies), whether in the same or another region.

### 3.18 Monitoring

- (1) Every regional council must establish methods for monitoring progress towards achieving target attributes states and environmental outcomes.
- (2) The methods must include measures of:
  - (a) mātauranga Māori; and
  - (b) the health of indigenous flora and fauna.
- (3) Monitoring methods must recognise the importance of long-term trends, and the relationship between results and their contribution to evaluating progress towards achieving long-term visions and environmental outcomes for FMUs and parts of FMUs.

### 3.19 Assessing trends

- (1) In order to assess trends in attribute states (that is, whether improving or deteriorating), every regional council must:
  - (a) determine the appropriate period for assessment (which must be the period specified in the relevant attribute table in Appendix 2A or 2B, if given); and
  - (b) determine the minimum sampling frequency and distribution of sampling dates (which must be the frequency and distribution specified in the relevant attribute table in Appendix 2A or 2B, if given); and
  - (c) specify the likelihood of any trend.
- (2) If a deteriorating trend is more likely than not, the regional council must:
  - (a) investigate the cause of the trend; and

- (b) consider the likelihood of the deteriorating trend, the magnitude of the trend, and the risk of adverse effects on the environment.
- (3) If a deteriorating trend that is the result of something other than a naturally occurring process is detected, any part of an FMU to which the attribute applies is degrading and clause 3.20 applies.
- (4) If a trend assessment cannot identify a trend because of insufficient monitoring, the regional council must make any practicable changes to the monitoring regime that will or are likely to help detect trends in that attribute state.

### 3.20 Responding to degradation

- (1) If a regional council detects that an FMU or part of an FMU is degraded or degrading, it must, as soon as practicable, take action to halt or reverse the degradation (for example, by making or changing a regional plan, or preparing an action plan).
- (2) Any action taken in response to a deteriorating trend must be proportionate to the likelihood and magnitude of the trend, the risk of adverse effects on the environment, and the risk of not achieving target attribute states.
- (3) Every action plan prepared under this clause must include actions to identify the causes of the deterioration, methods to address those causes, and an evaluation of the effectiveness of the methods.

## Subpart 3 Specific requirements

### 3.21 Definitions relating to wetlands and rivers

- (1) In clauses 3.21 to 3.24:

**effects management hierarchy**, in relation to natural inland wetlands and rivers, means an approach to managing the adverse effects of an activity on the extent or values of a wetland or river (including cumulative effects and loss of potential value) that requires that:

- (a) adverse effects are avoided where practicable; and
- (b) where adverse effects cannot be avoided, they are minimised where practicable; and
- (c) where adverse effects cannot be minimised, they are remedied where practicable; and
- (d) where more than minor residual adverse effects cannot be avoided, minimised, or remedied, aquatic offsetting is provided where possible; and
- (e) if aquatic offsetting of more than minor residual adverse effects is not possible, aquatic compensation is provided; and
- (f) if aquatic compensation is not appropriate, the activity itself is avoided

**functional need** means the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment

**improved pasture** means an area of land where exotic pasture species have been deliberately sown or maintained for the purpose of pasture production, and species composition and growth has been modified and is being managed for livestock grazing

**loss of value**, in relation to a natural inland wetland or river, means the wetland or river is less able to provide for the following existing or potential values:

- (a) any value identified for it under the NOF process; or
- (b) any of the following, whether or not they are identified under the NOF process:
  - (i) ecosystem health
  - (ii) indigenous biodiversity
  - (iii) hydrological functioning
  - (iv) Māori freshwater values
  - (v) amenity

**natural wetland** means a wetland (as defined in the Act) that is not:

- (a) a wetland constructed by artificial means (unless it was constructed to offset impacts on, or restore, an existing or former natural wetland); or
- (b) a geothermal wetland; or
- (c) any area of improved pasture that, at the commencement date, is dominated by (that is more than 50% of) exotic pasture species and is subject to temporary rain-derived water pooling

**natural inland wetland** means a natural wetland that is not in the coastal marine area

**specified infrastructure** means any of the following:

- (a) infrastructure that delivers a service operated by a lifeline utility (as defined in the Civil Defence Emergency Management Act 2002)
- (b) regionally significant infrastructure identified as such in a regional policy statement or regional plan
- (c) any public flood control, flood protection, or drainage works carried out:
  - (i) by or on behalf of a local authority, including works carried out for the purposes set out in section 133 of the Soil Conservation and Rivers Control Act 1941; or
  - (ii) for the purpose of drainage by drainage districts under the Land Drainage Act 1908

**restoration**, in relation to a natural inland wetland, means active intervention and management, appropriate to the type and location of the wetland, aimed at restoring its ecosystem health, indigenous biodiversity, or hydrological functioning.

(2) For the purpose of the definition of **effects management hierarchy**:

**aquatic compensation** means a conservation outcome resulting from actions that are intended to compensate for any more than minor residual adverse effects on a wetland or river after all appropriate avoidance, minimisation, remediation, and aquatic offset measures have been sequentially applied

**aquatic offset** means a measurable conservation outcome resulting from actions that are intended to:

- (a) redress any more than minor residual adverse effects on a wetland or river after all appropriate avoidance, minimisation, and remediation, measures have been sequentially applied; and
- (b) achieve no net loss, and preferably a net gain, in the extent and values of the wetland or river, where:
  - (i) **no net loss** means that the measurable positive effects of actions match any loss of extent or values over space and time, taking into account the type and location of the wetland or river; and
  - (ii) **net gain** means that the measurable positive effects of actions exceed the point of no net loss

### 3.22 Natural inland wetlands

- (1) Every regional council must include the following policy (or words to the same effect) in its regional plan(s):

“The loss of extent of natural inland wetlands is avoided, their values are protected, and their restoration is promoted, except where:

- (a) the loss of extent or values arises from any of the following:
  - (i) the customary harvest of food or resources undertaken in accordance with tikanga Māori
  - (ii) restoration activities
  - (iii) scientific research
  - (iv) the sustainable harvest of sphagnum moss
  - (v) the construction or maintenance of wetland utility structures (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020)
  - (vi) the maintenance or operation of specified infrastructure, or other infrastructure (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020)
  - (vii) natural hazard works (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020); or
- (b) the regional council is satisfied that:
  - (i) the activity is necessary for the construction or upgrade of specified infrastructure; and
  - (ii) the specified infrastructure will provide significant national or regional benefits; and
  - (iii) there is a functional need for the specified infrastructure in that location; and
  - (iv) the effects of the activity are managed through applying the effects management hierarchy.”

- (2) Subclause (3) applies to an application for a consent for an activity:
  - (a) that falls within any exception referred to in paragraph (a)(ii) to (vii) or (b) of the policy in subclause (1); and
  - (b) would result (directly or indirectly) in the loss of extent or values of a natural inland wetland.

- (3) Every regional council must make or change its regional plan(s) to ensure that an application referred to in subclause (2) is not granted unless:



- (a) the council is satisfied that the applicant has demonstrated how each step of the effects management hierarchy will be applied to any loss of extent or values of the wetland (including cumulative effects and loss of potential value), particularly (without limitation) in relation to the values of: ecosystem health, indigenous biodiversity, hydrological functioning, Māori freshwater values, and amenity value; and
  - (b) any consent is granted subject to:
    - (i) conditions that apply the effects management hierarchy; and
    - (ii) a condition requiring monitoring of the wetland at a scale commensurate with the risk of the loss of extent or values of the wetland.
- (4) Every regional council must make or change its regional plan(s) to include objectives, policies, and methods that provide for and promote the restoration of natural inland wetlands in its region, with a particular focus on restoring the values of ecosystem health, indigenous biodiversity, hydrological functioning, Māori freshwater values, and amenity value.

### 3.23 Mapping and monitoring natural inland wetlands

- (1) Every regional council must identify and map every natural inland wetland in its region that is:
  - (a) 0.05 hectares or greater in extent; or
  - (b) of a type that is naturally less than 0.05 hectares in extent (such as an ephemeral wetland) and known to contain threatened species.
- (2) However, a regional council need not identify and map natural inland wetlands located in public conservation lands or waters (as that term is defined in the Conservation General Policy 2005 issued under the Conservation Act 1987).
- (3) In case of uncertainty or dispute about the existence or extent of a natural inland wetland, a regional council must have regard to the Wetland delineation protocols (*see* clause 1.8).
- (4) The mapping of natural inland wetlands must be completed within 10 years of the commencement date, and the regional council must prioritise its mapping, for example by:
  - (a) first, mapping any wetland at risk of loss of extent or values; then
  - (b) mapping any wetland identified in a farm environment plan, or that may be affected by an application for, or review of, a resource consent; then
  - (c) mapping all other natural inland wetlands.
- (5) Every regional council must establish and maintain an inventory of all natural inland wetlands mapped under this clause, and the inventory:
  - (a) must include, at a minimum, the following information about each wetland:
    - (i) identifier and location
    - (ii) area and GIS polygon
    - (iii) classification of wetland type

- (iv) any existing monitoring information; and
  - (b) may include any other information (such as an assessment of the values applying to the wetland and any new information obtained from monitoring).
- (6) Every regional council must:
- (a) develop and undertake a monitoring plan that:
    - (i) monitors the condition of its natural inland wetlands (including, if the council chooses, wetlands referred to in subclause (2)); and
    - (ii) contains sufficient information to enable the council to assess whether its policies, rules, and methods are ensuring no loss of extent or values of those wetlands; and
  - (b) have methods to respond if loss of extent or values is detected.

### 3.24 Rivers

- (1) Every regional council must include the following policy (or words to the same effect) in its regional plan(s):
- “The loss of river extent and values is avoided, unless the council is satisfied:
- (a) that there is a functional need for the activity in that location; and
  - (b) the effects of the activity are managed by applying the effects management hierarchy.”
- (2) Subclause (3) applies to an application for a consent for an activity:
- (a) that falls within the exception to the policy described in subclause (1); and
  - (b) would result (directly or indirectly) in the loss of extent or values of a river.
- (3) Every regional council must make or change its regional plan(s) to ensure that an application referred to in subclause (2) is not granted unless:
- (a) the council is satisfied that the applicant has demonstrated how each step in the effects management hierarchy will be applied to any loss of extent or values of the river (including cumulative effects and loss of potential value), particularly (without limitation) in relation to the values of: ecosystem health, indigenous biodiversity, hydrological functioning, Māori freshwater values, and amenity; and
  - (b) any consent granted is subject to conditions that apply the effects management hierarchy.
- (4) Every regional council must:
- (a) develop and undertake a monitoring plan that:
    - (i) monitors the condition of its rivers; and
    - (ii) contains sufficient information to enable the council to assess whether its policies, rules, and methods are ensuring no loss of extent or values of the rivers; and
  - (b) have methods to respond if loss of extent or values is detected.

### 3.25 Deposited sediment in rivers

- (1) If a site to which a target attribute state for deposited fine sediment applies (see Table 16 in Appendix 2B) is soft-bottomed, the regional council must determine whether the site is naturally soft-bottomed or is naturally hard-bottomed.
- (2) If a regional council determines that a site that is currently soft-bottomed is naturally hard-bottomed, the council must:
  - (a) monitor deposited sediment at the site using the SAM2 method at least once a year (instead of at the frequency required by Table 16 in Appendix 2B); and
  - (b) monitor freshwater habitat in a manner suitable to the current state of the site (that is, as soft-bottomed); and
  - (c) determine whether, having regard to the relevant long-term vision, it is appropriate to return the site to a hard-bottomed state; and
  - (d) if it is appropriate to return the site to a hard-bottomed state, prepare an action plan for how to do that.
- (3) In this clause:

**soft-bottomed** means a site where the bed has a greater than 50% coverage of deposited fine sediment (grain size less than 2 mm in diameter) as determined using the SAM2 method

**hard-bottomed** means a site that is not soft-bottomed

**naturally**, in relation to a site, means its state before the arrival of humans in New Zealand

**SAM2 method** means the method described at p 17 – 20 of Clapcott JE, Young RG, Harding JS, Matthaehi CD, Quinn JM, and Death RG. 2011. Sediment Assessment Methods: Protocols and guidelines for assessing the effects of deposited fine sediment on in-stream values. Cawthron Institute: Nelson, New Zealand (see clause 1.8).

### 3.26 Fish passage

- (1) Every regional council must include the following fish passage objective (or words to the same effect) in its regional plan(s):
 

“The passage of fish is maintained, or is improved, by instream structures, except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages, or their habitats.”
- (2) Every regional council must make or change its regional plan(s) to include policies that:
  - (a) identify the desired fish species, and their relevant life stages, for which instream structures must provide passage; and
  - (b) identify the undesirable fish species whose passage can or should be prevented; and
  - (c) identify rivers and receiving environments where desired fish species have been identified; and
  - (d) identify rivers and receiving environments where fish passage for undesirable fish species is to be impeded in order to manage their adverse effects on fish populations upstream or downstream of any barrier.
- (3) When developing the policies required by subclause (2) a regional council must:

- (a) take into account any Freshwater Fisheries Management Plans and Sports Fish and Game Management Plans approved by the Minister of Conservation under the Conservation Act 1987; and
  - (b) seek advice from the Department of Conservation and statutory fisheries managers regarding fish habitat and population management.
- (4) Every regional council must make or change its regional plan(s) to require that regard is had to at least the following when considering an application for a consent relating to an instream structure:
- (a) the extent to which it provides, and will continue to provide for the foreseeable life of the structure, for the fish passage objective in subclause (1)
  - (b) the extent to which it does not cause a greater impediment to fish movements than occurs in adjoining river reaches and receiving environments
  - (c) the extent to which it provides efficient and safe passage for fish, other than undesirable fish species, at all their life stages
  - (d) the extent to which it provides the physical and hydraulic conditions necessary for the passage of fish
  - (e) any proposed monitoring and maintenance plan for ensuring that the structure meets the fish passage objective in subclause (1) for fish now and in the future.
- (5) Every regional council must make or change its regional plan(s) to promote the remediation of existing structures and the provision of fish passage (other than for undesirable fish species) where practicable.
- (6) Every regional council must prepare an action plan to support the achievement of the fish passage objective in subclause (1), and the action plan must, at a minimum:
- (a) set out a work programme to improve the extent to which existing instream structures achieve the fish passage objective; and
  - (b) set targets for remediation of existing instream structures; and
  - (c) achieve any environmental outcomes and target attribute states relating to the abundance and diversity of fish.
- (7) The work programme in an action plan must, at a minimum:
- (a) identify instream structures in the region by recording, for each structure:
    - (i) all the information in Part 1 of Appendix 4; and
    - (ii) any other information about the structure, such as the information in Part 2 of Appendix 4; and
  - (b) evaluate the risks that instream structures present as an undesirable barrier to fish passage; and
  - (c) prioritise structures for remediation, applying the ecological criteria described in table 5.1, of the New Zealand Fish Passage Guidelines (*see* clause 1.8); and
  - (d) document the structures or locations that have been prioritised, the remediation that is required to achieve the desired outcome, and how and when this will be achieved; and

- (e) identify the structures that have been remediated since the commencement date; and
  - (f) specify how the ongoing performance of remediated structures will be monitored and evaluated, including the effects of the structure on the abundance and diversity of desired fish species.
- (8) An action plan for fish passage may be part of, or separate from, an action plan prepared for any purpose under this Part, but clause 3.15, about preparing action plans, applies in either case.

### 3.27 Primary contact sites

- (1) Every regional council must monitor primary contact sites for:
  - (a) their risk to human health; and
  - (b) their suitability for the activities that take place in them (for example, by monitoring whether there is slippery or unpleasant weed growth, and the visual clarity of the water).
- (2) For every primary contact site in an FMU, the regional council must identify one or more monitoring sites representative of the primary contact site or a number of primary contact sites.
- (3) Every regional council must identify, for each primary contact site in its region, a time period (a **bathing season**) during the year when the regional council considers that the site is regularly used, or would be regularly used but for existing freshwater quality, for recreational activities.
- (4) During the bathing season for primary contact sites, every regional council must undertake weekly sampling for *E. coli* at each relevant monitoring site.
- (5) However, if a single sample taken during the bathing season from a monitoring site is greater than 260 *E. coli* per 100 mL, the regional council must (unless the council is satisfied that the elevated result is temporary or the cause is being addressed):
  - (a) increase sampling frequency to daily, where practicable; and
  - (b) take all practicable steps to identify potential causes of microbial contamination.
- (6) If a single sample from a monitoring site is greater than 540 *E. coli* per 100 mL, the regional council must, as soon as practicable, take all practicable steps to notify the public and keep the public informed that the site is unsuitable for primary contact, until further sampling shows a result of 540 *E. coli* per 100 mL or less.
- (7) A regional council may comply with subclause (6) by, for example, erecting signs and publicising the situation, or liaising with an environmental health officer or other relevant body or person to co-ordinate how to inform the public about the situation.

### 3.28 Water allocation

- (1) Every regional council must make or change its regional plan(s) to include criteria for:
  - (a) deciding applications to approve transfers of water take permits; and

- (b) deciding how to improve and maximise the efficient allocation of water (which includes economic, technical, and dynamic efficiency).
- (2) Every regional council must include methods in its regional plan(s) to encourage the efficient use of water.

### 3.29 Freshwater accounting systems

- (1) Every regional council must operate and maintain, for every FMU:
- (a) a freshwater quality accounting system; and
  - (b) a freshwater quantity accounting system.
- (2) The purpose of the accounting systems is to provide the baseline information required:
- (a) for setting target attribute states, environmental flows and levels, and limits; and
  - (b) to assess whether an FMU is, or is expected to be, over-allocated; and
  - (c) to track over time the cumulative effects of activities (such as increases in discharges and changes in land use).
- (3) The accounting systems must be maintained at a level of detail commensurate with the significance of the water quality or quantity issues applicable to each FMU or part of an FMU.
- (4) Every regional council must publish information from those systems regularly and in a suitable form.
- (5) The freshwater quality accounting system must (where practicable) record, aggregate, and regularly update, for each FMU, information on the measured, modelled, or estimated:
- (a) loads and concentrations of relevant contaminants; and
  - (b) where a desired contaminant load has been set as part of a limit on resource use, or identified as necessary to achieve a target attribute state, the proportion of the contaminant load that has been allocated; and
  - (c) sources of relevant contaminants; and
  - (d) the amount of each contaminant attributable to each source.
- (6) The freshwater quantity accounting system must record, aggregate, and regularly update, for each FMU, information on the measured, modelled, or estimated:
- (a) amount of freshwater take; and
  - (b) the proportion of freshwater taken by each major category of use; and
  - (c) where a take limit has been set, the proportion of the take limit that has been allocated.
- (7) In this clause, **freshwater take** refers to all takes and forms of water consumption, whether metered or not, whether subject to a consent or not, and whether authorised or not.

### 3.30 Assessing and reporting

- (1) Every regional council must publish the following annually:
  - (a) actual data, or a link to those data, about each component of the value ecosystem health and the value human contact, as obtained from monitoring sites for the relevant attributes; and if no data has been collected in relation to any attribute, this must be identified
  - (b) actual data, or a link to those data, from any other monitoring done for the purpose of freshwater management
  - (c) a description of any uncertainties associated with the data.
  
- (2) As part of each review required by section 35(2A) of the Act (which is required at least every 5 years), every regional council must prepare and publish the following:
  - (a) an assessment of the extent to which, in the region:
    - (i) the long-term visions, as identified under clause 3.3, are being achieved; and
    - (ii) this National Policy Statement is being given effect to
  - (b) a comparison of the current state of attributes as compared with target attribute states
  - (c) an assessment of whether the target attribute states and environmental outcomes for each FMU or part of an FMU in the region are being achieved and, if not, whether and when they are likely to be
  - (d) if monitoring shows that an FMU or part of an FMU is degraded or degrading, information on the known or likely causes
  - (e) a description of the environmental pressures on each FMU (such as water takes, sources of contaminants, or water body modification) as indicated by information from the freshwater accounting systems referred to in clause 3.29
  - (f) an assessment of the cumulative effect of changes across multiple sites within an FMU and multiple attributes during the period covered by the assessment
  - (g) predictions of changes, including the foreseeable effects of climate change, that are likely to affect water bodies and freshwater ecosystems in the region
  - (h) an assessment of the actions taken over the past 5 years in the region, whether regulatory or non-regulatory and whether by local authorities or others, that contribute to the implementation of this National Policy Statement.
  
- (3) At the same time that a regional council publishes the review required by section 35(2A) of the Act, the regional council must publish an ecosystem health scorecard that:
  - (a) reports on and gives a score for the state of each component of the value ecosystem health (as described in Appendix 1A) in each FMU in the region; and
  - (b) identifies where any data or information is missing; and
  - (c) provides a single overall score for ecosystem health for each FMU in the region.
  
- (4) The ecosystem health scorecard must:
  - (a) be written and presented in a way that members of the public are likely to understand easily; and

- (b) include specific data, or a link to where those data may be viewed.

### 3.31 Large hydro-electric generation schemes

- (1) This clause applies to the following 5 hydro-electricity generation schemes (referred to as **Schemes**):
  - (a) Waikato Scheme
  - (b) Tongariro Scheme
  - (c) Waitaki Scheme
  - (d) Manapouri Scheme
  - (e) Clutha Scheme.
- (2) When implementing any part of this National Policy Statement as it applies to an FMU or part of an FMU affected by a Scheme, a regional council must have regard to the importance of the Scheme's:
  - (a) contribution to meeting New Zealand's greenhouse gas emission targets; and
  - (b) contribution to maintaining the security of New Zealand's electricity supply; and
  - (c) generation capacity, storage, and operational flexibility.
- (3) Subclause (4) applies if:
  - (a) an FMU or part of an FMU is adversely affected by an existing structure that forms part of a Scheme; and
  - (b) the baseline state of an attribute in the FMU or part of the FMU is below the national bottom line for the attribute; and
  - (c) achieving the national bottom line for the attribute would have a significant adverse effect on the Scheme, having regard to the matters in subclause (2).
- (4) When this subclause applies, the regional council:
  - (a) may set a target attribute state that is below the national bottom line for the attribute, despite clause 3.11(4); but
  - (b) must still, as required by clause 3.11(2) and (3), set the target attribute state to achieve an improved attribute state to the extent practicable without having a significant adverse effect on the Scheme having regard to the matters in subclause (2) of this clause.
- (5) In this clause, **existing structure** means a structure that was operational on or before 1 August 2019, and includes any structure that replaces it, provided the effects of the replacement are the same or similar in character, intensity and scale, or have a lesser impact.

### 3.32 Naturally occurring processes

- (1) If all or part of a water body is affected by naturally occurring processes that mean that the current state is below the national bottom line, and a target attribute state at or above the national bottom line cannot be achieved, the regional council:



- (a) may set a target attribute state that is below the national bottom line for the attribute, despite clause 3.11(4); but
  - (b) must still, as required by clause 3.11(2) and (3), set the target attribute state to achieve an improved attribute state, to the extent practicable given the naturally occurring processes.
- (2) In any dispute about whether this exception should apply, the onus is on the relevant regional council to demonstrate that it is naturally occurring processes that prevents the national bottom line being achieved.

### 3.33 Specified vegetable growing areas

- (1) This clause applies only to the 2 **specified vegetable growing areas** identified in Part 1 of Appendix 5.
- (2) When implementing any part of this National Policy Statement as it applies to an FMU or part of an FMU that is in, or includes, all or part of a specified vegetable growing area, a regional council must have regard to the importance of the contribution of the specified growing area to:
  - (a) the domestic supply of fresh vegetables; and
  - (b) maintaining food security for New Zealanders.
- (3) Subclause (4) applies if:
  - (a) an FMU or part of an FMU is adversely affected by vegetable growing in a specified vegetable growing area; and
  - (b) the baseline state of an attribute specified in Part 2 of Appendix 5 in the FMU or part of the FMU where all or part of the specified vegetable growing area is located is below the national bottom line for the attribute; and
  - (c) achieving the national bottom line for the attribute would compromise the matters in subclause (2).
- (4) When this subclause applies, the regional council:
  - (a) may set a target attribute state that is below the national bottom line for the attribute, despite clause 3.11(4); but
  - (b) must still, as required by clause 3.11(2) and (3), set the target attribute state to achieve an improved attribute state without compromising the matters in subclause (2) of this clause.
- (5) When implementing clauses 3.12 to 3.14 in relation to FMUs that include all or part of a specified vegetable growing area, a regional council must ensure that vegetable growers in the area are not exempt from any requirements (such as in limits, action plans, and conditions on resource consents) aimed at achieving target attribute states.
- (6) This clause ceases to apply to a specified vegetable growing area on the earlier of the following dates:
  - (a) 10 years after the commencement date; or
  - (b) the date National Environmental Standards (or other regulations under the Act) come into force that:

- (i) apply to the specified vegetable growing area; and
- (ii) are made for the purpose of avoiding, remedying, or mitigating the adverse effects of vegetable growing on freshwater.

## Part 4: Timing and transitionals

### 4.1 Timing

- (1) Every local authority must give effect to this National Policy Statement as soon as reasonably practicable.
- (2) Local authorities must publicly notify any changes to their regional policy statements, regional plans, and district plans that are necessary to give effect to this National Policy Statement as required under the Act.

### 4.2 Keeping policy statements and plans up to date

- (1) Once a local authority has made the changes required by clause 4.1, it must continue to make whatever changes to its regional policy statement, regional plan, or district plan are necessary to respond to changes over time in the state of water bodies and freshwater ecosystems in its region or district.

### 4.3 Existing policy statements and plans

- (1) To the extent that regional policy statements and regional and district plans already (at the commencement date) give effect to this National Policy Statement, local authorities are not obliged to make changes to wording or terminology merely for consistency with it.
- (2) In case of dispute, the onus is on the local authority to show that, despite the different wording or terminology used, their policy statement or plan does implement this National Policy Statement.
- (3) However, if a local authority chooses to amend an operative policy statement or plan by merely changing wording or terminology for consistency with this National Policy Statement, the amendment is to be treated as the correction of a minor error (and therefore, under clause 20A of Schedule 1 of the Act, the amendment can be made without using a process in that Schedule).

# Appendices

## Appendix 1A – Compulsory values

### 1 Ecosystem health

This refers to the extent to which an FMU or part of an FMU supports an ecosystem appropriate to the type of water body (for example, river, lake, wetland, or aquifer).

There are 5 biophysical components that contribute to freshwater ecosystem health, and it is necessary that all of them are managed. They are:

*Water quality* – the physical and chemical measures of the water, such as temperature, dissolved oxygen, pH, suspended sediment, nutrients and toxicants

*Water quantity* – the extent and variability in the level or flow of water

*Habitat* – the physical form, structure, and extent of the water body, its bed, banks and margins; its riparian vegetation; and its connections to the floodplain and to groundwater

*Aquatic life* – the abundance and diversity of biota including microbes, invertebrates, plants, fish and birds

*Ecological processes* – the interactions among biota and their physical and chemical environment such as primary production, decomposition, nutrient cycling and trophic connectivity.

In a healthy freshwater ecosystem, all 5 biophysical components are suitable to sustain the indigenous aquatic life expected in the absence of human disturbance or alteration (before providing for other values).

### 2 Human contact

This refers to the extent to which an FMU or part of an FMU supports people being able to connect with the water through a range of activities such as swimming, waka, boating, fishing, mahinga kai, and water skiing, in a range of different flows or levels.

Matters to take into account include pathogens, water clarity, deposited sediment, plant growth (from macrophytes to periphyton to phytoplankton), cyanobacteria, other toxicants, and litter.

### 3 Threatened species

This refers to the extent to which an FMU or part of an FMU that supports a population of threatened species has the critical habitats and conditions necessary to support the presence, abundance, survival, and recovery of the threatened species. All the components of ecosystem health must be managed, as well as (if appropriate) specialised habitat or conditions needed for only part of the life cycle of the threatened species.

#### 4 Mahinga kai

Mahinga kai – kai is safe to harvest and eat.

Mahinga kai generally refers to freshwater species that have traditionally been used as food, tools, or other resources. It also refers to the places those species are found and to the act of catching or harvesting them. Mahinga kai provide food for the people of the rohe and these sites give an indication of the overall health of the water. For this value, kai would be safe to harvest and eat. Transfer of knowledge is able to occur about the preparation, storage and cooking of kai. In FMUs or parts of FMUs that are used for providing mahinga kai, the desired species are plentiful enough for long-term harvest and the range of desired species is present across all life stages.

Mahinga kai – Kei te ora te mauri (the mauri of the place is intact).

In FMUs or parts of FMUs that are valued for providing mahinga kai, customary resources are available for use, customary practices are able to be exercised to the extent desired, and tikanga and preferred methods are able to be practised.

## Appendix 1B – Other values that must be considered

### 1 Natural form and character

The FMU or part of the FMU has particular natural qualities that people value. Natural qualities may include exceptional, natural, or iconic aesthetic features.

Matters contributing to the natural form and character of an FMU are its biological, visual and physical characteristics that are valued by the community, including:

- a) its biophysical, ecological, geological, geomorphological and morphological aspects
- b) the natural movement of water and sediment including hydrological and fluvial processes
- c) the natural location of a water body and course of a river
- d) the relative dominance of indigenous flora and fauna
- e) the presence of culturally significant species
- f) the colour of the water
- g) the clarity of the water.

### 2 Drinking water supply

The FMU or part of the FMU can meet people's drinking water needs. Water quality and quantity is sufficient for water to be taken and used for drinking water supply.

Matters affecting the suitability of water for drinking include:

- a) physical, chemical, and microbiological contamination (for example, bacteria and cyanotoxins, viruses, protozoa and other pathogens)
- b) any other contaminants identified in drinking water standards issued under the Health Act 1956 or any other legislation
- c) the effects of contamination on drinking water treatment processes and the safety of drinking water, and its aesthetic value (that is, appearance, taste, and smell).

### 3 Wai tapu

Wai tapu represent the places in an FMU or part of an FMU where rituals and ceremonies are performed, or where there is special significance to tangata whenua.

Rituals and ceremonies include, but are not limited to, tohi (baptism), karakia (prayer), waerea (protective incantation), whakatapu (placing of rāhui), whakanoa (removal of rāhui), and tuku iho (gifting of knowledge and resources to future generations).

In providing for this value, the wai tapu are free from human and animal waste, contaminants and excess sediment, with valued features and unique properties of the wai protected. Other matters that may be important are that there is no artificial mixing of the wai tapu and identified taonga in the wai are protected.

### 4 Transport and tauranga waka

The FMU or part of the FMU is navigable for identified means of transport.

Transport and tauranga waka generally refers to places to launch waka and water craft, and appropriate places for waka to land (tauranga waka).

## 5 Fishing

The FMU or part of the FMU supports fisheries of species allowed to be caught and eaten.

For FMUs or parts of FMUs valued for fishing, the numbers of fish are sufficient and suitable for human consumption. In some areas, fish abundance and diversity provide a range in species and size of fish, and algal growth, water clarity and safety are satisfactory for fishers. Attributes will need to be specific to fish species such as salmon, trout, tuna, lamprey, or whitebait.

## 6 Hydro-electric power generation

The FMU or part of the FMU is suitable for hydro-electric power generation.

Water quality and quantity and the physical qualities of the FMU or part of the FMU, including hydraulic gradient and flow rate, can provide for hydro-electric power generation.

## 7 Animal drinking water

The FMU or part of the FMU meets the needs of farmed animals.

Water quality and quantity meets the needs of farmed animals, including whether it is palatable and safe.

## 8 Irrigation, cultivation, and production of food and beverages

The FMU or part of the FMU meets irrigation needs for any purpose.

Water quality and quantity is suitable for irrigation needs, including supporting the cultivation of food crops, the production of food from farmed animals, non-food crops such as fibre and timber, pasture, sports fields and recreational areas. Attributes will need to be specific to irrigation and food production requirements.

## 9 Commercial and industrial use

The FMU or part of the FMU provides economic opportunities for people, businesses and industries.

Water quality and quantity can provide for commercial and industrial activities. Attributes will need to be specific to commercial or industrial requirements.

## Appendix 2A – Attributes requiring limits on resource use

**Table 1 – Phytoplankton (trophic state)**

Value (and component)	Ecosystem health (Aquatic Life)	
Freshwater body type	Lakes	
Attribute unit	mg chl- <i>a</i> / m <sup>3</sup> (milligrams chlorophyll- <i>a</i> per cubic metre)	
Attribute band and description	Numeric attribute state	
	Annual median	Annual maximum
<p style="text-align: center;"><b>A</b></p> <p>Lake ecological communities are healthy and resilient, similar to natural reference conditions.</p>	≤2	≤10
<p style="text-align: center;"><b>B</b></p> <p>Lake ecological communities are slightly impacted by additional algal and/or plant growth arising from nutrient levels that are elevated above natural reference conditions.</p>	>2 and ≤5	>10 and ≤25
<p style="text-align: center;"><b>C</b></p> <p>Lake ecological communities are moderately impacted by additional algal and plant growth arising from nutrient levels that are elevated well above natural reference conditions. Reduced water clarity is likely to affect habitat available for native macrophytes.</p>	>5 and ≤12	>25 and ≤60
<b>National bottom line</b>	<b>12</b>	<b>60</b>
<p style="text-align: center;"><b>D</b></p> <p>Lake ecological communities have undergone or are at high risk of a regime shift to a persistent, degraded state (without native macrophyte/seagrass cover), due to impacts of elevated nutrients leading to excessive algal and/or plant growth, as well as from losing oxygen in bottom waters of deep lakes.</p>	>12	>60

For lakes and lagoons that are intermittently open to the sea, monitoring data should be analysed separately for closed periods and open periods.



**Table 2 – Periphyton (trophic state)**

<b>Value (and component)</b>	Ecosystem health (Aquatic Life)	
<b>Freshwater body type</b>	Rivers	
<b>Attribute unit</b>	mg chl- <i>a</i> /m <sup>2</sup> (milligrams chlorophyll- <i>a</i> per square metre)	
<b>Attribute band and description</b>	<b>Numeric attribute state (default class)</b>	<b>Numeric attribute state (productive class)</b>
	Exceeded no more than 8% of samples	Exceeded no more than 17% of samples
<b>A</b> Rare blooms reflecting negligible nutrient enrichment and/or alteration of the natural flow regime or habitat.	≤50	≤50
<b>B</b> Occasional blooms reflecting low nutrient enrichment and/or alteration of the natural flow regime or habitat.	>50 and ≤120	>50 and ≤120
<b>C</b> Periodic short-duration nuisance blooms reflecting moderate nutrient enrichment and/or moderate alteration of the natural flow regime or habitat.	>120 and ≤200	>120 and ≤200
<b>National bottom line</b>	<b>200</b>	<b>200</b>
<b>D</b> Regular and/or extended-duration nuisance blooms reflecting high nutrient enrichment and/or significant alteration of the natural flow regime or habitat.	>200	>200

At low risk sites monitoring may be conducted using visual estimates of periphyton cover. Should monitoring based on visual cover estimates indicate that a site is approaching the relevant periphyton abundance threshold, monitoring should then be upgraded to include measurement of chlorophyll-*a*.

Classes are streams and rivers defined according to types in the River Environment Classification (REC). The Productive periphyton class is defined by the combination of REC "Dry" Climate categories (that is, Warm-Dry (WD) and Cool-Dry (CD)) and REC Geology categories that have naturally high levels of nutrient enrichment due to their catchment geology (that is, Soft-Sedimentary (SS), Volcanic Acidic (VA) and Volcanic Basic (VB)). Therefore the productive category is defined by the following REC defined types: WD/SS, WD/VB, WD/VA, CD/SS, CD/VB, CD/VA. The Default class includes all REC types not in the Productive class.

Based on a monthly monitoring regime. The minimum record length for grading a site based on periphyton (chlorophyll-*a*) is 3 years.

**Table 3 – Total nitrogen (trophic state)**

<b>Value (and component)</b>	Ecosystem health (Water quality)	
<b>Freshwater body type</b>	Lakes	
<b>Attribute unit</b>	mg/m <sup>3</sup> (milligrams per cubic metre)	
<b>Attribute band and description</b>	<b>Numeric attribute state</b>	
	<b>Annual median</b>	<b>Annual median</b>
	Seasonally stratified and brackish	Polymictic
<b>A</b> Lake ecological communities are healthy and resilient, similar to natural reference conditions.	≤160	≤300
<b>B</b> Lake ecological communities are slightly impacted by additional algal and/or plant growth arising from nutrient levels that are elevated above natural reference conditions.	>160 and ≤350	>300 and ≤500
<b>C</b> Lake ecological communities are moderately impacted by additional algal and plant growth arising from nutrient levels that are elevated well above natural reference conditions.	>350 and ≤750	>500 and ≤800
<b>National bottom line</b>	<b>750</b>	<b>800</b>
<b>D</b> Lake ecological communities have undergone or are at high risk of a regime shift to a persistent, degraded state (without native macrophyte/seagrass cover), due to impacts of elevated nutrients leading to excessive algal and/or plant growth, as well as from losing oxygen in bottom waters of deep lakes.	>750	>800

For lakes and lagoons that are intermittently open to the sea, monitoring data should be analysed separately for closed periods and open periods.

**Table 4 – Total phosphorus (trophic state)**

<b>Value (and component)</b>	Ecosystem health (Water quality)
<b>Freshwater body type</b>	Lakes
<b>Attribute unit</b>	mg/m <sup>3</sup> (milligrams per cubic metre)
<b>Attribute band and description</b>	<b>Numeric attribute state</b>
	Annual median
<b>A</b> Lake ecological communities are healthy and resilient, similar to natural reference conditions.	≤10
<b>B</b> Lake ecological communities are slightly impacted by additional algal and plant growth arising from nutrient levels that are elevated above natural reference conditions.	>10 and ≤20
<b>C</b> Lake ecological communities are moderately impacted by additional algal and plant growth arising from nutrient levels that are elevated well above natural reference conditions.	>20 and ≤50
<b>National bottom line</b>	<b>50</b>
<b>D</b> Lake ecological communities have undergone or are at high risk of a regime shift to a persistent, degraded state (without native macrophyte/seagrass cover), due to impacts of elevated nutrients leading to excessive algal and/or plant growth, as well as from losing oxygen in bottom waters of deep lakes.	>50
For lakes and lagoons that are intermittently open to the sea, monitoring data should be analysed separately for closed periods and open periods.	

**Table 5 – Ammonia (toxicity)**

<b>Value (and component)</b>	Ecosystem health (Water quality)	
<b>Freshwater body type</b>	Rivers and lakes	
<b>Attribute unit</b>	mg NH <sub>4</sub> -N/L (milligrams ammoniacal-nitrogen per litre)	
<b>Attribute band and description</b>	<b>Numeric attribute state</b>	
	Annual median	Annual maximum
<b>A</b> 99% species protection level: No observed effect on any species tested.	≤0.03	≤0.05
<b>B</b> 95% species protection level: Starts impacting occasionally on the 5% most sensitive species.	>0.03 and ≤0.24	>0.05 and ≤0.40
<b>National bottom line</b>	<b>0.24</b>	<b>0.40</b>
<b>C</b> 80% species protection level: Starts impacting regularly on the 20% most sensitive species (reduced survival of most sensitive species).	>0.24 and ≤1.30	>0.40 and ≤2.20
<b>D</b> Starts approaching acute impact level (that is, risk of death) for sensitive species.	>1.30	>2.20
Numeric attribute state is based on pH 8 and temperature of 20°C. Compliance with the numeric attribute states should be undertaken after pH adjustment.		

**Table 6 – Nitrate (toxicity)**

<b>Value (and component)</b>	Ecosystem health (Water quality)	
<b>Freshwater body type</b>	Rivers	
<b>Attribute unit</b>	mg NO <sub>3</sub> – N/L (milligrams nitrate-nitrogen per litre)	
<b>Attribute band and description</b>	<b>Numeric attribute state</b>	
	Annual median	Annual 95th percentile
<b>A</b> High conservation value system. Unlikely to be effects even on sensitive species.	≤1.0	≤1.5
<b>B</b> Some growth effect on up to 5% of species.	>1.0 and ≤2.4	>1.5 and ≤3.5
<b>National bottom line</b>	<b>2.4</b>	<b>3.5</b>
<b>C</b> Growth effects on up to 20% of species (mainly sensitive species such as fish). No acute effects.	>2.4 and ≤6.9	>3.5 and ≤9.8
<b>D</b> Impacts on growth of multiple species, and starts approaching acute impact level (that is, risk of death) for sensitive species at higher concentrations (>20 mg/L).	>6.9	>9.8

This attribute measures the toxic effects of nitrate, not the trophic state. Where other attributes measure trophic state, for example periphyton, freshwater objectives, limits and/or methods for those attributes may be more stringent.

Table 7 – Dissolved oxygen

<b>Value (and component)</b>	Ecosystem health (Water quality)	
<b>Freshwater body type</b>	Rivers (below point sources only)	
<b>Attribute unit</b>	mg/L (milligrams per litre)	
<b>Attribute band and description</b>	<b>Numeric attribute state</b>	
	7-day mean minimum (summer period: 1 November to 30th April)	1-day minimum (summer period: 1 November to 30th April)
<b>A</b>  No stress caused by low dissolved oxygen on any aquatic organisms that are present at matched reference (near-pristine) sites.	≥8.0	≥7.5
<b>B</b>  Occasional minor stress on sensitive organisms caused by short periods (a few hours each day) of lower dissolved oxygen. Risk of reduced abundance of sensitive fish and macroinvertebrate species.	≥7.0 and <8.0	≥5.0 and <7.5
<b>C</b>  Moderate stress on a number of aquatic organisms caused by dissolved oxygen levels exceeding preference levels for periods of several hours each day. Risk of sensitive fish and macroinvertebrate species being lost.	≥5.0 and <7.0	≥4.0 and <5.0
<b>National bottom line</b>	<b>5.0</b>	<b>4.0</b>
<b>D</b>  Significant, persistent stress on a range of aquatic organisms caused by dissolved oxygen exceeding tolerance levels. Likelihood of local extinctions of keystone species and loss of ecological integrity.	<5.0	<4.0

The 7-day mean minimum is the mean value of seven consecutive daily minimum values.

The 1-day minimum is the lowest daily minimum across the whole summer period.

**Table 8 – Suspended fine sediment**

Value (and component)	Ecosystem health (Water quality)			
Freshwater body type	Rivers			
Attribute unit	Visual clarity (metres)			
Attribute band and description	Numeric attribute state by suspended sediment class			
	1	2	3	4
<b>A</b> Minimal impact of suspended sediment on instream biota. Ecological communities are similar to those observed in natural reference conditions.	≥1.78	≥0.93	≥2.95	≥1.38
<b>B</b> Low to moderate impact of suspended sediment on instream biota. Abundance of sensitive fish species may be reduced.	<1.78 and ≥1.55	<0.93 and ≥0.76	<2.95 and ≥2.57	<1.38 and ≥1.17
<b>C</b> Moderate to high impact of suspended sediment on instream biota. Sensitive fish species may be lost.	<1.55 and >1.34	<0.76 and >0.61	<2.57 and >2.22	<1.17 and >0.98
<b>National bottom line</b>	<b>1.34</b>	<b>0.61</b>	<b>2.22</b>	<b>0.98</b>
<b>D</b> High impact of suspended sediment on instream biota. Ecological communities are significantly altered and sensitive fish and macroinvertebrate species are lost or at high risk of being lost.	<1.34	<0.61	<2.22	<0.98

The minimum record length for grading a site is the median of 5 years of at least monthly samples (at least 60 samples).

Councils may monitor turbidity and convert the measures to visual clarity.

See Appendix 2C Tables 23 and 26 for the definition of suspended sediment classes and their composition.

The following are examples of **naturally occurring processes** relevant for suspended sediment:

- naturally highly coloured brown-water streams
- glacial flour affected streams and rivers
- selected lake-fed REC classes (particularly warm climate classes) where low visual clarity may reflect autochthonous phytoplankton production.

Table 9 – *Escherichia coli* (*E. coli*)

<b>Value</b>	Human contact			
<b>Freshwater body type</b>	Lakes and rivers			
<b>Attribute unit</b>	<i>E. coli</i> /100 mL (number of <i>E. coli</i> per hundred millilitres)			
<b>Attribute band and description</b>	<b>Numeric attribute state</b>			
Description of risk of <i>Campylobacter</i> infection (based on <i>E. coli</i> indicator)	% exceedances over 540/100 mL	% exceedances over 260/100 mL	Median concentration /100 mL)	95th percentile of <i>E. coli</i> /100 mL
<p><b>A (Blue)</b></p> <p>For at least half the time, the estimated risk is &lt;1 in 1,000 (0.1% risk).</p> <p>The predicted average infection risk is 1%.</p>	<5%	<20%	≤130	≤540
<p><b>B (Green)</b></p> <p>For at least half the time, the estimated risk is &lt;1 in 1,000 (0.1% risk).</p> <p>The predicted average infection risk is 2%.</p>	5-10%	20-30%	≤130	≤1000
<p><b>C (Yellow)</b></p> <p>For at least half the time, the estimated risk is &lt;1 in 1,000 (0.1% risk).</p> <p>The predicted average infection risk is 3%.</p>	10-20%	20-34%	≤130	≤1200
<p><b>D (Orange)</b></p> <p>20-30% of the time the estimated risk is ≥50 in 1,000 (&gt;5% risk).</p> <p>The predicted average infection risk is &gt;3%.</p>	20-30%	>34%	>130	>1200
<p><b>E (Red)</b></p> <p>For more than 30% of the time the estimated risk is ≥50 in 1,000 (&gt;5% risk).</p> <p>The predicted average infection risk is &gt;7%.</p>	>30%	>50%	>260	>1200

Attribute state should be determined by using a minimum of 60 samples over a maximum of 5 years, collected on a regular basis regardless of weather and flow conditions. However, where a sample has been missed due to adverse weather or error, attribute state may be determined using samples over a longer timeframe.

Attribute state must be determined by satisfying all numeric attribute states.

The predicted average infection risk is the overall average infection to swimmers based on a random exposure on a random day, ignoring any possibility of not swimming during high flows or when a surveillance advisory is in place (assuming that the *E. coli* concentration follows a lognormal distribution). Actual risk will generally be less if a person does not swim during high flows.



Table 10 – Cyanobacteria (planktonic)

<b>Value</b>	Human contact
<b>Freshwater body type</b>	Lakes and lake fed rivers
<b>Attribute unit</b>	Biovolume mm <sup>3</sup> /L (cubic millimetres per litre)
<b>Attribute band and description</b>	<b>Numeric attribute state</b>
	80th percentile
<p><b>A (Blue)</b></p> <p>Risk exposure from cyanobacteria is no different to that in natural conditions (from any contact with freshwater).</p>	≤0.5 mm <sup>3</sup> /L biovolume equivalent for the combined total of all cyanobacteria
<p><b>B (Green)</b></p> <p>Low risk of health effects from exposure to cyanobacteria (from any contact with freshwater).</p>	>0.5 and ≤1.0 mm <sup>3</sup> /L biovolume equivalent for the combined total of all cyanobacteria
<p><b>C (Yellow)</b></p> <p>Moderate risk of health effects from exposure to cyanobacteria (from any contact with freshwater).</p>	<p>&gt;1.0 and ≤1.8 mm<sup>3</sup>/L biovolume equivalent of potentially toxic cyanobacteria OR</p> <p>&gt;1.0 and ≤10 mm<sup>3</sup>/L total biovolume of all cyanobacteria</p>
<b>National bottom line</b>	<p><b>1.8 mm<sup>3</sup>/L biovolume equivalent of potentially toxic cyanobacteria</b></p> <p><b>OR</b></p> <p><b>10 mm<sup>3</sup>/L total biovolume of all cyanobacteria</b></p>
<p><b>D (Orange/Red)</b></p> <p>High health risks (for example, respiratory, irritation and allergy symptoms) exist from exposure to cyanobacteria (from any contact with freshwater).</p>	<p>&gt;1.8 mm<sup>3</sup>/L biovolume equivalent of potentially toxic cyanobacteria</p> <p><b>OR</b></p> <p>&gt;10 mm<sup>3</sup>/L total biovolume of all cyanobacteria</p>
The 80th percentile must be calculated using a minimum of 12 samples collected over 3 years. Thirty samples collected over 3 years is recommended.	

## Appendix 2B – Attributes requiring action plans

**Table 11 – Submerged plants (natives)**

<b>Value (and component)</b>	Ecosystem health (Aquatic life)
<b>Freshwater body type</b>	Lakes
<b>Attribute unit</b>	Lake Submerged Plant (Native Condition Index)
<b>Attribute band and description</b>	<b>Numeric attribute state (% of maximum potential score)</b>
<b>A</b> Excellent ecological condition. Native submerged plant communities are almost completely intact.	>75%
<b>B</b> High ecological condition. Native submerged plant communities are largely intact.	>50 and ≤75%
<b>C</b> Moderate ecological condition. Native submerged plant communities are moderately impacted.	≥20 and ≤50%
<b>National bottom line</b>	<b>20%</b>
<b>D</b> Poor ecological condition. Native submerged plant communities are largely degraded or absent.	<20%

Monitoring to be conducted at least once every three years, following the method described in Clayton J, and Edwards T. 2006. *LakeSPI: A method for monitoring ecological condition in New Zealand lakes. User Manual Version 2*. National Institute of Water & Atmospheric Research: Hamilton, New Zealand. (see clause 1.8)

Scores are reported as a percentage of maximum potential score (%) of the Native Condition Index, and lakes in a devegetated state receive scores of 0.

Table 12 – Submerged plants (invasive species)

<b>Value (and component)</b>	Ecosystem health (Aquatic life)
<b>Freshwater body type</b>	Lakes
<b>Attribute unit</b>	Lake Submerged Plant (Invasive Impact Index)
<b>Attribute band and description</b>	<b>Numeric attribute state (% of maximum potential score)</b>
<b>A</b> No invasive plants present in the lake. Native plant communities remain intact.	0%
<b>B</b> Invasive plants having only a minor impact on native vegetation. Invasive plants will be patchy in nature co-existing with native vegetation. Often major weed species not present or in early stages of invasion.	>1 and ≤25%
<b>C</b> Invasive plants having a moderate to high impact on native vegetation. Native plant communities likely displaced by invasive weed beds particularly in the 2 – 8 m depth range.	>25 and ≤90%
<b>National bottom line</b>	<b>90%</b>
<b>D</b> Tall dense weed beds exclude native vegetation and dominate entire depth range of plant growth. The species concerned are likely hornwort and Egeria.	>90%

Numeric attribute state to be calculated annually following the method described in Clayton J, and Edwards T. 2006. *LakeSPI: A method for monitoring ecological condition in New Zealand lakes. User Manual Version 2*. National Institute of Water & Atmospheric Research: Hamilton, New Zealand. (see clause 1.8)

**Table 13 – Fish (rivers)**

<b>Value (and component)</b>	Ecosystem health (Aquatic life)
<b>Freshwater body type</b>	Wadeable rivers
<b>Attribute unit</b>	Fish Index of Biotic Integrity (F-IBI)
<b>Attribute band and description</b>	<b>Numeric attribute state (average)</b>
<b>A</b> High integrity of fish community. Habitat and migratory access have minimal degradation.	≥34
<b>B</b> Moderate integrity of fish community. Habitat and/or migratory access are reduced and show some signs of stress.	<34 and ≥28
<b>C</b> Low integrity of fish community. Habitat and/or migratory access is considerably impairing and stressing the community.	<28 and ≥18
<b>D</b> Severe loss of fish community integrity. There is substantial loss of habitat and/or migratory access, causing a high level of stress on the community.	<18

Sampling is to occur at least annually between December and March (inclusive) following the protocols for at least one of the backpack electrofishing method, spotlighting method, or trapping method in Joy M, David B, and Lake M. 2013. *New Zealand Freshwater Fish Sampling Protocols (Part 1): Wadeable rivers and streams*. Massey University: Palmerston North, New Zealand. (see clause 1.8)

The F-IBI score is to be calculated using the general method defined by Joy, MK, and Death RG. 2004. Application of the Index of Biotic Integrity Methodology to New Zealand Freshwater Fish Communities. *Environmental Management*, 34(3), 415-428. (see clause 1.8)

Table 14 – Macroinvertebrates (1 of 2)

<b>Value (and component)</b>	Ecosystem health (Aquatic life)	
<b>Freshwater body type</b>	Wadeable rivers	
<b>Attribute unit</b>	Macroinvertebrate Community Index (MCI) score; Quantitative Macroinvertebrate Community Index (QMCI) score	
<b>Attribute band and description</b>	<b>Numeric attribute states</b>	
	QMCI	MCI
<b>A</b> Macroinvertebrate community, indicative of pristine conditions with almost no organic pollution or nutrient enrichment.	≥6.5	≥130
<b>B</b> Macroinvertebrate community indicative of mild organic pollution or nutrient enrichment. Largely composed of taxa sensitive to organic pollution/nutrient enrichment.	≥5.5 and <6.5	≥110 and <130
<b>C</b> Macroinvertebrate community indicative of moderate organic pollution or nutrient enrichment. There is a mix of taxa sensitive and insensitive to organic pollution/nutrient enrichment.	≥4.5 and <5.5	≥90 and <110
<b>National bottom line</b>	<b>4.5</b>	<b>90</b>
<b>D</b> Macroinvertebrate community indicative of severe organic pollution or nutrient enrichment. Communities are largely composed of taxa insensitive to inorganic pollution/nutrient enrichment.	<4.5	<90

MCI and QMCI scores to be determined using annual samples taken between December and March (inclusive) with either fixed counts with at least 200 individuals, or full counts, and with current state calculated as the five-year median score. All sites for which the deposited sediment attribute does not apply, whether because they are in river environment classes shown in Table 25 in Appendix 2C or because they require alternate habitat monitoring under clause 3.25 are to use soft sediment sensitivity scores and taxonomic resolution as defined in table A1.1 in Clapcott et al. 2017 *Macroinvertebrate metrics for the National Policy Statement for Freshwater Management*. Cawthron Institute: Nelson, New Zealand. (see clause 1.8)

MCI and QMCI to be assessed using the method defined in Stark JD, and Maxted, JR. 2007 *A user guide for the Macroinvertebrate Community Index*. Cawthron Institute: Nelson, New Zealand (See Clause 1.8), except for sites for which the deposited sediment attribute does not apply, which require use of the soft-sediment sensitivity scores and taxonomic resolution defined in table A1.1 in Clapcott et al. 2017 *Macroinvertebrate metrics for the National Policy Statement for Freshwater Management*. Cawthron Institute: Nelson, New Zealand. (see clause 1.8)

Table 15 – Macroinvertebrates (2 of 2)

Value (and component)	Ecosystem health (Aquatic life)
Freshwater body type	Wadeable rivers
Attribute unit	Macroinvertebrate Average Score Per Metric (ASPM)
Attribute band and description	Numeric attribute states ASPM score
<b>A</b> Macroinvertebrate communities have high ecological integrity, similar to that expected in reference conditions.	≥0.6
<b>B</b> Macroinvertebrate communities have mild-to-moderate loss of ecological integrity.	<0.6 and ≥0.4
<b>C</b> Macroinvertebrate communities have moderate-to-severe loss of ecological integrity.	<0.4 and ≥0.3
<b>National bottom line</b>	<b>0.3</b>
<b>D</b> Macroinvertebrate communities have severe loss of ecological integrity.	<0.3

ASPM scores to be determined using annual samples taken between December and March (inclusive) with either fixed counts with at least 200 individuals, or full counts, and with current state calculated as the five-year median score. All sites for which the deposited sediment attribute does not apply, whether because they are in river environment classes shown in Table 25 in Appendix 2C or because they require alternate habitat monitoring under clause 3.25, are to use soft-sediment sensitivity scores and taxonomic resolution as defined in table A1.1 in Clapcott et al. 2017. *Macroinvertebrate metrics for the National Policy Statement for Freshwater Management*. Cawthron Institute: Nelson, New Zealand. (see clause 1.8)

When normalising scores for the ASPM, use the following minimums and maximums: %EPT-abundance (0-100), EPT-richness (0-29), MCI (0-200) using the method of Kevin J Collier (2008). Average score per metric: An alternative metric aggregation method for assessing wadeable stream health. *New Zealand Journal of Marine and Freshwater Research*, 42:4, 367-378, DOI: 10.1080/00288330809509965. (see clause 1.8)

Table 16 – Deposited fine sediment

Value (and component)	Ecosystem health (Physical habitat)			
Freshwater body type	Wadeable rivers			
Attribute unit	% fine sediment cover			
Attribute band and description	Numeric attribute state by deposited sediment class			
	1	2	3	4
<b>A</b> Minimal impact of deposited fine sediment on instream biota. Ecological communities are similar to those observed in natural reference conditions.	≤7	≤10	≤9	≤13
<b>B</b> Low to moderate impact of deposited fine sediment on instream biota. Abundance of sensitive macroinvertebrate species may be reduced.	>7 and ≤14	>10 and ≤19	>9 and ≤18	>13 and ≤19
<b>C</b> Moderate to high impact of deposited fine sediment on instream biota. Sensitive macroinvertebrate species may be lost.	>14 and <21	>19 and <29	>18 and <27	>19 and <27
<b>National bottom line</b>	<b>21</b>	<b>29</b>	<b>27</b>	<b>27</b>
<b>D</b> High impact of deposited fine sediment on instream biota. Ecological communities are significantly altered and sensitive fish and macroinvertebrate species are lost or at high risk of being lost.	>21	>29	>27	>27

The indicator score is percentage cover of the streambed in a run habitat determined by the instream visual method, SAM2 as defined in p. 17-20 of Clapcott JE, Young RG, Harding JS., Matthaei CD, Quinn JM. and Death RG. 2011. *Sediment Assessment Methods: Protocols and guidelines for assessing the effects of deposited fine sediment on in-stream values*. Cawthron Institute: Nelson, New Zealand. (see clause 1.8)

The minimum record length for grading a site is the median of 60 samples taken over 5 years of monthly monitoring, or longer for sites where flow conditions only permit monthly monitoring seasonally.

See Tables 24 and 26 in Appendix 2C for deposited sediment classes and their composition.

This attribute does not apply in river environment classes shown in Table 25 in Appendix 2C, or where clause 3.25 requires freshwater habitat monitoring.

**Table 17 – Dissolved oxygen**

<b>Value (and component)</b>	Ecosystem health (Water quality)	
<b>Freshwater body type</b>	Rivers	
<b>Attribute unit</b>	mg/L (milligrams per litre)	
<b>Attribute description band and description</b>	<b>Numeric attribute state</b>	
	<b>7-day mean minimum</b>	<b>1-day minimum</b>
<b>A</b> No stress caused by low dissolved oxygen on any aquatic organisms that are present at matched reference (near-pristine) sites.	≥8.0	≥7.5
<b>B</b> Occasional minor stress on sensitive organisms caused by short periods (a few hours each day) of lower dissolved oxygen. Risk of reduced abundance of sensitive fish and macroinvertebrate species.	≥7.0 and <8.0	≥5.0 and <7.5
<b>C</b> Moderate stress on a number of aquatic organisms caused by dissolved oxygen levels exceeding preference levels for periods of several hours each day. Risk of sensitive fish and macroinvertebrate species being lost.	≥5.0 and <7.0	≥4.0 and <5.0
<b>National bottom line</b>	<b>5.0</b>	<b>4.0</b>
<b>D</b> Significant, persistent stress on a range of aquatic organisms caused by dissolved oxygen exceeding tolerance levels. Likelihood of local extinctions of keystone species and loss of ecological integrity.	<5.0	<4.0
The 7-day mean minimum is the mean value of 7 consecutive daily minimum values.		
The 1-day minimum is the lowest daily minimum across the whole summer period.		



**Table 18 – Lake-bottom dissolved oxygen**

<b>Value (and component)</b>	Ecosystem health (Water quality)
<b>Freshwater body type</b>	Lakes
<b>Attribute unit</b>	mg/L (milligrams per litre)
<b>Attribute description band and description</b>	<b>Numeric attribute state</b>
	<b>Measured or estimated annual minimum</b>
<b>A</b> No risk from lake-bottom dissolved oxygen of biogeochemical conditions causing nutrient release from sediments.	≥7.5
<b>B</b> Minimal risk from lake-bottom dissolved oxygen of biogeochemical conditions causing nutrient release from sediments.	≥2.0 and < 7.5
<b>C</b> Risk from lake-bottom dissolved oxygen of biogeochemical conditions causing nutrient release from sediments.	≥0.5 and < 2.0
<b>National bottom line</b>	<b>0.5</b>
<b>D</b> Likelihood from lake-bottom dissolved oxygen of biogeochemical conditions resulting in nutrient release from sediments.	<0.5
To be measured less than 1 metre above sediment surface at the deepest part of the lake using either continuous monitoring sensors or discrete dissolved oxygen profiles.	

**Table 19 – Mid-hypolimnetic dissolved oxygen**

<b>Value (and component)</b>	Ecosystem health (Water quality)
<b>Freshwater body type</b>	Seasonally stratifying lakes
<b>Attribute unit</b>	mg/L (milligrams per litre)
<b>Attribute description band and description</b>	<b>Numeric attribute state</b>
	<b>Measured or estimated annual minimum</b>
<b>A</b> No stress caused to any fish species by low dissolved oxygen.	≥7.5
<b>B</b> Minor stress on sensitive fish seeking thermal refuge in the hypolimnion. Minor risk of reduced abundance of sensitive fish and macro-invertebrate species.	≥ 5.0 and <7.5
<b>C</b> Moderate stress on sensitive fish seeking thermal refuge in the hypolimnion. Risk of sensitive fish species being lost.	≥ 4.0 and <5 .0
<b>National bottom line</b>	<b>4.0</b>
<b>D</b> Significant stress on a range of fish species seeking thermal refuge in the hypolimnion. Likelihood of local extinctions of fish species and loss of ecological integrity.	< 4.0
To be measured using either continuous monitoring sensors or discrete dissolved oxygen profiles.	

**Table 20 – Dissolved reactive phosphorus**

<b>Value (and component)</b>	Ecosystem health (Water quality)	
<b>Freshwater body type</b>	Rivers	
<b>Attribute unit</b>	DRP mg/L (milligrams per litre)	
<b>Attribute band and description</b>	<b>Numeric attribute state</b>	
	Median	95th percentile
<b>A</b> Ecological communities and ecosystem processes are similar to those of natural reference conditions. No adverse effects attributable to dissolved reactive phosphorus (DRP) enrichment are expected.	≤ 0.006	≤ 0.021
<b>B</b> Ecological communities are slightly impacted by minor DRP elevation above natural reference conditions. If other conditions also favour eutrophication, sensitive ecosystems may experience additional algal and plant growth, loss of sensitive macroinvertebrate taxa, and higher respiration and decay rates.	> 0.006 and ≤ 0.010	> 0.021 and ≤ 0.030
<b>C</b> Ecological communities are impacted by moderate DRP elevation above natural reference conditions. If other conditions also favour eutrophication, DRP enrichment may cause increased algal and plant growth, loss of sensitive macro-invertebrate and fish taxa, and high rates of respiration and decay.	> 0.010 and ≤ 0.018	> 0.030 and ≤ 0.054
<b>D</b> Ecological communities impacted by substantial DRP elevation above natural reference conditions. In combination with other conditions favouring eutrophication, DRP enrichment drives excessive primary production and significant changes in macroinvertebrate and fish communities, as taxa sensitive to hypoxia are lost.	>0.018	>0.054

Numeric attribute state must be derived from the median of monthly monitoring over 5 years.

**Table 21 – Ecosystem metabolism (both gross primary production and ecosystem respiration)**

<b>Value (and component)</b>	Ecosystem health (Ecosystem processes)
<b>Freshwater body type</b>	Rivers
<b>Attribute unit</b>	$\text{g O}_2 \text{ m}^{-2} \text{ d}^{-1}$ (grams of dissolved oxygen per square metre per day)

Derived from at least 7 days of continuous dissolved oxygen monitoring to be collected at least once during summer (December to March inclusive), using the method of Young RG, Clapcott JE, Simon K. 2016. Ecosystem functions and stream health. *Advances in New Zealand Freshwater Science*. NZ Freshwater Sciences Society, NZ Hydrological Society. (see clause 1.8)

Table 22 – *Escherichia coli* (*E. coli*) (primary contact sites)

<b>Value</b>	Human contact
<b>Freshwater body Type</b>	Primary contact sites in lakes and rivers (during the bathing season)
<b>Attribute unit</b>	95th percentile of <i>E. coli</i> /100 mL (number of <i>E. coli</i> per hundred millilitres)
<b>Attribute band and description</b>	<b>Numeric attribute state</b>
<p style="text-align: center;"><b>Excellent</b></p> <p>Estimated risk of <i>Campylobacter</i> infection has a &lt; 0.1% occurrence, 95% of the time.</p>	≤ 130
<p style="text-align: center;"><b>Good</b></p> <p>Estimated risk of <i>Campylobacter</i> infection has a 0.1 – 1.0% occurrence, 95% of the time.</p>	> 130 and ≤ 260
<p style="text-align: center;"><b>Fair</b></p> <p>Estimated risk of <i>Campylobacter</i> infection has a 1 – 5% occurrence, 95% of the time.</p>	> 260 and ≤ 540
<b>National bottom line</b>	<b>540</b>
<p style="text-align: center;"><b>Poor</b></p> <p>Estimated risk of <i>Campylobacter</i> infection has a &gt; 5% occurrence, at least 5% of the time.</p>	> 540
The narrative attribute state description assumes “% of time” equals “% of samples”.	

## Appendix 2C – Sediment classification tables

In this Appendix, **REC groups** refers to the classes and categories described in the New Zealand River Environment Classification User Guide (see clause 1.8), except where those REC groups are further clustered according to table 26.

**Table 23 Suspended sediment class composition**

Suspended sediment class	Suspended sediment clustered River Environment Classification groups
1	CD_Low_HS; WW_Low_VA; WW_Hill_VA; CD_Low_AI; CW_Hill_SS; CW_Mount_SS; CW_Hill_VA; CD_Hill_SS; CD_Hill_VA; CD_Low_VA; CW_Low_VA; CW_Mount_VA; CW_Mount_HS; CD_Mount_AI; CW_Hill_AI; CW_Mount_AI; WD_Low_AI
2	CD_Low_SS; WW_Low_HS; WW_Low_SS; WW_Hill_HS; WW_Hill_SS; WW_Low_AI; WD_Low_SS; WD_Lake_Any; WD_Low_HS; WD_Low_VA
3	CW_Hill_HS; CW_Lake_Any; CD_Lake_Any; WW_Lake_Any; CW_Low_HS; CW_Low_AI; CD_Hill_HS; CD_Hill_AI; CD_Mount_HS; CD_Mount_SS; CD_Mount_VA
4	CW_Low_SS

**Table 24 – Deposited sediment class composition**

Deposited sediment class	Deposited sediment clustered River Environment Classification groups
1	WD_Low_HS; WW_Lake_Any
2	CD_Hill_AI; CD_Low_HS; CD_Low_VA; WW_Low_HS; WW_Low_VA; CD_Hill_SS; CD_Lake_Any; CW_Lake_Any; CW_Low_AI; CD_Hill_HS; CW_Hill_VA; CW_Low_SS; CW_Low_VA
3	CD_Low_AI; CD_Low_SS; WW_Hill_SS; WW_Low_SS
4	CD_Hill_VA; CW_Mount_VA; WW_Hill_HS; CW_Mount_SS; CD_Mount_AI; CD_Mount_HS; CD_Mount_SS; CD_Mount_VA; CW_Hill_AI; CW_Hill_HS; CW_Hill_SS; CW_Low_HS; CW_Mount_AI; CW_Mount_HS; WW_Hill_VA

**Table 25 – Clustered River Environment Classification groups that are naturally soft-bottomed**

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WD\_Low\_AI; WD\_Low\_VA; WD\_Lake\_Any; WD\_Low\_SS; WW\_Low\_AI

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**Table 26 – Further clustering of River Environment Classification groups specific to this appendix**

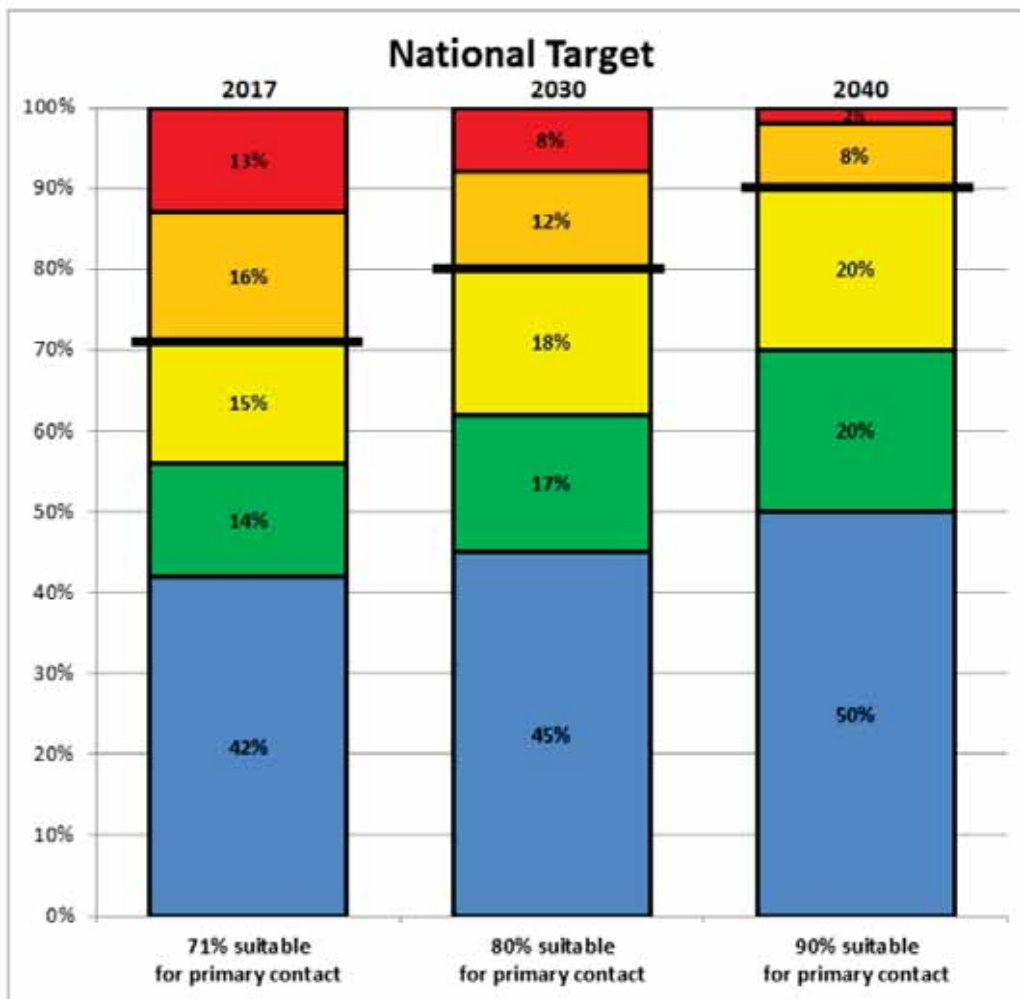
REC variable	REC groups	Clustered REC groups
Climate	Warm-Wet	Warm-Wet (WW)
	Warm-Extremely Wet	
	Warm-Dry	Warm-Dry (WD)
	Cold-Wet	Cold-Wet (CW)
	Cold-Extremely Wet	
	Cold-Dry	Cold-Dry (CD)
Topography (Source of flow)	Lowland	Lowland (Low)
	Lakefed	Lakefed (Lake)
	Hill	Hill (Hill)
	Mountain	Mountain (Mount)
	Glacial Mountain	
Geology	Soft Sedimentary	Soft Sedimentary (SS)
	Plutonic Volcanic	
	Miscellaneous	
	Hard Sedimentary	Hard Sedimentary (HS)
	Alluvium	Alluvium (AI)
	Volcanic Basic	Volcanic (VA)
	Volcanic Acidic	

## Appendix 3 – National target for primary contact

The national target is to increase proportions of specified rivers and lakes that are suitable for primary contact (that is, that are in the blue, green and yellow categories) to at least 80% by 2030, and 90% no later than 2040, but also to improve water quality across all categories.

In this Appendix, **specified rivers and lakes** means:

- a) rivers that are fourth order or greater, using the methods outlined in the River Environment Classification System, National Institute of Water and Atmospheric Research, Version 1 (see clause 1.8); and
- b) lakes with a perimeter of 1.5 km or more.



The categories above represent combined improvements in all regions. For each region, this means reducing the length of specified rivers and lakes in the red and orange categories, and increasing the length of specified rivers and lakes in the yellow, green and blue categories.

The categories are based on water quality in terms of the 2 human contact attributes, *E. coli* and *cyanobacteria* (planktonic), in tables 9 and 10 in Appendix 2A.

For rivers and lakes, the target categories are same as the *E. coli* table attribute states. However, the categories do not include the 95th percentile of *E. coli*/100 mL numeric attribute state if there is insufficient monitoring data to establish the 95th percentile.



For lakes, the categories are also based on the cyanobacteria (planktonic) attribute states. However, to provide additional granularity for tracking improvements over time, the D band has been split into 2 categories (orange and red) as follows:

- a) **orange** means the lake has between 1.8 and 3.0 mm<sup>3</sup>/L biovolume of cyanobacteria (planktonic), using an 80th percentile
- b) **red** means the lake has more than 3.0 mm<sup>3</sup>/L biovolume of cyanobacteria (planktonic), using an 80th percentile.

For lakes, the lowest category for either *E. coli* or cyanobacteria (planktonic) applies.

## Appendix 4 – Details for instream structures

### Part 1: Required information

#### *For all structures*

- a) geographical co-ordinates of the structure
- b) date and time of survey
- c) flow when survey was completed (no flow, low, normal, high, unknown)
- d) whether the stream is tidal where structure is located (yes, no, unknown)
- e) the width of the river at the water's surface and the width of the bed of the river
- f) structure type
- g) photos viewed upstream and downstream at both ends of the structure

#### *For all culverts*

- a) number of culvert barrels
- b) culvert shape, length, width and height or diameter
- c) mean water velocity through the culvert
- d) whether low velocity recirculation zones are present (yes, no, unknown)
- e) culvert water depth
- f) culvert substrate
- g) whether wetted margins present in the culvert
- h) structure outlet drop height
- i) structure outlet undercut length (if applicable)
- j) whether add-ons present and add-on type

#### *For all weirs*

- a) weir type
- b) weir crest shape
- c) weir height
- d) weir substrate
- e) whether wetted margins present
- f) weir slope (degrees)
- g) whether add-ons present and add-on type

#### *For all fords*

- a) ford drop height
- b) ford substrate
- c) whether add-ons present and add-on type

*For all dams*

- a) dam height
- b) whether spillway present
- c) whether add-ons present and add-on type

*For all aprons*

- a) apron drop height
- b) apron water depth
- c) apron substrate type

*For all ramps*

- a) ramp surface
- b) ramp length
- c) ramp slope (degrees)
- d) whether wetted margins present on the ramp

*For all flap gates*

- a) gate type
- b) number of flap gates on the structure
- c) whether add-ons present and add-on type

**Part 2: Additional optional information***For all structures*

- a) owner of the structure (NZTA, KiwiRail, Department of Conservation, regional council, territorial authority, private, other, or unknown)
- b) asset ID (if known)
- c) any fish passage observations (for example, does the structure protect desired species or their habitats)
- d) effectiveness of fish passage remediation if fish passage improvement present (for example, rock ramp, artificial ramp, fish passage)
- e) risk of structure to fish passage class (if known) (very low, low, medium, high risk, very high risk, not assessed)

*For all culverts*

- a) structure slope
- b) structure alignment with the stream
- c) structure material
- d) number of flap gates (if present)
- e) flap gate type and material

*For all weirs*

- a) weir width
- b) backwater distance
- c) weir material

*For all fords*

- a) ford width
- b) ford length
- c) ford material

*For all aprons*

- a) apron material
- b) apron length
- c) apron water velocity

*For all flap gates*

- a) gate height and width
- b) gate material

## Appendix 5 – Specified vegetable growing areas

### Part 1 – Description of specified vegetable growing areas

#### Pukekohe specified vegetable growing area:

##### *Western boundary*

From the point that the Waiuku River meets the Waiuku Stream at NZTM2000 1753472 5876259, up the Waiuku Stream to Waiuku Road to the boundary at NZTM2000 1755854 5875779.

##### *Southern boundary*

The north bank of the Waikato River, from the end of Crouch Road at NZTM2000 1756420 5868522 to the end of Bluff Road at NZTM2000 1778986 5871955.

##### *Eastern boundary*

From the arm of the Pahurehure inlet at NZTM2000 1771949 5896064, eastwards along Elliot Street until it becomes Broadway, along Clevedon Road which becomes Papakura-Clevedon Road until the point at which the national grid transmission lines cross the road at NZTM2000 1778853, 5900012. Following in a southward direction the transmission line to the Auckland Council and Waikato Regional Council regional boundary at NZTM2000 1788858, 5882363.

##### *Northern boundary*

From the mouth of the Waiuku river NZTM2000 1753472 5876259 to the north following the coastline of the Manukau Harbour to the eastern most arm of Pahurehure Inlet at NZTM2000 1771949 5896064.

#### Horowhenua specified vegetable growing area:

##### *Lake Horowhenua (Hoki\_1a) Water Management Subzone*

Whole lake catchment above Lake Horowhenua outlet (at approx. NZTM2000 1789400 5502450). From the lake outlet, crossing Moutere Road to the north-west, and as far west as the eastern edge of the Waitarere Forest, and as far north as Waitarere Beach Road. As far east as Gladstone Road, near Gladstone Reserve, crossing Roslyn Road, Denton Road. To the south as far as Tararua Road, and crossing Kimberley Road, Buller Road, Hokio Sand Road, then north to Lake Horowhenua outlet.

##### *Hoki (Hoki\_1b) Water Management Subzone*

Hokio Stream catchment downstream of Lake Horowhenua outlet (approx. NZTM2000 1789400 5502450). Extending north to cross the Moutere Road, north of the bridge that crosses the Hokio Stream, and extending south to south of the landfill off Hokio Beach Road. Excluding the mainstem of the Hokio Stream from the cross-river Coastal Marine Area boundary at NZTM2000 1784949 5504086, at the western end of Muaupoko Street, and seawards.

## Part 2 – Attributes

Attributes for the purpose of clause 3.33:

- (a) phytoplankton (Appendix 2A, Table 1)
- (b) periphyton (Appendix 2A, Table 2)
- (c) total nitrogen (trophic state) (Appendix 2A, Table 3)
- (d) ammonia (toxicity) (Appendix 2A, Table 5)
- (e) nitrate (toxicity) (Appendix 2A, Table 6)
- (f) dissolved oxygen (Appendix 2A, Table 7, Appendix 2B, Tables 17, 18 and 19)
- (g) cyanobacteria (Appendix 2A, Table 10)
- (h) macroinvertebrates (Appendix 2B, Tables 14 and 15)

NATIONAL POLICY STATEMENT

# for Freshwater Management 2014

*Updated August 2017 to incorporate amendments from the  
National Policy Statement for Freshwater Amendment Order 2017*

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# Preamble

Fresh water is essential to New Zealand's economic, environmental, cultural and social well-being. Fresh water gives our primary production, tourism, and energy generation sectors their competitive advantage in the global economy. Fresh water is highly valued for its recreational aspects and it underpins important parts of New Zealand's biodiversity and natural heritage. Fresh water has deep cultural meaning to all New Zealanders. Many of New Zealand's lakes, rivers and wetlands are iconic and well known globally for their natural beauty and intrinsic values.

The Treaty of Waitangi/Te Tiriti o Waitangi is the underlying foundation of the Crown-iwi/hapū relationship with regard to freshwater resources. Addressing tangata whenua values and interests across all of the well-beings, and including the involvement of iwi and hapū in the overall management of fresh water, are key to giving effect to the Treaty of Waitangi.

All New Zealanders have a common interest in ensuring the country's freshwater lakes, rivers, aquifers and wetlands are managed wisely.

New Zealand faces challenges in managing our fresh water to provide for all of the values that are important to New Zealanders. The quality, health, availability and economic value of our fresh waters are under threat. These challenges are likely to increase over time due to the impacts of climate change.

To respond effectively to these challenges and issues, we need to have a good understanding of our freshwater resources, the threats to them, and provide a management framework that enables water to contribute both to New Zealand's economic growth and environmental integrity and provides for the values that are important to New Zealanders.

Given the vital importance of freshwater resources to New Zealand and New Zealanders, and in order to achieve the purpose of the Resource Management Act 1991 (the Act), there is a particular need for clear central government policy to set a national direction, though the management of the resource needs to reflect the catchment-level variation and different demands on the resource across regions. This includes managing land use and development activities that affect fresh water so that growth is achieved with a lower environmental footprint.

This national policy statement recognises Te Mana o te Wai and sets out objectives and policies that direct local government to manage water in an integrated and sustainable way, while providing for economic growth within set water quantity and quality limits. The national policy statement is a first step to improve freshwater management at a national level.

As demand for fresh water increases, it is vital to account for all freshwater takes and sources of relevant contaminants. The freshwater accounting requirements of this national policy statement will provide information for councils to use in establishing freshwater objectives and limits and in targeting their management of fresh water.

This national policy statement provides a National Objectives Framework to assist regional councils and communities to more consistently and transparently plan for freshwater objectives. Te Mana o te Wai is an integral part of the framework that forms the platform for community discussions about the desired state of fresh water relative to the current state. New Zealanders generally aspire to high standards for our waterways and outcomes that are better than those achieved under the status quo. Freshwater planning will require an iterative approach that tests a range of possible objectives, limits and methods for their achievement, including different timeframes for achieving objectives. This ensures that the implications of proposed freshwater objectives are clear for councils and communities.

The national policy statement recognises iwi/hapū and community interests in fresh water,

including their environmental, social, economic, and cultural values. There are two compulsory values that must be managed for – ecosystem health and human health.

National bottom lines in the national policy statement are not standards to aim for. Where freshwater management units are below national bottom lines they must be improved to at least the national bottom line, or better, over time. It is up to communities and iwi/hapū, through councils, to determine the pathway and timeframe for ensuring freshwater management units meet the national bottom lines. Where changes in the way communities use fresh water are required, the pace of those changes should take into account impacts on economic well-being. Improvements in freshwater quality may take generations depending on the characteristics of each freshwater management unit.

Iwi and hapū have a kinship relationship with the natural environment, including fresh water, through shared whakapapa. Iwi and hapū recognise the importance of fresh water in supporting a healthy ecosystem, including human health, and have a reciprocal obligation as kaitiaki to protect freshwater quality.

New Zealand's rivers and lakes should be safe for primary contact as often as possible. The Government has set a national target of 90% of specified rivers and lakes to be safe for primary contact by 2040. The expectation is that more of these rivers and lakes will be safe for primary contact more of the time. The risks to human health from contact with fresh water must be reduced. There is an interim target of 80% of these rivers and lakes to be safe for primary contact by 2030. By the end of 2018, councils need to set regional targets to improve water quality for primary contact, so that it is clear how each region will contribute to achieving the national target.

The national policy statement requires freshwater quality within a freshwater management unit to be maintained at its current level (where community values are currently supported) or improved (where community values are not currently supported). For the human health value, water quality in fresh water management units must be improved unless regional targets have been achieved or naturally occurring processes mean further improvement is not possible. This national policy statement allows some variability in terms of freshwater quality, as long as the overall freshwater quality is maintained within a freshwater management unit.

Monitoring plans are intended to be practical and affordable. It is not possible for regional councils to monitor every drop of fresh water, nor every possible indicator of freshwater health. Monitoring freshwater objectives need only be undertaken at representative sites within a freshwater management unit as identified by regional councils, and must use the Macroinvertebrate Community Index, as well as measures of indigenous flora and fauna and Mātauranga Māori. Monitoring plans are also intended to recognise the importance of long term trends in data.

Setting enforceable quality and quantity limits is a key purpose of this national policy statement. This is a fundamental step to achieving environmental outcomes and creating the necessary incentives to use fresh water efficiently, while providing certainty for investment. Water quality and quantity limits must reflect local and national values. The process for setting limits should be informed by the best available information and scientific and socio-economic knowledge.

Once limits are set, freshwater resources need to be allocated to users, while providing the ability to transfer entitlements between users so that we maximise the value we get from water. Where water resources are over-allocated (in terms of quality and quantity) to the point that national and local values are not met, over-allocation must be reduced over agreed timeframes.

The New Zealand Coastal Policy Statement 2010 addresses issues with water quality in the coastal environment. The management of coastal water and fresh water requires an integrated and consistent approach.

This preamble may assist the interpretation of the national policy statement.

## Review

The Minister for the Environment intends to seek an independent review of the implementation and effectiveness of this national policy statement in achieving all its objectives and policies and in achieving the purpose of the Act, no later than 1 July 2020. The Minister shall then consider the need to review, change or revoke this national policy statement.

## Title

This national policy statement is the National Policy Statement for Freshwater Management 2014.

## Commencement

This national policy statement will take effect 28 days after the date of its issue by notice in the New Zealand Gazette.

## National significance of fresh water and Te Mana o te Wai

The matter of national significance to which this national policy statement applies is the management of fresh water through a framework that considers and recognises Te Mana o te Wai as an integral part of freshwater management.

The health and well-being of our freshwater bodies is vital for the health and well-being of our land, our resources (including fisheries, flora and fauna) and our communities.

Te Mana o te Wai is the integrated and holistic well-being of a freshwater body.

Upholding Te Mana o te Wai acknowledges and protects the mauri of the water. This requires that in using water you must also provide for Te Hauora o te Taiao (the health of the environment), Te Hauora o te Wai (the health of the waterbody) and Te Hauora o te Tangata (the health of the people).

Te Mana o te Wai incorporates the values of tangata whenua and the wider community in relation to each water body.

The engagement promoted by Te Mana o te Wai will help the community, including tangata whenua, and regional councils develop tailored responses to freshwater management that work within their region.

By recognising Te Mana o te Wai as an integral part of the freshwater management framework it is intended that the health and well-being of freshwater bodies is at the forefront of all discussions and decisions about fresh water, including the identification of freshwater values and objectives, setting limits and the development of policies and rules. This is intended to ensure that water is available for the use and enjoyment of all New Zealanders, including tangata whenua, now and for future generations.

# Interpretation

In this national policy statement:

“**Attribute**” is a measurable characteristic of fresh water, including physical, chemical and biological properties, which supports particular values.

“**Attribute state**” is the level to which an attribute is to be managed for those attributes specified in Appendix 2.

“**Compulsory values**” mean the national values relating to ecosystem health and to human health for recreation included in Appendix 1 and for which a non-exhaustive list of attributes is provided in Appendix 2.

“**Efficient allocation**” includes economic, technical and dynamic efficiency.

“**Environmental flows and/or levels**” are a type of limit which describes the amount of water in a freshwater management unit (except ponds and naturally ephemeral water bodies) which is required to meet freshwater objectives. Environmental flows for rivers and streams must include an allocation limit and a minimum flow (or other flow/s). Environmental levels for other freshwater management units must include an allocation limit and a minimum water level (or other level/s).

“**Existing freshwater quality**” means the quality of the fresh water at the time the regional council commences the process of setting or reviewing freshwater objectives and limits in accordance with Policy A1, Policy B1, and Policies CA1-CA4.

“**Freshwater management unit**” is the water body, multiple water bodies or any part of a water body determined by the regional council as the appropriate spatial scale for setting freshwater objectives and limits and for freshwater accounting and management purposes.

“**Freshwater objective**” describes an intended environmental outcome in a freshwater management unit.

“**Freshwater quality accounting system**” means a system that, for each freshwater management unit, records, aggregates and keeps regularly updated, information on the measured, modelled or estimated:

- a) loads and/or concentrations of relevant contaminants;
- b) sources of relevant contaminants;
- c) amount of each contaminant attributable to each source; and
- d) where limits have been set, proportion of the limit that is being used.

“**Freshwater quantity accounting system**” means a system that, for each freshwater management unit, records, aggregates and keeps regularly updated, information on the measured, modelled or estimated:

- a) total freshwater take;
- b) proportion of freshwater taken by each major category of use; and
- c) where limits have been set, proportion of the limit that has been taken.

“**Freshwater take**” is a take of ground or surface fresh water whether authorised or not.

“**Limit**” is the maximum amount of resource use available, which allows a freshwater objective to be met.

“**Minimum acceptable state**” means, where specified in Appendix 2, the minimum level at which a freshwater objective may be set in a regional plan in order to provide for the associated national value.

“**National bottom line**” means, where specified, the minimum acceptable state for the compulsory values as specified in Appendix 2.

“**National target**” means the national target for water quality improvement in Appendix 6.

“**National value**” means any value described in Appendix 1.

“**Naturally occurring processes**” means processes that could have occurred in New Zealand prior to the arrival of humans.

“**Outstanding freshwater bodies**” are those water bodies identified in a regional policy statement or regional plan as having outstanding values, including ecological, landscape, recreational and spiritual values.

“**Over-allocation**” is the situation where the resource:

- a) has been allocated to users beyond a limit; or
- b) is being used to a point where a freshwater objective is no longer being met.

This applies to both water quantity and quality.

“**Pest**” means a pest as defined in the Biosecurity Act 1993.

“**Primary contact**” means people’s contact with fresh water that involves immersion in water, including swimming.

“**Primary contact site**” means:

- a) any part of a specified river or lake that a regional council considers is used, or would be used but for existing freshwater quality, for primary contact; and
- b) any other site in any other river or lake that a regional council has determined should be managed for primary contact.

“**Regional target**” means a regional target established under Policy A6.

“**Specified rivers and lakes**” means:

- a) rivers that are fourth order or above using the methods outlined in the River Environment Classification system, National Institute of Water and Atmospheric Research, Version 1; and
- b) lakes with a perimeter of 1.5 kilometres or more.

“**Suitable for primary contact more often**” means reducing the percentage and magnitude of *E. coli* exceedences for rivers and lakes, and cyanobacteria - planktonic biovolume for lakes, according to the attribute tables in Appendix 2.

“**Target**” is a limit which must be met at a defined time in the future. This meaning only applies in the context of over-allocation.

“**Unwanted organism**“ means an unwanted organism as defined in the Biosecurity Act 1993.

“**Value**” means:

- a) any national value; and
- b) includes any value in relation to fresh water, that is not a national value, which a regional council identifies as appropriate for regional or local circumstances (including any use value).

Terms given meaning in the Act have the meanings so given.



## AA. Te Mana o te Wai

### Objective AA1

To consider and recognise Te Mana o te Wai in the management of fresh water.

### Policy AA1

By every regional council making or changing regional policy statements and plans to consider and recognise Te Mana o te Wai, noting that:

- a) te Mana o te Wai recognises the connection between water and the broader environment – Te Hauora o te Taiao (the health of the environment), Te Hauora o te Wai (the health of the waterbody) and Te Hauora o te Tangata (the health of the people); and
- b) values identified through engagement and discussion with the community, including tangata whenua, must inform the setting of freshwater objectives and limits.

## A. Water quality

### Objective A1

To safeguard:

- a) the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, of fresh water; and
- b) the health of people and communities, as affected by contact with fresh water;

in sustainably managing the use and development of land, and of discharges of contaminants.

### Objective A2

The overall quality of fresh water within a freshwater management unit is maintained or improved while:

- a) protecting the significant values of outstanding freshwater bodies;
- b) protecting the significant values of wetlands; and
- c) improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.

### Objective A3

The quality of fresh water within a freshwater management unit is improved so it is suitable for primary contact more often, unless:

- a) regional targets established under Policy A6(b) have been achieved; or
- b) naturally occurring processes mean further improvement is not possible.

### Objective A4

To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing freshwater quality, within limits.

#### Policy A1

By every regional council making or changing regional plans to the extent needed to ensure the plans:

- a) establish freshwater objectives in accordance with Policies CA1-CA4 and set freshwater quality limits for all freshwater management units in their regions to give effect to the objectives in this national policy statement, having regard to at least the following:
  - i. the reasonably foreseeable impacts of climate change;
  - ii. the connection between water bodies; and
  - iii. the connections between freshwater bodies and coastal water; and
- b) establish methods (including rules) to avoid over-allocation.

## Policy A2

Where freshwater management units do not meet the freshwater objectives made pursuant to Policy A1, every regional council is to specify targets and implement methods (either or both regulatory and non-regulatory), in a way that considers the sources of relevant contaminants recorded under Policy CC1, to assist the improvement of water quality in the freshwater management units, to meet those targets, and within a defined timeframe.

## Policy A3

By regional councils:

- a) imposing conditions on discharge permits to ensure the limits and targets specified pursuant to Policy A1 and Policy A2 can be met; and
- b) where permissible, making rules requiring the adoption of the best practicable option to prevent or minimise any actual or likely adverse effect on the environment of any discharge of a contaminant into fresh water, or onto or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.

## Policy A4 and direction (under section 55) to regional councils

By every regional council amending regional plans (without using the process in Schedule 1) to the extent needed to ensure the plans include the following policy to apply until any changes under Schedule 1 to give effect to Policy A1 and Policy A2 (freshwater quality limits and targets) have become operative:

1. *“When considering any application for a discharge the consent authority must have regard to the following matters:*
  - a. *the extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of fresh water including on any ecosystem associated with fresh water and*
  - b. *the extent to which it is feasible and dependable that any more than minor adverse effect on fresh water, and on any ecosystem associated with fresh water, resulting from the discharge would be avoided.*
2. *When considering any application for a discharge the consent authority must have regard to the following matters:*
  - a. *the extent to which the discharge would avoid contamination that will have an adverse effect on the health of people and communities as affected by their contact with fresh water; and*
  - b. *the extent to which it is feasible and dependable that any more than minor adverse effect on the health of people and communities as affected by their contact with fresh water resulting from the discharge would be avoided.*
3. *This policy applies to the following discharges (including a diffuse discharge by any person or animal):*
  - a. *a new discharge or*
  - b. *a change or increase in any discharge – of any contaminant into fresh water, or onto*

*or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.*

4. *Paragraph 1 of this policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2011 took effect on 1 July 2011.*
5. *Paragraph 2 of this policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2014 takes effect.”*

#### Policy A5

By every regional council making or changing regional plans to the extent needed to ensure the plans:

- a) identify specified rivers and lakes, and primary contact sites; and
- b) state what improvements will be made, and over what timeframes, to specified rivers and lakes, and primary contact sites, so they are suitable for primary contact more often; or
- c) state how specified rivers and lakes, and primary contact sites, will be maintained if regional targets established under Policy A6(b) have been achieved.

Improvements to specified rivers and lakes in (b) must make a contribution to achieving regional targets established under Policy A6(b).

#### Policy A6

By every regional council developing regional targets to improve the quality of fresh water in specified rivers and lakes and contribute to achieving the national target in Appendix 6, and ensuring:

- a) draft regional targets are available to the public by 31 March 2018; and
- b) final regional targets are available to the public by 31 December 2018.

#### Policy A7

By every regional council considering, when giving effect to this national policy statement, how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits.

## B. Water quantity

### Objective B1

To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water, in sustainably managing the taking, using, damming, or diverting of fresh water.

### Objective B2

To avoid any further over-allocation of fresh water and phase out existing over-allocation.

### Objective B3

To improve and maximise the efficient allocation and efficient use of water.

### Objective B4

To protect significant values of wetlands and of outstanding freshwater bodies.

### Objective B5

To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing fresh water quantity, within limits.

#### Policy B1

By every regional council making or changing regional plans to the extent needed to ensure the plans establish freshwater objectives in accordance with Policies CA1-CA4 and set environmental flows and/or levels for all freshwater management units in its region (except ponds and naturally ephemeral water bodies) to give effect to the objectives in this national policy statement, having regard to at least the following:

- a) the reasonably foreseeable impacts of climate change;
- b) the connection between water bodies; and
- c) the connections between freshwater bodies and coastal water.

#### Policy B2

By every regional council making or changing regional plans to the extent needed to provide for the efficient allocation of fresh water to activities, within the limits set to give effect to Policy B1.

#### Policy B3

By every regional council making or changing regional plans to the extent needed to ensure the plans state criteria by which applications for approval of transfers of water take permits are to be decided, including to improve and maximise the efficient allocation of water.

#### Policy B4

By every regional council identifying methods in regional plans to encourage the efficient use of water.

#### Policy B5

By every regional council ensuring that no decision will likely result in future over-allocation – including managing fresh water so that the aggregate of all amounts of fresh water in a freshwater management unit that are authorised to be taken, used, dammed or diverted does not over-allocate the water in the freshwater management unit.

#### Policy B6

By every regional council setting a defined timeframe and methods in regional plans by which over-allocation must be phased out, including by reviewing water permits and consents to help ensure the total amount of water allocated in the freshwater management unit is reduced to the level set to give effect to Policy B1.

#### **Policy B7 and direction (under section 55) to regional councils**

By every regional council amending regional plans (without using the process in Schedule 1) to the extent needed to ensure the plans include the following policy to apply until any changes under Schedule 1 to give effect to Policy B1 (allocation limits), Policy B2 (allocation), and Policy B6 (over-allocation) have become operative:

1. *When considering any application the consent authority must have regard to the following matters:*
  - a. *the extent to which the change would adversely affect safeguarding the life-supporting capacity of fresh water and of any associated ecosystem and*
  - b. *the extent to which it is feasible and dependable that any adverse effect on the life-supporting capacity of fresh water and of any associated ecosystem resulting from the change would be avoided.*
2. *This policy applies to:*
  - a. *any new activity and*
  - b. *change in the character, intensity or scale of any established activity – that involves any taking, using, damming or diverting of fresh water or draining of any wetland which is likely to result in any more than minor adverse change in the natural variability of flows or level of any fresh water, compared to that which immediately preceded the commencement of the new activity or the change in the established activity (or in the case of a change in an intermittent or seasonal activity, compared to that on the last occasion on which the activity was carried out).*
3. *This policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2011 took effect on 1 July 2011.”*

#### Policy B8

By every regional council considering, when giving effect to this national policy statement, how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits.

## C. Integrated management

### Objective C1

To improve integrated management of fresh water and the use and development of land in whole catchments, including the interactions between fresh water, land, associated ecosystems and the coastal environment.

#### Policy C1

By every regional council:

- a) recognising the interactions, ki uta ki tai (from the mountains to the sea) between fresh water, land, associated ecosystems and the coastal environment; and
- b) managing fresh water and land use and development in catchments in an integrated and sustainable way to avoid, remedy or mitigate adverse effects, including cumulative effects.

#### Policy C2

By every regional council making or changing regional policy statements to the extent needed to provide for the integrated management of the effects of the use and development of:

- a) land on fresh water, including encouraging the co-ordination and sequencing of regional and/or urban growth, land use and development and the provision of infrastructure; and
- b) land and fresh water on coastal water.

# CA. National Objectives Framework

## Objective CA1

To provide an approach to establish freshwater objectives for national values, and any other values, that:

- a) is nationally consistent; and
- b) recognises regional and local circumstances.

### Policy CA1

By every regional council identifying freshwater management units that include all freshwater bodies within its region.

### Policy CA2

By every regional council, through discussion with communities, including tangata whenua, applying the following processes in developing freshwater objectives for all freshwater management units:

- a) considering all national values and how they apply to local and regional circumstances;
- b) identifying the values for each freshwater management unit, which
  - i. must include the compulsory values; and
  - ii. may include any other national values or other values that the regional council considers appropriate (in either case having regard to local and regional circumstances); and
- c) identifying:
  - i. for the compulsory values or any other national value for which relevant attributes are provided in **Appendix 2**:
    - A. the attributes listed in Appendix 2 that are applicable to each value identified under Policy CA2(b) for the freshwater body type; and
    - B. any other attributes that the regional council considers appropriate for each value identified under Policy CA2(b) for the freshwater body type; and
  - iii. for any national value for which relevant attributes are not provided in **Appendix 2** or any other value, the attributes that the regional council considers appropriate for each value identified under Policy CA2(b) for the freshwater body type;
- d) for those attributes specified in Appendix 2, assigning an attribute state at or above the minimum acceptable state for that attribute;
- e) formulating freshwater objectives:
  - i. in those cases where an applicable numeric attribute state is specified in Appendix 2, in numeric terms by reference to that specified numeric attribute state; or
  - ii. in those cases where the attribute is not listed in Appendix 2, in numeric terms where practicable, otherwise in narrative terms;



- ii. in those cases where a freshwater objective seeks to maintain overall water quality in accordance with Objective A2, by every regional council ensuring:
    - A. where an attribute is listed in Appendix 2, that freshwater objectives are set at least within the same attribute state as existing freshwater quality; and
    - B. where an attribute is not listed in Appendix 2, that freshwater objectives are set so that values identified under Policy CA2(b) will not be worse off when compared to existing freshwater quality; and
  - iii. on the basis that, where an attribute applies to more than one value, the most stringent freshwater objective for that attribute is adopted; and
- f) considering the following matters at all relevant points in the process described in Policy CA2(a)-(e):
- iaa. how to improve the quality of fresh water so it is suitable for primary contact more often, unless regional targets established under Policy A6(b) have been achieved or naturally occurring processes mean further improvement is not possible;
  - iab. how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits;
  - i. the current state of the freshwater management unit, and its anticipated future state on the basis of past and current resource use, including community understandings of the health and well-being of the freshwater management unit;
  - ii. the spatial scale at which freshwater management units are defined;
  - iii. the limits that would be required to achieve the freshwater objectives;
  - iv. any choices between the values that the formulation of freshwater objectives and associated limits would require;
  - v. any implications for resource users, people and communities arising from the freshwater objectives and associated limits including implications for actions, investments, ongoing management changes and any social, cultural or economic implications;
  - vi. the timeframes required for achieving the freshwater objectives, including the ability of regional councils to set long timeframes for achieving targets; and
  - vii. such other matters relevant and reasonably necessary to give effect to the objectives and policies in this national policy statement, in particular Objective AA1 and Objective A2.

### Policy CA3

By every regional council ensuring that freshwater objectives for the compulsory values are set at or above the national bottom lines for all freshwater management units, unless the existing freshwater quality of the freshwater management unit is already below the national bottom line for an attribute or attributes and the regional council considers it appropriate to set the freshwater objective below the national bottom line for an attribute or attributes because:

- a) the existing freshwater quality is caused by naturally occurring processes; or
- b) any of the existing significant infrastructure (that was operational on 1 August 2014) listed in Appendix 3 contributes to the existing freshwater quality; and
  - i) it is necessary to realise the benefits provided by the listed infrastructure; and
  - ii) it applies only to the waterbody, water bodies or any part of a waterbody, where the listed infrastructure contributes to the existing water quality.

### Policy CA4

A regional council may set a freshwater objective below a national bottom line on a transitional basis for the freshwater management units and for the periods of time specified in Appendix 4.

## CB. Monitoring plans

### Objective CB1

To provide for an approach to the monitoring of progress towards, and the achievement of, freshwater objectives and the values identified under Policy CA2(b).

#### Policy CB1

By every regional council developing a monitoring plan that:

- a) establishes methods for monitoring progress towards, and the achievement of, freshwater objectives established under Policies CA1-CA4;
- aa) establishes methods for monitoring the extent to which the values identified under Policy CA2(b) are being provided for in a freshwater management unit. These methods must at least include:
  - i. surveillance monitoring of microbial health risks to people at primary contact sites in accordance with Appendix 5;
  - ii. the monitoring of macroinvertebrate communities;
  - iii. measures of the health of indigenous flora and fauna;
  - iv. information obtained under Policy CB1(a) and Policy CC1; and
  - v. Mātauranga Māori.
- b) identifies a site or sites at which monitoring will be undertaken that are representative for each freshwater management unit; and
- c) recognises the importance of long-term trends in monitoring results and the relationship between results and the overall state of fresh water in a freshwater management unit.

#### Policy CB2

By every regional council establishing methods, for example, action plans, for responding to monitoring that indicates freshwater objectives will not be met and/or values will not be provided for in a freshwater management unit.

#### Policy CB3

By every regional council:

- a) using the Macroinvertebrate Community Index;
- b) establishing methods under Policy CB2 to respond to a Macroinvertebrate Community Index score below 80, or a declining trend; and
- c) ensuring that methods:
  - i. investigate the causes of declining trends or the Macroinvertebrate Community Index score below 80;
  - ii. seek to halt declining trends; and
  - iii. seek to improve on a Macroinvertebrate Community Index score if it is below 80, unless this is caused by naturally occurring processes, pest or unwanted organism, or by infrastructure listed in Appendix 3.

Policy CB4

By every regional council taking reasonable steps to ensure that information gathered in accordance with Policy CB1 is available to the public regularly and in a suitable form.

## CC. Accounting for freshwater takes and contaminants

### Objective CC1

To improve information on freshwater takes and sources of freshwater contaminants, in order to:

- a) ensure the necessary information is available for freshwater objective and limit setting and freshwater management under this national policy statement; and
- b) ensure information on resource availability is available for current and potential resource users.

### Policy CC1

By every regional council:

- a) establishing and operating a freshwater quality accounting system and a freshwater quantity accounting system for those freshwater management units where they are setting or reviewing freshwater objectives and limits in accordance with Policy A1, Policy B1, and Policies CA1-CA4; and
- b) maintaining a freshwater quality accounting system and a freshwater quantity accounting system at levels of detail that are commensurate with the significance of the freshwater quality and freshwater quantity issues, respectively, in each freshwater management unit.

### Policy CC2

By every regional council taking reasonable steps to ensure that information gathered in accordance with Policy CC1 is available to the public, regularly and in a suitable form, for the freshwater management units where they are setting or reviewing, and where they have set or reviewed, freshwater objectives and limits in accordance with Policy A1, Policy B1, and Policies CA1-CA4.

**Objective CC1 and Policies CC1 and CC2 will take effect 24 months from the date of entry into effect of the National Policy Statement for Freshwater Management 2014.**

## D. Tangata whenua roles and interests

### Objective D1

To provide for the involvement of iwi and hapū, and to ensure that tangata whenua values and interests are identified and reflected in the management of fresh water including associated ecosystems, and decision-making regarding freshwater planning, including on how all other objectives of this national policy statement are given effect to.

### Policy D1

Local authorities shall take reasonable steps to:

- a) involve iwi and hapū in the management of fresh water and freshwater ecosystems in the region;
- b) work with iwi and hapū to identify tangata whenua values and interests in fresh water and freshwater ecosystems in the region; and
- c) reflect tangata whenua values and interests in the management of, and decision-making regarding, fresh water and freshwater ecosystems in the region.

## E. Progressive implementation programme

### Policy E1

- a) This policy applies to the implementation by a regional council of a policy of this national policy statement.
- b) Every regional council is to implement the policy as promptly as is reasonable in the circumstances, and so it is fully completed by no later than 31 December 2025.
- ba) A regional council may extend the date in Policy E1(b) to 31 December 2030 if it considers that:
  - i. meeting that date would result in lower quality planning; or
  - ii. it would be impracticable for it to complete implementation of a policy by that date.
- c) Where a regional council is satisfied that it is impracticable for it to complete implementation of a policy fully by 31 December 2015, the council may implement it by a programme of defined time-limited stages by which it is to be fully implemented by 31 December 2025 or 31 December 2030 if Policy E1(ba) applies.
- d) Any programme of time-limited stages is to be formally adopted by the council by 31 December 2015 and publicly notified.
- e) Where a regional council has adopted a programme of staged implementation, it is to publicly report, in every year, on the extent to which the programme has been implemented.
- f) Any programme adopted under Policy E1 (c) of the National Policy Statement for Freshwater Management 2011 or under E1(c) of the National Policy Statement for Freshwater Management 2014 by a regional council is to be reviewed, revised if necessary, and formally adopted by the regional council by 31 December 2018, and publicly notified.
- g) Every regional council must, at intervals of not more than five years, compile and make available to the public a review of the improvements to specified rivers and lakes, and primary contact sites, made in giving effect to Policy A5.

## Appendix 1: National values and uses for fresh water

### COMPULSORY NATIONAL VALUES

**Ecosystem health** – The freshwater management unit supports a healthy ecosystem appropriate to that freshwater body type (river, lake, wetland, or aquifer).

In a healthy freshwater ecosystem ecological processes are maintained, there is a range and diversity of indigenous flora and fauna, and there is resilience to change.

Matters to take into account for a healthy freshwater ecosystem include the management of adverse effects on flora and fauna of contaminants, changes in freshwater chemistry, excessive nutrients, algal blooms, high sediment levels, high temperatures, low oxygen, invasive species, and changes in flow regime. Other matters to take into account include the essential habitat needs of flora and fauna and the connections between water bodies.

**Human health for recreation** – In a healthy waterbody, people are able to connect with the water through a range of activities such as swimming, waka, boating, fishing, mahinga kai and water-skiing, in a range of different flows.

Matters to take into account for a healthy waterbody for human use include pathogens, clarity, deposited sediment, plant growth (from macrophytes to periphyton to phytoplankton), cyanobacteria and other toxicants.



## OTHER NATIONAL VALUES

**Natural form and character** – Where people value particular natural qualities of the freshwater management unit.

Matters contributing to the natural form and character of a freshwater management unit are its biological, visual and physical characteristics that are valued by the community, including:

- i. its biophysical, ecological, geological, geomorphological and morphological aspects;
- ii. the natural movement of water and sediment including hydrological and fluvial processes;
- iii. the location of the water body relative to its natural course;
- iv. the relative dominance of indigenous flora and fauna;
- v. the presence of culturally significant species;
- vi. the colour of the water; and
- vii. the clarity of the water.

They may be freshwater management units with exceptional, natural, and iconic aesthetic features.

**Mahinga kai** – Kai are safe to harvest and eat.

Mahinga kai generally refers to indigenous freshwater species that have traditionally been used as food, tools, or other resources. It also refers to the places those species are found and to the act of catching them. Mahinga kai provide food for the people of the rohe and these sites give an indication of the overall health of the water.

For this value, kai would be safe to harvest and eat. Transfer of knowledge would occur about the preparation, storage and cooking of kai. In freshwater management units that are used for providing mahinga kai, the desired species are plentiful enough for long-term harvest and the range of desired species is present across all life stages.

**Mahinga kai** – Kei te ora te mauri (the mauri of the place is intact).

For this value, freshwater resources would be available and able to be used for customary use. In freshwater management units that are valued for providing mahinga kai, resources would be available for use, customary practices able to be exercised to the extent desired, and tikanga and preferred methods are able to be practised.

**Fishing** – The freshwater management unit supports fisheries of species allowed to be caught and eaten.

For freshwater management units valued for fishing, the numbers of fish would be sufficient and suitable for human consumption. In some areas, fish abundance and diversity would provide a range in species and size of fish, and algal growth, water clarity and safety would be satisfactory for fishers. Attributes will need to be specific to fish species such as salmon, trout, eels, lamprey, or whitebait.

<p><b>Irrigation, cultivation and food production</b> – The freshwater management unit meets irrigation needs for any purpose.</p> <p>Water quality and quantity would be suitable for irrigation needs, including supporting the cultivation of food crops, the production of food from domesticated animals, non-food crops such as fibre and timber, pasture, sports fields and recreational areas. Attributes will need to be specific to irrigation and food production requirements.</p>
<p><b>Animal drinking water</b> – The freshwater management unit meets the needs of stock.</p> <p>Water quality and quantity would meet the needs of stock, including whether it is palatable and safe.</p>
<p><b>Wai tapu</b> – Wai tapu represent the places where rituals and ceremonies are performed, or where there is special significance to iwi/hapū.</p> <p>Rituals and ceremonies include, but are not limited to, tohi (baptism), karakia (prayer), waerea (protective incantation), whakatapu (placing of raahui), whakanoa (removal of raahui), and tuku iho (gifting of knowledge and resources for future generations).</p> <p>In providing for this value, the wai tapu would be free from human and animal waste, contaminants and excess sediment, with valued features and unique properties of the wai protected. Other matters that may be important are that there is no artificial mixing of the wai tapu and identified taonga in the wai are protected.</p>
<p><b>Water supply</b> – The freshwater management unit can meet people's potable water needs.</p> <p>Water quality and quantity would enable domestic water supply to be safe for drinking with, or in some areas without, treatment.</p>
<p><b>Commercial and industrial use</b> – The freshwater management unit provides economic opportunities to people, businesses and industries.</p> <p>Water quality and quantity can provide for commercial and industrial activities. Attributes will need to be specific to commercial or industrial requirements.</p>
<p><b>Hydro-electric power generation</b> – The freshwater management unit is suitable for hydro electric power generation.</p> <p>Water quality and quantity and the physical qualities of the freshwater management unit, including hydraulic gradient and flow rate, can provide for hydro-electric power generation.</p>

**Transport and tauranga waka** – The freshwater management unit is navigable for identified means of transport.

Transport and tauranga waka generally refers to places to launch waka and water craft, and appropriate places for waka to land (tauranga waka).

Water quality and quantity in the freshwater management unit would provide for navigation. The freshwater management unit may also connect places and people including for traditional trails and rites of passage, and allow the use of various craft.

## Appendix 2: Attribute tables

<b>Value</b>	Ecosystem health		
<b>Freshwater Body Type</b>	Lakes		
<b>Attribute</b>	Phytoplankton (Trophic state)		
<b>Attribute Unit</b>	mg/m <sup>3</sup> (milligrams chlorophyll-a per cubic metre)		
<b>Attribute State</b>	<b>Numeric Attribute State</b>		<b>Narrative Attribute State</b>
	Annual Median	Annual Maximum	
<b>A</b>	≤2	≤10	Lake ecological communities are healthy and resilient, similar to natural reference conditions.
<b>B</b>	>2 and ≤5	>10 and ≤25	Lake ecological communities are slightly impacted by additional algal and/or plant growth arising from nutrient levels that are elevated above natural reference conditions.
<b>C</b>	>5 and ≤12	>25 and ≤60	Lake ecological communities are moderately impacted by additional algal and plant growth arising from nutrient levels that are elevated well above natural reference conditions. Reduced water clarity is likely to affect habitat available for native macrophytes.
<b>National Bottom Line</b>	<b>12</b>	<b>60</b>	

<b>D</b>	>12	>60	Lake ecological communities have undergone or are at high risk of a regime shift to a persistent, degraded state (without native macrophyte/seagrass cover), due to impacts of elevated nutrients leading to excessive algal and/or plant growth, as well as from losing oxygen in bottom waters of deep lakes.
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Note: For lakes and lagoons that are intermittently open to the sea, monitoring data should be analysed separately for closed periods and open periods.

<b>Value</b>	Ecosystem health		
<b>Freshwater Body Type</b>	Lakes		
<b>Attribute</b>	Total Nitrogen (Trophic state)		
<b>Attribute Unit</b>	mg/m <sup>3</sup> (milligrams per cubic metre)		
<b>Attribute State</b>	<b>Numeric Attribute State</b>		<b>Narrative Attribute State</b>
	Annual Median	Annual Median	
	Seasonally Stratified and Brackish	Polymictic	
<b>A</b>	≤160	≤300	Lake ecological communities are healthy and resilient, similar to natural reference conditions.
<b>B</b>	>160 and ≤350	>300 and ≤500	Lake ecological communities are slightly impacted by additional algal and/or plant growth arising from nutrient levels that are elevated above natural reference conditions.

<b>C</b>	>350 and ≤750	>500 and ≤800	Lake ecological communities are moderately impacted by additional algal and plant growth arising from nutrient levels that are elevated well above natural reference conditions.
<b>National Bottom Line</b>	<b>750</b>	<b>800</b>	
<b>D</b>	>750	>800	Lake ecological communities have undergone or are at high risk of a regime shift to a persistent, degraded state, (without native macrophyte/seagrass cover) due to impacts of elevated nutrients leading to excessive algal and/or plant growth, as well as from losing oxygen in bottom waters of deep lakes.

Note: For lakes and lagoons that are intermittently open to the sea, monitoring data should be analysed separately for closed periods and open periods.

<b>Value</b>	Ecosystem health	
<b>Freshwater Body Type</b>	Lakes	
<b>Attribute</b>	Total Phosphorus (Trophic state)	
<b>Attribute Unit</b>	mg/m <sup>3</sup> (milligrams per cubic metre)	
<b>Attribute State</b>	<b>Numeric Attribute State</b>	<b>Narrative Attribute State</b>
	<b>Annual Median</b>	
<b>A</b>	≤10	Lake ecological communities are healthy and resilient, similar to natural reference conditions.
<b>B</b>	>10 and ≤20	Lake ecological communities are slightly impacted by additional algal and plant growth arising from nutrient levels that are elevated above natural reference conditions.

C	>20 and ≤50	Lake ecological communities are moderately impacted by additional algal and plant growth arising from nutrient levels that are elevated well above natural reference conditions.
<b>National Bottom Line</b>	<b>50</b>	
D	>50	Lake ecological communities have undergone or are at high risk of a regime shift to a persistent, degraded state (without native macrophyte/seagrass cover), due to impacts of elevated nutrients leading to excessive algal and/or plant growth, as well as from losing oxygen in bottom waters of deep lakes.

Note: For lakes and lagoons that are intermittently open to the sea, monitoring data should be analysed separately for closed periods and open periods.

<b>Value</b>	Ecosystem health		
<b>Freshwater Body Type</b>	Rivers		
<b>Attribute</b>	Periphyton (Trophic state)		
<b>Attribute Unit</b>	mg chl-a/m <sup>2</sup> (milligrams chlorophyll-a per square metre)		
<b>Attribute State</b>	<b>Numeric Attribute State (Default Class)</b>	<b>Numeric Attribute State (Productive Class)<sup>1</sup></b>	<b>Narrative Attribute State</b>
	<b>Exceeded no more than 8% of samples<sup>2</sup></b>	<b>Exceeded no more than 17% of samples<sup>2</sup></b>	
A	≤50	≤50	Rare blooms reflecting negligible nutrient enrichment and/or alteration of the natural flow regime or habitat.
B	>50 and ≤120	>50 and ≤120	Occasional blooms reflecting low nutrient enrichment and/or alteration of the natural flow regime or habitat.
C	>120 and ≤200	>120 and ≤200	Periodic short-duration nuisance blooms reflecting moderate nutrient enrichment and/or alteration of the natural flow regime or habitat.
<b>National Bottom Line</b>	<b>200</b>	<b>200</b>	

<b>D</b>	>200	>200	Regular and/or extended-duration nuisance blooms reflecting high nutrient enrichment and/or significant alteration of the natural flow regime or habitat.
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1. Classes are streams and rivers defined according to types in the River Environment Classification (REC). The Productive periphyton class is defined by the combination of REC “Dry” Climate categories (i.e. Warm-Dry (WD) and Cool-Dry (CD)) and REC Geology categories that have naturally high levels of nutrient enrichment due to their catchment geology (i.e. Soft-Sedimentary (SS), Volcanic Acidic (VA) and Volcanic Basic (VB)). Therefore the productive category is defined by the following REC defined types: WD/SS, WD/VB, WD/VA, CD/SS, CD/VB, CD/VA. The Default class includes all REC types not in the Productive class.

2. Based on a monthly monitoring regime. The minimum record length for grading a site based on periphyton (chl-a) is 3 years.

**Note:** To achieve a freshwater objective for periphyton within a freshwater management unit, regional councils must at least set appropriate instream concentrations and exceedance criteria for dissolved inorganic nitrogen (DIN) and dissolved reactive phosphorus (DRP). Where there are nutrient sensitive downstream receiving environments, criteria for nitrogen and phosphorus will also need to be set to achieve the outcomes sought for those environments.

Regional councils must use the following process, in the following order, to determine instream nitrogen and phosphorus criteria in a freshwater management unit:

- a) either –
  - i) if the freshwater management unit supports, or could support, conspicuous periphyton, derive instream concentrations and exceedance criteria for DIN and DRP to achieve a periphyton objective for the freshwater management unit; or
  - ii) if the freshwater management unit does not support, and could not support, conspicuous periphyton, consider the nitrogen and phosphorus criteria (instream concentrations or instream loads) needed to achieve any other freshwater objectives:
- b) if there are nutrient sensitive downstream environments, for example, a lake and/or estuary, derive relevant nitrogen and phosphorus criteria (instream concentrations or instream loads) needed to achieve the outcomes sought for those sensitive downstream environments:
- c) compare all nitrogen and phosphorus criteria derived in steps (a) – (b) and adopt those necessary to achieve the freshwater objectives for the freshwater management unit and outcomes sought for the nutrient sensitive downstream environments.



<b>Value</b>	Ecosystem health		
<b>Freshwater Body Type</b>	Rivers		
<b>Attribute</b>	Nitrate (Toxicity)		
<b>Attribute Unit</b>	mg NO <sub>3</sub> -N/L (milligrams nitrate-nitrogen per litre)		
<b>Attribute State</b>	<b>Numeric Attribute State</b>		<b>Narrative Attribute State</b>
	<b>Annual Median</b>	<b>Annual 95<sup>th</sup> Percentile</b>	
<b>A</b>	≤1.0	≤1.5	High conservation value system. Unlikely to be effects even on sensitive species.
<b>B</b>	>1.0 and ≤2.4	>1.5 and ≤3.5	Some growth effect on up to 5% of species.
<b>C</b>	>2.4 and ≤6.9	>3.5 and ≤9.8	Growth effects on up to 20% of species (mainly sensitive species such as fish). No acute effects.
<b>National Bottom Line</b>	6.9	9.8	
<b>D</b>	>6.9	>9.8	Impacts on growth of multiple species, and starts approaching acute impact level (ie risk of death) for sensitive species at higher concentrations (>20 mg/L).

Note: This attribute measures the toxic effects of nitrate, not the trophic state. Where other attributes measure trophic state, for example periphyton, freshwater objectives, limits and/or methods for those attributes will be more stringent.

<b>Value</b>	Ecosystem health		
<b>Freshwater Body Type</b>	Lakes and rivers		
<b>Attribute</b>	<b>Ammonia (Toxicity)</b>		
<b>Attribute Unit</b>	mg NH <sub>4</sub> -N/L (milligrams ammoniacal-nitrogen per litre)		
<b>Attribute State</b>	<b>Numeric Attribute State</b>		<b>Narrative Attribute State</b>
	<b>Annual Median*</b>	<b>Annual Maximum*</b>	
<b>A</b>	≤0.03	≤0.05	99% species protection level: No observed effect on any species tested
<b>B</b>	>0.03 and ≤0.24	>0.05 and ≤0.40	95% species protection level: Starts impacting occasionally on the 5% most sensitive species
<b>C</b>	>0.24 and ≤1.30	>0.40 and ≤2.20	80% species protection level: Starts impacting regularly on the 20% most sensitive species (reduced survival of most sensitive species)
<b>National Bottom Line</b>	<b>1.30</b>	<b>2.20</b>	
<b>D</b>	>1.30	>2.20	Starts approaching acute impact level (ie risk of death) for sensitive species

\* Based on pH 8 and temperature of 20°C.

Compliance with the numeric attribute states should be undertaken after pH adjustment.

<b>Value</b>	Ecosystem health		
<b>Freshwater Body Type</b>	Rivers (below point sources)		
<b>Attribute</b>	<b>Dissolved Oxygen</b>		
<b>Attribute Unit</b>	mg/L (milligrams per litre)		
<b>Attribute State</b>	<b>Numeric Attribute State</b>		<b>Narrative Attribute State</b>
	7-day mean minimum <sup>1</sup> (Summer Period: 1 November to 30th April)	1-day minimum <sup>2</sup> (Summer Period: 1 November to 30th April)	
<b>A</b>	≥8.0	≥7.5	No stress caused by low dissolved oxygen on any aquatic organisms that are present at matched reference (near-pristine) sites.
<b>B</b>	≥7.0 and <8.0	≥5.0 and <7.5	Occasional minor stress on sensitive organisms caused by short periods (a few hours each day) of lower dissolved oxygen. Risk of reduced abundance of sensitive fish and macroinvertebrate species.
<b>C</b>	≥5.0 and <7.0	≥4.0 and <5.0	Moderate stress on a number of aquatic organisms caused by dissolved oxygen levels exceeding preference levels for periods of several hours each day. Risk of sensitive fish and macroinvertebrate species being lost.
<b>National Bottom Line</b>	<b>5.0</b>	<b>4.0</b>	

<b>D</b>	<5.0	<4.0	Significant, persistent stress on a range of aquatic organisms caused by dissolved oxygen exceeding tolerance levels. Likelihood of local extinctions of keystone species and loss of ecological integrity.
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1. The mean value of 7 consecutive daily minimum values.
2. The lowest daily minimum across the whole summer period.

<b>Value</b>	Human health for recreation				
<b>Freshwater Body Type</b>	Lakes and rivers				
<b>Attribute</b>	<i>Escherichia coli</i> ( <i>E. coli</i> )				
<b>Attribute Unit</b>	<i>E. coli</i> /100 mL (number of <i>E. coli</i> per hundred millilitres)				
<b>Attribute State<sup>1,2</sup></b>	<b>Numeric Attribute State</b>				<b>Narrative Attribute State</b>
	% exceedances over 540 cfu/100 mL	% exceedances over 260 cfu/100 mL	Median concentration (cfu/100 mL)	95th percentile of <i>E. coli</i> /100 mL	Description of risk of Campylobacter infection (based on <i>E. coli</i> indicator)
<b>A (Blue)</b>	<5%	<20%	≤130	≤540	For at least half the time, the estimated risk is <1 in 1000 (0.1% risk)  The predicted average infection risk is 1%*
<b>B (Green)</b>	5-10%	20-30%	≤130	≤1000	For at least half the time, the estimated risk is <1 in 1000 (0.1% risk)  The predicted average infection risk is 2%*
<b>C (Yellow)</b>	10-20%	20-34%	≤130	≤1200	For at least half the time, the estimated risk is <1 in 1000 (0.1% risk)  The predicted average infection risk is 3%*
<b>D (Orange)</b>	20-30%	>34%	>130	>1200	20-30% of the time the estimated risk is ≥50 in 1000 (>5% risk)  The predicted average infection risk is >3%*

<p style="text-align: center;"><b>E</b> <b>(Red)</b></p>	<p style="text-align: center;">&gt;30%</p>	<p style="text-align: center;">&gt;50%</p>	<p style="text-align: center;">&gt;260</p>	<p style="text-align: center;">&gt;1200</p>	<p>For more than 30% of the time the estimated risk is <math>\geq 50</math> in 1000 (&gt;5% risk)</p> <p>The predicted average infection risk is &gt;7%*</p>
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\* The predicted average infection risk is the overall average infection to swimmers based on a random exposure on a random day, ignoring any possibility of not swimming during high flows or when a surveillance advisory is in place (assuming that the *E. coli* concentration follows a lognormal distribution). Actual risk will generally be less if a person does not swim during high flows.

<sup>1</sup> Attribute state should be determined by using a minimum of 60 samples over a maximum of 5 years, collected on a regular basis regardless of weather and flow conditions. However, where a sample has been missed due to adverse weather or error, attribute state may be determined using samples over a longer timeframe.

<sup>2</sup> Attribute state must be determined by satisfying all numeric attribute states.

<b>Value</b>	Human health for recreation	
<b>Freshwater Body Type</b>	Lakes and lake fed rivers	
<b>Attribute</b>	<i>Cyanobacteria – Planktonic</i>	
<b>Attribute Unit</b>	<i>Biovolume - mm<sup>3</sup>/L (cubic millimetres per litre)</i>	
<b>Attribute State</b>	<b>Numeric Attribute State</b>	<b>Narrative Attribute State</b>
	80th percentile*	
<b>A (Blue)</b>	≤0.5 mm <sup>3</sup> /L biovolume equivalent for the combined total of all cyanobacteria	Risk exposure from cyanobacteria is no different to that in natural conditions (from any contact with fresh water).
<b>B (Green)</b>	>0.5 and ≤1.0 mm <sup>3</sup> /L biovolume equivalent for the combined total of all cyanobacteria	Low risk of health effects from exposure to cyanobacteria (from any contact with fresh water).
<b>C (Yellow)</b>	>1.0 and ≤1.8 mm <sup>3</sup> /L biovolume equivalent of potentially toxic cyanobacteria OR >1.0 and ≤10 mm <sup>3</sup> /L total biovolume of all cyanobacteria	Moderate risk of health effects from exposure to cyanobacteria (from any contact with fresh water).
<b>National Bottom Line</b>	1.8 mm <sup>3</sup> /L biovolume equivalent of potentially toxic cyanobacteria OR 10 mm <sup>3</sup> /L total biovolume of all cyanobacteria	
<b>D (Orange/Red)</b>	>1.8 mm <sup>3</sup> /L biovolume equivalent of potentially toxic cyanobacteria OR >10 mm <sup>3</sup> /L total biovolume of all cyanobacteria	High health risks (eg. respiratory, irritation and allergy symptoms) exist from exposure to cyanobacteria (from any contact with fresh water).

\* The 80th percentile must be calculated using a minimum of 12 samples collected over 3 years. 30 samples collected over 3 years is recommended.

## Appendix 3: Existing infrastructure for the purposes of Policy CA3(b) and Policy CB3(c)

[Editor's note: This appendix is currently empty.]



## Appendix 4: Freshwater management units and periods of time for transition under Policy CA4

[Editor's note: This appendix is currently empty.]

## Appendix 5: Surveillance monitoring of *E. coli* at primary contact sites

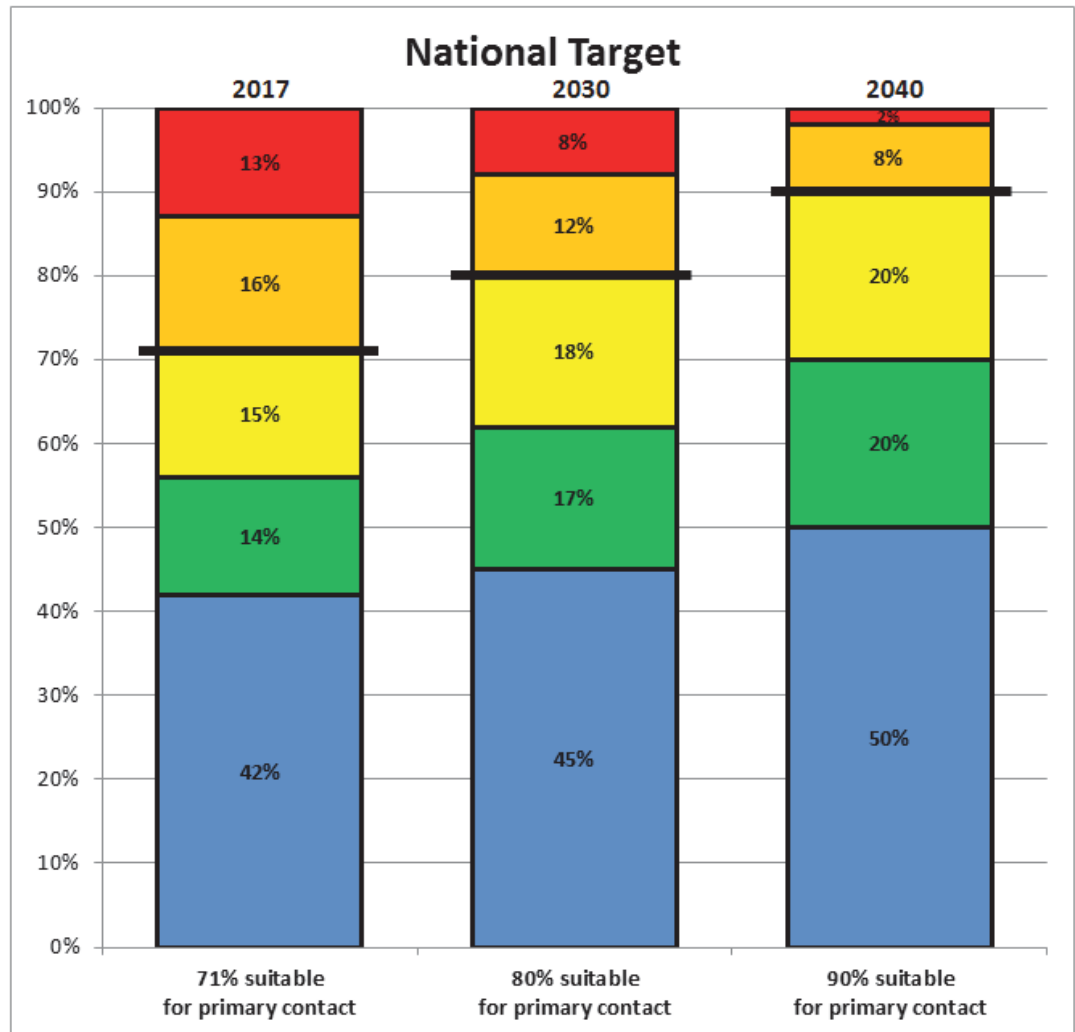
### Surveillance monitoring requirements for *E. coli*

Where a regional plan has identified primary contact sites, the regional council will:

- a) For each identified primary contact site, identify the date range or date ranges and flow conditions within which it is or would be used for primary contact;
- b) Identify a sampling site (or sites) that is representative of the primary contact site (or primary contact sites); and
- c) For each sampling site, and within the date range or date ranges identified in (a) undertake weekly sampling for *E. coli*, unless;
  - i. a single sample from a sampling site is greater than 260 *E. coli* per 100 mL, in which case, increase sampling frequency to daily where practicable, and take all reasonable steps to identify potential causes of microbiological contamination; and
  - ii. a single sample is greater than 540 *E. coli* per 100 mL, in which case take all reasonable steps to notify, and keep the public informed, that the site is unsuitable for recreation until further sampling shows a result of 540 *E. coli* per 100 mL or less.

## APPENDIX 6: National target for water quality improvement

The national target is to increase proportions of specified rivers and lakes that are suitable for primary contact (those that are in the **blue**, **green** and **yellow** categories) to at least 80% by 2030, and 90% no later than 2040, but also to improve water quality across all categories.



The categories above represent combined improvements in all regions. For each region, this means reducing the length of specified rivers and lakes in the **red** and **orange** categories, and increasing the length of specified rivers and lakes in the **yellow**, **green** and **blue** categories.

The categories are based on water quality in terms of the two human health attributes, *E. coli* and cyanobacteria – planktonic in Appendix 2 of this national policy statement.

For rivers and lakes, the target categories are same as the *E. coli* table attribute states. However, the categories do not include the 95<sup>th</sup> percentile of *E. coli*/100 mL numeric attribute state if there is insufficient monitoring data to establish the 95<sup>th</sup> percentile.

For lakes, the categories are also based on the cyanobacteria – planktonic attribute states, however, to provide additional granularity for tracking improvements over time, the D band has been split into two categories (**orange** and **red**) as follows:

- a. **orange** means the lake has between 1.8 and 3.0 mm<sup>3</sup>/L biovolume of cyanobacteria – planktonic, using an 80<sup>th</sup> percentile; and
- b. **red** means the lake has more than 3.0 mm<sup>3</sup>/L biovolume of cyanobacteria – planktonic, using an 80<sup>th</sup> percentile.

For lakes, the lowest category for either *E. coli* or cyanobacteria – planktonic applies.

# Reprint notes

## 1 General

This is a reprint of the National Policy Statement for Freshwater Management 2014 that incorporates all the amendments to the National Policy Statement as at the date of the last amendment to it.

## 2 Amendments incorporated in this reprint

National Policy Statement for Freshwater Management Amendment Order 2017, as published in the *New Zealand Gazette*, 10 August 2017, Editon 81, page 1.

New Zealand Government

# National Policy Statement on Urban Development 2020

July 2020

This National Policy Statement was approved by the Governor-General under section 52(2) of the Resource Management Act 1991 on 20 July 2020, and is published by the Minister for the Environment under section 54 of that Act.

This National Policy Statement replaces the National Policy Statement on Urban Development Capacity 2016.

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# Part 1: Preliminary provisions

## 1.1 Title

- (1) This is the National Policy Statement on Urban Development 2020.

## 1.2 Commencement

- (1) This National Policy Statement comes into force on 20 August 2020.
- (2) See Part 4, which sets out timeframes for complying with different parts of this National Policy Statement.

## 1.3 Application

- (1) This National Policy Statement applies to:
- (a) all local authorities that have all or part of an urban environment within their district or region (ie, tier 1, 2 and 3 local authorities); and
  - (b) planning decisions by any local authority that affect an urban environment.
- (2) However, some objectives, policies, and provisions in Parts 3 and 4 apply only to tier 1, 2, or 3 local authorities.

## 1.4 Interpretation

- (1) In this National Policy Statement:

**accessible car park** means a car park designed and marked (for instance, in accordance with the mobility car parking scheme) for use by persons with a disability or with limited mobility

**Act** means the Resource Management Act 1991

**active transport** means forms of transport that involve physical exercise, such as walking or cycling, and includes transport that may use a mobility aid such as a wheelchair

**additional infrastructure** means:

- (a) public open space
- (b) community infrastructure as defined in section 197 of the Local Government Act 2002
- (c) land transport (as defined in the Land Transport Management Act 2003) that is not controlled by local authorities
- (d) social infrastructure, such as schools and healthcare facilities
- (e) a network operated for the purpose of telecommunications (as defined in section 5 of the Telecommunications Act 2001)
- (f) a network operated for the purpose of transmitting or distributing electricity or gas

**business land** means land that is zoned, or identified in an FDS or similar strategy or plan, for business uses in urban environments, including but not limited to land in the following:

- (a) any industrial zone
- (b) the commercial zone
- (c) the large format retail zone
- (d) any centre zone, to the extent it allows business uses
- (e) the mixed use zone, to the extent it allows business uses
- (f) any special purpose zone, to the extent it allows business uses

**centre zone** means any of the following zones:

- (a) city centre zone
- (b) metropolitan centre zone
- (c) town centre zone
- (d) local centre zone
- (e) neighbourhood centre zone

**commencement date** means the date on which this National Policy Statement comes into force (see clause 1.2)

**community services** means the following:

- (a) community facilities
- (b) educational facilities
- (c) those commercial activities that serve the needs of the community

**competitiveness margin** means the margin referred to in clause 3.22

**decision-maker** means any person exercising functions or powers under the Act

**development capacity** means the capacity of land to be developed for housing or for business use, based on:

- (a) the zoning, objectives, policies, rules, and overlays that apply in the relevant proposed and operative RMA planning documents; and
- (b) the provision of adequate development infrastructure to support the development of land for housing or business use

**development infrastructure** means the following, to the extent they are controlled by a local authority or council controlled organisation (as defined in section 6 of the Local Government Act 2002):

- (a) network infrastructure for water supply, wastewater, or stormwater
- (b) land transport (as defined in section 5 of the Land Transport Management Act 2003)

**FDS** means the Future Development Strategy required by subpart 4 of Part 3

**feasible** means:

- (a) for the short term or medium term, commercially viable to a developer based on the current relationship between costs and revenue

- (b) for the long term, commercially viable to a developer based on the current relationship between costs and revenue, or on any reasonable adjustment to that relationship

**HBA** means the Housing and Business Development Capacity Assessment required by subpart 5 of Part 3

**infrastructure-ready** has the meaning in clause 3.4(3)

**long term** means between 10 and 30 years

**long-term plan** means a long-term plan (including the infrastructure strategy required to be included in it) adopted by a local authority under section 93 of the Local Government Act 2002

**medium term** means between 3 and 10 years

**nationally significant infrastructure** means all of the following:

- (a) State highways
- (b) the national grid electricity transmission network
- (c) renewable electricity generation facilities that connect with the national grid
- (d) the high-pressure gas transmission pipeline network operating in the North Island
- (e) the refinery pipeline between Marsden Point and Wiri
- (f) the New Zealand rail network (including light rail)
- (g) rapid transit services (as defined in this clause)
- (h) any airport (but not its ancillary commercial activities) used for regular air transport services by aeroplanes capable of carrying more than 30 passengers
- (i) the port facilities (but not the facilities of any ancillary commercial activities) of each port company referred to in item 6 of Part A of Schedule 1 of the Civil Defence Emergency Management Act 2002

**planned** in relation to forms or features of transport, means planned in a regional land transport plan prepared and approved under the Land Transport Management Act 2003

**plan-enabled** has the meaning in clause 3.4(1)

**planning decision** means a decision on any of the following:

- (a) a regional policy statement or proposed regional policy statement
- (b) a regional plan or proposed regional plan
- (c) a district plan or proposed district plan
- (d) a resource consent
- (e) a designation
- (f) a heritage order
- (g) a water conservation order

**public transport** means any existing or planned service for the carriage of passengers (other than an aeroplane) that is available to the public generally by means of:

- (a) a vehicle designed or adapted to carry more than 12 persons (including the driver); or
- (b) a rail vehicle; or
- (c) a ferry

**qualifying matter** has the meaning in clause 3.32

**rapid transit service** means any existing or planned frequent, quick, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic

**rapid transit stop** means a place where people can enter or exit a rapid transit service, whether existing or planned

**RMA planning document** means all or any of the following:

- (a) a regional policy statement
- (b) a regional plan
- (c) a district plan

**short-medium term** means within the next 10 years

**short term** means within the next 3 years

**tier 1 local authority** means each local authority listed in column 2 of table 1 in the Appendix, and **tier 1 regional council** and **tier 1 territorial authority** have corresponding meanings

**tier 2 local authority** means each local authority listed in column 2 of table 2 in the Appendix, and **tier 2 regional council** and **tier 2 territorial authority** have corresponding meanings

**tier 3 local authority** means a local authority that has all or part of an urban environment within its region or district, but is not a tier 1 or 2 local authority, and **tier 3 regional council** and **tier 3 territorial authority** have corresponding meanings

**tier 1 urban environment** means an urban environment listed in column 1 of table 1 in the Appendix

**tier 2 urban environment** means an urban environment listed in column 1 of table 2 in the Appendix

**tier 3 urban environment** means an urban environment that is not listed in the Appendix

**urban environment** means any area of land (regardless of size, and irrespective of local authority or statistical boundaries) that:

- (a) is, or is intended to be, predominantly urban in character; and
- (b) is, or is intended to be, part of a housing and labour market of at least 10,000 people

**well-functioning urban environment** has the meaning in Policy 1.

- (2) Terms defined in the Act and used in this National Policy Statement have the meanings in the Act, unless otherwise specified.
- (3) Terms defined in the National Planning Standard issued under section 58E of the Act and used in this National Policy Statement have the meanings in that Standard, unless otherwise specified.
- (4) A reference in this National Policy Statement to a **zone** is:
  - (a) a reference to that zone as described in Standard 8 (Zone Framework Standard) of the National Planning Standard; or
  - (b) a reference to the nearest equivalent zone, in relation to local authorities that have not yet implemented the Zone Framework in the National Planning Standard.

### **1.5 Implementation by tier 3 local authorities**

- (1) Tier 3 local authorities are strongly encouraged to do the things that tier 1 or 2 local authorities are obliged to do under Parts 2 and 3 of this National Policy Statement, adopting whatever modifications to the National Policy Statement are necessary or helpful to enable them to do so.

### **1.6 Incorporation by reference**

- (1) Clause 2(1) of Schedule 1AA of the Act does not apply to any material incorporated by reference in this National Policy Statement.

## Part 2: Objectives and policies

### 2.1 Objectives

**Objective 1:** New Zealand has well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.

**Objective 2:** Planning decisions improve housing affordability by supporting competitive land and development markets.

**Objective 3:** Regional policy statements and district plans enable more people to live in, and more businesses and community services to be located in, areas of an urban environment in which one or more of the following apply:

- (a) the area is in or near a centre zone or other area with many employment opportunities
- (b) the area is well-serviced by existing or planned public transport
- (c) there is high demand for housing or for business land in the area, relative to other areas within the urban environment.

**Objective 4:** New Zealand's urban environments, including their amenity values, develop and change over time in response to the diverse and changing needs of people, communities, and future generations.

**Objective 5:** Planning decisions relating to urban environments, and FDSs, take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

**Objective 6:** Local authority decisions on urban development that affect urban environments are:

- (a) integrated with infrastructure planning and funding decisions; and
- (b) strategic over the medium term and long term; and
- (c) responsive, particularly in relation to proposals that would supply significant development capacity.

**Objective 7:** Local authorities have robust and frequently updated information about their urban environments and use it to inform planning decisions.

**Objective 8:** New Zealand's urban environments:

- (a) support reductions in greenhouse gas emissions; and
- (b) are resilient to the current and future effects of climate change.

### 2.2 Policies

**Policy 1:** Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:

- (a) have or enable a variety of homes that:
  - (i) meet the needs, in terms of type, price, and location, of different households; and
  - (ii) enable Māori to express their cultural traditions and norms; and

- (b) have or enable a variety of sites that are suitable for different business sectors in terms of location and site size; and
- (c) have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and
- (d) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and
- (e) support reductions in greenhouse gas emissions; and
- (f) are resilient to the likely current and future effects of climate change.

**Policy 2:** Tier 1, 2, and 3 local authorities, at all times, provide at least sufficient development capacity to meet expected demand for housing and for business land over the short term, medium term, and long term.

**Policy 3:** In relation to tier 1 urban environments, regional policy statements and district plans enable:

- (a) in city centre zones, building heights and density of urban form to realise as much development capacity as possible, to maximise benefits of intensification; and
- (b) in metropolitan centre zones, building heights and density of urban form to reflect demand for housing and business use in those locations, and in all cases building heights of at least 6 storeys; and
- (c) building heights of least 6 storeys within at least a walkable catchment of the following:
  - (i) existing and planned rapid transit stops
  - (ii) the edge of city centre zones
  - (iii) the edge of metropolitan centre zones; and
- (d) in all other locations in the tier 1 urban environment, building heights and density of urban form commensurate with the greater of:
  - (i) the level of accessibility by existing or planned active or public transport to a range of commercial activities and community services; or
  - (ii) relative demand for housing and business use in that location.

**Policy 4:** Regional policy statements and district plans applying to tier 1 urban environments modify the relevant building height or density requirements under Policy 3 only to the extent necessary (as specified in subpart 6) to accommodate a qualifying matter in that area.

**Policy 5:** Regional policy statements and district plans applying to tier 2 and 3 urban environments enable heights and density of urban form commensurate with the greater of:

- (a) the level of accessibility by existing or planned active or public transport to a range of commercial activities and community services; or
- (b) relative demand for housing and business use in that location.

**Policy 6:** When making planning decisions that affect urban environments, decision-makers have particular regard to the following matters:



- (a) the planned urban built form anticipated by those RMA planning documents that have given effect to this National Policy Statement
- (b) that the planned urban built form in those RMA planning documents may involve significant changes to an area, and those changes:
  - (i) may detract from amenity values appreciated by some people but improve amenity values appreciated by other people, communities, and future generations, including by providing increased and varied housing densities and types; and
  - (ii) are not, of themselves, an adverse effect
- (c) the benefits of urban development that are consistent with well-functioning urban environments (as described in Policy 1)
- (d) any relevant contribution that will be made to meeting the requirements of this National Policy Statement to provide or realise development capacity
- (e) the likely current and future effects of climate change.

**Policy 7:** Tier 1 and 2 local authorities set housing bottom lines for the short-medium term and the long term in their regional policy statements and district plans.

**Policy 8:** Local authority decisions affecting urban environments are responsive to plan changes that would add significantly to development capacity and contribute to well-functioning urban environments, even if the development capacity is:

- (a) unanticipated by RMA planning documents; or
- (b) out-of-sequence with planned land release.

**Policy 9:** Local authorities, in taking account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) in relation to urban environments, must:

- (a) involve hapū and iwi in the preparation of RMA planning documents and any FDSs by undertaking effective consultation that is early, meaningful and, as far as practicable, in accordance with tikanga Māori; and
- (b) when preparing RMA planning documents and FDSs, take into account the values and aspirations of hapū and iwi for urban development; and
- (c) provide opportunities in appropriate circumstances for Māori involvement in decision-making on resource consents, designations, heritage orders, and water conservation orders, including in relation to sites of significance to Māori and issues of cultural significance; and
- (d) operate in a way that is consistent with iwi participation legislation.

**Policy 10:** Tier 1, 2, and 3 local authorities:

- (a) that share jurisdiction over urban environments work together when implementing this National Policy Statement; and
- (b) engage with providers of development infrastructure and additional infrastructure to achieve integrated land use and infrastructure planning; and
- (c) engage with the development sector to identify significant opportunities for urban development.

**Policy 11:** In relation to car parking:

- (a) the district plans of tier 1, 2, and 3 territorial authorities do not set minimum car parking rate requirements, other than for accessible car parks; and
- (b) tier 1, 2, and 3 local authorities are strongly encouraged to manage effects associated with the supply and demand of car parking through comprehensive parking management plans.

## Part 3: Implementation

### 3.1 Outline of part

- (1) This part sets out a non-exhaustive list of things that local authorities must do to give effect to the objectives and policies of this National Policy Statement, but nothing in this part limits the general obligation under the Act to give effect to those objectives and policies.

### Subpart 1 – Providing development capacity

#### 3.2 Sufficient development capacity for housing

- (1) Every tier 1, 2, and 3 local authority must provide at least sufficient development capacity in its region or district to meet expected demand for housing:
  - (a) in existing and new urban areas; and
  - (b) for both standalone dwellings and attached dwellings; and
  - (c) in the short term, medium term, and long term.
- (2) In order to be **sufficient** to meet expected demand for housing, the development capacity must be:
  - (a) plan-enabled (*see* clause 3.4(1)); and
  - (b) infrastructure-ready (*see* clause 3.4(3)); and
  - (c) feasible and reasonably expected to be realised (*see* clause 3.26); and
  - (d) for tier 1 and 2 local authorities only, meet the expected demand plus the appropriate competitiveness margin (*see* clause 3.22).

#### 3.3 Sufficient development capacity for business land

- (1) Every tier 1, 2, and 3 local authority must provide at least sufficient development capacity in its region or district to meet the expected demand for business land:
  - (a) from different business sectors; and
  - (b) in the short term, medium term, and long term.
- (2) In order to be **sufficient** to meet expected demand for business land, the development capacity provided must be:
  - (a) plan-enabled (*see* clause 3.4(1)); and
  - (b) infrastructure-ready (*see* clause 3.4(3)); and
  - (c) suitable (as described in clause 3.29(2)) to meet the demands of different business sectors (as described in clause 3.28(3)); and
  - (d) for tier 1 and 2 local authorities only, meet the expected demand plus the appropriate competitiveness margin (*see* clause 3.22).

### 3.4 Meaning of plan-enabled and infrastructure-ready

- (1) Development capacity is **plan-enabled** for housing or for business land if:
  - (a) in relation to the short term, it is on land that is zoned for housing or for business use (as applicable) in an operative district plan
  - (b) in relation to the medium term, either paragraph (a) applies, or it is on land that is zoned for housing or for business use (as applicable) in a proposed district plan
  - (c) in relation to the long term, either paragraph (b) applies, or it is on land identified by the local authority for future urban use or urban intensification in an FDS or, if the local authority is not required to have an FDS, any other relevant plan or strategy.
- (2) For the purpose of subclause (1), land is **zoned** for housing or for business use (as applicable) only if the housing or business use is a permitted, controlled, or restricted discretionary activity on that land.
- (3) Development capacity is **infrastructure-ready** if:
  - (a) in relation to the short term, there is adequate existing development infrastructure to support the development of the land
  - (b) in relation to the medium term, either paragraph (a) applies, or funding for adequate infrastructure to support development of the land is identified in a long-term plan
  - (c) in relation to the long term, either paragraph (b) applies, or the development infrastructure to support the development capacity is identified in the local authority's infrastructure strategy (as required as part of its long-term plan).

### 3.5 Availability of additional infrastructure

- (1) Local authorities must be satisfied that the additional infrastructure to service the development capacity is likely to be available.

### 3.6 Housing bottom lines for tier 1 and 2 urban environments

- (1) The purpose of the housing bottom lines required by this clause is to clearly state the amount of development capacity that is sufficient to meet expected housing demand plus the appropriate competitiveness margin in the region and each constituent district of a tier 1 or tier 2 urban environment.
- (2) For each tier 1 or tier 2 urban environment, as soon as practicable after an HBA is made publicly available (see clause 3.19(1)):
  - (a) the relevant regional council must insert into its regional policy statement:
    - (i) a housing bottom line for the short-medium term; and
    - (ii) a housing bottom line for the long term; and
  - (b) every relevant territorial authority must insert into its district plan:
    - (i) a housing bottom line for the short-medium term that is the proportion of the housing bottom line for the short-medium term (as set out in the relevant regional policy statement) that is attributable to the district of the territorial authority; and

- (ii) a housing bottom line for the long term that is the proportion of the housing bottom line for the long term (as set out in the relevant regional policy statement) that is attributable to the district of the territorial authority.
- (3) The housing bottom lines must be based on information in the most recent publicly available HBA for the urban environment and are:
  - (a) for the short-medium term, the sum of:
    - (i) the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin, for the short term; and
    - (ii) the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin, for the medium term; and
  - (b) for the long term, the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin, for the long term.
- (4) The insertion of bottom lines must be done without using a process in Schedule 1 of the Act, but any changes to RMA planning documents required to give effect to the bottom lines must be made using a Schedule 1 process.

### **3.7 When there is insufficient development capacity**

- (1) If a local authority determines that there is insufficient development capacity (as described in clauses 3.2 and 3.3) over the short term, medium term, or long term, it must:
  - (a) immediately notify the Minister for the Environment; and
  - (b) if the insufficiency is wholly or partly a result of RMA planning documents, change those documents to increase development capacity for housing or business land (as applicable) as soon as practicable, and update any other relevant plan or strategy (including any FDS, as required by subpart 4); and
  - (c) consider other options for:
    - (i) increasing development capacity; and
    - (ii) otherwise enabling development.

## **Subpart 2 – Responsive planning**

### **3.8 Unanticipated or out-of-sequence developments**

- (1) This clause applies to a plan change that provides significant development capacity that is not otherwise enabled in a plan or is not in sequence with planned land release.
- (2) Every local authority must have particular regard to the development capacity provided by the plan change if that development capacity:
  - (a) would contribute to a well-functioning urban environment; and
  - (b) is well-connected along transport corridors; and
  - (c) meets the criteria set under subclause (3); and

- (3) Every regional council must include criteria in its regional policy statement for determining what plan changes will be treated, for the purpose of implementing Policy 8, as adding significantly to development capacity.

## Subpart 3 – Evidence-based decision-making

### 3.9 Monitoring requirements

- (1) Every tier 1, 2, and 3 local authority must monitor, quarterly, the following in relation to each urban environment in their region or district:
- (a) the demand for dwellings
  - (b) the supply of dwellings
  - (c) prices of, and rents for, dwellings
  - (d) housing affordability
  - (e) the proportion of housing development capacity that has been realised:
    - (i) in previously urbanised areas (such as through infill housing or redevelopment); and
    - (ii) in previously undeveloped (ie, greenfield) areas
  - (f) available data on business land.
- (2) In relation to tier 1 urban environments, tier 1 local authorities must monitor the proportion of development capacity that has been realised in each zone identified in clause 3.37(1) (ie, each zone with development outcomes that are monitored).
- (3) Every tier 1, 2, and 3 local authority must publish the results of its monitoring at least annually.
- (4) The monitoring required by this clause must relate to the relevant urban environments, but may apply more widely (such as, for example, where the relevant data is available only on a region or district-wide basis).
- (5) If more than one tier 1 or tier 2 local authority has jurisdiction over a tier 1 or tier 2 urban environment, those local authorities are jointly responsible for doing the monitoring required by this subpart.

### 3.10 Assessing demand and development capacity

- (1) Every local authority must assess the demand for housing and for business land in urban environments, and the development capacity that is sufficient (as described in clauses 3.2 and 3.3) to meet that demand in its region or district in the short term, medium term, and long term.
- (2) Tier 1 and tier 2 local authorities comply with subclause (1) in relation to tier 1 and tier 2 urban environments by preparing and publishing an HBA as required by subpart 5.

### 3.11 Using evidence and analysis

- (1) When making plans, or when changing plans in ways that affect the development of urban environments, local authorities must:
  - (a) clearly identify the resource management issues being managed; and
  - (b) use evidence, particularly any relevant HBAs, about land and development markets, and the results of the monitoring required by this National Policy Statement, to assess the impact of different regulatory and non-regulatory options for urban development and their contribution to:
    - (i) achieving well-functioning urban environments; and
    - (ii) meeting the requirements to provide at least sufficient development capacity.
- (2) Local authorities must include the matters referred to in subclause (1)(a) and (b) in relevant evaluation reports and further evaluation reports prepared under sections 32 and 32AA of the Act.

## Subpart 4 – Future Development Strategy (FDS)

### 3.12 Preparation of FDS

- (1) Every tier 1 and tier 2 local authority must prepare, and must make publicly available as required under the Local Government Act 2002, an FDS for the tier 1 or 2 urban environment:
  - (a) every 6 years; and
  - (b) in time to inform, or at the same time as, preparation of the next long-term plan of each relevant local authority.
- (2) The FDS must apply, at a minimum, to the relevant tier 1 and 2 urban environments of the local authority, but may apply to any wider area.
- (3) If more than one tier 1 or tier 2 local authority has jurisdiction over a tier 1 or tier 2 urban environment, those local authorities are jointly responsible for preparing an FDS as required by this subpart.
- (4) If a local authority that is not a tier 1 or 2 local authority chooses to prepare an FDS, either alone or with any other local authority, this subpart applies as if it were a tier 1 or 2 local authority, except that any reference to an HBA may be read as a reference to any other document that contains broadly equivalent information.
- (5) An FDS may be prepared and published as a stand-alone document, or be treated as part of any other document (such as a spatial plan).

### 3.13 Purpose and content of FDS

- (1) The purpose of an FDS is:
  - (a) to promote long-term strategic planning by setting out how a local authority intends to:

- (i) achieve well-functioning urban environments in its existing and future urban areas; and
  - (ii) provide at least sufficient development capacity, as required by clauses 3.2 and 3.3, over the next 30 years to meet expected demand; and
  - (b) assist the integration of planning decisions under the Act with infrastructure planning and funding decisions.
- (2) Every FDS must spatially identify:
- (a) the broad locations in which development capacity will be provided over the long term, in both existing and future urban areas, to meet the requirements of clauses 3.2 and 3.3; and
  - (b) the development infrastructure and additional infrastructure required to support or service that development capacity, along with the general location of the corridors and other sites required to provide it; and
  - (c) any constraints on development.
- (3) Every FDS must include a clear statement of hapū and iwi values and aspirations for urban development.

### **3.14 What FDSs are informed by**

- (1) Every FDS must be informed by the following:
- (a) the most recent applicable HBA
  - (b) a consideration of the advantages and disadvantages of different spatial scenarios for achieving the purpose of the FDS
  - (c) the relevant long-term plan and its infrastructure strategy, and any other relevant strategies and plans
  - (d) Māori, and in particular tangata whenua, values and aspirations for urban development
  - (e) feedback received through the consultation and engagement required by clause 3.15
  - (f) every other National Policy Statement under the Act, including the New Zealand Coastal Policy Statement
  - (g) any other relevant national policy required by, or issued under, legislation.

### **3.15 Consultation and engagement**

- (1) When preparing or updating an FDS local authorities must use the special consultative procedure in section 83 of the Local Government Act 2002.
- (2) In order to prepare the draft required by that procedure, local authorities must engage with the following:
- (a) other local authorities with whom there are significant connections relating to infrastructure or community
  - (b) relevant central government agencies



- (c) relevant hapū and iwi
- (d) providers of additional infrastructure
- (e) relevant providers of nationally significant infrastructure
- (f) the development sector (to identify significant future development opportunities and infrastructure requirements).

### 3.16 Review of FDS

- (1) Every tier 1 and tier 2 local authority must regularly review its FDS to determine whether it needs updating, and the review must be done in time to inform the next long-term plan (ie, every 3 years).
- (2) The review must:
  - (a) engage with the development sector and landowners to identify significant future development opportunities and associated infrastructure requirements; and
  - (b) consider the most recent HBA.
- (3) If, following the review, the local authority decides that the FDS does not need updating, that decision and the reasons for it must be publicly notified.
- (4) If, following the review, the local authority decides that the FDS is to be updated, the local authority must follow the same processes for consultation as apply to the preparation of an FDS, but only in relation to the aspects proposed to be updated.

### 3.17 Effect of FDS

- (1) Every tier 1 and tier 2 local authority:
  - (a) must have regard to the relevant FDS when preparing or changing RMA planning documents; and
  - (b) is strongly encouraged to use the relevant FDS to inform:
    - (i) long-term plans, and particularly infrastructure strategies; and
    - (ii) regional land transport plans prepared by a local authority under Part 2 of the Land Transport Management Act 2003; and
    - (iii) any other relevant strategies and plans.

### 3.18 FDS implementation plan

- (1) Every tier 1 and tier 2 local authority must prepare and implement an implementation plan for its FDS.
- (2) If a tier 1 or tier 2 local authority consists of more than one local authority, the implementation plan must be prepared as a single document by all the local authorities that jointly prepared the FDS.
- (3) Every implementation plan, or part of an implementation plan, must be updated annually.

- (4) An implementation plan or part of an implementation plan:
  - (a) is not part of the FDS to which it relates; and
  - (b) does not need to be prepared using the consultation and engagement requirements set out in clause 3.15; and
  - (c) does not have the effect of an FDS as described in clause 3.17.

## Subpart 5 – Housing and Business Development Capacity Assessment (HBA)

### 3.19 Obligation to prepare HBA

- (1) Every tier 1 and tier 2 local authority must prepare, and must make publicly available as required under the Local Government Act 2002, an HBA for its tier 1 or tier 2 urban environments every 3 years, in time to inform the relevant authority's next long-term plan.
- (2) The HBA must apply, at a minimum, to the relevant tier 1 or tier 2 urban environments of the local authority (ie, must assess demand and capacity within the boundaries of those urban environments), but may apply to any wider area.
- (3) If more than one tier 1 or tier 2 local authority has jurisdiction over a tier 1 or tier 2 urban environment, those local authorities are jointly responsible for preparing an HBA as required by this subpart.

### 3.20 Purpose of HBA

- (1) The purpose of an HBA is to:
  - (a) provide information on the demand and supply of housing and of business land in the relevant tier 1 or tier 2 urban environment, and the impact of planning and infrastructure decisions of the relevant local authorities on that demand and supply; and
  - (b) inform RMA planning documents, FDSs, and long-term plans; and
  - (c) quantify the development capacity that is sufficient to meet expected demand for housing and for business land in the short term, medium term, and long term.

### 3.21 Involving development sector and others

- (1) In preparing an HBA, every tier 1 and tier 2 local authority must seek information and comment from:
  - (a) expert or experienced people in the development sector; and
  - (b) providers of development infrastructure and additional infrastructure; and
  - (c) anyone else who has information that may materially affect the calculation of the development capacity.

### 3.22 Competitiveness margin

- (1) A competitiveness margin is a margin of development capacity, over and above the expected demand that tier 1 and tier 2 local authorities are required to provide, that is required in order to support choice and competitiveness in housing and business land markets.
- (2) The competitiveness margins for both housing and business land are:
  - (a) for the short term, 20%
  - (b) for the medium term, 20%
  - (c) for the long term, 15%.

## Housing

### 3.23 Analysis of housing market and impact of planning

- (1) Every HBA must include analysis of how the relevant local authority's planning decisions and provision of infrastructure affects the affordability and competitiveness of the local housing market.
- (2) The analysis must include an assessment of how well the current and likely future demands for housing by Māori and different groups in the community (such as older people, renters, homeowners, low-income households, visitors, and seasonal workers) are met, including the demand for different types and forms of housing (such as for lower-cost housing, papakāinga, and seasonal worker or student accommodation).
- (3) The analysis must be informed by:
  - (a) market indicators, including:
    - (i) indicators of housing affordability, housing demand, and housing supply; and
    - (ii) information about household incomes, housing prices, and rents; and
  - (b) price efficiency indicators.

### 3.24 Housing demand assessment

- (1) Every HBA must estimate, for the short term, medium term, and long term, the demand for additional housing in the region and each constituent district of the tier 1 or tier 2 urban environment:
  - (a) in different locations; and
  - (b) in terms of dwelling types.
- (2) Local authorities may identify locations in any way they choose.
- (3) Local authorities may identify the types of dwellings in any way they chose but must, at a minimum, distinguish between standalone dwellings and attached dwellings.
- (4) The demand for housing must be expressed in terms of numbers of dwellings.

- (5) Every HBA must:
- (a) set out a range of projections of demand for housing in the short term, medium term, and long term; and
  - (b) identify which of the projections are the most likely in each of the short term, medium term, and long term; and
  - (c) set out the assumptions underpinning the different projections and the reason for selecting the most likely; and
  - (d) if those assumptions involve a high level of uncertainty, the nature and potential effects of that uncertainty.

### 3.25 Housing development capacity assessment

- (1) Every HBA must quantify, for the short term, medium term, and long term, the housing development capacity for housing in the region and each constituent district of the tier 1 or tier 2 urban environment that is:
- (a) plan-enabled; and
  - (b) plan-enabled and infrastructure-ready; and
  - (c) plan-enabled, infrastructure-ready, and feasible and reasonably expected to be realised.
- (2) The development capacity must be quantified as numbers of dwellings:
- (a) in different locations, including in existing and new urban areas; and
  - (b) of different types, including standalone dwellings and attached dwellings.

### 3.26 Estimating what is feasible and reasonably expected to be realised

- (1) For the purpose of estimating the amount of development capacity that is reasonably expected to be realised, or that is both feasible and reasonably expected to be realised, local authorities:
- (a) may use any appropriate method; but
  - (b) must outline and justify the methods, inputs, and assumptions used to arrive at the estimates.
- (2) The following are examples of the kind of methods that a tier 1 local authority could use to assess the amount of development capacity that is feasible and reasonably expected to be realised:
- (a) separately estimate the number of feasible dwellings (using a feasibility model) and the number of dwellings that can reasonably be expected to be realised (using building consents data on the number of sites and extent of allowed capacity that has been previously developed), for the short, medium and long term; compare the numbers of dwellings estimated by each method; then pick the lower of the numbers in each time period, to represent the amount of development capacity that is feasible and reasonably expected to be realised

- (b) estimate the number of feasible dwellings or sites, and then assess the proportion of these that can reasonably be expected to be developed in the short, medium and long term, using information about landowner and developer intentions
  - (c) integrate information about past development trends and future landowner and developer intentions into the feasibility model, which could mean modifying assumptions about densities, heights, and timing of development.
- (3) The following is an example of the kind of methods that a tier 2 local authority could use to assess the amount of development capacity that is feasible and reasonably expected to be realised:
- (a) assess the number of dwellings that can reasonably be expected to be developed (using building consents data on the number of sites and extent of allowed capacity that has been developed previously), for the short, medium and long term; and
  - (b) then seek advice from the development sector about what factors affect the feasibility of development.
- (4) Different methods may be appropriate when assessing the development capacity that is reasonably expected to be realised in different circumstances, such as:
- (a) in existing, as opposed to new, urban areas; and
  - (b) for stand-alone, as opposed to attached, dwellings.

### **3.27 Assessment of sufficient development capacity for housing**

- (1) Every HBA must clearly identify, for the short term, medium term, and long term, where there is sufficient development capacity to meet demand for housing in the region and each constituent district of the tier 1 or tier 2 urban environment.
- (2) The requirements of subclause (1) must be based on a comparison of:
  - (a) the demand for housing referred to in clause 3.24 plus the appropriate competitiveness margin; and
  - (b) the development capacity identified under clause 3.25.
- (3) If there is any insufficiency, the HBA must identify where and when this will occur and analyse the extent to which RMA planning documents, a lack of development infrastructure, or both, cause or contribute to the insufficiency.

## **Business land**

### **3.28 Business land demand assessment**

- (1) Every HBA must estimate, for the short term, medium term, and long term, the demand from each business sector for additional business land in the region and each constituent district of the tier 1 or tier 2 urban environment.
- (2) The demand must be expressed in hectares or floor areas.

- (3) For the purpose of this clause, a local authority may identify business sectors in any way it chooses but must, as a minimum, distinguish between sectors that would use land zoned for commercial, retail, or industrial uses.
- (4) The HBA for a tier 1 urban environment must:
  - (a) set out a range of projections of demand for business land by business sector, for the short term, medium term, and long term; and
  - (b) identify which of the projections is the most likely in each of the short term, medium term, and long term; and
  - (c) set out the assumptions underpinning the different projections and the reason for selecting which is the most likely; and
  - (d) if those assumptions involve a high level of uncertainty, the nature and potential effects of that uncertainty.
- (5) The HBA for a tier 2 urban environment must:
  - (a) set out the most likely projection of demand for business land by business sector in the short term, medium term, and long term; and
  - (b) set out the assumptions underpinning that projection; and
  - (c) if those assumptions involve a high level of uncertainty, the nature and potential effects of that uncertainty.

### **3.29 Business land development capacity assessment**

- (1) Every HBA must estimate the following, for the short term, medium term, and long term, for the region and each constituent district of the tier 1 or tier 2 urban environment:
  - (a) the development capacity (in terms of hectares or floor areas) to meet expected demand for business land for each business sector, plus the appropriate competitiveness margin; and
  - (b) of that development capacity, the development capacity that is:
    - (i) plan-enabled; and
    - (ii) plan-enabled and infrastructure-ready; and
    - (iii) plan-enabled, infrastructure-ready, and suitable for each business sector.
- (2) A local authority may define what it means for development capacity to be “suitable” in any way it chooses, but suitability must, at a minimum, include suitability in terms of location and site size.

### **3.30 Assessment of sufficient development capacity for business land**

- (1) Every HBA must clearly identify, for the short term, medium term, and long term, whether there is sufficient development capacity to meet demand for business land in the region and each constituent district of the tier 1 or tier 2 urban environment.

- (2) The requirements of subclause (1) must be based on a comparison of:
  - (a) the demand for business land referred to in clause 3.28 plus the appropriate competitiveness margin; and
  - (b) the development capacity identified under clause 3.29.
- (3) If there is any insufficiency, the HBA must identify where and when this will occur and analyse the extent to which RMA planning documents, a lack of development infrastructure, or both, cause or contribute to the insufficiency.

## Subpart 6 – Intensification in tier 1 urban environments

### 3.31 Tier 1 territorial authorities implementing intensification policies

- (1) Every tier 1 territorial authority must identify, by location, the building heights and densities required by Policy 3.
- (2) If the territorial authority considers that it is necessary to modify the building height or densities in order to provide for a qualifying matter (as permitted under Policy 4), it must:
  - (a) identify, by location, where the qualifying matter applies; and
  - (b) specify the alternate building heights and densities proposed for those areas.
- (3) The territorial authority must make the information required by subclauses (1) and (2) publicly available at the same time as it notifies any plan change or proposed plan change to give effect to Policy 3.

### 3.32 Qualifying matters

- (1) In this National Policy Statement, **qualifying matter** means any of the following:
  - (a) a matter of national importance that decision-makers are required to recognise and provide for under section 6 of the Act
  - (b) a matter required in order to give effect to any other National Policy Statement
  - (c) any matter required for the purpose of ensuring the safe or efficient operation of nationally significant infrastructure
  - (d) open space provided for public use, but only in relation to the land that is open space
  - (e) an area subject to a designation or heritage order, but only in relation to the land that is subject to the designation or heritage order
  - (f) a matter necessary to implement, or ensure consistency with, iwi participation legislation
  - (g) the requirement to provide sufficient business land suitable for low density uses to meet expected demand under this National Policy Statement
  - (h) any other matter that makes high density development as directed by Policy 3 inappropriate in an area, but only if the requirements of clause 3.33(3) are met.

### 3.33 Requirements if qualifying matter applies

- (1) This clause applies if a territorial authority is amending its district plan and intends to rely on Policy 4 to justify a modification to the direction in Policy 3 in relation to a specific area.
- (2) The evaluation report prepared under section 32 of the Act in relation to the proposed amendment must
  - (a) demonstrate why the territorial authority considers that:
    - (i) the area is subject to a qualifying matter; and
    - (ii) the qualifying matter is incompatible with the level of development directed by Policy 3 for that area; and
  - (b) assess the impact that limiting development capacity, building height or density (as relevant) will have on the provision of development capacity; and
  - (c) assess the costs and broader impacts of imposing those limits.
- (3) A matter is not a qualifying matter under clause 3.32(1)(h) in relation to an area unless the evaluation report also:
  - (a) identifies the specific characteristic that makes the level of development directed by Policy 3 inappropriate in the area, and justifies why that is inappropriate in light of the national significance of urban development and the objectives of this National Policy Statement; and
  - (b) includes a site-specific analysis that:
    - (i) identifies the site to which the matter relates; and
    - (ii) evaluates the specific characteristics on a site-specific basis to determine the spatial extent where intensification needs to be compatible with the specific matter; and
    - (iii) evaluates an appropriate range of options to achieve the greatest heights and densities directed by Policy 3, while managing the specific characteristics.

### 3.34 Effects on consideration of resource consents

- (1) Nothing in Policies 3 or 4 or this subpart precludes the consideration (under section 104 of the Act) of any actual or potential effects on the environment associated with building heights.

## Subpart 7 – Development outcomes for zones

### 3.35 Development outcomes for zones

- (1) Every tier 1, 2 or 3 territorial authority must ensure that:
  - (a) the objectives for every zone in an urban environment in its district describe the development outcomes intended for the zone over the life of the plan and beyond; and



- (b) the policies and rules in its district plan are individually and cumulatively consistent with the development outcomes described in the objectives for each zone.

### 3.36 Development outcomes consistent with intensification policies

- (1) Every tier 1 territorial authority must ensure that the development outcomes for zones in its tier 1 urban environments are consistent with the outcomes required by Policy 3.

### 3.37 Monitoring development outcomes

- (1) Every tier 1 territorial authority must monitor the extent to which development is occurring in each of the following zones as anticipated by the development outcomes included in the objectives for the zone:
  - (a) city centre zones
  - (b) metropolitan centre zones
  - (c) town centre zones
  - (d) mixed use zones
  - (e) high density residential zones
  - (f) medium density residential zones
  - (g) general residential zones.
- (2) If monitoring under this clause indicates that development outcomes are not being realised, the territorial authority must, as soon as practicable:
  - (a) undertake an assessment to identify whether provisions of the district plan (individually and cumulatively), or any other factors (and if so, what factors), or both, are contributing to the failure to realise development outcomes; and
  - (b) give public notice (as defined in the Act) of the results of the assessment.
- (3) If the assessment indicates that provisions of a district plan are contributing to the failure to realise development outcomes, the territorial authority must change its district plan to address the deficiency.
- (4) If the assessment indicates that other factors are contributing to the failure to realise development outcomes, the territorial authority must consider alternative methods to improve the rate of realisation (such as the use of incentives for site amalgamation).
- (5) Any plan change required under subclause (3) must be notified as soon as practicable, and no later than 12 months after the assessment is publicly notified.

## Subpart 8 – Car parking

### 3.38 Car parking

- (1) If the district plan of a tier 1, 2, or 3 territorial authority contains objectives, policies, rules, or assessment criteria that have the effect of requiring a minimum number of car parks to be provided for a particular development, land use, or activity, the territorial authority must change its district plan to remove that effect, other than in respect of accessible car parks.

- (2) Territorial authorities must make any changes required by subclause (1) without using a process in Schedule 1 of the Act.
- (3) Nothing in this National Policy Statement prevents a district plan including objectives, policies, rules, or assessment criteria:
  - (a) requiring a minimum number of accessible car parks to be provided for any activity; or
  - (b) relating to parking dimensions or manoeuvring standards to apply if:
    - (i) a developer chooses to supply car parks; or
    - (ii) when accessible car parks are required.

## Part 4: Timing

### 4.1 Timeframes for implementation

- (1) Every tier 1, 2, and 3 local authority must amend its regional policy statement or district plan to give effect to the provisions of this National Policy Statement as soon as practicable
- (2) In addition, local authorities must comply with specific policies of this National Policy Statement in accordance with the following table:

Local authority	Subject	National Policy Statement provisions	By when
Tier 1 only	Intensification	Policies 3 and 4 ( <i>see Part 3 subpart 6</i> )	Not later than 2 years after commencement date
Tier 2 only	Intensification	Policy 5	Not later than 2 years after commencement date
Tiers 1 and 2	First FDS made publicly available after commencement date	Policy 2 ( <i>see Part 3 subpart 4</i> )	In time to inform the 2024 long-term plan
Tiers 1 and 2	HBA so far as it relates to housing	Policy 2 ( <i>see Part 3 subpart 5</i> )	By 31 July 2021
Tiers 1 and 2	HBA relating to both housing and business land	Policy 2 ( <i>see Part 3 subpart 5</i> )	In time to inform the 2024 long-term plan
Tiers 1, 2, and 3	Car parking	Policy 11(a) ( <i>see clause 3.38</i> )	Not later than 18 months after commencement date

# Appendix: Tier 1 and tier 2 urban environments and local authorities

**Table 1**

Tier 1 urban environment	Tier 1 local authorities
Auckland	Auckland Council
Hamilton	Waikato Regional Council, Hamilton City Council, Waikato District Council, Waipā District Council
Tauranga	Bay of Plenty Regional Council, Tauranga City Council, Western Bay of Plenty District Council
Wellington	Wellington Regional Council, Wellington City Council, Porirua City Council, Hutt City Council, Upper Hutt City Council, Kāpiti Coast District Council
Christchurch	Canterbury Regional Council, Christchurch City Council, Selwyn District Council, Waimakariri District Council

**Table 2**

Tier 2 urban environment	Tier 2 local authorities
Whangārei	Northland Regional Council, Whangarei District Council
Rotorua	Bay of Plenty Regional Council, Rotorua District Council
New Plymouth	Taranaki Regional Council, New Plymouth District Council
Napier Hastings	Hawke's Bay Regional Council, Napier City Council, Hastings District Council
Palmerston North	Manawatū-Whanganui Regional Council, Palmerston North City Council
Nelson Tasman	Nelson City Council, Tasman District Council
Queenstown	Otago Regional Council, Queenstown Lakes District Council
Dunedin	Otago Regional Council, Dunedin City Council

NATIONAL POLICY STATEMENT

# for Renewable Electricity Generation 2011

*Issued by notice in the Gazette on 14 April 2011*

[newzealand.govt.nz](http://newzealand.govt.nz)

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## Preamble

This national policy statement sets out an objective and policies to enable the sustainable management of renewable electricity generation under the Resource Management Act 1991 ('the Act').

New Zealand's energy demand has been growing steadily and is forecast to continue to grow. New Zealand must confront two major energy challenges as it meets growing energy demand. The first is to respond to the risks of climate change by reducing greenhouse gas emissions caused by the production and use of energy. The second is to deliver clean, secure, affordable energy while treating the environment responsibly.

The contribution of renewable electricity generation, regardless of scale, towards addressing the effects of climate change plays a vital role in the wellbeing of New Zealand, its people and the environment. In considering the risks and opportunities associated with various electricity futures, central government has reaffirmed the strategic target that 90 per cent of electricity generated in New Zealand should be derived from renewable energy sources by 2025 (based on delivered electricity in an average hydrological year) providing this does not affect security of supply.

Development that increases renewable electricity generation capacity can have environmental effects that span local, regional and national scales, often with adverse effects manifesting locally and positive effects manifesting nationally.

This national policy statement does not apply to the allocation and prioritisation of freshwater as these are matters for regional councils to address in a catchment or regional context and may be subject to the development of national guidance in the future.

In some instances the benefits of renewable electricity generation can compete with matters of national importance as set out in section 6 of the Act, and with matters to which decision-makers are required to have particular regard under section 7 of the Act. In particular, the natural resources from which electricity is generated can coincide with areas of significant natural character, significant amenity values, historic heritage, outstanding natural features and landscapes, significant indigenous vegetation and significant habitats of indigenous fauna. There can also be potential conflicts with the relationship of Maori with their taonga and the role of kaitiaki. The New Zealand Coastal Policy Statement 2010 also addresses these issues in the coastal environment. Increased national consistency in addressing the competing values associated with the development of New Zealand's renewable energy resources will provide greater certainty to decision-makers, applicants, and the wider community.

## Title

This national policy statement is the National Policy Statement for Renewable Electricity Generation 2011.

## Commencement

This national policy statement will take effect 28 days after the date of its issue by notice in the New Zealand Gazette.

## Interpretation

In this national policy statement, unless the context otherwise requires:

**Act** means the Resource Management Act 1991.

**Decision-makers** means all persons exercising functions and powers under the Act.

**Distribution network** means a distributor's lines and associated equipment used for the conveyance of electricity on lines other than lines that are part of the national grid.

**Distributor** means a business engaged in distribution of electricity.

**National grid** means the lines and associated equipment used or owned by Transpower to convey electricity.

**Renewable electricity generation** means generation of electricity from solar, wind, hydro-electricity, geothermal, biomass, tidal, wave, or ocean current energy sources.

**Renewable electricity generation activities** means the construction, operation and maintenance of structures associated with renewable electricity generation. This includes small and community-scale distributed renewable generation activities and the system of electricity conveyance required to convey electricity to the distribution network and/or the national grid and electricity storage technologies associated with renewable electricity.

**Small and community-scale distributed electricity generation** means renewable electricity generation for the purpose of using electricity on a particular site, or supplying an immediate community, or connecting into the distribution network.

Terms given meaning in the Act have the meanings so given.

## Matters of national significance

The matters of national significance to which this national policy statement applies are:

- a) the need to develop, operate, maintain and upgrade renewable electricity generation activities throughout New Zealand; and
- b) the benefits of renewable electricity generation.

## Objective

To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation.



## A. Recognising the benefits of renewable electricity generation activities

### POLICY A

Decision-makers shall recognise and provide for the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities. These benefits include, but are not limited to:

- a) maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;
- b) maintaining or increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation;
- c) using renewable natural resources rather than finite resources;
- d) the reversibility of the adverse effects on the environment of some renewable electricity generation technologies;
- e) avoiding reliance on imported fuels for the purposes of generating electricity.

## B. Acknowledging the practical implications of achieving New Zealand's target for electricity generation from renewable resources

### POLICY B

Decision-makers shall have particular regard to the following matters:

- a) maintenance of the generation output of existing renewable electricity generation activities can require protection of the assets, operational capacity and continued availability of the renewable energy resource; and
- b) even minor reductions in the generation output of existing renewable electricity generation activities can cumulatively have significant adverse effects on national, regional and local renewable electricity generation output; and
- c) meeting or exceeding the New Zealand Government's national target for the generation of electricity from renewable resources will require the significant development of renewable electricity generation activities.

## C. Acknowledging the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities

### POLICY C1

Decision-makers shall have particular regard to the following matters:

- a) the need to locate the renewable electricity generation activity where the renewable energy resource is available;
- b) logistical or technical practicalities associated with developing, upgrading, operating or maintaining the renewable electricity generation activity;
- c) the location of existing structures and infrastructure including, but not limited to, roads, navigation and telecommunication structures and facilities, the distribution network and the national grid in relation to the renewable electricity generation activity, and the need to connect renewable electricity generation activity to the national grid;

- d) designing measures which allow operational requirements to complement and provide for mitigation opportunities; and
- e) adaptive management measures.

#### POLICY C2

When considering any residual environmental effects of renewable electricity generation activities that cannot be avoided, remedied or mitigated, decision-makers shall have regard to offsetting measures or environmental compensation including measures or compensation which benefit the local environment and community affected.

### D. Managing reverse sensitivity effects on renewable electricity generation activities

#### POLICY D

Decision-makers shall, to the extent reasonably possible, manage activities to avoid reverse sensitivity effects on consented and on existing renewable electricity generation activities.

### E. Incorporating provisions for renewable electricity generation activities into regional policy statements and regional and district plans

#### E1 Solar, biomass, tidal, wave and ocean current resources

##### POLICY E1

Regional policy statements and regional and district plans shall include objectives, policies and methods (including rules within plans) to provide for the development, operation, maintenance, and upgrading of new and existing renewable electricity generation activities using solar, biomass, tidal, wave and ocean current energy resources to the extent applicable to the region or district.

#### E2 Hydro-electricity resources

##### POLICY E2

Regional policy statements and regional and district plans shall include objectives, policies, and methods (including rules within plans) to provide for the development, operation, maintenance, and upgrading of new and existing hydro-electricity generation activities to the extent applicable to the region or district.

#### E3 Wind resources

##### POLICY E3

Regional policy statements and regional and district plans shall include objectives, policies, and methods (including rules within plans) to provide for the development, operation, maintenance and upgrading of new and existing wind energy generation activities to the extent applicable to the region or district.

## E4 Geothermal resources

### POLICY E4

Regional policy statements and regional and district plans shall include objectives, policies, and methods (including rules within plans) to provide for the development, operation, maintenance, and upgrading of new and existing electricity generation activities using geothermal resources to the extent applicable to the region or district.

## F. Incorporating provisions for small and community-scale renewable electricity generation activities into regional policy statements and regional and district plans

### POLICY F

As part of giving effect to Policies E1 to E4, regional policy statements and regional and district plans shall include objectives, policies, and methods (including rules within plans) to provide for the development, operation, maintenance and upgrading of small and community-scale distributed renewable electricity generation from any renewable energy source to the extent applicable to the region or district.

## G. Enabling identification of renewable electricity generation possibilities

### POLICY G

Regional policy statements and regional and district plans shall include objectives, policies, and methods (including rules within plans) to provide for activities associated with the investigation, identification and assessment of potential sites and energy sources for renewable electricity generation by existing and prospective generators.

## H. Time within which implementation is required

### POLICY H1

Unless already provided for within the relevant regional policy statement or proposed regional policy statement, regional councils shall give effect to Policies A, B, C, D, E, F and G by notifying using Schedule 1 of the Act, a change or variation (whichever applies) within 24 months of the date on which this national policy statement takes effect.

### POLICY H2

Unless already provided for within the relevant regional or district plans or proposed plans, plan changes or variations, local authorities shall give effect to Policies A, B, C, D, E, F and G by notifying using Schedule 1 of the Act, a change or variation (whichever applies) within the following timeframes:

- a) where the relevant regional policy statement or proposed regional policy statement already provides for the Policies, 24 months of the date on which this national policy statement takes effect; or
- b) where a change or variation to the regional policy statement or proposed regional policy statement is required by Policy H1, 12 months of the date on which the change or variation becomes operative.

## Monitoring and reviewing the implementation and effectiveness of the national policy statement

To monitor and review the implementation and effectiveness of this national policy statement in achieving the purpose of the Act, the Minister for the Environment should:

- in collaboration with local authorities and relevant government agencies collect data for, and, as far as practicable, incorporate district and regional monitoring information into a nationally consistent monitoring and reporting programme, including monitoring the performance of local authorities against the timeframes for giving effect to this national policy statement;
- utilise other information gathered or monitored that assists in measuring progress towards the Government's national target for the generation of electricity from renewable sources;
- within five years of its taking effect, and thereafter as considered necessary, assess the effect of this national policy statement on relevant regional policy statements and regional or district plans, resource consents and other decision-making; and
- publish a report and conclusions on matters above.

### Explanatory note

*This note is not part of the national policy statement but is intended to indicate its general effect.*

This national policy statement takes effect 28 days after the date of its issue by notice in the *New Zealand Gazette*. It recognises renewable electricity generation activities and the benefits of renewable electricity generation as matters of national significance under the Resource Management Act 1991.

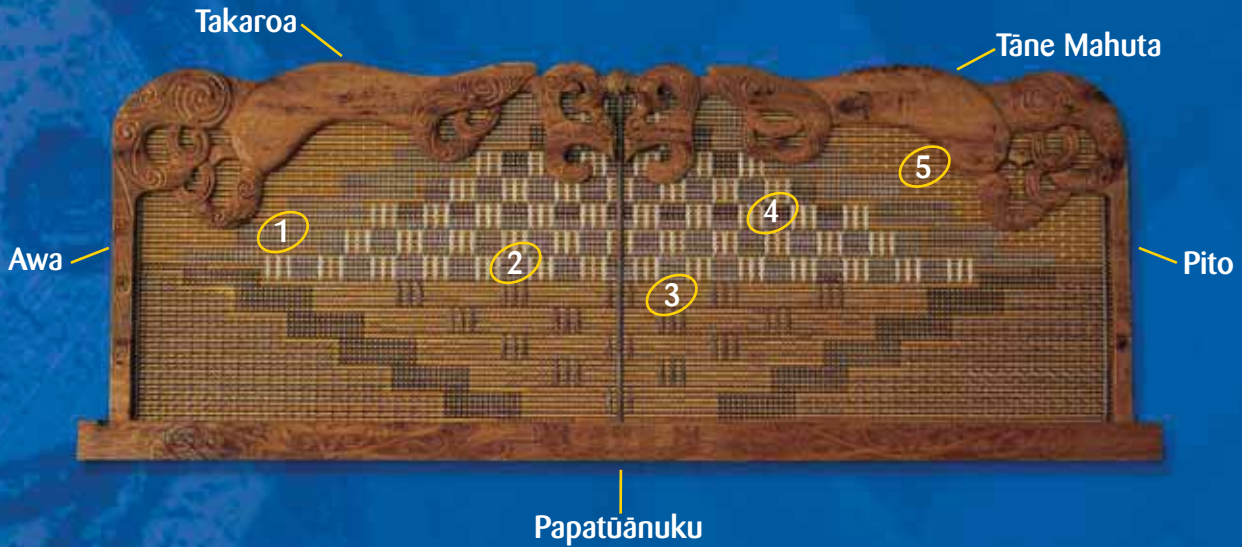
This national policy statement is to be applied by all persons exercising powers and functions under the Act. The objective and policies are intended to guide applicants and decision-makers on applications for resource consent, in making decisions on the notification and determination of resource consent applications, in considering a requirement for a designation or a heritage order, in considering an application for a water conservation order and when exercising other powers as required by the Act. Regional policy statements, regional plans and district plans must give effect to this national policy statement.

This national policy statement requires regional councils, unless they have already provided for renewable electricity generation activities, to give effect to its provisions by notifying changes to existing or proposed regional policy statements within 24 months of the date on which it takes effect. In the case of district plans, proposed plans or variations, local authorities are required to give effect to its provisions by notifying changes within the following timeframes: 24 months of the date on which this national policy statement takes effect where the regional policy statement or proposed regional policy statement already provides for the policies; or, where a change or variation to the regional policy statement or proposed regional policy statement is required, within 12 months of the date on which the change or variation becomes operative.

A large, faint Maori koru pattern is visible in the background, rendered in a lighter shade of blue against the darker blue background. The koru is a stylized, unfurling fern frond, a symbol of new life and growth in Maori culture.

**KĀI TAHU KI OTAGO  
NATURAL RESOURCE  
MANAGEMENT PLAN  
2005**

# PLAN PHILOSOPHY AS DEPICTED BY THE TAOKA “KAITIAKITAKA”



- Takaroa** The sea god, representing the coastal and inland waterways and fisheries of the Otago region.
- Tāne Mahuta** God of the forest, the atua over the native flora and fauna of the Otago region.
- Papatūānuku** Mother earth, with arms outstretched, carved in the kōwhaiwhai pattern to show people working in conjunction with Papatūānuku to create new growth.
- Awa** Waterways, running from Papatūānuku to join the sea god, Takaroa.
- Pito** Linking Papatūānuku to Tāne Mahuta, symbolising the umbilical cord connecting people and mother earth.



**Green/Grey - Poutama**

Stairway signifies the partnership between Kāi Tahu ki Otago and the Otago Regional Council, each with their own levels of understanding and knowledge, joining together to enclose and embrace the natural resources under the kaupapa or kaitiakitaka.



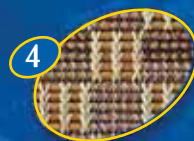
**Green/White - Roimata Toroa**

Reflects the importance of the Toroa (Albatross) in tradition and pride of place in Otago.



**Green/Grey - Waewae Pakura**

Part of the lower half of the design. Depicts footprints of the Pukeko, signifying presence of wildlife on the land.



**Light and Dark Blue - Mumu/Tapawhā**

Represents blocks of forest and vegetation.



**Yellow - Purapura Whetū**

Reminds us of the tini mate - myriads of ancestors.

## ACKNOWLEDGEMENTS

This Plan is the culmination of 2 years of effort by Papatipu Rūnaka and whānau rōpū representatives, principally a voluntary group of people dedicated to the advancement of the Kāi Tahu ki Otago position in the management of natural, physical and historic resources and values. The Plan is the result of many marae-based hui and innumerable meetings.

*Thanks is due to the Review Working Group who spent many hours of voluntary work ...*

Edward Ellison, Te Rūnanga o Ōtākou; Gail Tipa, Te Rūnanga o Moeraki; Joy Smith, Kāti Huirapa Rūnaka ki Puketeraki; Rewi Anglem and Rena Fowler, Hokonui Rūnanga; and Maureen Wylie, Waikoau Ngāi Tahu Rūnanga (S.O.) Incorporated; Matapura Ellison, Kaupapa Atawhai, Manager Department of Conservation; Kate Sedgley, Te Rūnanga o Ngāi Tahu Kaupapa Taiao Unit; Christopher Rosenbrock, KTKO Ltd Manager.

*Many thanks are also owed to the following people ...*

David O'Connell, Nigel Scott, Craig Pauling, Martin Fastier, Paulette Tamati-Elliffe; and Te Waka Reo Unit.

*For the provision of funds to assist the production of the Plan ...*

Financial support has been received from the Minister for the Environment's Sustainable Management Fund, which is administered by the Ministry for the Environment.



The Ministry for the Environment does not endorse or support the content of the publication in any way

The New Zealand Lottery Grants Board, Te Puna Tahua Environment and Heritage Distribution Committee Te Tahua Taiao Ngā Taonga Tuku Iho.



The Otago Regional Council, Waitaki District Council, Queenstown Lakes District Council, Central Otago District Council, Clutha District Council, Dunedin City Council.

Kāi Tahu ki Otago would like to thank the Otago Regional Council for the use the “Kaitiakitaka” taoka image on the cover of this Plan. This taoka is of special significance to both the Otago Regional Council and Kāi Tahu ki Otago.

To all those people who have provided support, direction and technical assistance during the development of this Plan, Ka nui ka mihi aroha ki a koutou mo te manaaki me tautoko tenei kaupapa taumaha.

## LIST OF ABBREVIATIONS

The Southern Ngāi Tahu dialect replaces “Ng” with “k” for example “Ngāi Tahu” is written and pronounced “Kāi Tahu”. The “k” is used throughout this Plan unless the situation deems it inappropriate for example traditional whakataukī, statute titles, Geographic Board names and particular Papatipu Rūnaka dialect.

DoC	<i>Department of Conservation</i>
ECan	<i>Environment Canterbury</i>
KTKO Ltd	<i>Kāi Tahu ki Otago Ltd a Papatipu Rūnaka-owned Consultancy business.</i>
KTKO NRMP 1995	<i>The Kāi Tahu ki Otago Natural Resource Management Plan 1995. The first Kāi Tahu ki Otago Natural Resource Management Plan published in 1995.</i>
KTKO NRMP 2005	<i>The Kāi Tahu ki Otago Natural Resource Management Plan 2005. This current Plan.</i>
LGA 2002	<i>Local Government Act 2002</i>
NTCSA 1998	<i>Ngāi Tahu Claims Settlement Act 1998</i>
ORC	<i>Otago Regional Council</i>
RMA 1991	<i>Resource Management Act 1991</i>



## FOREWORD

### KĀI TAHU KI OTAGO

The period between the production of the Kāi Tahu ki Otago Natural Resource Management Plan 2005 and the Kāi Tahu ki Otago Natural Resource Management Plan 1995 represents a significant re-emergence of Ngāi Tahu whānui interests and capacity in the management of the natural environment in our tribal area. For generations our elders struggled for recognition of their values and beliefs in respect of the interconnectedness of people, their actions and the health of the environment. The success of the tribe in establishing the iwi authority Te Rūnanga o Ngāi Tahu (1996) and negotiating the Ngāi Tahu Claims Settlement Act 1998 has played a crucial part in restoring influence and involvement that is a reflection of tino rangatiratanga.

Central to the function of participation is building and maintaining effective relationships with the community, with local government and government agencies in the decision-making framework in Otago. This requires mutual respect, effort and understanding from all parties who have the wider objective of a healthy environment at heart.

The task of ensuring the Crown recognises and gives effect to the Treaty of Waitangi and respects their treaty partner remains a pivotal task that influences whether success or failure occurs at a local level.

This Plan is not a starting point but a continuation on the achievements of many people over the years, with the vision we hold for the environment in which we are a part of, reflected in the policies of this plan, for now and future generations.

We commend all who have contributed to the production of this the Kāi Tahu ki Otago Natural Resource Management Plan 2005.



**David Higgins**  
Te Rūnanga o Moeraki  
Upoko



**Matapura Ellison**  
Kāti Huirapa Rūnanga ki Puketeraki  
Deputy Upoko



**Kuo Langsbury**  
Te Rūnanga o Ōtākou  
Upoko



**Rewi Anglem**  
Hokonui Rūnanga  
Kaiwhakahaere

**STEPHEN CAIRNS****OTAGO REGIONAL COUNCIL**

Under the Resource Management Act 1991, the Otago Regional Council is charged with sustainably managing Otago's land, air and water resources. The iwi natural resources planning document for the Otago Region, the Kāi Tahu ki Otago Natural Resource Management Plan 2005 (the Plan) is an important document in assisting the Council to meet its statutory obligations. The Otago Regional Council has been happy to support this Plan's development and looks forward to using the Plan in its everyday work. The knowledge and information contained within the Plan will be of benefit to the Otago Regional Council and its committees in maintaining and enhancing the region's coastal, river and lake environments and the sustainable management of land and resources. In this respect, Otago Regional Council planning and implementation will benefit from integrating the objectives and policies as stated in the Plan into our own planning frameworks, for the benefit of the whole region.

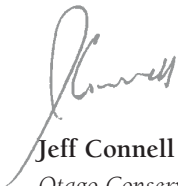
I am pleased that our relationship with Kāi Tahu ki Otago, both formally and informally, is strong and growing. It is in the spirit of that relationship that we congratulate Kāi Tahu ki Otago for producing an excellent resource for the region's future.


**Stephen Cairns**

*Otago Regional Council*  
Chairperson

**JEFF CONNELL****DEPARTMENT OF CONSERVATION**

The Department of Conservation is committed to managing New Zealand's publicly owned natural and historic heritage for the benefit of all New Zealanders and to promote conservation generally. In order to achieve this, we need to work closely with communities, businesses, landowners, local authorities, conservation organizations and tangata whenua. We were pleased to support the first iwi natural resources management plan and now the development of the Kāi Tahu Natural Resource Management Plan 2005 (the Plan). We consider the Plan's production as an aid to the development of our relationship with tangata whenua in the Otago Conservancy. As our kōrero has grown over the years, it has become increasingly obvious that Kāi Tahu ki Otago natural resources philosophy and our own are moving closer together - the protection and enhancement of our natural resources and heritage for today and for future generations. It is through cultural management tools such as the KTKO NRMP 2005 that DoC and iwi can achieve better understanding and, in doing so, form constructive partnerships to work and advocate for achieving our shared vision for the region.


**Jeff Connell**

*Otago Conservator*  
Department of Conservation

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**PART 1**  
**INTRODUCTION**  
**AND USE**

*Chapters 1 - 2*





# 1 INTRODUCTION *HE KUPU WHAKATAKI*

*Kāi Tahu ki Otago published the Kāi Tahu ki Otago Natural Resource Management Plan in 1995. Since 1995 many legislative and structural changes within Kāi Tahu have highlighted the need for a review of the Plan.*

*This Chapter outlines background information necessary to understand the structure of the Kāi Tahu ki Otago Natural Resource Management Plan 2005.*

## 1.1 KĀI TAHU KI OTAGO NATURAL RESOURCE MANAGEMENT PLAN 2005

### *TE MAHERE WHAKAHAERE O KĀ RAWA TAIAO O KĀI TAHU KI OTAGO*

This is the principal planning document for Kāi Tahu ki Otago<sup>1</sup>. The Kāi Tahu ki Otago Natural Resource Management Plan 2005 (KTKO NRMP 2005), has been developed over a 2-year period through extensive consultation with the 4 Papatipu Rūnaka of Otago as well as consultation with, and input from, the Otago whānau and rōpū groups and Southland and South Canterbury Rūnaka.

The KTKO NRMP 2005 utilises the geographic boundaries of the Otago Regional Council<sup>2</sup> to give a focus to the Plan unless requested to do otherwise by one of the Papatipu Rūnanga that comprises Kāi Tahu ki Otago. However, it is important to acknowledge that these “artificial” boundary lines do not align with those of custom and tradition of whānau and hapū, for example the Waitaki Catchment extends beyond the artificial boundaries of the Otago Regional Council<sup>3</sup>.

The holistic nature of the Kāi Tahu ki Otago approach to natural resource management means many issues identified in this Plan are potentially addressed by a number of agencies. This reflects the inability of the existing legislation and institutional structures to fully incorporate Kāi Tahu ki Otago values, concepts and concerns, as well as highlighting the need for integration across agencies.

The KTKO NRMP 2005 represents the view of a Treaty partner, in addition to that of a stakeholder in the larger community. The KTKO NRMP 2005 has been developed to:

- Provide the principal planning document for Kāi Tahu ki Otago.
- Provide information, direction and a framework to achieve a greater understanding of the natural resource values, concerns and issues of Kāi Tahu ki Otago.
- Provide a basis from which Kāi Tahu ki Otago participation in the management of the natural, physical and historic resources of Otago is further developed.
- The KTKO NRMP 2005 shall provide the basis, but not substitute, for consultation and outline the consultation expectations of Kāi Tahu ki Otago.

This Plan will **not** replace the continuing need for direct communication and dialogue “Kanohi ki te Kanohi” “Face to Face” or “Eye to Eye” contact with Kāi Tahu ki Otago.

## 1.2 PLAN PHILOSOPHY *TE MATAURAKA MĀTĀPONO O TE MAHERE*

The kaupapa of this plan is “Ki Uta Ki Tai”, “Mountains to the Sea” and reflects the Kāi Tahu ki Otago philosophy to natural resource management. This philosophy is depicted in the taoka “Kaitiakitaka” on the cover of this Plan that encompasses the values and beliefs of manawhenua.

The kaupapa “Ki Uta Ki Tai”, emphasises holistic management of the interrelated elements within and between catchments, from the air and atmosphere to the land and the coastal environment, implementation will require a collaborative approach<sup>4</sup>.

<sup>1</sup> The collective term Kāi Tahu ki Otago is used to describe the four Papatipu Rūnanga and associated whānau and rōpū of the Otago region, see 1.5 Kāi Tahu ki Otago

<sup>2</sup> See Map 1 Area of Plan

<sup>3</sup> See Map 4 Waitaki Catchments

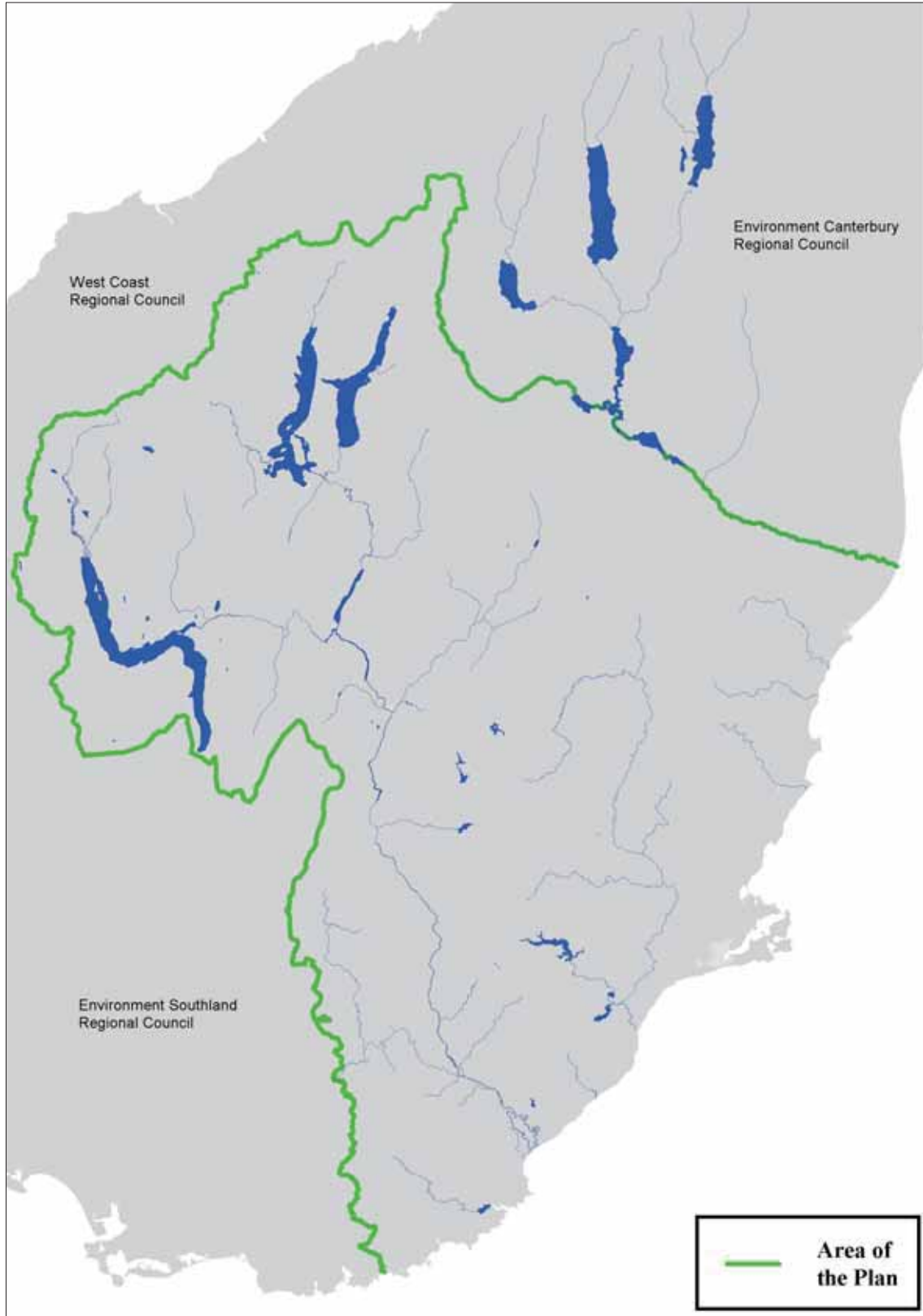
<sup>4</sup> See Chapter 11 Implementation and Review

**1.3 KĀI TAHU KI OTAGO NATURAL RESOURCE MANAGEMENT PLAN 2005**

*TE MAHERE WHAKAHAERE O KĀ RAWA TAIAO O KĀI TAHU KI OTAGO*

This Plan (KTKO NRMP 2005) incorporates the “values” and expands on the “Management Guidelines” of the Kāi Tahu ki Otago Natural Resource Management Plan 1995 to introduce a planning framework that informs the reader of Kāi Tahu ki Otago natural resource management policies.

**Map 1** *Area of Plan*



#### 1.4 KĀI TAHU

Kāi Tahu whānui, represented by Kā Papatipu Rūnaka and Te Rūnanga o Ngāi Tahu, comprise people of Kāi Tahu, Ngāti Māmoe and Waitaha descent, who hold manawhenua over an area that includes the entire Otago region.

The takiwā or tribal area of Kāi Tahu whānui includes all the lands, islands, and coasts of Te Waipounamu south of Te Parinui o Whiti on the east coast and Te Rae o Kahurangi Point on the west coast as described in the Te Rūnanga o Ngāi Tahu Act 1996<sup>5</sup>. Takiwā is determined by the principles of manawhenua that underpin ancestral rights, the origins of which are traceable and extend back to the lines of the Waitaha people<sup>6</sup>.

Kā Papatipu Rūnaka are recognised in the Te Rūnanga o Ngāi Tahu Act 1996, and are principally responsible for managing the collective interests of their members in the areas of cultural, spiritual, economic, moral and social spheres. Membership of Kā Papatipu Rūnaka is based on whakapapa connection to whānau and hapū who hold manawhenua status to an area and resource.

#### 1.5 KĀI TAHU KI OTAGO

Throughout this Plan, reference to Kāi Tahu ki Otago should be interpreted as including the four Papatipu Rūnaka and associated whānau and rōpū of the Otago Region. The four Papatipu Rūnaka are:

- Te Rūnanga o Moeraki
  - Kāti Huirapa Rūnaka ki Puketeraki
  - Te Rūnanga o Ōtākou
  - Hokonui Rūnanga
- Associated whānau and rōpū include:
- Moturata Taieri Whānau
  - Waikoau Ngāi Tahu Rūnanga (S.O.) Incorporated.

While the collective term Kāi Tahu ki Otago is used throughout this Plan, it is recognised that individual Papatipu Rūnaka, and associated whānau and rōpū groups, have specific interests in particular areas.

##### 1.5.1 Shared Interest

The Te Rūnanga o Ngāi Tahu Act 1996<sup>7</sup> describes the takiwā of Kā Papatipu Rūnaka including Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākou and Hokonui Rūnanga. **However, it is important to acknowledge the shared nature of some of that interest with Papatipu Rūnaka located beyond the boundaries of the Otago region, particularly in the inland lakes and mountains of Otago<sup>8</sup>.** Kāi Tahu ki Otago are committed to working together to identify durable working relationships with the Papatipu Rūnaka with a shared interest.

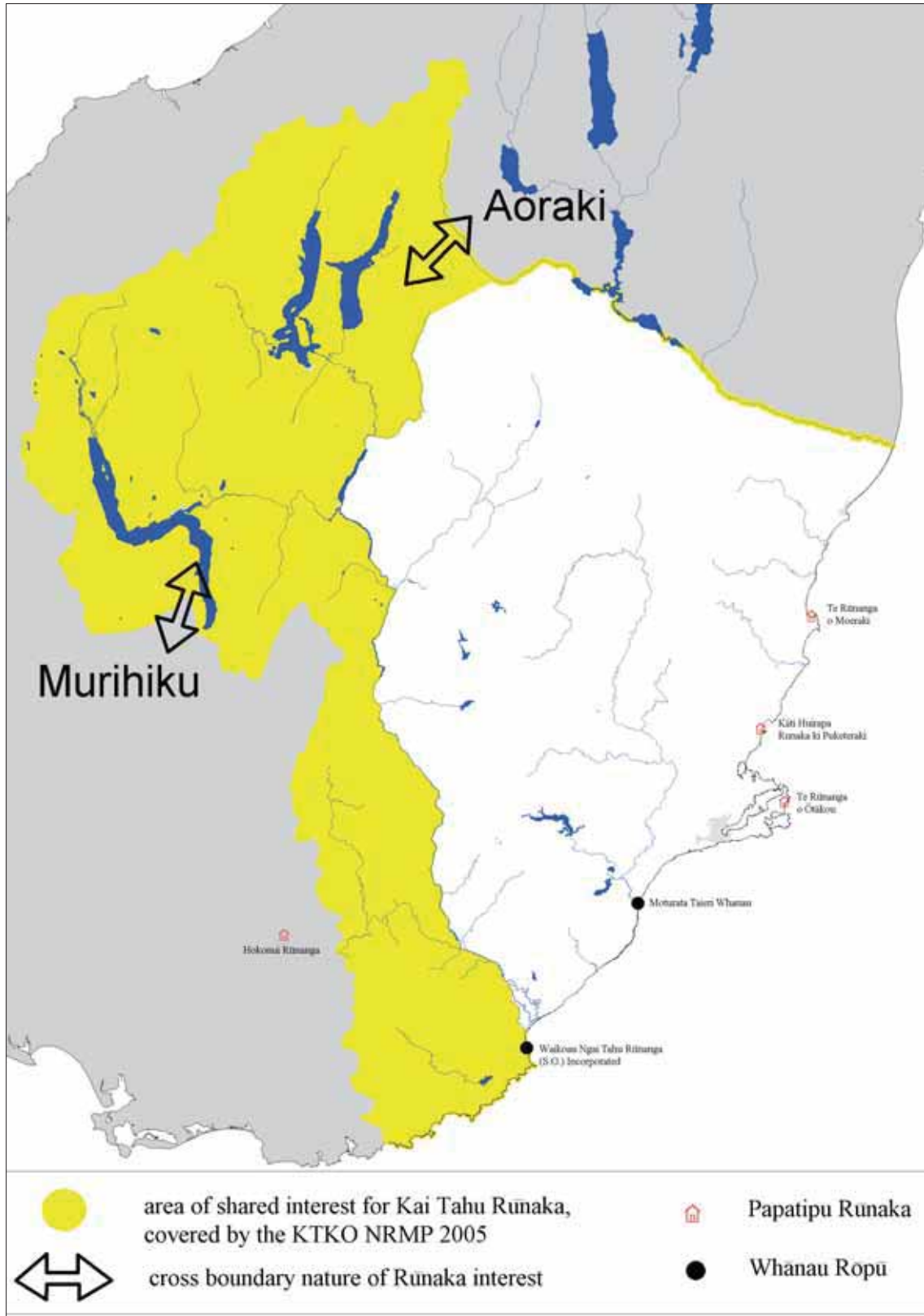
<sup>5</sup> See Appendix 1 First Schedule Te Rūnanga o Ngāi Tahu Act 1996

<sup>6</sup> See Chapter 3 Manawhenua and Kaitiakitaka

<sup>7</sup> See Appendix 1 First Schedule Te Rūnanga o Ngāi Tahu Act 1996

<sup>8</sup> See Map 2 Shared Interest

Map 2 Shared Interest



**1.6 REASONS FOR REVIEW HE TAKE MO TE TIROHAKA HOU**

The rights guaranteed to Māori through the Treaty of Waitangi and the enactment of the Resource Management Act 1991, placed responsibility on resource managers to understand and provide for iwi values and input into managing natural, physical and historic resources. The most effective way for iwi to enunciate values is through Iwi Management Plans that allow resource users and decision makers an understanding of Māori values while not substituting for the need for “kanohi ki te kanohi”, consultation. In response to this, Kāi Tahu ki Otago produced and published the Kāi Tahu

ki Otago Natural Resource Management Plan in 1995 (KTKO NRMP 1995). The KTKO NRMP 1995 was one of the first iwi management plans produced in New Zealand and is acknowledged as an innovative document.

Subsequent to the publication of the KTKO NRMP 1995 new legislation has been enacted that impacts on the currency of the Plan as well as changing the ability of Kāi Tahu ki Otago to respond and participate in the management of the natural, physical and historic resources. It was also noted at various hui that a comprehensive review of the KTKO NRMP 1995 was required.

Increasingly, the focus of resource management is on integrated resource management and the need to address resource management issues across agencies and government departments, most notably Department of Conservation, Fish and Game, and the Historic Places Trust along with the Local Government Agencies.

### **1.6.1 Te Rūnanga o Ngāi Tahu Act 1996**

Te Rūnanga o Ngāi Tahu was established, by the Te Rūnanga o Ngāi Tahu Act 1996, to assume responsibility for the protection of the beneficial interests of all members of Kāi Tahu whānui<sup>9</sup>.

Since the formation of the Kaupapa Taiao Unit (a specific Unit set up within Te Rūnanga o Ngāi Tahu to address environmental issues relevant to all of Kāi Tahu) a number of tribal policies relating to the natural environment have been developed<sup>10</sup>.

### **1.6.2 Ngāi Tahu Claims Settlement Act 1998**

The ability of Kāi Tahu ki Otago to express our traditional relationship with Te Ao Tūroa and to exercise our kaitiaki responsibilities has been drastically eroded over the last 160 years, post treaty.

The Ngāi Tahu Claims Settlement Act 1998 contains Cultural Redress elements of the Crown's Settlement Offer aimed at restoring that lost ability to give practical effect to kaitiaki roles and responsibilities. The Cultural Redress elements, enacted through the Ngāi Tahu Claims Settlement Act 1998 provide a unique opportunity to see Kāi Tahu mana over taoka resources and areas of land, recognised and given practical effect to in day-to-day management<sup>11</sup>.

### **1.6.3 Ngāi Tahu (Pounamu Vesting) Act 1997**

The Ngāi Tahu (Pounamu Vesting) Act 1997 formally vested all pounamu within the takiwā (including those parts of the territorial sea of New Zealand that are adjacent to the takiwā of Kāi Tahu) in Te Rūnanga o Ngāi Tahu on behalf of Kāi Tahu whānui.

The vesting of pounamu is an example of Kāi Tahu being able to exercise its kaitiaki responsibilities over this important cultural resource<sup>12</sup>.

### **1.6.4 KTKO Ltd**

A direct outcome of the KTKO NRMP 1995 was the four Papatipu Rūnaka of Otago working co-operatively to establish Kāi Tahu ki Otago Ltd (KTKO Ltd)<sup>13</sup>.

KTKO Ltd is a consultancy service responsible for assessing and processing resource management inquiries in an efficient and timely manner on a user-pays basis<sup>14</sup>. KTKO Ltd is experienced in iwi planning processes, environmental evaluation, cultural knowledge and values. In addition, KTKO Ltd holds information on archaeological sites and components of the Kāi Tahu ki Otago Resource Inventory<sup>15</sup>.

The ability of Kāi Tahu ki Otago to develop policies through the work undertaken by KTKO Ltd further highlighted the need for a comprehensive review of the KTKO NRMP 1995.

9 See Section 4.3 Te Rūnanga o Ngāi Tahu Act 1996

10 See Section 2.5 Linkage with other Plans

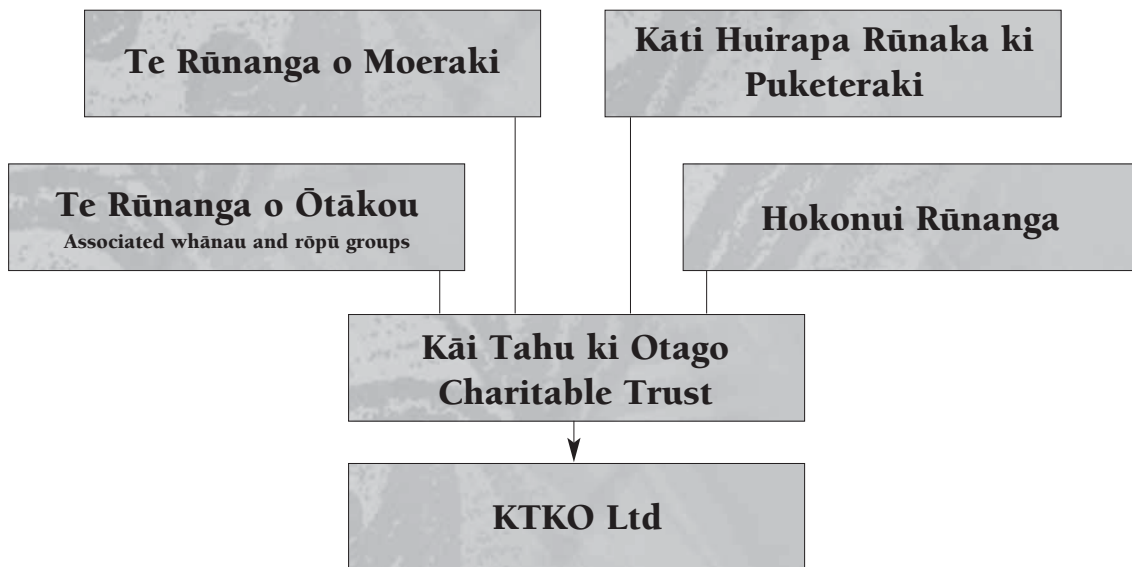
11 See Section 4.4 Ngāi Tahu Claims Settlement Act 1998

12 See Section 5.9 Pounamu

13 See Figure 1 KTKO Ltd Structure

14 See Appendix 36 Contact Details

15 See Chapter 12 Resource Inventory



**Figure 1 KTKO Ltd Structure**

### 1.6.5 Development of Resource Inventory Database

The development of a Resource Inventory Database, to record and access information, that better enables informed resource management decisions to be made, was seen as an essential outcome after the production of the KTKO NRMP 1995. The Resource Inventory Database will be an ongoing project. It is envisaged that the project will be completed within 5 years.

The KTKO NRMP 2005 contains a description of the methodology used to collect the data, however due to the sensitivity of some of the information collected the details including all information will be held in the first instance by Kā Papatipu Rūnaka<sup>16</sup>. Facilitation of information is undertaken by KTKO Ltd.

### 1.6.6 Resource Management Amendment Act 2003

The review of the Resource Management Act 1991 (RMA) in 2003 gave greater weighting to iwi management plans (IMPs) in Regional Policy Statements and regional and district plan development. Local Government Agencies must “take into account” any relevant planning document recognised by an iwi authority. Previously Local Government Agencies only had to “have regard to” such plans<sup>17</sup>. This heightened the role of IMPs and the need to update and review the KTKO NRMP 1995 in line with legislation and developments within iwi.

### 1.6.7 Further Reasons for the Review

When the KTKO NRMP 1995 was first launched, the intention was to provide updates by way of additional inserts, as and when additional material was completed. The rate of change for Kāi Tahu ki Otago has been more dramatic than envisaged at that time in terms of the development of policy, structure and legislation, hence the reason a complete review was undertaken. This review has enabled an update of the objectives and management guidelines contained within the KTKO NRMP 1995.

The review timeframe is also consistent with other statutory planning documents and acknowledges a 10 year “life span”. The KTKO NRMP 2005 will inform Kāi Tahu ki Otago and other natural resource managers in preparation for the imminent review of regional and district plans and the Conservation Management Strategy for Otago.

<sup>16</sup> See Chapter 12 Resource Inventory

<sup>17</sup> See Chapter 11 Implementation and Review

### 1.7 REVIEW PROCESS *TE HĀTEPE O TE TIROHAKA HOU*

A formal structure was established to undertake the review of the KTKO NRMP 1995. KTKO Ltd were appointed as project manager and tasked with seeking the funding necessary to undertake the review.

A Review Committee and a Review Working Group consisting of members of the four Papatipu Rūnaka and associated whānau rōpū of Otago was established. Meetings were held at the papatipu marae with Kā Papatipu Rūnaka from both the north and south invited, to allow for a robust and open process.

**Photo 1** *Some members of the KTKO NRMP 2005 Review Working Group*  
From left to right Kate Sedgley, Matapura Ellison, Maureen Wylie, Edward Ellison.



### 1.8 KĀI TAHU KI OTAGO ENDORSEMENT *TE WHAKAAE A KĀI TAHU KI OTAGO*

This Plan has been recognised and endorsed by Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākou and Hokonui Rūnanga as the principal planning document of Kāi Tahu ki Otago on the 21st of April 2005.

#### 1.8.1 *Iwi Management Plan Status*

This Plan was endorsed by Te Rūnanga o Ngāi Tahu Kaiwhakahaere, Mark Solomon on the 3rd of June 2005 in accordance with the Te Rūnanga o Ngāi Tahu Resolution (July 2003) to endorse environmental planning documents prepared by Papatipu Rūnanga based on set criteria. As such, this Plan must be considered a recognised planning document recognised by the iwi authority (Te Rūnanga o Ngāi Tahu) and has been lodged with the relevant local authorities.





## 2 HOW TO USE THIS PLAN

### HE TOHUTOHU HEI MAHI TIKA I TE MAHERE NEI

*This chapter provides an overview of the structure of the Kāi Tahu ki Otago Natural Resource Management Plan 2005 as well as information on how to use the Plan.*

#### 2.1 PLAN STRUCTURE TE HAKA O TE MAHERE

##### Part 1 Introduction and Use

*Provides an understanding of the plan philosophy, and use.*

- 1 Introduction and Purpose
- 2 How to Use this Plan

##### Part 2 Cultural and Legal Context

*Provides an understanding of the cultural and legal context of the Plan.*

- 3 Manawhenua and Kaitiakitaka
- 4 Legal Context

##### Part 3 Issues, Objectives and Policies

*Outlines the issues, objectives and policies for Kāi Tahu ki Otago for the Otago Region. The Otago Region Chapter contains the generic issues, objectives and policies for the entire region. Subsequent Chapters address issues and policies specific to each catchment.*

- 5 Otago Region
- 6 Waitaki
- 7 East Otago
- 8 Otago Harbour
- 9 Taieri
- 10 Mata-au/Clutha

##### Part 4 Implementation, Review and Resource Inventory

*Provides information on consultation and implementation methods and Plan review.*

- 11 Implementation and Review
- 12 Resource Inventory

#### 2.2 HOW TO READ THIS PLAN ME PĒHEA TE PĀNUI TIKA I TE MAHERE NEI

For Plan users the following steps should be taken to ensure all appropriate information is acquired from the Plan.

##### Part 1 Introduction and Use

**Step 1** Chapters 1-2 Read Chapters 1-2 for an understanding of the philosophy and context of this Plan.

##### Part 2 Cultural and Legal Context

**Step 2** Chapters 3-4 Identify the appropriate Papatipu Rūnanga that may have an interest in the area or activity<sup>18</sup>.

<sup>18</sup> Note the shared interest in Inland Otago, see Map 2 Shared Interest

<b>Part 3 Issues, Objectives and Policies</b>		
<b>Step 3</b>	<i>Chapter 5 Otago Region</i>	Identify the relevant value affected by the activity or proposal from the Otago Region Chapter section. A brief summary of values is below in section 2.3 with a full description in the Otago Region Chapter.  Identify the issues, objectives and policies of relevance to the activity or proposal.
<b>Step 4</b>	<i>Chapters 6-10 Catchments</i>	Locate the relevant value affected by the activity or proposal from the appropriate Catchment Chapter <sup>19</sup> .  Identify the issues and policies of relevance to the activity or proposal.
<b>Part 4 Implementation, Review and Resource Inventory</b>		
<b>Step 5</b>	<i>Appendix 35 Information Needs</i>	Identify the information needs. These are listed under the relevant values.
<b>Step 6</b>	<i>Chapter 11 Implementation and Review</i>	Identify the appropriate consultation method.

### 2.3 KĀI TAHU KI OTAGO VALUES *NGA UARA KAI TAHU KI OTAGO*

This Plan is based on the following Kāi Tahu ki Otago values:

- Wai Māori/Wai Tai
- Wāhi Tapu
- Cultural Landscapes
- Mahika Kai and Biodiversity
- Air and Atmosphere
- Coastal Environment
- Pounamu.

Chapter 5 Otago Region, provides a full description of each value, as well as listing the general issues, objectives and policies for each value.

While the values are listed separately for ease of use, it is important to recognise the overlaps, inter-dependence, connections and linkages between all values and the environment. Many of the issues, objectives and policies can be applied to more than one value; therefore users will need to scan associated values to be fully informed.

Descriptions of, and issues, objectives and policies for, Air and Atmosphere Coastal Environment and Pounamu are contained in Chapter 5 Otago Region.

<sup>19</sup> See Map 3 Catchments

## 2.4 ISSUES, OBJECTIVES AND POLICIES *KĀ TAKE, KA WHĀIKA ME KĀ KAUPAPA*

The KTKO NRMP 2005 builds on the previously stated “Management Guidelines” in the KTKO NRMP 1995 by reconfirming issues and objectives and establishing policies. This represents a significant step forward for Kāi Tahu ki Otago in protecting our values.

Extensive consultation with the four Papatipu Rūnaka of Otago, associated whānau and rūpū groups and Rūnaka beyond the Otago Region has been carried out to confirm the validity of the issues and to identify further, or new, issues since the publication of the KTKO NRMP 1995.

The issues, objectives and policies contained within Chapters 5-10 of this plan have been identified through the review of existing policy-type statements from Kāi Tahu ki Otago, Papatipu Rūnaka, KTKO Ltd and Te Rūnanga o Ngāi Tahu including:

- Cultural Impact Assessments produced by KTKO Ltd and Te Rūnanga o Ngāi Tahu.
- Non-notified resource consents processed by KTKO Ltd.
- Submissions on fisheries issues such as fisheries management, quota, and protection.
- Submissions by Kāi Tahu ki Otago on notified resource consents.
- Submissions on, and participation in Regional and District Plan developments.
- Participation in the development of the Otago Conservation Management Strategy, and National Park Plan.

### 2.4.1 *An Issue*

An “issue” is an existing or potential environmental problem or conflict, including any activity, or a current or future state, that adversely impacts on Kāi Tahu ki Otago values.

### 2.4.2 *An Objective*

An “objective” is the desired result in order to protect Kāi Tahu ki Otago values. They are statements of a future state that is sought through the management of identified issues and advocacy to agencies and individuals with roles and responsibilities in the management of the natural, physical, and historic resources of Otago. Many of the objectives are long-term in their focus and it is acknowledged that they may not be achieved in the ten-year “life” of the KTKO NRMP 2005.

### 2.4.3 *A Policy*

A “policy” is the course of action, desired action or process to be taken to achieve the stated objectives. The intended outcome is the protection and enhancement of Kāi Tahu ki Otago values.

### 2.4.4 *Policy Conventions*

The following policy conventions have been adopted to provide consistency throughout the policy statements in the Plan. Kāi Tahu ki Otago acknowledge that by utilising these policy conventions there is a need to work with other agencies to achieve the objectives.

<b>To Oppose</b>	An activity or action that <b>must not occur</b> to achieve the objectives of this Plan and protect Kāi Tahu ki Otago values.
<b>To Require</b>	Something that <b>must be done</b> in order to achieve the objectives of this Plan and protect Kāi Tahu ki Otago values.
<b>To Promote</b>	Working in <b>collaboration</b> with other agencies to promote Kāi Tahu ki Otago values.
<b>To Encourage</b>	<b>Encourage action</b> (through the Plan and other methods) by other agencies to protect Kāi Tahu ki Otago values.
<b>To Discourage</b>	Generally <b>not supported</b> in order to protect Kāi Tahu ki Otago values.
<b>To Identify</b>	Work in <b>collaboration</b> with other agencies where stated or, independently to identify Kāi Tahu ki Otago values.
<b>To Protect</b>	Work in <b>collaboration</b> with other agencies to protect Kāi Tahu ki Otago values.

## 2.5 LINKAGE WITH OTHER PLANS *TE HONOKA KI KĀ MAHERE ANO*

### 2.5.1 *Internal Plans*

Te Rūnanga o Ngāi Tahu has a number of plans currently in place, or in development. These plans have been produced to provide guidance to those who manage the natural, physical and historic resources within the Kāi Tahu takiwā. Each plan is distinct in its scope and purpose, and contributes to the goal of achieving better management and environmental results and more effective input by Kāi Tahu.

### 2.5.2 *Ngāi Tahu Freshwater Policy (1999)*

The Ngāi Tahu Freshwater Policy sets out tribal policies with respect to freshwater.

It describes in general terms:

- Kāi Tahu association with freshwater resources;
- the ways in which Kāi Tahu, as takata tiaki, want to participate in freshwater management; and, most importantly
- the environmental outcomes sought.

The KTKO NRMP 2005 incorporates the broad policies stated in the Ngāi Tahu Freshwater Policy and establishes specific localised policy, as well as laying the foundations for continued and improved consultation with Kāi Tahu ki Otago on water-related resource management issues in Otago.

### 2.5.3 *Ngāi Tahu 2025*

Te Rūnanga o Ngāi Tahu has produced, Ngāi Tahu 2025 (NT 2025) a strategy that outlines where Ngāi Tahu want to be in 2025. NT 2025 includes tribal direction related to te ao tūroa. The KTKO NRMP 2005 helps achieve the outcomes and outputs detailed in NT 2025 at the local level for Kāi Tahu ki Otago, Specifically:

- Papatipu Rūnaka has developed to the extent where they are able to meet all their natural resource and environmental management responsibilities.
- Papatipu Rūnaka has a range of iwi members working in the natural resource field.
- The abundance of, access to, and use of mahika kai is increased for whānau.
- Councils have adopted in their everyday practice Kāi Tahu philosophies such as Ki Uta Ki Tai planning.
- All wāhi tapu, mahika kai and other taoka tuku iho are adequately and appropriately protected according to Kāi Tahu values and interests.
- All waterways are enhanced and restored, meeting cultural standards, being void of weeds, having indigenous riparian corridors, with water quality and quantity sufficient to support healthy populations of species of cultural significance.

### 2.5.4 *Te Rūnanga o Ngāi Tahu Pounamu Resource Management Plan (2002)*

As a result of the Ngāi Tahu (Pounamu Vesting) Act 1997 Ngāi Tahu has developed a resource management plan that allows for the on-going use and protection of this resource in a way that is sustainable and responsible<sup>20</sup>.

### 2.5.5 *External*

The extent and scope of Kāi Tahu ki Otago cultural values and policies being incorporated in external plans developed by other agencies is severely limited. Most only identify issues while the provisions in external documents often represent the agencies' interpretation of the Kāi Tahu ki Otago view.

Failure to implement Kāi Tahu ki Otago policies stated in this Plan in Local Government Agency plans will be considered a breach of contract under the Treaty of Waitangi.

<sup>20</sup> See Section 5.9 Pounamu

### 2.5.6 *Regional and District Plans*

Kāi Tahu ki Otago values have been incorporated, to varying extents, in the following Regional and District Plans and Policy Statements:

- Otago Regional Council: Regional Plan Waste (1997)
- Clutha District Council District Plan (1998)
- Otago Regional Policy Statement (1998)
- Queenstown Lakes District Council District Plan: Proposed (1998)
- Waitaki District Plan: Proposed (1999)
- Dunedin City Council District Plan: Proposed (1999)
- Central Otago District Plan: Proposed (2000)
- Otago Regional Council: Regional Plan Coast (2001)
- Otago Regional Council: Regional Plan Air (2003)
- Otago Regional Council: Regional Plan Water for Otago (2004).

### 2.5.7 *Department of Conservation Plans and Strategies*

Kāi Tahu ki Otago values have been incorporated, to varying degrees, in the following Department of Conservation Management Strategies and Plans:

- General Policies for National Parks (1983)
- Otago Conservation Management Strategy (1998)
- Aoraki National Park Management Plan (2004)
- Mount Aspiring National Park Plan (1994)<sup>21</sup>.

### 2.5.8 *Ministry of Fisheries*

Te Rūnanga o Ōtākou and Kāti Huirapa Rūnaka ki Puketeraki have developed the Te Tai o Arai Te Uru – Kaupapa Tuaki Fisheries Management Plan for the Otago Tuaki/Littleneck Clam resource in association with the Ministry of Fisheries. The plan provides for the transition of the Otago Tuaki/Littleneck Clam resource to management under the Quota Management System and provides a framework for its long-term development and management.

<sup>21</sup> Gazetted



**PART 2**  
**CULTURAL AND LEGAL**  
**CONTEXT**

*Chapters 3 - 4*





### 3 MANAWHENUA AND KAITIAKITAKA

Naia te toa a Tarewai, kei aia anō tana Patu

*There is an appropriate authority for everything*

*This chapter provides an overview of the history and location of the Papatipu Rūnaka and whānau rōpū groups of the Otago region.*

#### 3.1 MANAWHENUA

The term manawhenua refers to those whānau and hapū with customary linkage and rights to a site, place and/or resource through the following tikaka:

<b>Umu takata</b>	Rights through conquest.
<b>Take whenua</b>	An inherited right.
<b>Mahi takata</b>	An ancestral right proven because of discovery and subsequent naming of the land and resource.
<b>Tūturu te noho</b>	Rights of settlement, which are only valid if there is an established inter-generational permanence or ahi kā.
<b>Kai taoka</b>	Exchange of land or resource for taoka (gift and or other resources).
<b>Tuku whenua</b>	The gifting of land and resource in traditional times, prior to European contact.
<b>Take tūpuna</b>	A right that can be established because an ancestor has asserted themselves over land or a resource.

It is important to understand that the right of manawhenua is traceable and defined by tradition and whakapapa to particular customary rights that whānau and hapū have inherited through the above tikaka.

#### 3.2 KAITIAKITAKA AND MAURI

Kaitiakitaka is derived from the word “kaitiaki” which includes guardianship, care and wise management. The term has received recognition in Section 7(a) of the Resource Management Act 1991 and is defined in the Act as “*the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources; and includes the ethic of stewardship*”.

Mauri is imbued in all things and is a special power derived from the Supreme Being. At birth the two parts of body and wairua are joined together as one by the mauri. On death the mauri is no longer able to bind these elements together and the physical and spiritual parts are separated. The forest, waters, the life supported by them, together with natural phenomena such as the mist, wind and rocks, possess a mauri or life force. The primary management principle for Māori is the protection of mauri or life-giving essence of an ecosystem from desecration.

Māori words such as kaitiakitaka, mauri, wairua and tikaka are expressive of customary concepts that are best understood in the context of the language and the culture they derive from. To reinterpret these meanings into the English language by its very nature loses significant context and meaning. To absorb such words into legal frameworks and create definitions to suit the legislative norm is reductive and creates a simplistic explanation. The Kāi Tahu understanding of kaitiakitaka is much broader than that defined in the RMA 1991.

##### 3.2.1 The Kaitiaki Te Kaitiaki

Prior to 1840 and the implementation of the new colonial order, it can be reasonably said that mana and kaitiakitaka were often synonymous. Iwi collectively protected to the fullest extent their territory and the resources in it, in concert with the affiliated hapū.

The whānau, hapū, and iwi maintained and developed their tikaka for the wellbeing of the people. It was the kaitiaki duty to protect and sustain the resources so they remained for their grandchildren

and their grandchildren's grandchildren also, *mo a matou mokopuna ake tonu ake*. The bottom line for all decisions therefore was the sustainable management of the resource and the continuing well-being of the hau kāika.

The kaitiaki looked for signs in nature as the season progressed that indicated the potential for successful planting or hunting or the cessation of hunting or gathering. Mātauraka Māori developed out of close observation and an amount of trial and error. An example is that when the kukupa feasted on the miro, it was not only time to hunt the bird, but also to gather the fruit of the miro.

For Kāi Tahu ki Otago kaitiakitaka is not only about the physical resources, it is about being manawhenua and maintaining a relationship to the spiritual dimension and influences of wairua and tapu.

Takata whenua traditionally invoked and exercised kaitiakitaka over the resources of the land and sea but a kaitiaki could take many forms and could be benevolent or malevolent.

The ruru was seen as the kaitiaki of the night, the kea kaitiaki of the inland fastness and the tōroa kaitiaki of the coast. This is recognised in the following whakatauki:

<b>E hāparaki atu kea ki uta</b>	<i>the screeching of kea far inland</i>
<b>Ki ruru ki pō</b>	<i>to owl the guardian of night</i>
<b>Ki tōroa ki tai</b>	<i>to tōroa along the coast</i>
<b>Hai karere ā iwi ki tara rāwāhi rā</b>	<i>these are our messenger birds who take our messages along the seas and beyond<sup>22</sup></i>

In tradition, kaitiaki were sometimes said to have abilities to call on supernatural powers in guarding their charges. The great Kāti Māmoe rakātira Te Rakitauneke was said to have had a guardian taniwha called Matamata who lived on the Taieri Plain.

The mechanisms of the kaitiaki for enacting temporary or complete closure of a resource are rāhui and tapu. A rāhui can be declared and the boundaries of it defined sometimes by the placement of pou during the rāhui ceremony and a tapu laid down. If the tapu was considered strong enough no-one would dare violate it. The rāhui and tapu were enforced by the solidarity of the people and the mana of rakātira.

The customary exercise of mana and kaitiakitaka were eventually curbed partly as a result of the changing social order post-treaty and also to the lack of recognition in ensuing legislation and decrees firstly of the governor and later parliament until recent times. In spite of this however, Manawhenua have maintained much of their traditional environmental knowledge and the concept of kaitiakitaka.

### 3.2.3 Kaitiakitaka Today Kaitiakitaka i Tēnei Wā

Since the KTKO NRMP 1995 was printed, there has been a significant improvement in the capacity of Kāi Tahu ki Otago and Te Rūnanga o Ngāi Tahu to exercise kaitiakitaka. Firstly the KTKO NRMP 1995 provided a base from which a number of initiatives sprung, the preparation of the iwi plan in itself was a “growth spurt” that gave kaha to the role of kaitiaki. It informed all stakeholders, councils and consultants of the “position” Kāi Tahu ki Otago had on natural resource management matters. It also gave impetus to the concept of the iwi consultancy KTKO Ltd that opened in 1997. Of even greater significance is the advent of Te Rūnanga o Ngāi Tahu in 1996 and the Cultural Redress component of the Ngāi Tahu Claims Settlement Act 1998.

The KTKO NRMP 2005 is a continuing expression of kaitiakitaka for the Otago Region.

22 Source Huata Holmes

### 3.3 WHAKAPAPA

Whakapapa is central to our identity and describes a familial relationship in which manawhenua are enveloped through custom and tradition with their lands, waters or sea. It is a bond that is reciprocal, manifest in our language through waiata, pūrākau, whakataukī and place names. Management, use and protection of the many natural resources are framed in the belief of interconnectedness, and the cultural values that underpin that world view.

We are of the Uruao, Arai-te-uru, Tākitimu waka, of the Kāti Rapuwai, Waitaha, Kāti Māmoe and Kāti Tahu people. Our traditions reach back to the very beginning of time, to the creation of land and sea, to the emergence of humankind. In this sense, we are a people who define their right to Manawhenua status and represent the mana of the land. Through having a culture, language, traditions, resource use and management, place names and whakapapa to the land well before other arrivals to this land, we are Manawhenua. This hallowed status is determined by whakapapa and the traditions that place whānau and hapū in a place and at a time in history as the true customary right holders. Continuous occupation and regularly exercising customary use rights to resources in a given territory are also an important means of keeping the “fires burning” to uphold ahi kā status.

The ability to access and use the range of resources, as did our tīpuna, is a long-held aspiration. The resources are a taoka, custom associated with the gathering, and use gives body to our culture. It is a function of Manawhenua to recognise and honour our traditions and associations to the landscape and resources, champion responsible use and protection so that future generations may commune and enjoy the benefits.

In former times, the rights and management were exercised by the actual right holders, the hapū and extended whānau, through their rakātira. Following the signing of the Treaty of Waitangi, the hierarchical nature of the tribal political structure was displaced by a democratic system, out of which arose the Rūnaka, or council, framework. Land withheld from the land sales in the 1800s, commonly known as Māori Land Reserves, was apportioned to the customary right holders of each area and today represents an important means of determining who hold the rights of manawhenua. This was reconfirmed when the Te Rūnanga o Ngāi Tahu Act 1996 was passed<sup>23</sup>.

### 3.4 Papatipu Rūnaka

The Papatipu Rūnaka structure is a practical means of addressing issues in common to their constituent hapū, while the underlying authority of Papatipu Rūnaka is inseparable from hapū and their custom and tradition. The takiwā or area of interest that the individual Papatipu Rūnaka operate in exclusively is most pronounced in the coastal environment, while Rūnaka interests merge as the distance from the coastal environment increases inland, or out to sea<sup>24</sup>.

Several whānau rōpū operate in the coastal area of Otago. They are located in areas that hold a strong tradition of Kāti Tahu presence close to the Papatipu lands reserved from the 1840s land sales. The whānau rōpū are organisations whose operations are based on informal co-operation with the existing Papatipu Rūnaka.

#### 3.4.1 Location of Papatipu Rūnaka and Whānau Rōpū

The most definitive indication of Papatipu Rūnaka territory can be applied to the coastline, which is more to do with the heavy reliance Kāti Tahu ki Otago had on this resource for survival following the land sales and loss of inland mahika kai than traditional boundaries<sup>25</sup>.

<sup>23</sup> See Section 4.3 Te Rūnanga o Ngāi Tahu Act 1996

<sup>24</sup> See Section 1.5.1 Shared Interest and Map 2 for a description of the shared nature of inland Otago

<sup>25</sup> See Section 1.5.1 Shared Interest

### 3.4.2 Coastal Management Areas<sup>26</sup>

- **Te Rūnanga o Moeraki** - Waitaki River south to Shag River.
- **Kāti Huirapa Rūnaka ki Puketeraki** - Shag River south to Purehurehu (north of Heywards Point).
- **Te Rūnanga o Ōtākou** - Purehurehu south to Mata-au (Clutha River). Moturata Taieri Whānau operate within this sphere from Bruces Rocks south to Tokomairiro. **Waikoau Ngāi Tahu Rūnaka (S.O.) Incorporated** operate within this sphere from Tokomairiro south.

Ownership of Māori land is an important determinant of customary rights, as is recognition of place names, burial sites, traditional use of seasonal resources, cultural indicators such as wāhi taoka and ancestral links over time, including the practice of kaitiakitaka. Takiwā is reaffirmed on a regular basis through dialogue, speech, waiata, wānaka and practice, and transfer to succeeding generations.

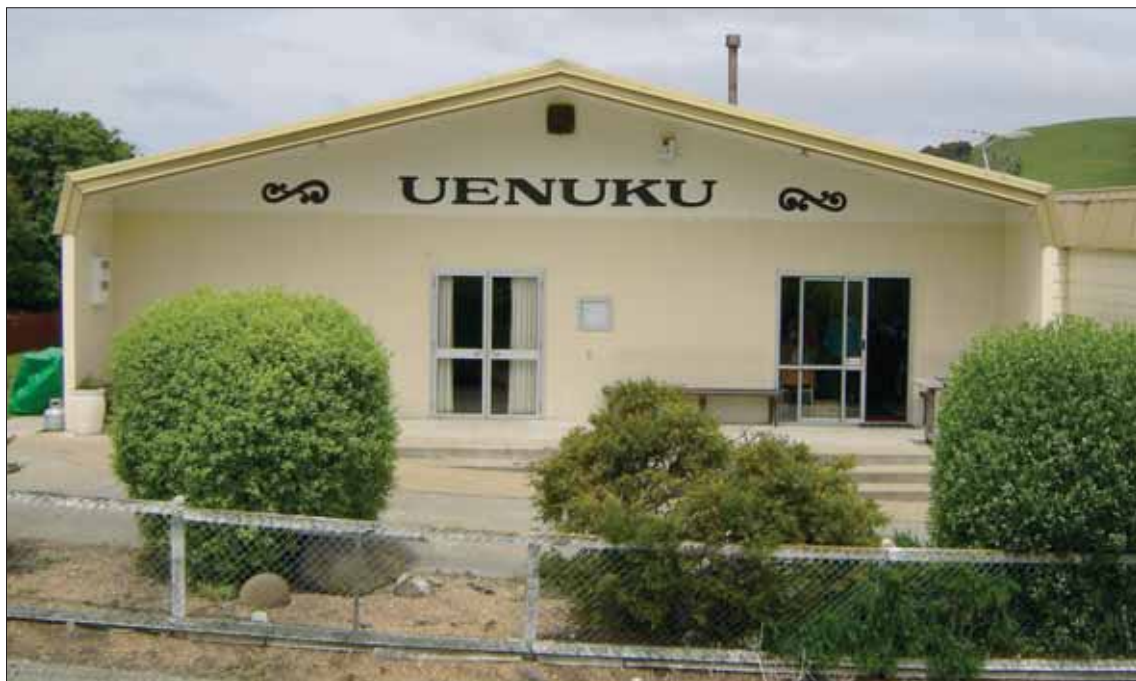
Traditional rights of access to resources were exercised on a seasonal basis by mobile sections of hapū generally utilising the same camp sites each time. The multi hapū nature of southern Kāi Tahu ensured that takiwā was determined on a rights basis according to the particular whakapapa and precedents established by the original forebears.

The ability to trace access through many generations of forebears to particular resources was crucial. This system of resource use and management is synonymous with southern Kāi Tahu.

### 3.5 TE RŪNANGA O MOERAKI

As the northern-most of the Otago Rūnanga, Te Rūnanga o Moeraki whānau are noted for the spread and breadth to which our people did, and still do, travel out and among our relations, and the diversity of hapū that whakapapa to the marae, drawing together the elements of Kāi Tahu whānui.

Photo 2 Te Rūnanga o Moeraki - Uenuku



<sup>26</sup> See Section 1.5.1 Shared Interest

The spirit of our marae is expressed in a contemporary waiata written for our Rūnaka by one of our younger members:

*Tiaho iho nei ko te whetū rakātira  
Hei tohu nō ruka mō te ara i te uru  
Takoto kau ana te paeka o te waka  
Horoia kā kete taoka i Kaihinaki  
E te rehu tai Araiteuru kāika e te po*

*Tū mai rā kā mauka atua takahuritia ki te kōhatu  
E te hau toka, hei pouhere whenua, pouhere takata  
Tēnā rā a Pukeuri, ka waewae i rere atu i tōna tihi  
Ka hoki ki te pū o Pakihiwitahi e kekeho atu nei  
Poporoa kau ana mō te pūkākaho o Puketapu  
Ko te heke o te karariwha whakahauora kā kōhaka  
Whatua kā aho tūpuna o te whare  
Hei tīhaka pūmau, uhia te whenua  
Taiāwhiotia kā whare i Manuhaea  
Whakamakuku kā moka i te huka a Aoraki  
E rere atu ana i te au o Waitaki*

*Taia kā toka i te moko i Takiroa, i Maerewhenua  
Whiua kā aho ki kā taoka a Tūhaitara, a Kahukura  
Mau tonu te pona ki te tīhaka tamahana te Raka-a-Hine-atea  
E mumuru ana ahi o Moeraki, o Matuatiki i te uairua  
Kawe ko te kupu o te morehu ki te ao  
Takohua ka tapuwae i Kātigi  
Haumiri i te tai ki Matakaea, ki te waha o Waihemo e<sup>27</sup>*

Our tūpuna were traditionally based at Koraritahuri (known also as the second kaik), Puna-o-maru, the old village at Georgetown (in the Waitaki Valley) and at Taki Karara at Wānaka. This spread is reflected in the Māori reserves that pertain to the Rūnaka, our papatipu lands. The hapū of Moeraki include Kāti Hateatea, Kāti Tuahuriri, Kāti Rakiamao, Kāti Kahukura, Kāti Te Aotamarewa, Kāti Urihia, Kāti Hinemihi, Hinematua and Kāti Tuke.

Our whare tūpuna is named Uenuku. Wairutuatai, Uenuku's wife, is the name of the whare kai. These tūpuna are the grandparents of Tahupotiki. At Koraritahuri, the school of learning, Omanawharetapu, was intentionally burnt down after the whare tūpuna Uenuku was built nearby.

The wharenuī which stands today was built in 1985 around the old wharenuī, which was then demolished and incorporated into the new whare.

Previously operating as the Moeraki Māori Committee, since 1994, our Rūnanga has been an incorporated society and shareholder in Te Rūnanga o Ngāi Tahu. As a papatipu marae of Kāti Tahu whānuī, our mission statement is:

*To provide for the wellbeing of the members of the Rūnanga by providing administration, guidance and management in their spiritual, cultural, moral, social and economic affairs and to administer the papatipu marae o Moeraki.*

27 Hana O'Regan (1995)

**Photo 3** *Ki Uta Ki Tai (From the Mountains to the Sea) - Uenuku*



Today the whānau activity centres around our marae, with our interests more concentrated in the Moeraki Peninsula area and surrounds. Features of note include: Te Rakahineatea pā, Koekohe (Hampden Beach), Te Kai Hinaki (the Boulders Beach) with its boulders. The large boulders are hinaki or eel baskets, the smaller boulders are the calabashes that hold water, the smallest are kumara. These are part of the provisions from the Araiteuru waka that foundered on a reef at the mouth of the Waihemo, spilling its occupants and provisions along the coast. Hape ka Taurake, the navigator of the waka and his slave Puketapu are now embodied in the local landscape, a column at the end of the Waihemo and a hill near modern-day Palmerston respectively. Onekakara is the name of Moeraki harbour; the second kaik was called “Moeraki” and “Korarithuri”. Korarithuri was also a traditional urunga waka and Matuatiki is the place often referred to as the first kaik.

Our interests are not restricted to this short list however, and extend to both the north and south of the Moeraki Peninsula.

### 3.6 KĀTI HUIRAPA RŪNAKA KI PUKETERAKI

Ko Hikaroroa tō mātou mauka  
 Ko te Papatuwhenua ko Puketeraki  
 Ko te awa a Waikouaiti  
 Ko te moana “Te Moana Roa a Kiwa”  
 Ko ngā waka a Huruhurumanu, Uruao, Tākitimu me Araiteuru  
 Ko ngā hapū, Kāi Te Ruahikihiki, Kāti Hāwea hoki tonu Kāti Huirapa ki Puketeraki

**Photo 4** Looking towards Maukoroa (Waikouaiti River Mouth).



Our coastal rohe stretches from the Waihemo River (Shag River) to Purehurehu, the strategic headlands being Matakaea (Shag Point), Huriawa, Pā Hāwea, Brinns Point, Mapoutahi and Heyward Point. We have a shared interest in the Lakes and Central Otago. At different periods these were inhabited by our ancestors who were Rapuwai, Hāwea, Waitaha, Kāti Māmoe and Kāi Tahu.

The people that lived in this area not only chose to live here because of the beautiful environment, but because of the abundance of kaimoana and mahika kai of the immediate areas.

Mataīnaka Lagoon (Hawkesbury Lagoon) was a major whitebait spawning area and was highly treasured for the catching of this delicacy. The Waikouaiti River was an abundant source of tuna, pātiki, shellfish and whitebait.

Waimataitai Lagoon (Goodwood) was another important whitebait area where they were trapped in ditches.

Many species of shellfish and fish can still be caught off the rocks at Huriawa, Puketeraki and Brinns Point. In the time of our ancestors the area held a treasure trove of taoka.

Okahau (Blueskin Bay) is a rich resource of shellfish, and Warrington surf beach is a place where frost fish are picked up.

The native bush that extended from where the Rūnaka Hall now stands at Puketeraki to Evansdale was believed to be one of the richest bird hunting areas in East Otago.

On Huriawa Peninsula Te Wera built his impregnable fortress and dwelt here for some time. The pā continued to be utilised and was an impressively organised complex. The carved meeting house was named Kuramatakitaki. The maukoroa (red ochre) found at Awamōkihi Bay, when mixed with shark's oil, was called kokowai and used to paint sacred carvings and parts of the human body. It was so highly regarded that a hapū from Taranaki came down and acquired some to paint their church.

### 3.6.1 *Huirapa Post 1840*

Today the centre of our takiwā is based at Puketeraki. The Rūnaka Hall was built in 1873 and as within our tikanga, it was named after our ancestor Huirapa, who was the son of Tūhaitara and Marukore. They lived approximately 15 generations ago. We greet Tūhaitara, Marukore and Huirapa, overlooking the Maniatoto and Strath-Taieri - gateway to the interior. As was customary, the kitchen-dining room was named after his wife Maririhau. After many years of planning, this whare was taken down and rebuilt, bringing to an end approximately 20 years of building focus.

It is a time of great change. A church was built at the top of the marae reserve also around 1873 and it was named Hui Te Rangiora (Place of Heavenly Assembly).

Day-to-day decisions at Rūnaka level are made by an Executive Committee elected from the wider membership of the Rūnaka. Trustees act on behalf of the beneficial owners for our various reserves.

Ancestral land is a place of belonging. It is one's tūrangawaewae, and it is a right derived from one's whakapapa.

**Photo 5** *Kāti Huirapa Rūnaka ki Puketeraki*



### 3.7 **TE RŪNANGA O ŌTĀKOU**

An ancient tauparapara known to Ōtākou and reminiscent of the importance the role the ruru played in the locality, agile, alert and a regular caller from the bush clad hills surrounding the harbour.

Tēnei te ruru te koukou mai nei  
 Kīhai i māwhitiwhiti  
 Kīhai i māarakaraka  
 Te upokōnui o te ruru  
 TEREKOU  
 He pō he pō  
 He aō he aō  
 Ka awatea!



**Photo 6** *Te Rūnanga o Ōtākou - Tamatea*



### 3.7.1 Ōtākou

The Otago Harbour is an important resource to Ōtākou people that has provided a thousand years of transport for generations of our Kāi Tahu tūpuna. It has also been our food basket, providing a rich source of kaimoana including the noted tuaki, while the tides are a constant reminder of nature at work.

The name “Ōtākou” is derived from the name of the eastern channel which runs by the present day settlement, a name transferred to the land by the early whalers, and later adopted by the wider region “Otago”.

Pukekura guards the entrance to our harbour, and in traditional times was one of the outstanding strongholds of Kāi Tahu in the southern part of Te Waipounamu. A place that embodies history, tradition, mana, and the turangawaewae of many illustrious ancestors.

The hapū of Ōtākou link by whakapapa to the Kāti Hāwea, Rapuwai, Waitaha, Kāti Māmoe and Kāi Tahu iwi. Some principal tūpuna names include; Raikaihautu, Hāwea-I-Te-Raki, HotuMāmoe, Nukutauraro, Te Rakitauneke, Tahu Potiki, Tukiauau, Te Ruahikihiki, Moki (II), Taoka, Te Pahi, Hakuiao, Taiaroa, Tuhawaiki, Karetai, Te Waewae, Tahatu, Wi Pōtiki.

There is much traditional evidence of occupation by the early people, particularly remembered in placenames, waiata, tauparapara and kōrero pūrākau.

Our people moved seasonally to gather food and tool-making resources from throughout the takiwā, this was an important means of maintaining customary connection and ahi kā. The hunting and gathering economy was a distinct feature of the southern lifestyle, a necessity that ensured our people regularly travelled throughout the takiwā seasonally.

Mahika kai or places where food resources could be produced or procured included the Taieri and South Otago wetlands, coastal Otago from Otago Harbour to Nugget Point, the catchment area of the Clutha River including the Manuherekia Valley and the major inland lakes and beyond to Poiopiotahi.

### 3.7.2 *Te Rūnanga o Ōtākou*

Today the centre for cultural activity and authority in the Ōtākou takiwā is our papatipu marae at Ōtākou. Our wharenuī Tamatea is the focal point, a place to celebrate, a sanctuary in times of life crisis, to discuss whānau, hapū, Rūnaka or iwi issues, and also a place to host our visitors.

Te Rūnaka Ōtākou, a council that is servant to the people, responsible for the management of the cultural, social, spiritual and economic affairs of the constituent whānau of Ōtākou.

### 3.7.3 *Pukekura*

Pukekura is an important physical and spiritual icon to the hapū of Ōtākou, occupied for generations by illustrious ancestors, a defensive position used by the high chiefs to provide protection for their people and from which they exercised mana over all things.

Pukekura is near the site where on the 13th June 1840, James Busby on board the *HMS Herald* hove to and obtained the signatures of the chiefs Karetai and Korako to the Treaty of Waitangi.

Pukekura enjoys a commanding view of all that lies before it, exposed as it is to the four winds it is a natural home to the tōroa, and as a consequence visitors from all corners of the earth<sup>28</sup>.

## 3.8 HOKONUI RŪNANGA

He toto o te tangata, he kai  
Te oranga o te tangata, he whenua  
*Food sustains the blood of people*  
*Land sustains their welfare*

The name Hokonui means “big snow” and although our Rūnanga is based in the Gore area, our interests in the Otago area, especially South Otago, are substantial. We hold this in common with other Otago Rūnanga through whakapapa, history and tradition. Our tūpuna would climb the highest peak in the Hokonui hills and say karakia to bless their feet before they walked into the interior of Central Otago on seasonal food gathering expeditions and to extract pounamu.

The rivers, lakes, and coast of the Otago area have been traditional sources of kai for people since our tūpuna first arrived in this land and for medicines and other materials that ensured the survival of our people.

The base for the Hokonui Rūnanga is 140 Charlton Road Gore.

Mahinga kai areas in the Hokonui ki Ōtākou takiwā include the Tautuku, Kaka Point, Waiwera, Kaihiku and Matau, as well as Central Otago and South Otago wetlands. It takes in coastal Otago from Wangaloa to Toe Toe in the South, the catchment area of the Clutha River including the Manuherekiā Valley and the major inland lakes and beyond and includes West Otago.

### 3.8.1 *Hokonui Rūnanga*

The Manawhenua centre for cultural activity and authority in the Hokonui area is located at 140 Charlton Road south of Gore in Eastern Southland. Like other papatipu marae in the Otago area, the Hokonui Rūnanga is the council, which is the servant of the people of its area with various responsibilities, both social and political. It is one of the 18 Papatipu Rūnanga that constitute the iwi authority responsible for policy development.

28 E. Ellison & B. Allingham (1995)

### 3.8.2 Māori Land

Māori land is one of the most important resources of our people, providing tūrangawaewae, passed down from generation to generation that has never been alienated, the remains of a once much larger estate. We belong to the land; unlike other cultures, the land does not belong to us. In other words, the land will always be there, we are only the kaitiaki for future generations and must ensure its ongoing sustainable use.

Maranuku is one example in which important physical evidence of Māori occupation has been lost or modified by development. Due to roading and buildings, identifying the pā, urupā and other historical sites is mostly by oral history. Some of this land was taken under the Public Works Act and made into a recreational park for the public. This is under claim to the Waitangi Tribunal to be given back to the owners.

Papatowai in the Catlins is another site of great historical value to Māori as a moa-era site. This was a major area for our Waitaha and Rapuwai tūpuna. Tautuku Peninsula is a wāhi taonga as some of our tūpuna lived there seasonally. The Tautuku Crown Forest has wāhi tapu where our tūpuna has rakau urupā (tree burial area). This is an ancient tradition. The Tautuku car park was once an urupā.

### 3.9 KORAKO KARETAI TRUST

The Korako Karetai Trust represents the descendents of Korako Karetai, the original owner of Pukekura. The trust was formed to negotiate the return of Korako Karetai land at Pukekura and to manage sustainable activities on the land, including identification and preservation of the cultural taonga of Pukekura for future generations.

### 3.10 MOTURATA TAIERI WHĀNAU

*Moturata (Taieri Island) at the mouth of the Taieri River is of special significance to all generations of Moturata Taieri Whānau. Evidence exists of early Māori occupation and a later whaling station. It is a haven for birds and sea mammals. A treasured place to visit and explore when time and tide allow.*

Māori occupation of the Taieri area probably dates back a thousand years. The numerous wāhi tapu, wāhi taoka and umu-tī throughout the coastal region, surrounding hills and Taieri Plain, testify to this long-term occupation and use of the area's resources.

The name "Taieri" was originally spelt "Tai-ari" and had three different meanings; "to smash or pulp", "shining river" and "tide on the eleventh night of the moon"<sup>29</sup>. Our tūpuna once moved with the seasons to obtain kai and other resources. The wider Taieri area provided a major mahika kai resource. The coastal areas provided a bountiful harvest of kaimoana including titī, seals, mussels and pāua, while the inland waterways provided tuna, kanakana, giant kokopu, pātiki and waterfowl. From the surrounding hills, weka, kukupa and tī-kouka from the cabbage tree were obtained. Taieri Māori also joined the annual autumn hikoī to the southern titi islands off Rakiura.

A number of fortified pā are known to have existed throughout the Taieri area. In later times our tūpuna occupied a fortified pā, Maitapapa, on the hill overlooking Henley. At the mouth, Motupara pā was on the south side of the river mouth, and the cave at the first rocky headland was Te Ao Kakume, named after the wife of a Kāti Māmoē chief. Kuri Bush was originally Te Kuri. Traditions recall Te Rereka a Haki te Kura and Te Rereka a Tuho Kairaki, as the two Māori leaps on the Taieri River, each encapsulating important events in the past.

29 G.Sutherland (1962)

When the early European explorers arrived, our tūpuna occupied kāika at Takoaihitau (Taieri Ferry) and at Taieri Mouth.

The Moturata Taieri Whānau was formed in 1991 and consists of descendants of the original tūpuna living at the Taieri papatipu kāika at Henley in the 1840s, and Kāi Tahu whānau who have moved into the area over the past 150 years. The whānau is recognised as being under the umbrella of the papatipu Rūnaka of Otago, and have a kaitiaki interest in the Taieri area and the wider Otago region shared in common with other Rūnaka and whānau. The whānau has no marae although the Taieri papatipu kāika at Henley had a Rūnaka Hall named “Te Wai Pounamu” which was disposed of in the 1920s.

### 3.11 WAIKOAU NGĀI TAHU RŪNANGA (S.O.) INCORPORATED

Nau te rourou

Naku te rourou

Ka ora ai koutou katoa

**Photo 7** *Pou Pou Tu Noa*



#### 3.11.1 South Otago

South Otago Rūnaka is formed of a group of people who have Kāi Tahu, Kāti Māmoe and Waitaha descent. Meetings are held on the first Saturday of each month excluding January. Members try to meet the commitments set down in legislation and endeavour to provide services required of mana tangata whenua to the local community and institutions within the community. Individual and whānau attend, when possible, combined Nga Rūnaka hui.

The Rūnaka is an Incorporated Society and fulfils the requirements of the Incorporated Societies Act. Our members have a high profile within the community and are represented on numerous committees. Some members work in schools and businesses within South Otago.

Decisions are made after informed discussion by consensus. Goodwill and co-operation are features remarkable amongst our members, especially as members are drawn from a small number of unrelated whānau who have lived in the area for up to four and five generations.

The members of Waikoau Ngāi Tahu Rūnaka (S.O.) Incorporated regard the coast from the mouth of the Tokomairiro, to the mouth of the Mata-au, to the mouth of the Mata Ura, to be of historical significance. Our tīpuna used these three rivers as pathways from lakes Wānaka, Hāwea and Wakātipu to the ocean according to the seasons, for food gathering. The ocean, lakes, estuaries and the forest provided an immense food basket.

We seek to maintain our relationships within our takiwā, with Māori and Pākehā ensuring that within the constraints imposed by the legislative bodies, the traditional place names indicate the traditional sources of mahika kai and the topography significant to our history.

Urupā and individual names of our ancestors are listed and, if possible, known and used. We also endeavour to observe and maintain the tikanga, traditions, customs and history that belong to our respective whānau.



## 4 THE LEGAL CONTEXT *TE HOROPAKI O TE TURE*

He mahi kaitakata, he mahi kai hoaka

*It is a work which devours people as sandstone devours pounamu*

*This chapter sets out the legal framework for Kāi Tahu ki Otago involvement in resource management.*

### 4.1 INTRODUCTION *HE KUPU WHAKATAKI*

Through legislation the Crown has articulated its obligations to ensuring takata whenua participation in natural resource management. Many statutes contain provisions relating to the role and inclusion of takata whenua in the management of natural, physical and historic resources.

### 4.2 TREATY OF WAITANGI *TE TIRITI O WAITANGI*

The Treaty of Waitangi is the foundation document of New Zealand society. It is the basis on which the partnership between takata whenua and the Crown was established.

The Kāi Tahu rakātira Karetai and Korako<sup>30</sup> signed the Treaty on behalf of the Otago section of the tribe at Pukekura (Taiaroa Heads) on 13 June 1840. Kāi Tahu also signed the Treaty at Akaroa and Ruapuke Island.

Kāi Tahu considered that the Treaty bound the whole tribe of Kāi Tahu irrevocably to an agreement that imposed both responsibilities and recognised the rights of both signatories, the Crown and Kāi Tahu. The Treaty should therefore, not be viewed as only guaranteeing rights to iwi Māori, for it is from this document that the Crown derives its right to govern in New Zealand.

#### 4.2.1 Text of the Treaty

There are two versions of the Treaty of Waitangi, the English version that is commonly thought to be the only version and the Māori version<sup>31</sup>. Kāi Tahu maintain that if there is any ambiguity, the Māori language text, as the version signed by the Kāi Tahu rakātira, should prevail. The international law principle of “Contra Preferentem” supports this conclusion.

#### 4.2.2 Kāi Tahu View of the Treaty of Waitangi

While the New Zealand Government, judiciary and the Waitangi Tribunal have chosen to express their interpretation of the Treaty in terms of its principles (Resource Management Act 1991, Section 8, Conservation Act Section 4), Kāi Tahu offer their own understanding of the text of the Treaty, as it was left to them by their tūpuna:

*Lady the Queen, great is our love for thee. This is a letter of love from all of us, that Te Tipa<sup>32</sup> may be sent back by thee as a permanent Governor for us in Te Wai Pounamu. This was the command thy love laid upon these Governors, and Governor Grey who was sent by thee to lay down the law of thy loving command for the Māori race - **that the law be made one, that the commandments be made one, that the nation be made one, that the white skin be made just equal with the dark skin, and to lay down the love of thy graciousness to the Māori that they dwell happily and that all men might enjoy a peaceable life, and the Māori remember the power of thy name.***

*(Petition to the Queen prepared by Matiaha Tiramorehu and the Otago Chiefs, 23 September 1857, when Kāi Tahu were pressing the Crown to honour the terms of Kemp’s Deed - emphasis added.)*

<sup>30</sup> It is unsure which Korako was the signatory as there were a number in that generation

<sup>31</sup> See Appendix 2 Māori and English Versions of the Treaty of Waitangi

<sup>32</sup> “Te Tipa” - “the Advance Guard” was the nickname applied to Walter Mantel

### 4.2.3 *The Crown*

The Crown has exercised its rights of governorship under Article I since the Treaty was signed in 1840. The non-observance of Kāi Tahu rights under Articles I and II of the Treaty since the 1840s formed the essence of the Kāi Tahu claims before the Waitangi Tribunal.

### 4.2.4 *Partnership*

The Treaty implies a partnership exercised in the utmost good faith. Kāi Tahu ki Otago embraces the ethic of partnership and recognises the need to work with the wider community to ensure a positive future for all people. Kāi Tahu ki Otago is the Crown's Treaty partner in the Otago Region and as such has a special status. The concept of partnership is fundamental to the compact or accord embodied in the Treaty of Waitangi; inherent in it is the notion of reciprocity. The test for Local Government Agencies and other branches of local and central government is how to develop an effective partnership with Kāi Tahu ki Otago. For some, joint management strategies, co-operative management regimes, or the transfer of powers and functions will have to be implemented in order to give effect to true partnership.

### 4.2.5 *The Principles of the Treaty*

In recent years, Parliament has chosen to refer in legislation, to the principles of the Treaty, rather than its explicit terms. For the purposes of the legal system, these principles are drawn from decisions of the Waitangi Tribunal, the New Zealand Court of Appeal and the lower courts.

In the resource management context, the Planning Tribunal has sounded some cautionary notes as to the applicability of all Treaty principles to matters under the Resource Management Act. However, it is the view of Kāi Tahu ki Otago that the Treaty is not to be read down in any circumstances, and that all of the principles of the Treaty have relevance to resource use and management decisions within the Otago region.

The principles of the Treaty, as enunciated by the Waitangi Tribunal and the courts include the following:

- **The principle of the government's right to govern.**  
This is recognised and acknowledged by Kāi Tahu.
- **The principle of tribal rakātirataka/self-regulation.**  
That Iwi have the right to organise as Iwi and, under the law, to control and manage important resources.
- **The principle of partnership.**  
That both Treaty partners will act reasonably and in the utmost good faith.
- **The principle of active participation in decision-making.**  
That the Treaty partners will ascertain each other's views and be willing to accommodate them.
- **The principle of active protection.**  
That the Crown will actively protect Māori in the use and management of their resources.
- **The principle of redress for past grievances.**  
That the Crown will take active and positive steps to redress past grievances and will avoid actions that prevent redress.

The principles as enunciated by the Courts are fluid and include the Te Rūnanga o Ngāi Tahu Principles<sup>34</sup>.

<sup>34</sup> See Appendix 3 Principles of a Te Rūnanga o Ngāi Tahu Treaty



### 4.3 TE RŪNANGA O NGĀI TAHU ACT 1996

Te Rūnanga o Ngāi Tahu “the body corporate” was established as the representative of Ngāi Tahu whānui under section 6 of the Te Rūnanga o Ngāi Tahu Act 1996. The takiwā of Ngāi Tahu is detailed in Section 5 of the Act and includes the entire Otago Region.

Section 15(1) of the Act states:

*Te Rūnanga o Ngāi Tahu shall be recognised for all purposes as the representative of Ngāi Tahu whānui.*

Section 15(2) of the Act states:

*Where any enactment requires consultation with any iwi or with any iwi authority, that consultation shall, with respect to matters affecting Ngāi Tahu whānui, be held with Te Rūnanga o Ngāi Tahu.*

Section 15(3) of the Act states:

*Te Rūnanga o Ngāi Tahu in carrying out consultation under subsection 2 of this section shall seek the views of such papatipu Rūnaka of Ngāi Tahu whānui and such hapū as in the opinion of Te Rūnanga o Ngāi Tahu may have views that they wish to express in relation to the matter.*

The First Schedule of the Act lists the 18 Papatipu Rūnaka that represent the members of Te Rūnanga o Ngāi Tahu. Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākou and Hokonui Rūnanga are identified as constituent Papatipu Rūnaka with interest in the Otago Region<sup>35</sup>.

### 4.4 NGĀI TAHU CLAIMS SETTLEMENT ACT 1998<sup>36</sup>

#### 4.4.1 *The Kāi Tahu Claim*

The Waitangi Tribunal conducted hearings held throughout the South Island over a two and a quarter year period, from 17 August 1987 to 10 October 1989. The efforts of the claimants, the Crown and the Tribunal’s research teams have resulted in a priceless database with detail on every facet of the “Claim”. The Tribunal produced a 1254 page report on the findings of the “Nine Tall Trees”<sup>37</sup> and a separate report on the fisheries<sup>38</sup> section of the claim. A separate report has also been released on the ancillary sections of the claim<sup>39</sup>.

In the Ngāi Tahu Report 1991, in reference to one segment of the Kāi Tahu claim, it states:

*“The predominant theme that constantly arises in the findings of the tribunal and indeed almost as constantly conceded by the Crown is the failure of the Crown to ensure Kāi Tahu were left with ample land for their present and future needs<sup>40</sup>.”*

#### 4.4.2 *Crown Apology*

The Ngāi Tahu Claims Settlement Act 1998 (NTCSA 1998), records the apology given by the Crown to Ngāi Tahu in the Deed of Settlement, and recognises the Crown’s failure to honour its obligations to Ngāi Tahu during the proceeding 164 years. The Crown’s apology is one of the most important aspects of the NTCSA 1998 and constituted the beginning of the reconciliation and healing process.

<sup>35</sup> See Appendix 1 First Schedule Te Rūnanga o Ngāi Tahu Act 1996

<sup>36</sup> The material for this section draws on Te Karaka Special Edition-Crown Settlement Offer-Second Edition November 1998

<sup>37</sup> Ngāi Tahu Report 1991

<sup>38</sup> Ngāi Tahu Sea Fisheries Report 1992

<sup>39</sup> Ngāi Tahu Ancillary Claims Report 1995

<sup>40</sup> Waitangi Tribunal (1991)

### 4.4.3 Cultural Redress

The NTCSA 1998 contains provisions that are part of the Cultural Redress offered by the Crown to Ngāi Tahu. These provisions were designed to restore the ability of Kāi Tahu to give practical effect to its kaitiaki responsibilities. The improved outcomes could only be achieved through a negotiated settlement. As part of the Cultural Redress the Crown returned ownership and control of various resources and areas of land of significance to Te Rūnanga o Ngāi Tahu, on behalf of the Kāi Tahu people. The Ownership and Control provisions include:

- High Country Stations
- Four Specific Sites
- Wāhi Taoka.

#### 4.4.3.1 High Country Stations

Ownership and control of three High Country Stations in Otago:

- Elfin Bay Station
- Routeburn Station
- Greenstone Station.

#### 4.4.3.2 Four Specific Sites

Te Rūnanga o Ngāi Tahu also regained ownership and control of four specific sites:

- Arahura Valley
- Rarotoka (Centre Island)
- Whenua Hou
- Crown Tītī Islands.

#### 4.4.3.3 Wāhi Taoka

Ownership and/or control of a further 41 areas of land was also returned to Te Rūnanga o Ngāi Tahu. These areas included wāhi tapu sites, wāhi taoka sites and mahika kai places including three lakes<sup>41</sup>.

### 4.4.4 Mana Recognition

The NTCSA 1998 provides for a number of instruments created to recognise the mana of Ngāi Tahu in relation to a range of sites and areas. Mana recognition instruments include:

- Statutory Acknowledgement Areas
- Deeds of Recognition
- Tōpuni Areas
- Place Names.

#### 4.4.4.1 Statutory Acknowledgment Areas

The NTCSA 1998 established Statutory Acknowledgment Areas (SAs) as a tool for Ngāi Tahu participation in Resource Management processes, 17 such areas exist in Otago:

- Tītitea (Mount Aspiring)
- Lake Hāwea
- Te Wairere (Lake Dunstan)
- Mata-au (Clutha River)
- Kakanui River
- Kuramea (Lake Catlins)
- Waitaki River
- Te Tai O Arai Te Uru (Otago Coastal Marine Area)
- Whakātipu-Wai-Māori (Lake Wakātipu)
- Te Tauraka Poti (Merton Tidal Arm)
- Pikirakatahi (Mount Earnslaw)
- Lake Wānaka
- Ka Moana Haehae (Lake Roxburgh)
- Poumahaka River
- Waiholā/Waipori Wetland
- Matakāea (Shag Point)
- Tokata (The Nuggets)

<sup>41</sup> See Appendix 34 Wāhi Taonga: Ownership and/or Control Sites

These SAs provide statements made by Te Rūnanga o Ngāi Tahu of the particular cultural, spiritual, historic and traditional association of Ngāi Tahu. The intent of the SAs is to provide a template that will be applied to all waterways in the Ngāi Tahu takiwā<sup>42</sup>.

#### 4.4.4.2 *Deeds of Recognition*

Deeds of Recognition apply to the same areas as Statutory Acknowledgments and complement them by providing Kāi Tahu ki Otago input into decision-making processes of the Crown agency responsible for the administration of each of these sites within the Otago Region. Deeds of Recognition are entered into pursuant to Section 212 of the NTCSA 1998 and require that Te Rūnanga o Ngāi Tahu be consulted and particular regard must be had to its views.

#### 4.4.4.3 *Tōpuni Areas*

Tōpuni areas are confirmation and recognition of Ngāi Tahu mana and rakātirataka over certain land managed by the Department of Conservation. Tōpuni apply to some of the most prominent landscape features and conservation areas in Otago. There are six Tōpuni areas in Otago:

- Aoraki/Mount Cook
- Maukaatua Scenic Reserve
- Te Koroka (Dart/Slipstream)
- Matakaea (Shag Point)
- Pikirakatahi (Mount Earnslaw)
- Tītitea (Mount Aspiring).

#### 4.4.4.4 *Place Names*

Place names are an important element of the identity and association with a place or a resource for Kāi Tahu ki Otago. The reinstatement of many traditional names serves as a tangible reminder of Kāi Tahu whānui history in Te Wai Pounamu. The reinstatement of various place names through the NTCSA 1998 and the Geographic Board was to provide the impetus whereby Kāi Tahu ki Otago could continue to apply for the reinstatement of further names.

In Otago the following names are dual names and recognised through the NTCSA 1998:

- Clutha River/Mata-au
- Goat Island/Rakiriri
- Harris Saddle/Tarahaka Whakātipu
- Lake Alabaster/Wawāhi
- Leaning Rock/Haehaeta
- Mount Alfred/Ari
- Mount Charles/Poatiri
- Mount MacKenzie/Pakihiwitahi
- Old Man Range/Kopuwai
- Pigeon Island/Wawāhi Waka
- Quarantine Island/Kamau Taurua
- Aoraki/Mount Cook
- Murdering Beach has been replaced by Whareakeake.
- Dart River/Te Awa Whakātipu
- Haast Pass/Tioripatea
- Kurow Hill/Te Kohurau
- Lake McKerrow/Whakātipu Waitai
- Moeraki Boulders/Kaihinaki
- Mount Aspiring/Tītitea
- Mount Earnslaw/Pikirakatahi
- Mount Watkin/Hikarorora
- Pig Island/Matau
- Taieri Island/Moturata
- Shag Point/Matakaea

#### 4.4.5 *Mahika Kai*

The Crown Settlement offer refers generally to mahika kai as part of the cultural redress package, however for Ngāi Tahu mahika kai refers to the interest Ngāi Tahu has in traditional food and other resources and the places where they are gathered. One element of the offer which particularly relates to mahika kai is:

- Nohoaka Sites.

42 See Appendices 7-17

#### 4.4.5.1 *Nohoaka Sites*

Nohoaka are areas of lakeshores or riverbanks that are to be used to facilitate the gathering of natural resources in a modern context. The sites allow Ngāi Tahu whānui temporary, but exclusive, rights to occupy 72 sites throughout Te Wai Pounamu; within Otago there are 17 Nohoaka sites:

- Waianakarua River
- Te Wairere(Lake Dunstan)
- Shotover River (2)
- Lake Hāwea (4)
- Taieri River (3)
- Matau-au (Clutha River) (3)
- Lake Wānaka (2)
- Whakātipu-wai-māori (Lake Wakātipu)

Four of the 17 Nohoaka sites are currently operative in the Otago area, although all of these sites can be established for Kāi Tahu whānui use.

#### 4.4.6 *Customary Fisheries*

The NTCS 1998 contains six separate but interconnected elements in regard to customary fisheries. These are:

- Acknowledgment of the special relationship of Kāi Tahu to a number of taoka fish species.
- Te Rūnanga o Ngāi Tahu will be an advisor to the Minister of Fisheries.
- Customary Freshwater Fisheries Regulations to cover freshwater species managed by the Department of Conservation<sup>43</sup>.

Prohibiting the commercial harvesting of several species of particular importance for customary fishing.

- Shellfish quota and the right of first refusal to purchase 40% of quota in each species at the market value. This is in addition to the 20% of quota that must be provided to TOKM for allocation to iwi.
- Closure provisions that allow for the Minister of Fisheries to temporarily close a fishery or impose a fishing-method restriction thereby giving effect to a rāhui.

#### 4.4.7 *Taoka Species*

The NTCSA 1998 lists a number of species with which Kāi Tahu are recognised to have a cultural, spiritual, historic and traditional relationship. Kāi Tahu ki Otago do not see this list of species as exhaustive<sup>44</sup>.

#### 4.4.8 *Species Recovery Groups*

Kāi Tahu have been given membership to groups involved in the threatened species management such as birds, plant and marine species. The Species Recovery Groups Kāi Tahu are currently involved in include:

- Mohua Recovery Group
- Hoiho Recovery Group
- Buff Weka Recovery Group
- Grand Skink Recovery Group
- Otago Skink Recovery Group.

#### 4.4.9 *Department of Conservation Protocols*<sup>45</sup>

The NTCSA 1998 allows for the Minister of Conservation to issue Protocols with Te Rūnanga o Ngāi Tahu. The protocols are to build the relationship between the Department of Conservation and Kāi Tahu ki Otago that achieves conservation policies, actions and outcomes leading to a dynamic positive partnership.

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:

<sup>43</sup> See Section 4.8.1 Section 26ZH

<sup>44</sup> See Appendix 4 Taoka Species

<sup>45</sup> 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 (NZ Gazette 2001, page 2171)

The Minister of Conservation can issue Protocols 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.

These protocols form a starting point for the development of relationships and management actions at the local level between Kāi Tahu ki Otago and the Department of Conservation.

#### 4.5 NGĀI TAHU (POUNAMU VESTING) ACT 1997

The Crown wrongly assumed ownership of pounamu during the Ngāi Tahu – Crown land sales of the 1800s, against the wishes of our tīpuna who desired to retain mana and authority over this taoka. This was redressed through the Treaty Settlement process when the Ngāi Tahu (Pounamu Vesting) Act 1997 (Vesting Act), was passed. The Vesting Act gave effect to the 1996 Deed of “On-Account” Settlement offered by the Crown by providing for the ownership and control of pounamu<sup>46</sup>.

All pounamu in Otago is subject to a range of legislation, policies and plans including:

- Ngāi Tahu (Pounamu Vesting) Act 1997
- Te Rūnanga o Ngāi Tahu Pounamu Resource Management Plan (2002)
- Conservation Act 1987
- Reserves Act 1977
- Resource Management Act 1991
- Crown Minerals Act 1991
- National Parks Act 1981
- Otago Regional Council Regional Policy Statement and Regional Plans
- Queenstown Lakes District Council District Plan.

On Crown non-conservation lands and private land pounamu cannot be collected without prior authority of Te Rūnanga o Ngāi Tahu and the appropriate Kaitiaki Rūnaka.

#### 4.6 TREATY OF WAITANGI (FISHERIES CLAIMS) SETTLEMENT ACT 1992

In 1992, the Crown and Māori reached agreement, through the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992, on the settlement of outstanding claims by Māori in relation to commercial fishing rights. This settlement Act also changed the status of non-commercial customary fishing rights, such that they no longer had legal effect except to the extent that they were provided for under regulations. The Crown was therefore required to promulgate regulations that recognised and provided for the customary fishing rights of the Takata Whenua as guaranteed by the Treaty of Waitangi, and that provided Takata Whenua with the opportunity to manage their property rights once more. The South Island Customary Fishing Regulations were first promulgated in April 1998 under section 186 of the Fisheries Act 1996. Takata Tiaki/Kaitiaki have been appointed under these regulations, for the entire area covered by this plan, to manage the customary food gathering of fish, aquatic life and seaweed managed under the Fisheries Act.

##### 4.6.1 Takata Tiaki

Takata Tiaki/Kaitiaki are able to authorise the taking of fish for customary food gathering purposes in a designated area. Within Otago it is up to Papatipu Rūnaka to determine whom the Takata Tiaki/Kaitiaki are to be and where their area of responsibility is within the rohe moana.

<sup>46</sup> See Chapter 5.9 Pounamo

#### 4.7 THE RESOURCE MANAGEMENT ACT 1991<sup>47</sup>

The Resource Management Act 1991 (RMA) is the mechanism under which the natural and physical resources of New Zealand are to be sustainably managed. In implementing that management it provides for takata whenua (being defined as hapū or iwi that hold mana whenua over the relevant area) values being recognised and provided for.

Kāi Tahu ki Otago consider that section 5 “Purpose” of the RMA embodies our traditions and values related to the use and protection of natural and physical resources. It is the view of Kāi Tahu ki Otago that through the “Purpose” of the RMA consideration of cultural values should occur alongside other considerations.

*“[M]anaging the use, development, and protection of natural and physical resources...”*

This definition of sustainable management is consistent with the Kāi Tahu ki Otago system of mahika kai. Resources would be collected on a seasonal and sustainable basis, this system allowed for an extensive rather than intensive use of resources and ensured sustainable management. Various protection mechanisms such as placing a rāhui over a resource for a set period to allow for it to naturally restore itself were also used.

*“Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations;...”*

Section 5(2)(a) embodies the philosophy expounded by Kāi Tahu ki Otago of “Mō tātou, a, mō kā uri ā muri ake nei” “For us, and our children after us”.

*“Safeguarding the life supporting capacity of air, water, soil, and ecosystems”*

It is an inherited responsibility of Kāi Tahu ki Otago to ensure that the mauri of all taoka is healthy and strong, and that the life supporting capacity of these ecosystems is protected. The maintenance of the mauri is important for the health and wellbeing of all people, to maintain the vitality of culture, practices, values, and beliefs. Kaitiakitaka enshrines an obligation to safeguard the wellbeing of land, air, water, flora and fauna and biodiversity.

##### 4.7.1 Matters of National Importance

*“In the opinion of Kāi Tahu the overall scheme of the Act is designed to accommodate bicultural understandings in its meaning and interpretation. It is therefore appropriate and acceptable to integrate our perceptions on what is ‘natural’, ‘outstanding’ and ‘significant’ with the non-Māori tendency to distinguish between man-made or modified environments and the ‘natural’. Kāi Tahu culture makes no such separation between the natural world and the place of humans within it. Key factors for assessing natural character revolve around the health and robustness of mauri, the life principle, while the status of a landscape or habitat as outstanding and significant are founded on the value and importance of those landscapes and habitats to the manawhenua community with whom they were and are intimately associated”<sup>48</sup>.*

##### 4.7.2 Historic Heritage

The RMA Amendment 2003 makes the protection of historic heritage (as defined in s2 of the Act) a matter of National Importance alongside those matters discussed above. This requires an increased focus by local authorities on what constitutes historic heritage within the district/region and an assessment of the heritage values. This will necessitate the development of partnerships with takata whenua to achieve the protection of historic heritage.

Consistent with the definition in Part II of the Act the protection of historic heritage will necessitate consultation and collaboration with Kāi Tahu ki Otago within the Otago Region to identify archaeological, cultural and historic sites and places of importance to Kāi Tahu ki Otago. These concepts are intricately linked to the identification and protection of “cultural landscapes”<sup>49</sup>.

<sup>47</sup> The material for this section is based on the earlier work of Hana Crengle who has written extensively on Kāi Tahu environmental values, obligations stemming from the RMA and Treaty principles – Crengle in Tipa et al (2002)

<sup>48</sup> Tipa G. Crengle H. Davis K. Allingham B. Symon A (2002) Cultural Impact Assessment – Project Aqua

<sup>49</sup> See Section 5.6 Cultural Landscapes

#### 4.7.3 Other Matters

Kaitiakitaka see Chapter 3 Manawhenua and Kaitiakitaka.

#### 4.7.4 Treaty of Waitangi

##### 8. Treaty of Waitangi —

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

##### *“[S]hall take into account...”*

It is the view of Kāi Tahu ki Otago that the RMA use of the words “take into account the principles of the Treaty of Waitangi” are not strong enough given the importance of the natural and physical resources to the Kāi Tahu ki Otago way of life. Kāi Tahu ki Otago believe that the stronger wording of “give effect to the principles of the Treaty of Waitangi”, as used in the Conservation Act 1987, is more appropriate given the RMA is the principal environment legislation in New Zealand.

##### *[P]rinciples of the Treaty of Waitangi*

There are various views on what the “Principles of the Treaty of Waitangi” are and how they are best applied. The “principles” developed through case law are one such interpretation. The “Principles of a Te Rūnanga o Ngāi Tahu Treaty<sup>50</sup>” are applied in Treaty Relationship Agreements that Te Rūnanga o Ngāi Tahu enter into.

#### 4.7.5 Functions of District and Regional Councils

Part IV of the RMA sets out the statutory functions, powers and duties of Central and Local Government.

#### 4.7.6 The RMA and Iwi Management Plans

Iwi Management Plans have been given legislative recognition through the Resource Management Act 1991:

##### **Section 66.** Matters to be considered by regional council—

(2A) A regional council, when preparing or changing a regional plan must—

(a) take into account any relevant planning document recognised by an iwi authority, and lodged with the council, to the extent that its content has a bearing on resource management issues of the region;

##### **Section 74** Matters to be considered by territorial authority—

(2A) A territorial authority, when preparing or changing a district plan, must—

(a) take into account any relevant planning document recognised by an iwi authority, and lodged with the territorial authority, to the extent that its content has a bearing on resource management issues of the district;

Part II of the RMA sets out the purpose and principles of the Act and makes provisions for a Māori perspective to be considered by local authorities in their decision-making processes. In relation to the processing of resource consents (RMA section 104 matters to be considered when considering an application for a resource consent) Iwi Management Plans will be of assistance to local authorities as section 104 is subject to Part II of the Act.

<sup>50</sup> See Appendix 3 Principles of a Te Rūnanga o Ngāi Tahu Treaty

#### 4.7.7 *Transfer of Powers and Reports to Local Authorities*

Section 33 states:

##### **33. Transfer of powers**

[(1) A local authority may transfer any one or more of its functions, powers, or duties under this Act, except this power of transfer, to another public authority in accordance with this section.]

(2) For the purposes of this section, “public authority” includes any local authority, iwi authority, Government department, statutory authority, and joint committee set up for the purposes of section 80.

Section 42A states:

##### **42A. Reports to local authority**

(1) An officer of a local authority (as defined by section 42(6)), or any consultant or other person employed for the purpose, may provide the local authority with a report on any matter described in section 39(1).

Both sections 33 and 42A are important tools in furthering the active involvement of Kāi Tahu ki Otago in planning decisions, processes and monitoring.

While the role of Kāi Tahu ki Otago in resource management is derived from the Treaty of Waitangi and the principle of tino rakātirataka, these mechanisms (RMA Section 33 and 42A) have not yet been implemented.

#### 4.8 THE CONSERVATION ACT 1987

The Conservation Act 1987 promotes the conservation of the natural and historic resources of New Zealand through the establishment of the Department of Conservation with functions and powers to enable the Department to undertake the management of many important natural and historic resources, both through the direct responsibilities in the administration and management of resources under its control and through its advocacy role on other issues.

*“[G]ive effect to the principles of the Treaty of Waitangi”*

##### **4. Act to give effect to Treaty of Waitangi**

This Act shall so be interpreted and administered as to give effect to the principles of the Treaty of Waitangi.

This is one of the strongest legislative statements of Treaty responsibility. Section 4 allows for partnerships; the objectives and policies in this plan are an expression of this.

##### **4.8.1 Section 26ZH**

Section 26ZH provides that nothing in the part of the Conservation Act which deals with freshwater fisheries is to affect any Māori fishing rights.

**[26ZH] Māori fishing rights unaffected by this Part—**

(1) Nothing in this Part of this Act shall affect any Māori fishing rights.

[[2) Subsection (1) does not apply to customary Māori fishing rights with respect to freshwater fisheries within South Island fisheries waters, in respect of which regulations have been made under section 48B, for so long as such regulations remain in force.]]



#### 4.8.2 Section 27A

Section 27A provides that Nga Whenua Rāhui Kawenata can be created over any Māori land or Crown land leased by Māori, where the Director-General is satisfied the land should be managed for conservation purposes, so as to protect:

- i. its natural and historic values; or
- ii. its spiritual and cultural values to Māori.

Where a kawenata is created, the provisions of the Conservation Act generally apply as if the land were a conservation area, subject to the terms of the covenant.

#### 4.8.3 Conservation Management Strategies

Conservation Management Strategies (CMS) are prepared under the Conservation Act 1987 and in accordance with any current Department of Conservation statements of General Policy. They are 10-year regional strategies that provide an overview of conservation issues and give direction for the management of conservation areas within the Conservancy.

Conservation Management Strategies can set out the intention to prepare Conservation Management Plans (CMPS) for specific areas or Freshwater Fisheries Management Plans (FFMPs) where they are required.

The Otago Conservation Management Strategy was approved by the New Zealand Conservation Authority in consultation with the Minister of Conservation in 1998.

Acts referred to in the Conservation Management Strategy are:

- Wildlife Act 1953
- Marine Reserves Act 1971
- Reserves Act 1977
- Wild Animal Control Act 1977
- Marine Mammals Protection Act 1978
- National Parks Act 1980
- NZ Walkways Act 1990.

#### 4.8.4 Department of Conservation Administered Legislation

The Department of Conservation also administers components of 25 Acts of Parliament.

These Acts include:

- Māori Reserved Land Act 1955
- Marine Farming Act 1971
- Fisheries Act 1983
- Biosecurity Act 1993.

### 4.9 THE HISTORIC PLACES ACT 1993

#### 4.9.1 Protection

The Historic Places Act 1993 provides for the protection of “archaeological sites”<sup>51</sup> and other historic places, including wāhi tapu, by the Historic Places Trust. In achieving the purpose of this Act, all persons exercising functions and powers under it are to recognise the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taoka<sup>52</sup>. The Historic Places Trust protects sites through Heritage Orders, Heritage Covenants and the maintenance of a Historic Places Register. In deciding whether to register any site, the Trust must have regard to the importance of the place to takata whenua. Applications for registration of wāhi tapu are dealt with by the Trust’s Māori Heritage Council.

<sup>51</sup> Defined in the Act as including “any place which was associated with human activity which occurred before 1900 and is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand”

<sup>52</sup> Historic Places Act 1993

#### 4.9.2 Penalties for Destruction

The Act makes it unlawful without the authorisation of the Trust to destroy, damage, or modify any archaeological site, knowing or having reasonable cause to suspect that it is an archaeological site - whether or not it is entered on the Historic Places Register. The maximum penalty for destroying such a site is \$100,000, and for damaging a site, \$40,000. An application to the Trust to destroy, damage, or modify an archaeological site must include information as to consultation with “takata whenua” and where the site is considered to be of interest to Māori, the application is referred to the Māori Heritage Council, which may consult and then make such recommendations as it thinks fit.

#### 4.9.3 Investigations

The Historic Places Trust may also authorise or carry out archaeological investigations. These must be carried out with the consent of the landowner and, where the Māori Heritage Council considers it appropriate, consent of the appropriate iwi authority or other body.

#### 4.10 LOCAL GOVERNMENT ACT 2002

The Local Government Act 2002 (LGA 2002) is concerned with the need to include and promote the inclusion of Māori (regardless of their relationship to the land) of the district or region in the decision-making processes. The LGA 2002 makes major changes to the way local authorities are empowered to perform their general operational functions. In particular it contrasts with the former LGA 1974 by the addition of specific provisions regarding the expected relationship between local authorities and Māori.

Local authorities now have clearly articulated obligations in relation to Māori, both in a substantive sense and procedurally.

Some of the most notable features of the LGA 2002 are:

- The attempt to prescribe the extent of the Treaty’s application;
- The focus on the decision-making process and consultation with Māori;
- The obligation to consider how Māori should be able to participate in the decision making process; and
- The requirement on local authorities to include information in their local governance statements about the representation arrangements in the district.

#### 4.11 FORESHORE AND SEABED ACT 2004

The Foreshore and Seabed Act 2004 (FSA 2004) addresses ownership access and customary rights in the coastal marine area. The FSA 2004 is the Government’s “knee jerk” reaction to a New Zealand Court of Appeal ruling, that the Māori Land Court had jurisdiction to hear the 1997 Te Tau Ihu application to declare the foreshore and seabed of the Marlborough Sounds as Māori customary land.

The objective of the FSA 2004 is,

*“to preserve the public foreshore and seabed in perpetuity as the common heritage of all New Zealanders in a way that enables the protection by the Crown of the public foreshore and seabed on behalf of all the people in New Zealand, including the protection of the association of whānau, hapū, and iwi with areas of the public foreshore and seabed”.*

The purposes of the FSA 2004 are to give effect to the objective by:

- (a) vesting the full legal and beneficial ownership of the public foreshore and seabed in the Crown; and
- (b) providing for the recognition and protection of ongoing customary rights to undertake or engage in activities, uses, or practices in areas of the public foreshore and seabed; and

- (c) enabling applications to be made to the High Court to investigate the full extent of the rights that may have been held at common law, and if those rights are not able to be fully expressed as a result of this Act, enabling a successful applicant group —
  - i. to participate in the administration of the foreshore and seabed reserve;
    - or
  - ii. to enter into formal discussions on redress; and
- (d) providing for general rights of public access and recreation in, on, over, and across the public foreshore and seabed and general rights of navigation within the foreshore and seabed.

The FSA 2004 has important implications about the legal recognition of customary rights, the nature and extent of customary rights, over and above customary rights already recognised, to the coastal marine area, and the participation of iwi in coastal marine management. This includes issues such as aquaculture and marine farming, marine reserves, recreational farming, oceans policy and general Resource Management and Local Government Act provisions.

Despite the FSA 2004, Kāi Tahu ki Otago maintain that takata whenua continue to hold customary rights with regards to the coastal marine area, and that such rights must be recognised, protected and provided for with regard to any activity in the coastal marine area.

#### 4.12 OTHER LEGISLATION *KĀ TURE ANO*

While the Resource Management Act 1991, Conservation Act 1987, Local Government Act 2002, and the Historic Places Act 1993 consolidated much of the law concerned with the management of natural and physical resources, there are still many other pieces of legislation that impact on the use and management of various types of resources. Other relevant legislation includes:

Building Act 1991	Crown Minerals Act 1991
Public Works Legislation	Reserves Act 1977
Environment Act 1986	Te Ture Whenua Māori Act 1993
Fisheries Act 1996	Transit New Zealand Act 1989
Forests Amendment Act 1993	
Forests Amendment Act 1999	
Health Act 1956	
Antiquities Act 1987	
Crown Pastoral Land Act 1998	
Hazardous Substances and New Organisms Act 1996	



**PART 3**  
**ISSUES, OBJECTIVES**  
**AND POLICIES**

*Chapters 5 - 10*



## 5 OTAGO REGION *TE ROHE O OTAGO*

*Na Te Timatanga Me Te Waiatatanga Mai o Te Atua*

Nā Te Po, Ko Te Ao

Nā Te Ao, Ko Te Ao Marama

Nā Te Ao Marama, Ko Te Ao Turoa

Nā Te Ao Turoa. Ko Te Koretewhiwhia

Nā Te Koretewhiwhia, Ko Te Rawea

Nā Te Rawea, Ko Te Koretetamaua

Nā Te Koretetamaua, Ko Te Korematua

E moe ana Maku i Mahoranuiatea

Ka Puta Ko Raki

Tuatahi e moe ana Raki i Pokoharua-i-Te-Pō

Tuarua e moe ana Papatūānuku

*This chapter outlines the issues, objectives and policies for the entire Otago Region including Air and Atmosphere, Coastal Environment and Pounamu.*

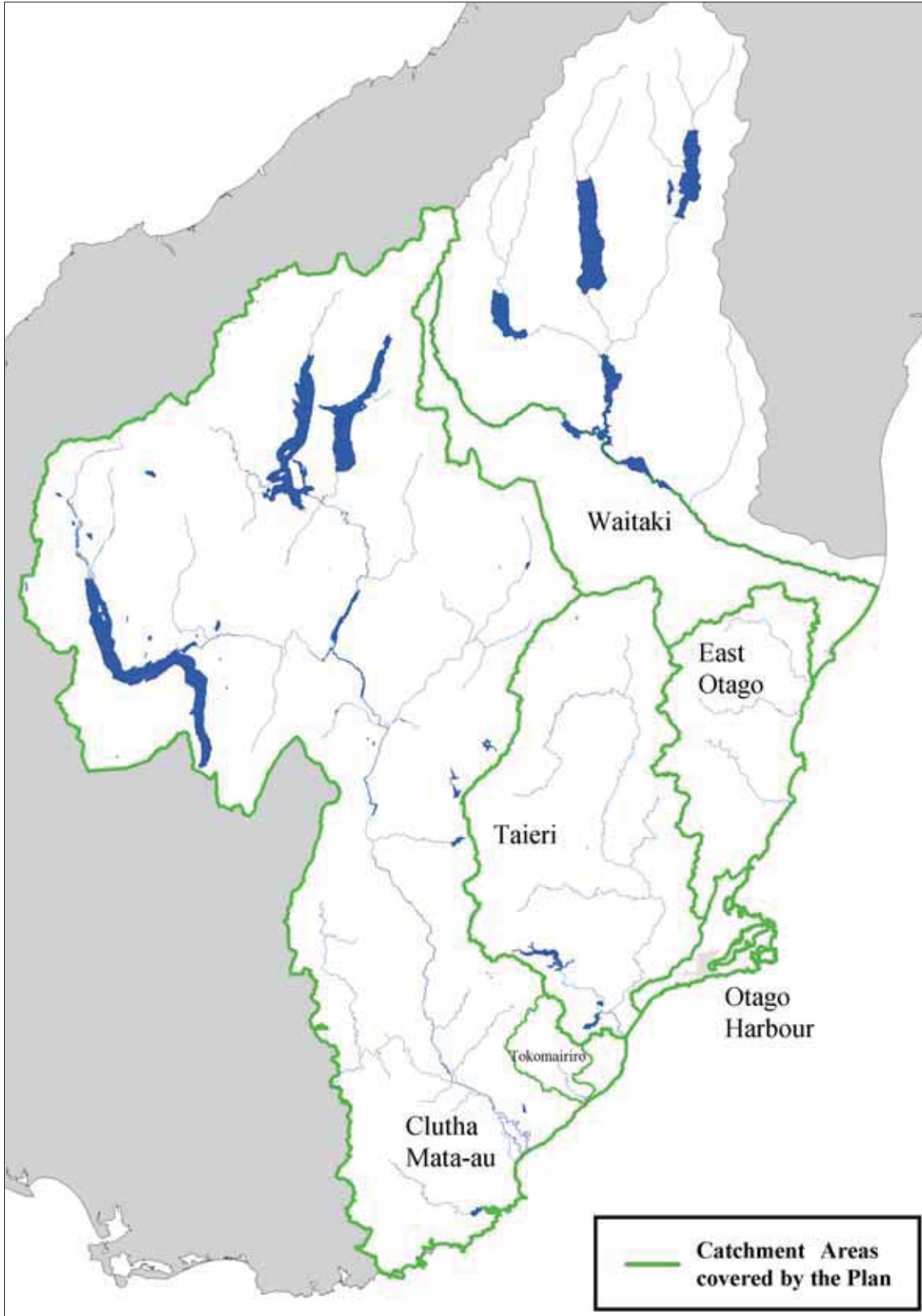
*Included in this chapter is a description of the Kāi Tahu ki Otago values, Wai Māori, Wāhi Tapu, Mahika Kai and Biodiversity and Cultural Landscapes.*

*Catchment specific issues and policies are listed in the Catchment Chapters 6 – 10.*

### 5.1 OTAGO REGION DESCRIPTION *TE WHĀKITAKA O TE ROHE ŌTĀKOU*

The Otago region is dynamic and diverse, a jigsaw piece in the wider tapestry of Te Waipounamu and the traditions and customs that bind our people to the land and sea. Otago is a part of the Murihiku region of Te Wai Pounamu, that area south of the Waitaki River. The trails and resource gathering places of our people were widespread throughout Otago, the seasonal travel and places of encampment ensured the depth of association and traditions were continuously renewed and transferred to succeeding generations. Reliance on the oral custom of knowledge transfer ensures that the landscape is imbued with fantastic stories, that traditional place names are descriptive of all aspects of the life and times of our people, and the whakapapa linkages are maintained.

Map 3 Kāi Tahu ki Otago Natural Resource Management Plan 2005 Catchments





## 5.2 OVERALL OBJECTIVES *KĀ WHĀIKA MATUA*

These overall objectives apply to the whole of the Otago Region.

- i. The rakātirataka and kaitiakitaka of Kāi Tahu ki Otago is recognised and supported.
- ii. Ki Uta Ki Tai management of natural resources is adopted within the Otago region.
- iii. The mana of Kāi Tahu ki Otago is upheld through the management of natural, physical and historic resources in the Otago Region.
- iv. Kāi Tahu ki Otago have effective participation in all resource management activities within the Otago Region.
- v. The respective roles and responsibilities of Manawhenua within the Otago Region are recognised and provided for through the other objectives and policies of the Plan.

## 5.3 WAI MĀORI

**Ko te wai te ora ngā mea katoa**

*Water is the life giver of all things*

### 5.3.1 Wai Māori Description

The waterways of Otago, carrying the precious waters from the mountains to the sea, are a significant feature of the region. The great lakes are traditionally known as Ka Puna Karikari o Rākaihautū, the pools dug by Rākaihautū, the first known mortal person to explore the lands of Te Waipounamu. Hāwea, Wānaka and Whakātipu-wai-māori are the three principal lakes of the interior, all feeding the Clutha/Mata-au River which weaves its way through the unique landscape out to the sea.

**“He taura whiri kotahi mai anō te kopunga tai nō i te pu au”**

*From the source to the mouth of the sea all things are joined together as one*

Water plays a significant role in our spiritual beliefs and cultural traditions, the condition of water is seen as a reflection of the health of Papatūānuku. The loss and degradation of this resource through drainage, pollution and damming is a significant issue for Kāi Tahu ki Otago and is considered to have resulted in material and cultural deprivation.

Because water is subject to a different management regime under the Resource Management Act 1991, the issues specific to water management are accorded a separate category in this plan.

### 5.3.2 Wai Māori General Issues

- Current water management does not adequately address Kāi Tahu ki Otago cultural values<sup>53</sup>.
- Cross mixing of water.
- Deteriorating water quality.
- Lack of consideration given to Kāi Tahu ki Otago cultural values in water research.
- The fundamental question of ownership of water resources remains unresolved.
- Damming.
- Lack of adequate minimum flows that provide for Kāi Tahu ki Otago cultural values.
- Setting of minimum flows may not appropriately consider social, biological and cultural needs.

#### **Water Extractions, in particular:**

- Inefficient irrigation methods, and reluctance to consider alternatives.
- Volume of some extractions being more than is required.
- Lack of water harvesting.
- Cumulative effects of water extractions.

53 See Section 2.3 Kāi Tahu ki Otago Values

- Over-allocation of water resources.
- Mining privileges that allow for complete dewatering.
- Long duration of water take consents.
- Lack of investigation of the link between ground and surface water.
- Increased water demand for domestic use.

**Discharges:**

- Cumulative effects of discharges.
- Discharge of human waste and other contaminants from point and non-point source discharges to water.
- Indiscriminate use of chemicals for weed control.
- View that due to dilution rates, discharges to water have little or no effect.
- Irrigation practices that return pesticides, herbicides and other contaminants to the waterway.

**River and Instream works:**

- Impacts of activities such as channel maintenance and channel cleaning adversely affecting water quality.
- Channel reshaping, in particular straightening that leads to faster flowing rivers and loss of habitat.
- Inappropriate suction dredging.
- Impacts of willow removal on water quality, water temperature and mahika kai habitat.
- Gravel extractions.
- Introduction of exotic weeds through poorly cleaned machinery, and the subsequent impact on bank habitat and water ecosystems.

**Mining activities including:**

- Groundwater discharges.
- Treated mine water discharges.
- Stormwater run off.
- Diversion of watercourses upstream and downstream of mines.

**Land Management and Use including:**

- Stock entering waterways.
- Inappropriate border dykes have affected natural drainage and caused severe flooding at times.
- Vegetation clearance and afforestation that affects the water retention capacity of land.
- Draining of wetlands.
- Lack of proper riparian management throughout an entire catchment.
- Sedimentation from land use and development.
- Accidental discovery of cultural materials or sites from changed land use.

### 5.3.3 Wai Māori General Objectives

- The spiritual and cultural significance of water to Kāi Tahu ki Otago is recognised in all water management.
- The waters of the Otago Catchment are healthy and support Kāi Tahu ki Otago customs.
- There is no discharge of human waste directly to water.
- Contaminants being discharged directly or indirectly to water are reduced.
- Flow regimes and water quality standards are consistent with the cultural values of Kāi Tahu ki Otago and are implemented throughout the Otago Region and lower Waitaki Catchment.
- The unresolved issues surrounding water ownership are addressed.

### 5.3.4 Wai Māori General Policies

- To require an assessment of instream values for all activities affecting water.
- To promote the cultural importance of water to Kāi Tahu ki Otago in all water management within the Otago Region and Lower Waitaki Catchment.

3. To promote co-ordinated research into water-related issues that provides for Kāi Tahu ki Otago input.
4. To protect and restore the mauri of all water.
5. To encourage the use of the Cultural Health Index as a tool for monitoring waterways.<sup>54</sup>
6. To oppose any further cross mixing of waters.
7. To promote to the Otago Regional Council and Environment Canterbury minimum flow levels, flow regimes, lake levels and lake operating levels for lakes and rivers that recognise and provide for Kāi Tahu ki Otago cultural values and the healthy functioning of associated ecosystems.

**Discharges:**

8. To require land disposal for human effluent and contaminants.
9. To require consideration of alternatives and use of new technology for discharge renewal consents.
10. To encourage all stormwater be treated before being discharged.
11. To encourage identification of non-point source pollution and mitigate, avoid or remedy adverse effects on Kāi Tahu ki Otago values.
12. To encourage Kāi Tahu ki Otago input into the development of monitoring programmes.
13. To require monitoring of all discharges be undertaken on a regular basis and all information, including an independent analysis of monitoring results, be made available to Kāi Tahu ki Otago.
14. To encourage Management Plans for all discharge activities that detail the procedure for containing spills and including plans for extraordinary events.
15. To require all discharge systems be well maintained and regularly serviced. Copies of all service and maintenance records should be available to Kāi Tahu ki Otago upon request.
16. To require re-vegetation with locally sourced indigenous plants for all disturbed areas. Re-vegetation should be monitored by an assessment of the vegetative cover at one growing season after establishment and again at three seasons from establishment.
17. To require visible signage informing people of the discharge area; such signs are to be written in Māori as well as English.
18. To require groundwater monitoring for all discharges to land.

**Dams/Diversions:**

19. To require a Cultural Impact Assessment for all proposals to dam<sup>55</sup>.
20. To identify in conjunction with Local Government Agencies the location of all existing dams, new dams and water storage in the region, together with the level of river flow intercepted and the cumulative effect of interception on Kāi Tahu ki Otago cultural values.

**Water Extractions:**

21. To require the collection and storage of rainwater for all new coastal subdivisions, and for all existing dwellings in water-short areas.
22. To require that resource consent applicants seek only the amount of water actually required for the purpose specified in the application.
23. To require that all water takes are metered and reported on, and information be made available upon request to Kāi Tahu ki Otago.
24. To require that ventures that use a greater volume of water during the set-up phase be reviewed after 5 years to determine actual ongoing needs.
25. To oppose the granting of water take consents for 35 years. Consistent with a precautionary approach, either a review clause or a reduced term may be sought.

**Irrigation:**

26. To encourage those that extract water for irrigation to use the most efficient method of application. Flood irrigation, border dyke and contour techniques are less likely to be supported than spray irrigation techniques.

<sup>54</sup> A Cultural Health Index For Streams And Waterways, Tipa and Teirny 2003

<sup>55</sup> See Section 11.6 Cultural Assessments

27. To require that a consent term for water extractions for irrigation be of 5-10 years where Kā Papatipu Rūnaka considers the method of irrigation to be inefficient to allow for an upgrade to a more efficient method.
28. To discourage over-watering.
29. To encourage irrigation to occur at times when winds are light and evaporation low.
30. To encourage dry land farming practices where appropriate.

***River and Instream Works:***

31. To require that fish passage is provided for at all times, both upstream and downstream.
32. To oppose all river and instream work if near a nohoaka site during the months of August to April.
33. To require that buffer zones are established and agreed upon with the Papatipu Rūnaka between the flowing water and the site of any river or instream work.
34. To require that any visual impacts at the site of the activity are minimal.
35. To require that wet concrete does not enter the active flow channels.
36. To require that any works be undertaken either before or after spawning season of potentially affected species as identified by the affected Papatipu Runaka<sup>56</sup>.
37. To require that all practical measures are taken to minimise sedimentation or discharge of sedimentation.
38. To require that all practical measures are undertaken to minimise the risk of contamination to the waterway.
39. To require that work is done when the water level is naturally low or dry.
40. To require that machinery enters the dry bed of the waterway only to the extent necessary, to carry out as much of the work as possible, using one corridor for entering and exiting.
41. To discourage machinery operating in flowing water.
42. To require that all machinery is clean and well maintained before entering the work site; refuelling is to be done away from the waterway.

***Bank Erosion:***

43. To discourage activities on riverbanks that have the potential to cause or increase bank erosion.
44. To encourage the planting of indigenous vegetation from the local environs to help reduce continual erosion of the edge of rivers.
45. To oppose ad-hoc remediation initiatives where erosion is already occurring. A planned approach based on investigation that recommends initiatives that take account of and blend into the landscape are preferred rather than, for example, the dumping of rocks to “patch” an eroded area.

***Willow Removals:***

46. To require before and after photos of the site that show the work carried out.
47. To require willow debris be stockpiled out of the flood plains.
48. To require that any bed disturbance is limited to the extent necessary to remove the vegetation and that all reasonable steps are taken to minimize the release of sediment to water.
49. To require that trees are removed only on a selective basis and not from both sides of the river at once.
50. To require that the consent holder will carry out ongoing maintenance by managing re-growth so that future disturbance of the beds and banks is minimised.
51. To require re-planting of locally-sourced indigenous plants.

***Gravel Extractions:***

52. To discourage instream extractions.
53. To require that all gravel-take applications include a report on the effects on aquatic ecosystems, fisheries, coastal processes and the sustainability of gravel takes in the area concerned.

<sup>56</sup> See Appendix 5 Spawning Times

**Land Use and Management:**

54. To promote land use that suits the type of land and climatic conditions.
55. To encourage the exclusion of stock from waterways.
56. To oppose the draining of wetlands. All wetlands are to be protected.
57. To require a programme to monitor the effect of stock and agricultural activity on groundwater quality be established.
58. To promote integrated riparian management throughout entire catchments.
59. To oppose the indiscriminate use of chemicals or poisons in or near waterways.

**5.4 WĀHI TAPU****5.4.1 Wāhi Tapu Description**

Tribal land was not just the source of economic wellbeing. For Māori it was also the burial ground of the placenta and of the bones of ancestors and the abode of tribal Atua. Ancestral lands were therefore regarded with deep veneration. For this reason, wāhi tapu is included as a distinct category.

For Kāi Tahu ki Otago, wāhi tapu refers to the places that hold the respect of the people in accordance with tikaka or history including:

- Mauka
- Urupā
- Tuhituhi Neherā
- Umu
- Nohoaka.

**5.4.2 Wāhi Tapu General Issues**

- Destruction and modification of wāhi tapu through the direct and indirect effects of development and resource use.
- Limited funding for the ongoing recording by Kāi Tahu ki Otago of sites of significance.
- Kōiwi or taoka associated with burials removed from sites as trophies or curiosities demonstrating a lack of appreciation of cultural sensitivity of Kāi Tahu ki Otago values.
- The customary use and consecration of new burial places on ancestral land is not facilitated by regulation.
- Contamination by discharges and other activities seriously erodes the cultural value and integrity of wāhi tapu.
- Repatriation of kōiwi takata from private collections.
- The resurfacing of kōiwi takata through natural and human-induced processes.
- Access to culturally important sites has been impeded.
- Misinterpretation of the status and importance of wāhi tapu.
- Inappropriate and inaccurate recording of wāhi tapu and the use of such information.
- Fossicking by individuals within urupā or other important sites still occasionally occurs.
- High market value paid on the legitimate or black market for antiquities is detrimental to the security and protection of vulnerable sites.

**5.4.3 Wāhi Tapu Objectives:**

- i. All wāhi tapu are protected from inappropriate activities.
- ii. Kāi Tahu ki Otago have access to wāhi tapu.
- iii. Wāhi tapu throughout the Otago region are protected in a culturally appropriate manner.

**5.4.4 Wāhi Tapu General Policies**

1. To require consultation with Kāi Tahu ki Otago for activities that have the potential to affect wāhi tapu<sup>57</sup>.

57 See Appendix 35 Information Needs

2. To promote the establishment of processes with appropriate agencies that:
  - i. enable the accurate identification and protection of wāhi tapu.
  - ii. provide for the protection of sensitive information about the specific location and nature of wāhi tapu.
  - iii. ensure that agencies contact Kāi Tahu ki Otago before granting consents or confirming an activity is permitted, to ensure that wāhi tapu are not adversely affected.
3. To advocate for the repatriation of kōiwi takata and taoka originating in the Otago region.

**Earth Disturbance:**

4. To require that a Kāi Tahu ki Otago mandated archaeologist survey an area before any earth disturbance work commences.
5. To promote the use of Accidental Discovery Protocols for any earth disturbance work<sup>58</sup>.
6. To require all Māori archaeological finds to remain the cultural property of Kāi Tahu ki Otago.

**Discharges:**

7. To discourage all discharges near wāhi tapu.

**Kāi Tahu ki Otago Resource Inventory<sup>59</sup>:**

8. To establish processes for public release of relevant information on wāhi tapu in Otago to achieve recognition and protection.
9. To encourage the use and further development of the Kāi Tahu ki Otago Resource Inventory as a tool for the gathering and recording of Kāi Tahu ki Otago information.
10. To require the development of a process whereby Local Government Agencies contact Kāi Tahu ki Otago to determine if a development affects a site recorded in the Resource Inventory before granting consent or confirming an activity is permitted.

**Historic Places Trust (HPT):**

11. To require the HPT to inform the appropriate Rūnaka and/or whānau where there is the potential for any activity to result in the disturbance of wāhi tapu, including:
  - i. an archaeological find; and/or
  - ii. the disturbance of any archaeological site; and/or
  - iii. the discovery of human remains.
 Further disturbance should be prohibited until clearance has been obtained from the Papatipu Rūnaka.
12. To require HPT to implement enforcement provisions to discourage fossicking and prosecute those who destroy wāhi tapu; and
13. To recognise Kāi Tahu ki Otago kaitiakitaka over the protection and recording of archaeological sites.

**Antiquities Act 1975 and International Conventions:**

14. To require the prevention of the trade in Māori Cultural Heritage objects;
15. To promote participation in International Conventions and enhanced Crown protection of Māori cultural heritage objects through the Antiquities Act 1975;
16. To promote international conventions that prevent the illicit trade in Māori Cultural Heritage objects, namely:
  - i. UNESCO Convention on the Means of Preventing the Illicit Import, Export and Transfer of ownership of Cultural Property (1970); and
  - ii. UNIDROIT Convention on Stolen or Illegally Exported Cultural Objects (1995).

<sup>58</sup> See Appendix 6 Accidental Discovery Protocol.

<sup>59</sup> See Chapter 12 Resource Inventory and Section 1.6.5 Development of a Resource Inventory Database

## 5.5 MAHIKA KAI AND BIODIVERSITY *TE REREKA KĒTAKA O KĀ KAIAO ME TE MAHIKA KAI*

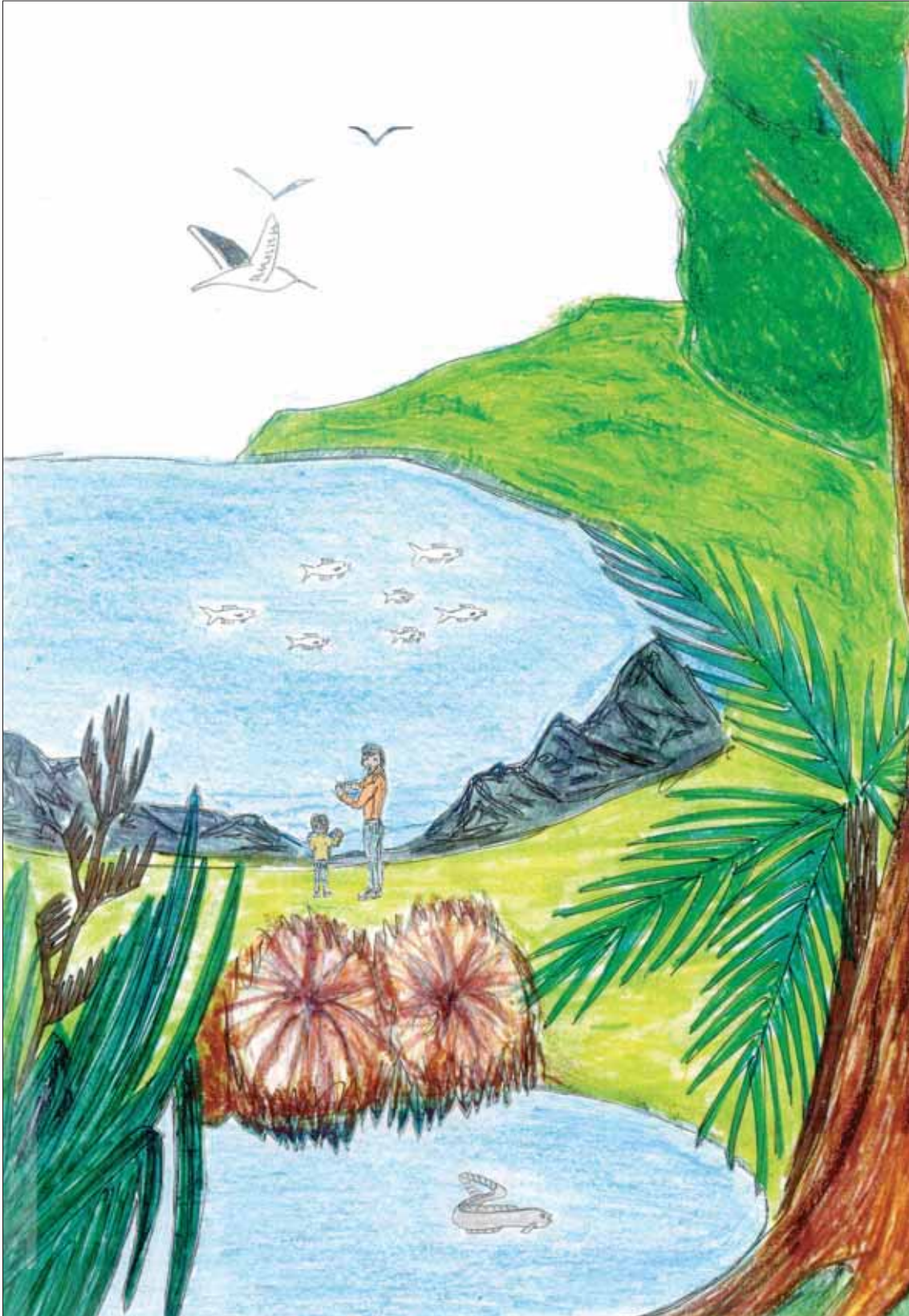
### 5.5.1 *Mahika Kai and Biodiversity Description*

Our very distinctive and unique culture and lifestyle in the southern half of the South Island included permanent coastal settlements and seasonal migrations inland over often-vast distances to harvest and collect food and resources. The seasonal inland migrations were determined by whakapapa as to who could exercise those rights. This practice is referred to as “mahika kai” and became a corner-stone of our culture. Mahika kai is the basis of culture, and the unrelenting cultural imperative is to keep the mahika kai intact, to preserve its productivity and the diversity of species.

The term “mahika kai” literally means “food works”. It encompasses the ability to access the resource, the site where gathering occurs, the act of gathering and using resources, and ensuring the good health of the resource for future generations. This is enshrined in the Kāi Tahu proverbial saying and tribal motto - “Mo tatou, a mo ka uri I muri ake nei - for us and for the generation that come after us”.

The classic creation beliefs of the Kāi Tahu higher school of learning, as articulated by Tiramorehu of Moeraki in the 1880s, state that all whakapapa descend from Rakinui through important unions with Pokohuaratepo and then with Papatūānuku begot many offspring, some of whom became the spiritual guardians of the important domains, and who formed relationships with various natural elements, and the offspring of these unions maturing into the myriad forms of life we call koiora or diversity of life.

Mahika Kai and Biodiversity - A Cultural Perspective





### 5.5.2 Mahika Kai and Biodiversity General Issues

- Genetic modification of indigenous flora and fauna.
- Point and non-point source discharges impacting on mahika kai.
- Human waste disposal to mahika kai areas.
- Introduced species have displaced or interbred with indigenous mahika kai species, but customary rights to take introduced species are often disregarded.
- Continued urban spread encroaching on mahika kai sites.
- Access for Kāi Tahu ki Otago to mahika kai sites.
- Customary accessibility of mahika kai species.
- Impact of dams and instream works on fish migration
- Research undertaken in isolation from Kāi Tahu ki Otago interests has had the effect of marginalising cultural interests.
- Loss of indigenous biodiversity in the region.
- Loss of species of particular importance.
- Pests and weeds and their impact on mahika kai and indigenous biodiversity.
- Loss of native fish species through displacement and predation.
- Isolation of species leading to a diminishing genetic pool
- Loss of indigenous flora and fauna remnants and lack of co-ordinated management of native corridors.
- Poorly managed landfills, industrial sites and waste disposal sites have created contaminated soils.
- Loss of recruitment of indigenous flora in remnant bush areas on farmed land due to continuous stock grazing which will lead to total collapse of viable ecosystems as old trees die off and disappear.
- Continuing loss of remnant bush is increasingly marginalising native bird populations through loss of roosting areas and food sources.
- Threats to native flora and fauna, such as feral and domestic cats, rats, stoats and ferrets, and invasive weeds, are largely not being addressed in any co-ordinated manner.
- Impact on and loss of native flora and fauna values due to inappropriate forestry developments.
- More intensive farming practices and the conversion of tussock lands to pasture has resulted in ecological disturbance and displacement of a wide range of species.
- Riverine fish species that normally inhabit shallow backwaters and the smaller braids will seek similar depths and habitats in rivers if the flow regime is altered and may face new competition from species that they might be encountering for the first time.
- Kā Papatipu Rūnaka believe that inappropriate use and development will adversely impact on:
  - the diversity & abundance of terrestrial and aquatic species;
  - the ability to access & gather mahika kai resources; and
  - the ability to educate future generations in significant mahika kai practices.

### 5.5.3 Mahika Kai and Biodiversity Objectives

- i. Habitats and the wider needs of mahika kai, taoka species and other species of importance to Kāi Tahu ki Otago are protected.
- ii. Mahika kai resources are healthy and abundant within the Otago Region.
- iii. Mahika kai is protected and managed in accordance with Kāi Tahu ki Otago tikaka.
- iv. Mahika kai sites and species are identified and recorded throughout the Otago Region.
- v. Indigenous plant and animal communities and the ecological processes that ensure their survival are recognised and protected to restore and improve indigenous biodiversity within the Otago Region.
- vi. To restore and enhance biodiversity with particular attention to fruiting trees so as to facilitate and encourage sustainable native bird populations.
- vii. To develop strategies and implementation plans for comprehensive control and/or eradication of pest species in targeted areas beyond conservation managed lands.
- viii. To provide for access to cultural materials and to support the development and promotion of a Cultural Materials Bank with the Department of Conservation.
- ix. To create a network of linked ecosystems for the retention of and sustainable utilisation by native flora and fauna.

#### 5.5.4 Mahika Kai and Biodiversity General Policies

1. To promote catchment-based management programmes and models, such as Ki Uta Ki Tai.
2. To promote more stringent border control protection mechanisms.
3. To encourage collaborative research into indigenous biodiversity.
4. To require Kāi Tahu ki Otago participation in the management of mahika kai, both introduced and indigenous.
5. To identify mahika kai sites and species of importance to Kāi Tahu ki Otago.
6. To protect and enhance physical access for Kāi Tahu ki Otago to mahika kai sites.
7. To require that all assessments of effects on the environment include an assessment of the impacts of the proposed activity on mahika kai<sup>60</sup>.
8. To promote the protection of remaining indigenous fish habitat by:
  - i. Identifying waterways that exclusively support indigenous fish.
  - ii. Prohibiting the introduction of exotic species where they currently do not exist.
  - iii. Ensuring fish passage (both ingress and egress).
  - iv. Removing exotic species from waterways of particular importance where this is achievable and appropriate according to Kāi Tahu ki Otago.
9. To promote the protection of traditional breeding stocks.
10. To encourage the transfer of knowledge through generations.
11. To promote the use of authorisation systems for the taking and use of cultural materials.
12. To protect and enhance existing wetlands, support the reinstatement of wetlands and promote assistance for landowners for fencing-off wetlands.
13. To promote the development of a cultural monitoring tool for vegetation and ecosystem health.
14. To encourage the creation of mahika kai parks in the Otago region.
15. To promote the reintroduction of locally extinct species of importance to Kāi Tahu ki Otago to the region.
16. To require that hazardous operations and the use, transportation and storage of hazardous substances are not to impact mahika kai and other cultural values.
17. To require that fish screens be fitted to all pumps and race intakes.
18. To promote best-practice methodologies for drain maintenance or diversions to ensure minimal damage to ecosystems with no further adverse effects on mahika kai and other cultural values.

#### **Genetic Modification:**

19. To require that a precautionary approach be taken towards all genetic engineering technology.
20. To require that research into genetically modified organisms be conducted in “containment” conditions to avoid unintended or accidental release into the environment.
21. To discourage the release of genetically modified organisms to the environment until such technology is proven scientifically and culturally safe.
22. To promote the containment and eradication of pests and weeds.

#### **Pest Control and Management:**

23. To require that monitoring of all pest management activity is undertaken, including effects on indigenous species. This monitoring is to be included in all pest management strategies.
24. To oppose the indiscriminate use of chemicals or poisons in or near mahika kai sites.

#### **Forestry:**

25. To encourage the identification of mahika kai sites on forestry operational plans.
26. To require that access to mahika kai sites is provided for through a permit system as agreed to between Kāi Tahu ki Otago and forest management companies.
27. To require certification of all forestry operators in the Otago region in accordance with the Forest Stewardship Council’s principles and criteria.

60 See Section 11.6 Cultural Assessments

## 5.6 CULTURAL LANDSCAPES *KA KĀIKA KANOHI AHUREA*

### 5.6.1 Cultural Landscapes Description

Increasingly the term “cultural landscape” is being used in land use planning and heritage management. It is therefore set out in this plan as a separate category.

The value attached to land is evident from the fact that every part of the landscape was known and named. Not only were the larger mountains, rivers and plains named but every hillock, streamlet and valley.

It is necessary to recognise the significance of cultural landscapes in terms of the integrity of the sites of significance they contain. For example, the position of an archaeological site adjacent to a wetland valued as a mahika kai: the readily available resources of the wetland were the deciding factor in the site’s position, and can be seen as an integral part of the site’s function, regardless of whether any archaeological remains lie within it.

On a wider scale, the entire landscape of Otago is dotted with sites of significance. These places did not function in isolation from one another, but were part of a wider cultural setting that included not only sites as defined by the presence of archaeological remains, but all manner of highly valued places that were named by the earliest inhabitants of the area.

Sites of significance that contribute to cultural landscapes within Otago include:

#### *Tuhituhi Neherā*

Tuhituhi neherā is of particular significance in North Otago and South Canterbury because it is testament to, not only the presence of our tūpuna in the catchment, but also their occupation for a sufficient time to record their history and presence in the form of rock art.

#### *Wāhi Kohātu*

Our tūpuna were highly mobile which necessitated numerous camps and shelters. Rocky outcrops that are a feature of many landscapes in Otago provided excellent shelters and were intensively occupied by Māori over many centuries from the moa-hunter period into early European settlement.

#### *Kāika Nohoaka*

Kāi Tahu ki Otago were located largely along the coast in permanent settlements, and ranged inland on a regular seasonal basis. Iwi history shows, through place names and whakapapa, a continued occupation through a network of settlements distributed along both sides of the entire main river system, from the source lakes to the sea.

#### *Umu*

The areas in which ovens are found are quite diverse, many are located on old stream banks or ancient river terraces, others are on low spurs or ridges, still more are in association with other features, such as quarry areas.

#### *Wāhi Mahi Kohātu*

Another important resource was the raw materials necessary for making stone tools, therefore quarry sites were of high importance.

#### *Wāhi Ingoa*

Arrival of ancient waka to Te Waipounamu are remembered by the place names given in their memory. The passengers are not forgotten, their names are found across the landscape and the moana. The huge waves that overcome the waka are immortalised in the landscape as they swept inland and turned to stone forming significant ranges and landmarks that dominate the region.

### *Ara Tawhito*

Many trails crossed the region, linking villages and a network of temporary campsites, providing access to a range of mahika kai resources, inland resources of pounamu and other stone resources such as silcrete. Travel was often by foot, but mokihi and waka were also important means of transport. The nature of resource use, regular movement and residence by whānau and hapū in a cyclic pattern across the landscape resulted in a multitude of burial sites, campsites and treasured sites. Coupled with place names, whakapapa and traditions of association, the transfer of customary rights from generation to generation was assured and systematic.

### *Mauka*

The mountain peaks of Ka Tiritiri o te Moana being spiritually elevated, connected to the tuākana Aoraki and his younger brothers. The upstanding symbols of the ancient creation of the Te Waipounamu landscape, reaching to the constellations, occupying a place of spiritual importance, the stairway to the source of knowledge, symbols of mana and permanence, and featuring in whakōrero and karakia. Tītitea/Mt Aspiring stands tall and proud in the interior, the dominant mauka of the Otago landscape.

## **5.6.2 Cultural Landscapes General Issues**

- Lack of recognition and implementation of the Cultural Redress components of the Ngāi Tahu Claims Settlement Act 1998 by local government agencies namely<sup>61</sup>:
  - Statutory Acknowledgements
  - Place names
  - Tōpuni areas
  - Nohoaka sites.
- There is a prevailing view that Kāi Tahu ki Otago interests are limited to Statutory Acknowledgements, Tōpuni, and Nohoaka sites.
- Land management regimes have failed to adequately provide for Kāi Tahu ki Otago interests in cultural landscapes.
- Early grazing following burning leaves the land vulnerable.
- Impact of intensified land use on cultural landscapes.
- The spread of exotic wilding trees and other woody weeds adversely affects cultural landscapes.
- The utilisation of Māori Land is constrained by unsympathetic laws that do not take into account the multi-ownership nature of Māori Land.
- Extension and maintenance of infrastructure (e.g. transport, telecommunications) can affect cultural landscapes.
- The lack of use of traditional names for landscape features and sites.
- The building of structures and activities in significant landscapes.
- Inability to address indirect and/or cumulative effects means that many issues of significance to Kāi Tahu ki Otago, such as linkages, are not addressed during resource management processes.

## **5.6.3 Cultural Landscapes Objectives**

- i. The relationship that Kāi Tahu ki Otago have with land is recognised in all resource management activities and decisions.
- ii. The protection of significant cultural landscapes from inappropriate use and development.
- iii. The cultural landscape that reflects the long association of Kāi Tahu ki Otago resource use with in the Otago region is maintained and enhanced.
- iv. The use of Māori land by beneficial owners according to cultural preferences is supported and the maintenance of relationships with the land facilitated.

<sup>61</sup> See 4.4 Ngāi Tahu Claims Settlement Act 1998 and Appendix 7 Instruments from the Ngāi Tahu Claims Settlement Act 1998 Relevant to this Plan

#### 5.6.4 Cultural Landscapes General Policies

1. To identify and protect the full range of landscape features of significance to Kāi Tahu ki Otago.
2. To protect important vistas and amenity values of marae.
3. To promote the control of visitor and recreational activities that impact on significant landscapes.
4. To require that the interpretation of Kāi Tahu ki Otago histories for either public or commercial reasons is undertaken by the appropriate Rūnaka and/or whānau.
5. To require tourist operators and staff to attend a cultural wānaka, facilitated by KTKO Ltd.
6. To promote the identification of areas of historic heritage in collaboration with Local Government Agencies.

#### Place names:

7. To encourage and promote the importance of traditional place names.
8. To promote the use of traditional place names through official name changes.
9. To encourage consultation with Kāi Tahu ki Otago over the naming of new reserves and areas of significance.

#### Nohoaka sites:

10. To promote the recording of nohoaka sites within regional and district plans and the consideration of Te Rūnaka as an affected party as the occupier of that land.
11. To encourage in conjunction with Te Rūnanga o Ngāi Tahu:
  - i. appropriate authorisations are gained;
  - ii. nohoaka are safe to use;
  - iii. operational management procedures are established;
  - iv. monitoring of nohoaka use is undertaken to identify development opportunities for specific sites (e.g. erection of temporary shelters where they would be used)
  - v. raising awareness of sites and their use to Kāi Tahu ki Otago.
12. To encourage making all nohoaka sites under the NTCSA 1998 operative.

#### Tōpuni areas<sup>62</sup>:

13. To encourage and promote the importance of Tōpuni areas.

#### Statutory Acknowledgement Areas:

14. To promote the use and application of the Statutory Acknowledgement model to further areas in Otago.
15. To require Statutory Acknowledgements are included (in full) on all Local Government Agency Plans.

#### Mining/Quarrying:

16. To discourage mining and quarrying activities within landscapes of cultural significance or highly visible landscapes.
17. To require all applications for mining or quarrying to include:
  - i. site rehabilitation plans that include the planting of indigenous species and address long term concerns; and
  - ii. requirement for screening off of the work site; and
  - iii. prevention or reduction of vibration, dust, noise, soil and water contamination; and
  - iv. restriction of the hours during which explosives may be used; and
  - v. provision for the containment of all waste discharges from mining operation.

#### High Country:

18. In the management of the high country provide for:
  - i. the identification of Kāi Tahu ki Otago values;
  - ii. no burning above 1000 metres;
  - iii. the re-vegetation and enhancement of high altitude and other significant indigenous ecosystems using indigenous flora of local genetic origin.

<sup>62</sup> See Appendix 7 Instruments from the Ngāi Tahu Claims Settlement Act 1998 Relevant to this Plan

**Earth Disturbance:**

19. To require all earthworks, excavation, filling or the disposal of excavated material to:
- i. Avoid adverse impacts on significant natural landforms and areas of indigenous vegetation;
  - ii. Avoid, remedy, or mitigate soil instability; and accelerated erosion;
  - iii. Mitigate all adverse effects.

**Roading:**

20. To require an accidental discovery protocol for all road realignments and widening and forest harvest roads and to avoid any sediment run-off during earthworks and road construction to avoid contamination of waterways<sup>63</sup>.
21. To require indigenous re-vegetation with locally sourced species for all disturbed areas. Re-vegetation should be monitored by an assessment of the vegetative cover at one growing season after establishment and again at three seasons from establishment.

**Landfills:**

22. To require site rehabilitation plans for land contaminated by landfills, tip sites, treatment plants, industrial waste, and agricultural waste.
23. To require monitoring of methane levels for all closed landfills and that analysed data be sent to KTKO Ltd.

**Structures:**

24. To discourage the erection of structures, both temporary and permanent, in culturally significant landscapes, lakes, rivers or the coastal environment.

**Subdivisions:**

25. To discourage subdivisions and buildings in culturally significant and highly visible landscapes.
26. To encourage a holistic planning approach to subdivisions between the Local Government Agencies that takes into account the following:
- i. All consents related to the subdivision to be sought at the same time.
  - ii. Protection of Kāi Tahu ki Otago cultural values.
  - iii. Visual amenity.
  - iv. Water requirements.
  - v. Wastewater and storm water treatment and disposal.
  - vi. Landscaping.
  - vii. Location of building platforms.
27. To require that where any earthworks are proposed as part of a subdivision activity, an accidental discovery protocol is to be signed between the affected papatipu Rūnaka and the Company .
28. To require applicants, prior to applying for subdivision consents, to contact Kāi Tahu ki Otago to determine the proximity of the proposed subdivision to sites of significance identified in the resource inventory.
29. To require public foot access along lakeshores and riverbanks within subdivisions.

**Tourist Operations:**

30. To require employees of tourist operations to attend a Kā Papatipu Rūnaka cultural awareness wānaka<sup>64</sup>.
31. To require commercial operators to consult with Kā Papatipu Rūnaka, and obtain agreement about any historical, spiritual or cultural information relating to the takata whenua and to ensure any information used is both appropriate and accurate.
32. To encourage that adequate provision is made for the storage and collection of litter and refuse, and disposal is in an approved manner.

63 See Appendix 6 Accidental Discovery Protocol Example

64 See Appendix 6 Accidental Discovery Protocol Example

33. To require land based tourist entities provide a pamphlet (including a map) with information and instruction on the following:
  - i. location of toilets,
  - ii. stipulation that fires should only be lit in designated places,
  - iii. request that visitors use only the marked tracks,
  - iv. explanation of the vulnerability of existing flora and fauna and that vegetation should not be disturbed or removed,
  - v. and, if considered appropriate by the Kā Papatipu Rūnaka, the cultural importance of particular sites.
34. To promote to visitors the risks of transporting predators and pests into sensitive habitats.
35. To require all liquid waste products (wastewater, effluent and bilge water) to be disposed of to an appropriate sewer reticulation system.
36. To require refuelling of any vessels to be carried out at an approved refuelling station only.
37. To encourage the establishment of maximum visitor numbers to sensitive areas.

## 5.7 AIR AND ATMOSPHERE *HAU ME TE HAU TAKIWĀ*

In our traditions, air and atmosphere emerged through the creation traditions and Te Ao Marama.

*Following the separation of Ranginui and Papatūānuku, one of their many children Tāwhirimātea fled with Ranginui to the sky; it is from there that Tawhirimatea controls the wind and elements.*

The continued pollution of the atmosphere adversely affects the mauri of this taoka and other taoka such as plants and animals, as all living things require clean air. The air is an integral part of the environment that must be valued, used with respect, and passed on intact to the next generation.

Kaitiakitaka requires Kā Papatipu Rūnaka to be actively engaged in the planning, consenting and monitoring of air resource to ensure our values are recognised and provided for and the mauri of our taoka protected.

### 5.7.1 Issues

#### *General Issues:*

- Discharges from industrial or trade premises adversely affect local and ambient air quality and can affect papakāika and mahika kai.
- Agrochemical spray drift has the potential to cause adverse effects on people's health and non-target neighbouring areas.
- The cultural impacts of air pollution and discharges to air are poorly understood and seldom recognised.
- Discharges to air can adversely affect health and can be culturally offensive.
- Motor vehicle emissions have serious cumulative effects that call for the adoption of higher emission control standards.
- Insufficient data has been collected and distributed about the effects of air discharges.
- Depletion of the ozone layer and high levels of solar radiation.
- Impact of increased aircraft traffic and resultant noise pollution.
- Emissions from domestic fires in built up areas prone to inversion layers are a concern.
- National priorities for carbon credits can often be detrimental to local district values and disadvantage private landowners.

#### *Wāhi Tapu*

Discharges from crematoriums, if located in close proximity to mahika kai and wāhi taoka are spiritually offensive.

- Vegetation burning on or adjacent to wāhi tapu sites can have adverse effects including damage to sites, impacts on the tapu of the site.
- Impact of odour on wāhi tapu sites.

#### **Mahika Kai and Biodiversity**

- Clean air is important to the health of mahika kai.

#### **Cultural Landscapes:**

- Impact of urban settlement and discharges to air on the visibility of cultural landscape features including the moon, stars and rainbows.
- Dust and the impact on people's health and traditional Māori rock art.

### **5.7.2 Objectives**

- Kāi Tahu ki Otago sites of significance are free from odour, visual and other pollutants.
- Kāi Tahu ki Otago are meaningfully involved in the management and protection of the air resource.
- The life supporting capacity and mauri of air is maintained for future generations.

### **5.7.3 Policies**

- To require earthworks and discharges to air consider the impact of dust and other air-borne contaminants on health, mahika kai, cultural landscapes, indigenous flora and fauna, wāhi tapu and taoka.
- To encourage early consultation with Kāi Tahu ki Otago in the development of air research proposals. The level of participation will be decided by Kāi Tahu ki Otago.
- To require Cultural Assessments for any discharges to air including agrochemical<sup>65</sup>.
- To encourage reduced vehicle emissions.
- To promote the planting of indigenous plants to offset carbon emissions.
- To encourage aircraft operators to utilise technology to reduce aircraft noise pollution.
- To promote clean forms of domestic heating.
- To discourage the location of any new crematoriums near mahika kai or wāhi taoka sites.
- To require Kāi Tahu ki Otago be an affected party to consenting of existing crematoriums.
- To require higher standards of emission controls for crematoriums.
- To discourage burning of vegetation within, adjacent to or impacting on wāhi tapu.
- To require light suppression techniques are used for any new subdivisions and replacement lighting.

## **5.8 COASTAL ENVIRONMENT TE TAI AO O TE TAKUTAI**

*Ahakoā kia pā te upoko o Te moana-Tāpokopoko-a-Tāwhaki ki ngā takutai o Te Waka-o-Aoraki, Engari, i tākekea te kupenga a Tahu kia oioi i roto i te nekeneke o te tai*

*Although the shores of Te Waipounamu may be buffeted by the turbulent currents of the great waves of the southern oceans, the fishing net of Tahu has been made flexible so as to move at one with the tide<sup>66</sup>.*

### **5.8.1 Taku Tai Moana Me Wai Māori Description**

Our tūpuna were great ocean travellers. The tempestuous nature of the coastal waters off Otago are a constant reminder of the exploits of our voyaging tūpuna and their illustrious waka. The coastal

<sup>65</sup> See Section 11.6 Cultural Assessments

<sup>66</sup> Source Maairé Goddall



waters and processes were integral to the way of life our tūpuna enjoyed. Our belief system binds and identifies kinships across Moananui-a-Kiwa, reinforces the centrality of Takaroa to those beliefs, and influences the way we relate to and manage our marine resources now and in the future.

The marine environment is a moving force, a reminder of the power of takaroa. The interconnection of the land and sea environments is consistent with the Ki Uta Ki Tai philosophy. The coastal waters are a receiving environment for freshwater, gravels and sediment from the terrestrial landscape (ki uta) which are important to maintain natural process and the domain of takaroa.

The coast of Otago is named “Te Tai o Arai-te-uru”, after the ancient waka atua, famed for its cargo of kumara and taro calabashes, and the many illustrious passengers on board. Arai-te-uru foundered south of Moeraki at the mouth of the Waihemo.

#### **5.8.1.1 Local Fisheries and Habitat Management**

Over the years, the Crown has proposed and developed a variety of local fisheries management methods. Presently Taiāpure, Mātaitai, temporary closures, method restrictions and marine reserves are available. Kāi Tahu ki Otago support localised management as it better recognises the needs of the takata whenua, environment and community. There are only a small number of Taiāpure, Mātaitai and Marine Reserves throughout the country. Their lack of completeness, and the ability of small community pressure groups to effectively cause their veto, has been to their detriment.

Kaitiaki use rāhui as a means of locally managing an area. Rāhui can provide for the total closure of an area, or some variation such as a single species closure.

#### **5.8.1.2 Taiāpure**

Taiāpure are local fishery areas, in estuarine or littoral coastal waters, which are of special significance to iwi or hapū as a source of seafood or for spiritual or cultural reasons. They are provided for through the Fisheries Act 1996 to give takata whenua a greater say in the management of the areas.

#### **5.8.1.3 Mātaitai**

Mātaitai reserves are areas of traditional importance where the takata whenua are authorised to manage and control the non-commercial harvest of seafood.

#### **5.8.1.4 Marine Reserves**

The purpose of a marine reserve is to preserve for the purpose of scientific study of marine life, areas of New Zealand that contain underwater scenery, natural features, or marine life of such distinctive quality, or so typical, or beautiful, or unique, that their continued preservation is in the national interest.

#### **5.8.1.5 Integrated Management**

It is the opinion of Kāi Tahu ki Otago that the best way forward to facilitate the sustainable management of the coastal environment is for resource management agencies to work collaboratively with takata whenua and local communities to implement an integrated range of management tools. The tools should be selected to provide the maximum protection against the threats posed to the marine environment, whilst creating the least impact on customary rights.

#### **5.8.1.6 Oceans Policy**

Takata whenua seek stronger relationships with all agencies in implementing management regimes to sustain and improve the quality of the marine environment of the Otago region. The concept of a collaborative approach, bringing all relevant agencies and

marine-based legislation under an overarching framework as mooted in the “Oceans Policy” is essential to achieve consistent, integrated and commonsense outcomes for the benefit of the resource and the community at large. The Oceans Policy concept is therefore supported by Kāi Tahu ki Otago.

### 5.8.2 *Taku Tai Moana Me Wai Māori Issues*

- Artificial opening of river mouths, estuary and lagoon systems and limited recognition of species migration.
- Saltwater/freshwater interface – saltwater ingress up river systems as a result of reduced river flows.
- Modifications to a waterway, such as damming, can affect the coastal environment and natural systems.
- Reclamation has a negative impact on water quality and flow in enclosed harbours and estuarine ecosystems.
- Land use activities adjoining the coast adversely affect localised coastal water quality, for example from devegetation and poor riparian management.

#### *Discharge and Waste:*

- Leachate from inappropriately sited landfills, casual disposal sites and potentially from land-based treatment of biosolids.
- Increasing discharges to the coastal environment from the growing number of coastal subdivisions.
- Point source industrial discharges to the coastal environment.
- Point source sewage discharges e.g. Tahuna, Kaka Point, Waldronville.
- Poorly designed or inadequate coastal sewerage infrastructure.
- Stormwater discharges e.g. from urban roads containing contaminants such as oil, carbon particles.
- Sewage disposal from ships within the EEZ impacting on water quality and the coastal environment.
- Bilge and ballast water discharges, including contaminated water.
- Rubbish (flotsam and jetsam), including lengths of rope from boats and moorings, plastic packaging strips, discarded and lost fishing gear, glass and plastic bottles.
- Discharge/disposal of waste product from the processing of marine species.
- Oil/chemical spills.
- Indiscriminate dumping of rubbish in the coastal environment.
- Tourism-associated waste, including chemically treated sewage, from campervans and freedom campers.
- Indiscriminate discharge of human ashes in sensitive areas such as kaimoana areas, or without the knowledge of the takata whenua.

### 5.8.3 *Taku Tai Moana Me Wai Māori Objectives*

- i. The spiritual and cultural significance of taku tai moana me te wai māori is recognised in all management of the coastal environment.
- ii. Te Tai o Arai Te Uru is healthy and supports Kāi Tahu ki Otago customs.
- iii. There is no direct discharge of human waste to Te Tai o Arai Te Uru and other contaminants being discharged directly or indirectly to the coastal environment are remedied.

### 5.8.4 *Taku Tai Moana Me Wai Māori Policies*

1. To encourage the integrated management of the coastal environment.
2. To require Kāi Tahu ki Otago input into any artificial openings or works in river mouths, estuary or lagoon systems.
3. To require that all water allocation regimes consider impacts on the coastal environment including the saltwater/freshwater interface
4. To require all hydro dam proposals include a complete evaluation of the effects of sediment trapping on coastal stability and water quality.
5. To discourage any further reclamation within the coastal environment.

6. To encourage any land use activity adjacent to the coastal environment to avoid or mitigate any adverse effects on coastal water quality. For example set back distances for effluent spraying and protection of coastal margins.

**Discharges:**

7. To oppose the discharge of sewage and industrial effluent directly to the coastal environment.
8. To require that leachate from disposal sites adjacent to coastal environments is monitored and contaminated environments rehabilitated.
9. To require better monitoring and consent condition compliance for septic tank systems in the coastal environment.
10. To encourage investigations and improvements to existing coastal sewage infrastructure.
11. To encourage the retention of waters within catchments to reduce runoff to the coastal environment.
12. To discourage the discharge of sewage from ships within territorial waters.
13. To require that collection facilities are to be installed at all ports for the collection of shipboard sewerage.
14. To encourage the use of best technology for treatment of all discharges including ballast water.
15. To encourage the setting of standards, including through National Policy Statements, to prevent the discharge of flotsam and jetsam.
16. To discourage the discharge and disposal of waste products from processed marine species within the coastal environment, including from recreational use.
17. To encourage preparedness for all oil spills and other contaminant spills within the Otago Region.
18. To require that all dumping occur within council-designated landfills, and that offenders be prosecuted to discourage continuing non-compliance.
19. To encourage the development of a network of disposal sites along the coast for campervan and other tourism-associated waste disposal.
20. To require campervan rental agencies to educate clients on the appropriate disposal of rubbish and effluent.
21. To oppose camping areas near culturally sensitive sites.
22. To encourage the designation of an area(s) for the purpose of spreading human ashes from cremation, taking into consideration tidal flows, currents, proximity to the coast and kaimoana areas.

### 5.8.5 Wāhi Tapu o te Taku Tai Moana

The coastal environment is the abode of Takaroa and includes the coastal waters of Te Tai o Arai Te Uru as well as the adjoining land. Tauraka waka occur up and down the coast in their hundreds and wherever a tauraka waka is located there is also likely to be a nohoaka, fishing ground, kaimoana resource, or rimurapa with the sea trail linked to a land trail or mahinga kai resource.

Our tūpuna had a huge knowledge of the coastal environment and weather patterns, passed from generation to generation. This knowledge continues to be held by whānau and hapu and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the coast.

Numerous urupū are being exposed or eroded at various times along much of the coast. Water burial sites on the coast, known as waiwhakaheketupapaku, are also spiritually important and linked with important sites on the land. Sites known to have been the scene of bloodshed are wāhi tapu also.

Rāhui and tapu were two sacred mechanisms, set in place through ritual and karakia and utilised to set aside places from the general population. The tapu which existed were removed by tohuka in the late 1800s to protect Pākehā from being harmed as a result of their innocent ignorance of sites. Notwithstanding this, the deeds of ancestors are still venerated and are important sites.

### 5.8.6 *Wāhi Tapu Issues*

Protection of:

- the abode of takaroa
  - water burial sites
  - coastal caves
  - umu takata
  - urupā from erosion, subdivisions and walkways.
- Reduced access to sites of significance from changing land ownership.

### 5.8.7. *Wāhi Tapu Objectives*

- i. Wāhi tapu are protected from inappropriate activities.
- ii. Kāi Tahu ki Otago access to sites and species of significance is protected.

### 5.8.8 *Wāhi Tapu Policies*

- 1 To require an accidental discovery protocol for any disturbance to the coastal marine environment<sup>67</sup>.
- 2 To oppose the discharge of sewage that may impact on wāhi tapu in the coastal environment such as water burial sites.
- 3 To require Kāi Tahu ki Otago whānau and hapu access to wāhi tapu sites are established maintained, and protected, and to discourage public access around known wāhi tapu areas.
- 4 To require that all artefacts discovered are returned to the Papatipu Rūnaka and if found on Māori land are returned to the appropriate Rūnaka, whānau or hapu.
- 5 To identify wāhi tapu areas within respective papatipu rūnaka takiwa through the Resource Inventory methodologies<sup>68</sup>.

### 5.8.9 *Mahika Kai (Kai Moana) & Biodiversity*

The abundant kaimoana of Te Takutai Moana presented a mainstay of sustenance for generations of our people living in the predominantly coastal settlements. Offshore fishing grounds were often named after ancestral figures as a means of identifying the people with particular harvest or fishing rights. Regionally abundant species were targeted with tried and true technologies. Waka unua were used to troll for makaa which were a particularly important species to Kāi Tahu ki Otago as well as catching species such as ling, hapuka and cod by longline. Koura were caught in the inshore reefs in hinaki. Large seabirds such as tōroa were sometimes snared on the tauihu of the waka or by other means. It is also evident that kekeno were harvested regularly and an occasional whale stranding a bonus for the kaik.

The availability and abundance of certain particularly sweet shellfish such as tuaki and pipi figure highly in the estimation of the local communities such as at Ōtākou on Otago Peninsula. The provision of special items of kai on the menu for guests provides a way of increasing the mana of the community and by reflection the rakātira representing them. The importance of shellfish in the diet of the tūpuna is witnessed by the huge piles of shells in midden material one might see eroding from coastal sites.

Our customs of resource use and management are firmly bedded in the concept of sustainable use, and respect for the diversity of life and ecosystems that co-habit Takutai Moana. Seeding or transfer of types of mature shellfish in woven kete was a way of expanding the range of kai available. This was done under a strict protocol and knowledge of natural observations. Rāhui and tapu were mechanisms developed for community control. Rāhui were traditionally utilized as a temporary fishing or harvesting ban to allow a resource to replenish should it be recognised that it was depleted and a tapu could be placed to provide for a complete ban but it might be for a range of reasons other than resource management. The maxim of only taking what you need was strictly adhered to and dissidents were sometimes drastically penalised.

<sup>67</sup> See Appendix 6 Accidental Discovery Protocol Example

<sup>68</sup> See Chapter 12 Resource Inventory

### 5.8.10 Mahika Kai (Kai Moana) & Biodiversity Issues

- Loss of the integrity of the Ngāi Tahu Claims Settlement Act 1998 and the Te Rūnanga o Ngāi Tahu Act 1996 from limited Government Agency recognition impacting on the ability to be effective kaitiaki within the EEZ.
- Lack of integration between marine protection initiatives and the imbalance in resources and commitment to establishing customary fishing tools.
- Effective management and protection of customary fishing and sites of particular significance.
- Further loss of customary rights through the inappropriate establishment of marine reserves in significant gathering areas.
- Restricted physical access to the foreshore and seabed for the collection of kaimoana.
- Impact on coastal kai moana, associated habitats and sites from:
  - tourism-associated recreational take affected sustainability
  - damming of waterways impacting freshwater/saltwater interface
  - dredging and dumping
  - reclamation
  - activities occurring in the catchment
  - artificial openings of river mouths and lagoons
  - adjacent industrial activity as associated discharges, both point and non-point sources
  - disturbance from vehicle access
  - aquaculture.
- Over-fishing, both commercial and recreational use resulting in depletion.
- By-catch of seabirds within the fishing industry.
- Kai moana which have strong cultural significance to whānau, hapū, and iwi have been commercialised leading to depletion or unavailability.
- The introduction and invasion of exotic species, such as undaria, through ballast, hull cleaning, and other shipping activities and the translocation of such species into coastal environments.
- Protection of marine mammals.
- Loss of natural habitat for indigenous marine species.
- Decline of marine mammals and access to material from dead marine mammals.

### 5.8.11 Mahika Kai (Kai Moana) & Biodiversity Objectives

- i. The Marine Environment is managed in a holistic way.
- ii. Te Tai o Arai Te Uru supports the full range of healthy ecosystems and species.
- iii. There is an abundance of healthy kai moana.

### 5.8.12 Mahika Kai (Kai Moana) & Biodiversity Policies

1. To require that greater provision is made for input from takata whenua across central and local government in the development of integrated policy for the coastal environment.
2. To require that customary fishing rights be exercised under the South Island Customary Fishing Regulations, and to require that the appointment of Takata Tiaki be administered by Papatipu Rūnaka as a function of Takata Whenua and to encourage the Ministry of Fisheries to provide Takata Tiaki with effective support.
3. To promote the integrated catchment management and inter-agency co-operation in the management of the coastal environment in particular adjacent to Mātaitai and Taiāpure and other important areas.
4. To identify marine areas of significance for customary fishing and to encourage inter-agency co-operation with Papatipu Rūnanga in the management and protection of these areas, including the Ministry of Fisheries and the Otago Regional Council.
5. To oppose the establishment of marine reserves in areas of significance for customary fishing, wāhi tapu, or where it would inhibit the development of a Mātaitai or Taiāpure.
6. To encourage a parallel process for the identification and establishment of Mātaitai, Taiāpure and marine reserves.

7. To encourage the Crown to provide better support to takata whenua to ensure they have the necessary capacity to manage Mātaitai and Taiāpure.
8. To seek joint and integrated management of land adjoining Mātaitai, Taiāpure and other important coastal areas. To require access for whānau and hapu to the coastal environment where kai moana is gathered.
9. To encourage tourism operators to set agreed limits on recreational take from charter operations.
10. To require that dredging and reclamation works avoid physical damage to kai moana sites, habitat and the integrity of the seabed.
11. To promote that artificial openings of river mouths and lagoons need to be aligned with natural cycles and migrations of mahika kai species.
12. To oppose vehicular access to coastal environment where mahika kai is gathered, dune areas, areas where pikao and other coastal plants occur, and in particular tidal areas.
13. To require the Otago Regional Council and the Ministry of Fisheries ensure aquaculture does not have an undue adverse effect on customary fishing, fishing resources, or fisheries.
14. To establish a process with the Otago Regional Council to identify suitable areas for aquaculture and the allocation of coastal space to ensure that Kāi Tahu Ki Otago rights are protected.
15. To encourage best fishing technology that will avoid undue adverse impacts.
16. To encourage effective takata whenua input and participation into Ministry of Fisheries processes.  
For example:
  - i. the setting of total allowable catches
  - ii. research planning and stock assessment
  - iii. compliance planning.
17. To encourage best technology to avoid by-catch of seabirds.
18. To oppose further commercialisation of species of significant local importance for customary fishing.
19. To require the investigation of better technologies for ballast water discharges and hull cleaning.
20. To require the eradication of any new exotic species or biosecurity threats where possible rather than relying on control methods.
21. To require the appropriate processes are in place for beached marine mammals as detailed in the Te Rūnanga o Ngāi Tahu Beached Marine Mammal Policy.
22. To provide for access to cultural materials and support the development and promotion of a Cultural Materials Bank with the Department of Conservation.

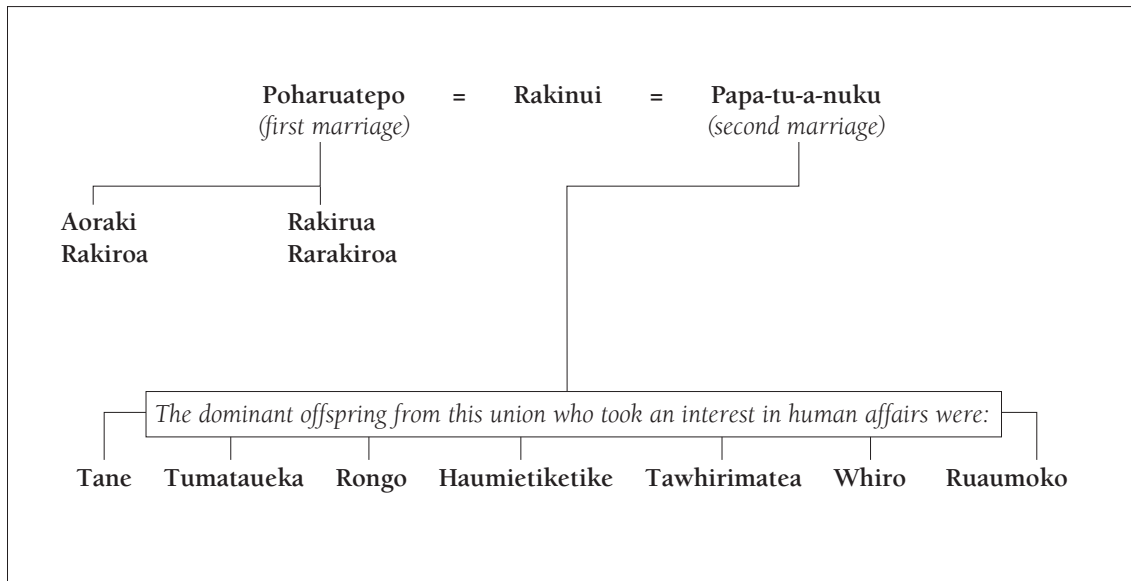
### 5.8.13 Cultural Landscapes

In the beginning there was no Te Wai Pounamu or Aotearoa. The waters of Kiwa rolled over the place now occupied by the South Island, the North Island and Stewart Island. No sign of land existed. Before Raki wedded Papatūānuku, each of them already had children by other unions. After the marriage, some of the Sky Children came down to greet their father's new wife in a waka called Te Waka a Aoraki. Among the celestial visitors were four sons of Raki. They cruised around Papatūānuku who lay as one body in a huge continent known as Hawaiiiki. Then, keen to explore, the voyagers set out to sea, but no matter how far they travelled, they could not find land. They decided to return to their celestial home but the karakia which should have lifted the waka back to the heavens failed and their craft ran aground on a hidden reef, turning to stone and earth in the process.

A great conflict arose between Tane Mahuta, Guardian of the Forest, and Takaroa, guardian of the Sea. Takaroa harboured anger towards Tane Mahuta who had succeeded in separating Rakinui, the Sky Father from Papa-tu-a-nuku, the Earth Mother. Tane Mahuta tried to end the warring between them and as a sign of peace plucked out his eyebrows and gave them to Takaroa. Takaroa's anger was so great that he could not find it in his heart to forgive Tane, and threw the eyebrows back onto the shore. There they grow today as Pikao, the Golden Sand Sedge, as the boundary between the forest and the sea, and in his continuing anger, Takaroa is still fighting against the domains of Tane Mahuta.

Tu-te-Rakiwhanoa (Tu), a benevolent relative of Tumataueka, the great god of war, came down to inspect the wrecked canoe of Aoraki and found things far from his liking. The high and elaborate prow of the canoe had fallen and shattered, forming the Marlborough Sounds and the stern had sunk with the taurapa being Bluff Hill. Tu and his helpers set about re-shaping the landscape. Tu had instructed Marokura (a minor god) to form a fishing station at Kaikoura – hence the peninsula – and to plant food in the sea.

Tu left two gods named Rokonui atau and Kahukura to attend to Otago, and they made Moeraki peninsula, Huriawa peninsula and Mua-upoko (Otago peninsula). Kahukura devoted a lot of attention to the South Coast. He saw to it that the coast from the Nuggets to Otara, and the heights behind, were covered in bush, and one stretch is named after him.



#### 5.8.14 Cultural Landscapes Issues

- Marine aquaculture in culturally significant landscapes.
- Mining of the seabed and foreshore.
- inappropriate siting of moorings and structures.
- Tourism activities and infrastructure.
- Access to some tauraka waka and associated trails has been impeded.
- The cumulative effect of incremental, unco-ordinated land use change and building within the coastal environment.
- Coastal erosion and the impact on coastal frontages.
- Protection of cultural landscapes and seascapes such as reef systems and other sites with associated mana.
- Coastal subdivisions and building consents.
- Failure to provide for changing coastal landscapes resulting from changing sea levels.
- Reclamation impacting on cultural landscapes.
- Integrity of cultural information and interpretation pertaining to the coastal environment.

#### 5.8.15 Cultural Landscapes Objectives

1. To recognise and protect the cultural integrity of coastal land and seascapes.

#### 5.8.16 Cultural Landscapes Policies

1. To encourage access and protection of coastal landscapes.
2. To encourage the identification and protection of significant sea and landscapes in the coastal environment.
3. To discourage mining around culturally significant landscapes including fishing sites or wāhi tapu.

4. To require the protection of fragile sand dunes and sand flat ecosystems through:
  - i. limiting land use activities, including earthworks and any extractive industry, which may have an adverse effect on the environment;
  - ii. controlling the removal of vegetation and any disturbance to ecosystems and, in particular, indigenous flora and fauna;
  - iii. monitoring erosion rates and any flooding that occurs;
  - iv. monitoring and controlling the effects of harbour dredging and reclamation;
  - v. monitoring and ensuring the sustainable use of sand.
5. To encourage coastal buffer zones free from visually intrusive structures and activities.
6. To protect the coastal environment from encroachment of the built environment.
7. To require that buildings and developments within the coastal environment are to be in sympathy with the cultural landscapes.
8. To require that jetties and other structures in the foreshore area are controlled to minimise adverse environmental impacts and to ensure access by Kāi Tahu ki Otago to culturally significant areas.
9. To encourage the correct use of Kāi Tahu place names associated with the coastal environment.
10. To oppose any further reclamation of the coastal marine area.
11. To protect the integrity of highly sensitive wildlife sanctuaries and wāhi tapu within the coastal environment through the prevention of inappropriate land use within significant natural and cultural areas, e.g. licensed premises.
12. To encourage rubbish/litter management strategies especially in high public use areas.
13. To allow the inward retreat of coastal ecosystems such as dune and estuarine systems.

## 5.9 POUNAMU

This section of the Plan reflects a work in progress as Otago and Murihiku Rūnaka work to complete a Regional Pounamu Management Plan.

### 5.9.1 Introduction

Kāi Tahu customs are intricately linked to this special taoka, the practice of gathering, using and trading pounamu bind our identity to the landscape. For our people pounamu conveys mana and mauri from ages past, and is reflected in its exalted whakapapa lineage, an uri of Takaroa.

The in-situ sources of pounamu in the interior of Otago enjoy high status, the difficulties our tīpuna overcame to travel on foot inland to obtain this taoka and return to the coast to work raw material is evidence of this. The traditions and imagery of such arduous journeys will forever impress each generation of the fortitude and physical courage of our tīpuna.

Following passage of the Ngāi Tahu (Pounamu Vesting) Act 1997 into law, Te Rūnanga o Ngāi Tahu undertook a comprehensive research and consultation process in conjunction with the pounamu industry and the community to establish principles that would be applied to the protection, use and management of pounamu. Appointment of an interim Pounamu Protection Officer and Regional Co-ordinators was made to provide administrative and protection measures while a management plan was being developed.

In September 2002 Te Rūnanga o Ngāi Tahu approved the Te Rūnanga o Ngāi Tahu Pounamu Resource Management Plan (2002); the plan informs Kāi Tahu whānui, other Māori, community and the pounamu industry on how pounamu will be managed. Emphasis is on upholding the mana and mauri of pounamu whilst providing a framework for the range of responsibilities that are to be held at the tribal level and at the regional level of Kaitiaki Rūnaka.

### 5.9.2 Responsibilities

#### 5.9.2.1 Te Rūnanga o Ngāi Tahu

The Te Rūnanga o Ngāi Tahu responsibility is to hold ownership on behalf of the “collective”, administer ongoing protection of tribal interests and legal ownership, monitor and review the Pounamu Management Plan.



### 5.9.2.2 *Kaitiaki Rūnaka*

The Kaitiaki Rūnaka are:

*Those based in the Otago Region:*

Te Rūnanga o Moeraki

Kāti Huirapa Rūnaka ki Puketeraki

Te Rūnanga o Ōtākou

Hokonui Rūnanga

*Those based in the Southland Region:*

Te Rūnanga o Ōraka Aparima

Te Rūnanga o Awarua

Waihōpai Rūnanga

Makaawhio Rūnanga

The principal role at the regional level is to act as kaitiaki of the pounamu in the takiwā. In Otago, it is a shared responsibility involving the kaitiaki Rūnaka listed above.

The kaitiaki functions include the following duties:

- Determine the extent of protection.
- Determine collection policy and rāhui pounamu/restrictions for the collection of pounamu.
- Determine sustainable extraction levels of any given deposit within their takiwā and undertake sustainable extraction.
- Be the point of contact, and undertake supply to the commercial industry.
- Undertake monitoring and surveying of deposits/pounamu areas.
- Create a pounamu resource management plan.

In undertaking the above functions the Kaitiaki Rūnaka will exercise authority over such matters as kawa and tikaka, an encompassing matrix of values and beliefs that when applied reinforce the mana and mauri of pounamu and the connection with Kāi Tahu whānui.

### 5.9.3 *Co-operation*

In undertaking their respective duties Te Rūnanga o Ngāi Tahu and Kaitiaki Rūnaka recognise the respective roles and duties of each partner. Commitment to co-operation and communication is an essential ingredient to the successful transition from a management regime that categorised pounamu as a “mineral” to the elevated status of pounamu with its life force and spiritual connection to the tribe.

Kaitiaki Rūnaka also recognise the cultural interest of the wider tribal membership and those Papatipu Rūnaka outside of the areas where pounamu exists.

### 5.9.4 *Regional Pounamu Management Plan*

The merging of the Murihiku and Otago Regional Pounamu Management Plans came about as the result of three hui held between Otago and Murihiku rūnaka.

The Regional Pounamu Management Plan will set out the specific management structures, policies and process for the management of pounamu in the combined takiwā of the Otago and Murihiku Rūnaka.

## Te Rūnanga o Ngāi Tahu Pounamu Resource Management Plan 2002

Overarching policies & processes for the management of pounamu developed by the NTPMG, including:

- Roles, responsibilities & relationships
- Protection mechanisms & policy
- Fossicking & collection policy
- Sustainable extraction policy
- Supply mechanisms.



## Regional Pounamu Management Plan 2002

Specific management structures, policies and processes for the management of pounamu in the takiwā of the combined Otago and Murihiku Rūnanga

### 5.9.5 Issues, Objectives and Policies

As an interim measure a rāhui pounamu has been in place in the Otago region since the passing of the Ngāi Tahu (Pounamu Vesting) Act 1997. This is subject to review by the collective Kaitiaki Rūnaka who will determine appropriate protection, access and use policies applicable to their membership and Ngāi Tahu whānui.

#### 5.9.5.1 Issues

Takiwā-wide issues for Pounamu are identified in the Te Rūnanga o Ngāi Tahu Pounamu Resource Management Plan. Local issues for the Otago Region are likely to include:

- Local protection mechanisms
- Review of existing rāhui pounamu
- Collection policies
- Recording and researching of pounamu deposits
- Monitoring of the pounamu resource
- Trade-marking and authenticity
- Crown Mineral Permits
- Access arrangements
- Accidental discovery/Finds
- Department of Conservation issues – planning, permits, concessions.
- Adoption and implementation of Te Rūnanga o Ngāi Tahu Pounamu Resource Management Plan (2002), and the Regional Plan when developed, into Territorial Local Authority Planning and consents.

#### 5.9.5.2 Objectives

- i. All pounamu within the Otago Region is protected through sound management process to provide for Kāi Tahu cultural practices.
- ii. There is a sound understanding of all in-situ pounamu resources with the takiwa.

#### 5.9.5.3 Policy

1. To develop in conjunction with Murihiku Papatipu Rūnaka a Pounamu Resource Management Plan for the Otago and Murihiku takiwa to complement and support the Te Rūnanga o Ngāi Tahu Pounamu Resource Management Plan (2002) and to recognise local Kaitiaki roles and responsibility.

2. To maintain the current “no take rāhui” over all in situ pounamu in the region. The duration of the rāhui will be subject to an Otago/Southland “Regional Pounamu Plan” which will address matters of sustainable use and take.
3. To require urgent investigation into Pounamu deposits in gravel takes from the Upper Wakātipu Area.
4. To require any artefact made of pounamu discovered or found within the Kāi Tahu takiwā on lands administered by the Department of Conservation should be left untouched and notified immediately to the local Department of Conservation Office who will in turn notify Kāi Tahu. If the artefact happens to be collected it should be handed directly to the local Department of Conservation along with all information about the find.
5. To ensure that all persons who find artefacts made of pounamu are aware of how to deal with the find appropriately and are familiar with their legal responsibilities.

### **5.9.6 Communication Strategy**

External relationships will be maintained and developed with a broad cross-section of the community to achieve understanding, co-operation and opportunity to promote protection and wise use of the pounamu resource. For example the following groups and agencies are central to any communication policy:

- Ma ta waka
- Department of Conservation
- Otago Regional Council
- Queenstown Lakes District Council
- Community
- Commercial.



## 6 WAITAKI CATCHMENTS *TE RIU O WAITAKI*

*This chapter outlines the issues, and policies for the Waitaki Catchments. Included in this chapter is a description of some of the Kā Papatipu Rūnaka values associated with the Waitaki Catchments.*

*Generic issues, objectives and policies for all Catchments across the Otago Region are recorded in Chapter 5 Otago Region.*

Kāi Tahu has a long association and involvement with the Waitaki Catchments and they remain of paramount importance. The Crown has recognised this significance, in part, through the Ngāi Tahu Claims Settlement Act 1998<sup>69</sup>. As manawhenua, the tribal members belonging to the three Papatipu Rūnaka, Te Rūnaka o Arowhenua, Te Rūnanga o Waihao and Te Rūnanga o Moeraki (herein referred to as Kā Papatipu Rūnaka) have a responsibility to assess how the use, development and protection of natural resources within the Waitaki Catchments impact upon their cultural, beliefs, values and practices.

### 6.1 WAITAKI CATCHMENTS DESCRIPTION *WHAKAAHUATAKA O TE RIU O WAITAKI*

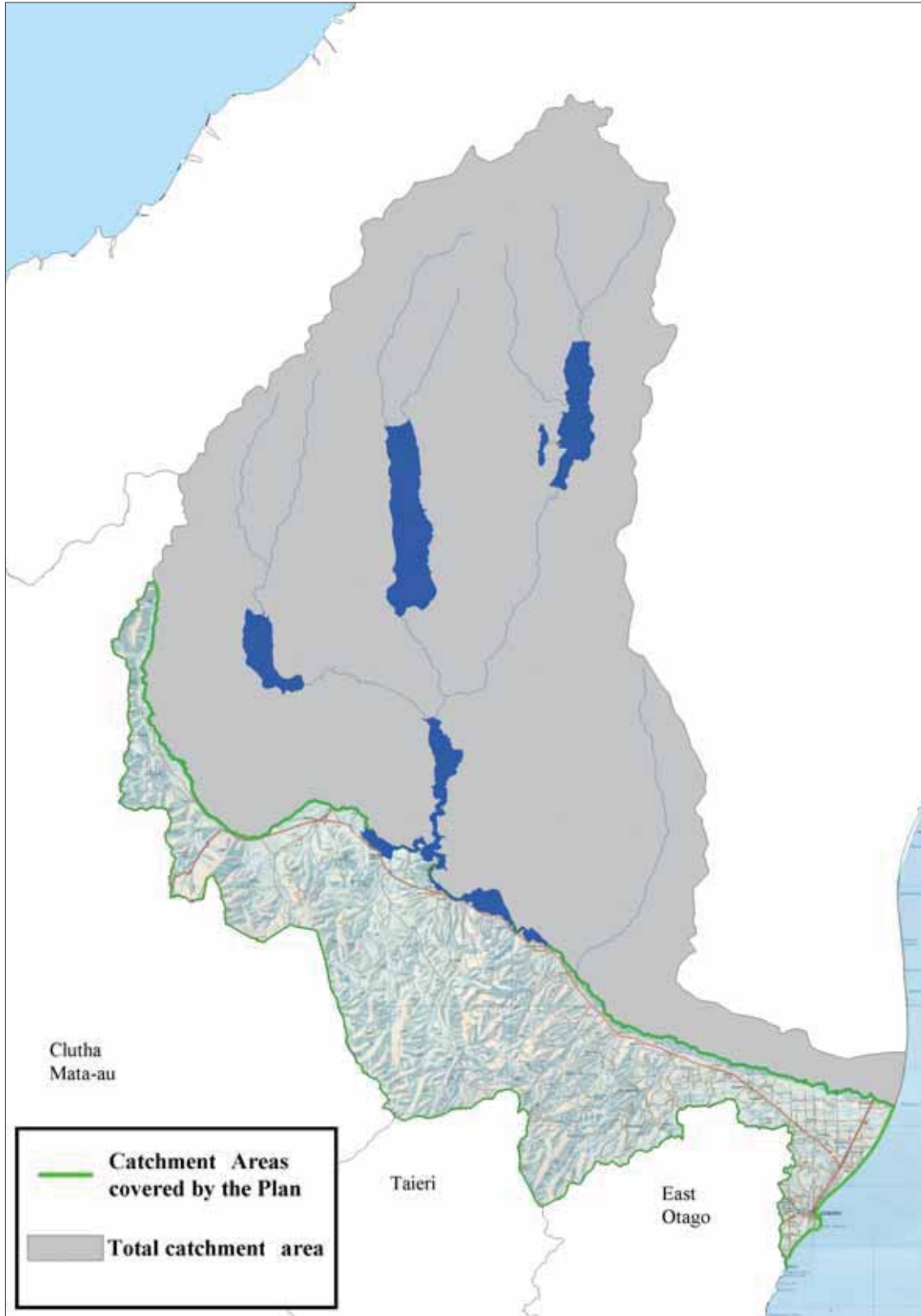
The Waitaki River flows from Aoraki which stands proudly in the Southern Alps/Kā Tiritiri o te Moana. Waters sourced from snow and ice flow into the glacial lakes of Ōhau, Pukaki and Tekapo before flowing down braided river beds to join the Ahuriri River flow in the man made lakes. Lakes Benmore, Aviemore and Waitaki are surrounded by the Benmore, Kirkliston and Hawkduin ranges. After passing through Waitaki Power Station, the power station furthest downstream, the waters are discharged to the braided river system commonly known as the Lower Waitaki River. Tributaries throughout the Waitaki Catchments enter either the lakes or the braided river system. These tributaries plus the riparian wetlands and numerous springs which are found in the Lower Waitaki all contribute to a complex river system which flows to meet the Pacific Ocean on the plains north of Ōamaru. Pukeuri, at the southern entrance to the Waitaki Valley was an important site for those travelling either north - south along the coastal trails or to inland areas.

Please note that while the focus of this Plan is the Otago Regional Council boundaries<sup>70</sup>, the Waitaki Catchments encompass land and waters in both the Otago and Canterbury regions. While we have tried to identify those issues, objectives and policies within the Otago Regional Council boundaries, in keeping with the philosophy of “Ki Uta Ki Tai” it is important to acknowledge the Waitaki Catchments encompass the wider area described above. This wider area is highlighted in the map at the request of Te Rūnanga o Moeraki.

<sup>69</sup> See Appendix 8 Statutory Acknowledgement Waitaki River - Appendix 12 Topuni Aoraki/Mt Cook – Appendix 32 Statutory Acknowledgement for Aoraki/Mt Cook  
<sup>70</sup> See Map 1 Area of Plan

Map 4 Waitaki Catchments

CHAPTER 6 WAITAKI CATCHMENTS



## 6.2 WAI MĀORI

### 6.2.1 Wai Māori Description

Kā Papatipu Rūnaka value all waterways within the Waitaki Catchments. We consider three dimensions to a waterway: from the headwaters to the sea; from the river to the riparian/floodplains; and from river to groundwater. Although some of the water bodies in the Waitaki Catchments are artificial, habitat has been created within them, and as a result they support cultural values such as mahika kai.

The Waitaki River is the ancestral river of Kāi Tahu and as such is of paramount importance. The waters themselves, ko roimata na Aoraki, are also of unparalleled significance. The melt waters flowing from Aoraki are sacred. On special cultural occasions, the blessings of Aoraki are sought through taking small amounts of its special waters back to other parts of the island for use in ceremonial occasions.

The Waitaki River is fed from a number of sources. These include:

- lakes in the upper and mid Waitaki;
- the braids of the Waitaki River;
- the main tributaries; and
- numerous small springs.

Springs occur predominantly along the wall on the north side of the lower valley. Some only moisten deep-rooted plants others bubble to the surface and are large enough for birds and humans to drink from. The network of waterways and springs, provided a patchwork of aquatic environments supporting fish, bird and plant life throughout an otherwise arid catchments.

In most parts of South Canterbury and North Otago water is a scarce resource. To a great extent the course of development within these two regions has followed the sources of water. The possession of water and the ability to use it has determined, in part, who thrives and who perishes. Kāi Tahu is not divorced from this fight as our culture and way of life is closely tied to the land and water.

GENERIC ISSUES, OBJECTIVES AND POLICIES FOR ALL CATCHMENTS ACROSS THE OTAGO REGION ARE RECORDED IN CHAPTER 5 OTAGO REGION

### 6.2.2 Wai Māori Issues for the Waitaki Catchments

- Loss of connection in the main stem of the Waitaki River between the river and the many side braids and backwater habitats.
- Solid waste deposits in and around the Waitaki Catchments represent a risk.
- Leaching into rivers and creeks.
- Cumulative and individual impacts on the unique water quality and quantity in the Waitaki River.
- Flow regimes, including:
- Loss of experiences and feelings associated with the main stem of the Waitaki River from reduced flows.
- Impacts of reduced flow in the main stem of the Waitaki River including:
  - biophysical
  - sedimentation
  - erosion
  - river stability
  - changes of flow regime
  - surface and groundwater quantity and quality
  - vegetation cover
  - mahika kai populations.
- Issues of flow variability and duration of low flow are often not addressed.
- Sufficient flows are needed to retain spring flow in the lower valley, particularly on the north side, and associated habitats.

**Water Extraction, in particular:**

- Threats to cultural values associated with water from the many proposals to extract water from the Waitaki Catchments.
- Excessive interception of tributary flows and lack of investigation into the impacts of such water harvesting.
- The groundwater tables will follow the changes of a rivers water level and the river will be the base level for the groundwater table which may adversely affect the confluence of the main stem of the Waitaki with the tributaries.
- Private company and landowner commitment to improving irrigation technology varies.

**Land use**

- Impact of changing land uses, enabled by increased irrigation, on nutrient inflow to the aquatic environments.
- Reduction in the size of rivers may result in encroachment of farming activity onto riverbeds and stock effluent entering groundwater and/or the residual river.
- Increased public access to sites of significance and the resultant inappropriate use or destruction.

**6.2.3 Wai Māori Policies for the Waitaki Catchments****Extraction:**

1. To encourage the efficient use of water in the Waitaki Catchments.
2. To encourage the prioritisation of the efficient use of water and wherever possible require an assessment of effects on the environment that accompanies resource consents, to justify the quantities of water taken. The amount taken should be based on efficient norms for the area cultivated, the crop mix, and the water requirements of each crop.
3. To require that as part of an application for consent to take water information on the interaction between groundwater and surface water flows in the Waitaki River main stem and/or tributaries be included. In the absence of such information, a precautionary approach to allocation will be sought.
4. To require the consideration of the overall state of the Catchments when determining an application to take water.
5. To require acceptable minimum flows for the water body from which water is to be abstracted. In some instances the minimum flow sought as a condition of the consent will be higher than the existing minimum flow. Irrigators that have invested in water harvesting will be advantaged by this approach.

**Water Harvesting:**

6. To support water-harvesting proposals that propose taking water at times of high flow provided a hydrological assessment shows that there will be no adverse effect on the overall flow regime.
7. To oppose the interception of tributary flows which contribute to base flows in the main stem.

**Water Quality:**

8. To require that the water in the Waitaki Catchments is managed to the highest standards due to the unique qualities of this water.
9. To require the Otago Regional Council and Environment Canterbury consider not just the physical but also the cultural context of water within the Waitaki Catchments. To develop, as a matter of priority, flow regimes for the Waitaki River main stem and significant tributaries that:
  - i. have been determined using methods that Kāi Tahu agree adequately respond to cultural values.
  - ii. consider low flows, duration of low flows, recession of flows
  - iii. protect the Waitaki braided river system, in particular the side braids along the main stem Lower Waitaki, the riparian wetlands and springs in the Lower Waitaki.
  - iv. protect the movement of migratory fish species throughout the Waitaki Catchments, in particular from main stem to tributaries.
  - v. prevent the build-up of fans of sediment at the confluence of tributaries with the Waitaki main stem.



**Solid Waste:**

10. To promote investigating the location of informal dumps, e.g. waste from hydro construction in the '50s, '60s and '70s.

**Land use and Riparian Management:**

11. To oppose the grazing of riverbeds.  
 12. To encourage the recognition of the defined river channel.  
 13. To encourage the use of buffer zones to protect the side braids and riparian wetlands.  
 14. To require Government agencies to assist Kā Papatipu Rūnaka identify areas at risk, e.g. from grazing licences and ad medium filum aqua areas (the grantee of the land takes the bed of the river to the middle line).

**6.3 WĀHI TAPU****6.3.1 Wāhi Tapu in the Waitaki Catchments****Mauka**

Kia tūohu koutou, me he mauka teitei, ko Aoraki anake  
 If you must bow your head, then let it be to the lofty mountain Aoraki

Aoraki stands as the most sacred of ancestors, from whom Kāi Tahu descend. No mauka is more significant than Aoraki. Other mountains of significance to Kāi Tahu in the Southern Alps/Ka Tiritiri o Te Moana include:

- Aoraki/Mount Cook
- Rakiroa (Mount Dampier)
- Rakirua (Mount Teichelmann)
- Rārakiroa (Mount Tasman)
- Te Kohurau (the highest in a line of three peaks, behind the hill you directly look at from Kurow township).

**Urupā**

While Māori burials are widespread and can be found virtually anywhere (in the ground, in water, in rock clefts and caves, and up in trees), only a few burials are reported.

Known urupā within the Waitaki Catchments include:

- Two rock shelters both laid to rest beneath the earth of the shelter floors.
- Three ground burials. One of these was destroyed during flooding in the late 1960s (it was located beside the Waitaki River), another two were disturbed during the development of farms and townships. Several of these burials also contained artefacts including pounamu adzes and chisels and other unnamed “Māori implements”.
- One site at Te Puna a Maru
- One site within the Lower Waitaki to be protected is at Taihinu/Tauhinu

Other sites that are considered “sacred”<sup>71</sup> include:

- Punatutai or Punatutae
- Te Awamoko
- Rakai koroheo
- Moepuku

**Tuhituhi Neherā**

The Waitaki Catchments contain one of the highest densities of rock art sites in the South Island, with over 300 sites recorded to date. These sites are of the highest cultural significance to Kāi Tahu.

71 As listed in historical records

Their importance to the iwi is recognised in the Statutory Acknowledgement for the Waitaki River, where the surviving rock art sites are described as “a particular taoka of the area, providing a unique record of the lives and beliefs of the people who travelled the river”. The rock art sites have also been deemed “of national significance” by the New Zealand Historic Places Trust, and are protected under the Historic Places Act (1993).

Within the Waitaki Catchments rock art sites are located in the limestone rich areas centred around the Maerewhenua and Awamoko river Catchments, and in the outcrops north, west and south of Ōamaru. Significant concentrations of rock art have also been recorded in the Upper Waitaki, near Lakes Pūkaki and Tekapō and on the banks of the Waitaki and Ahuriri Rivers. The sites in the Upper Waitaki have particular significance because in this area the art was applied to greywacke rather than limestone.

Rock art is vulnerable to damage from many sources because it is part of the natural landscape. Natural processes such as wind, sun and rain can damage these sites, with extreme changes in climate, such as heavy frost, causing particular harm. Stock also pose a threat as they rub against the art or chew the outcrops for salt.

Modifications to the landscape around the sites can also be detrimental. Where rock art is applied to limestone, even very slight changes in microclimate or hydrology can affect the rate of exfoliation of the surface of the rock, in turn damaging the art. Changes in the microclimate can also affect the growth of vegetation in the area, which can have a negative impact upon the art. Activities at some distance from the art may also be problematic, with increases in dust or vibration putting these fragile sites at risk.

A considerable amount of the rock art in the Waitaki Catchments has been destroyed or damaged through a variety of natural human induced and processes. During the early 1960s all but a few of the known rock art sites in the Upper Waitaki were destroyed when they were flooded with the formation of Lake Benmore, used for the generation of hydroelectric power. Other sites have suffered damage and destruction through failed attempts to remove the art and early efforts to protect it through fence construction. Other sites have been damaged by graffiti, retouching, stock rubbing, exfoliation and modern developments. It is imperative that the remaining rock art sites in the Waitaki Catchments are subject to the highest level of protection possible.

The Ngāi Tahu Māori Rock Art Trust was established to ensure the protection, preservation and promotion of the rock art sites within the tribal boundaries through the guardianship of the Kaitiaki Rūnaka. It is the iwi mandated organisation to manage all rock art related issues.

### **6.3.2 Wāhi Tapu Issues for the Waitaki Catchments**

#### **Rock Art**

- Lack of public awareness of the existence and significance of rock art sites.
- Lack of public awareness of the role of Kā Papatipu Rūnaka as the kaitiaki of the rock art sites within their takiwā.
- Lack of awareness of the many factors that may detrimentally affect rock art.
- Insufficient resources within the Kā Papatipu Rūnaka to protect all of the rock art sites within their rohe.
- Accurate information on the exact location of the rock art sites is not publicly available.
- Any activity in the vicinity of a rock art site has the potential to cause damage.

### **6.3.3 Wāhi Tapu Policies for the Waitaki Catchments**

1. To protect rock art sites from inappropriate activities that adversely affect the integrity of such sites.
2. To support the development of management plans for rock art sites. To promote the recognition of the cultural significance of rock art and the role of the Rūnaka as kaitiaki of the sites within their takiwā.

3. To support the development of proactive management strategies for rock art sites.
4. To encourage the ongoing surveying, recording and monitoring of rock art sites.

## **6.4 MAHIKA KAI AND BIODIVERSITY *TE REREKA KĒTAKA O KĀ KAIAO ME TE MAHIKA KAI***

### **6.4.1 Mahika Kai and Biodiversity in the Waitaki Catchments**

Basic patterns of mahika kai behaviour persist, and resources from the land and the freshwater resources of the Waitaki Catchments continue to play a prominent role in Kā Papatipu Rūnaka life ways.

From the accumulation of written and oral evidence, we see a picture of a stable mahika kai-based lifestyle in the Waitaki Catchments, beginning at least 900 years ago. Except for a few groups practising limited agriculture at permanent settlements, all was provided by nature. An outstanding characteristic of mahika kai within the Waitaki Catchments was the sequential utilisation of a great variety of natural resources as they occurred in widely scattered localities. From the upper lakes to river valleys, on the terraces above the floodplains, along the length of the Waitaki Catchments, and at the confluences of tributaries with the Waitaki River, there are remains of campsites both permanent and seasonal.

Information on the location of significant mahika kai sites in the Waitaki Catchments is held by Kā Papatipu Rūnaka<sup>72</sup>.

Repeated reference has been made to the significance of the Lower Waitaki River, in particular side braids, riparian wetlands, springs and backwaters for their biodiversity values. They are also significant for their mahika kai.

### **6.4.2 Mahika Kai and Biodiversity Issues in the Waitaki Catchments**

- Many islands in the Lower Waitaki could over time become linked to the riverbanks if the river flow is reduced. Their attractiveness to taoka bird species could be reduced. Further species that continue to live in these areas will become more vulnerable because they could be threatened again from adjacent land uses and/or easier access for plant and animal pests and predators.
- Excessive proliferation of aquatic weeds in tributaries and backwaters could result from reduced flows and/or land use change.
- Of particular concern is the threat of increased invasion of exotic aquatic plants, already present in the Mid Waitaki lakes, if the flow in the lower river is reduced. At present, flows are acting as a barrier to their spread.
- Kā Papatipu Rūnaka believe the impact of the loss of wetlands, springs, side braids and backwaters impact on mahika kai.
- In winter, lower flow levels in the Lower Waitaki River, can lead to ice formations in some side braids, which adversely impacts on the ability to access mahika kai. Hibernating species could also be adversely impacted.
- Kā Papatipu Rūnaka is concerned that increased fluctuations in the operational regimes of Lakes Benmore and Aviemore could adversely impact compensatory mahika kai habitats within and around the lakes.

### **6.4.3 Mahika Kai and Biodiversity Policies**

1. To protect the remaining mahika kai sites in the Waitaki Catchments.

## **6.5 CULTURAL LANDSCAPES *KĀ KĀIKA KANOHI AHUREA***

### **6.5.1 Cultural Landscapes in the Waitaki Catchments**

The entire landscape of the Waitaki Valley is dotted with archaeological sites. These places did not function in isolation from one another, but were part of a wider cultural setting that included not only archaeological sites as defined by the presence of archaeological remains, but all manner of highly valued places that were named by the earliest inhabitants of the area.

<sup>72</sup> See Section 1.4.5 Development of a Resource Inventory and Chapter 12 Resource Inventory

Examples of significant cultural landscapes include:

#### **Lone Hill limestone bluffs, Gards Rd**

The limestone outcrops to the west of Gards Rd are a significant feature on the landscape, which is reflected in their naming. They are also significant in terms of archaeology, in that the rock shelters, as well as the flat land in front of the bluffs contain the remains of prehistoric occupation. It is likely that these remains extend out into the paddock in front of the bluffs, and some may still be intact despite border-dyke construction in this area. The fossil dentalium shells that can be found eroding out of the limestone matrix were also an important resource, used by early Māori in the manufacture of necklaces.

#### **Site and wetlands at Priests Rd**

Archaeological material was observed in several places to the north of SH83, on a terrace overlooking a wetland area. The wetlands area at Priests Road below the terrace site should be preserved as an integral part of the site above. It is likely that the resources contained within the wetland (raupō, harakeke, wetlands birds and fish) would have been the stimulus for the site's position on the terrace above, and as such, the wetlands must be considered to be part of the site's wider area.

#### **Limestone bluffs, Maerewhenua to Kokoamo**

The limestone bluffs that run between Maerewhenua and Kokoamo have been surveyed for rock art. Although none have been recorded it is highly likely that they contain unrecorded archaeological material, as do most other rock shelters in the area.

#### **Wāhi Kohātu**

Kāi Tahu from the North Otago area were highly mobile which necessitated numerous camps and shelters. The limestone outcrops of the Waitaki Valley provided excellent shelters and were intensively occupied by Māori over many centuries. Those that have been excavated reveal a variety of activities taking place, covering the whole spectrum of daily life from food preparation, to tool making and weaving, to burial of the dead. Fossil dentalium shells, used in the manufacture of reels and tubes for necklaces, could be found amongst the other fossil species eroding out of the limestone matrix.

The two specific source sites that have been identified are at the Lone Hill bluffs on Gards Rd, and behind the old settlement of Otekaieke.

#### **Kāika nohoaka**

Historical kāika within the Lower Waitaki valley include:

- Puna Maru
- Te Korotuaheka at the Waitaki Mouth
- Te Awakokomuka
- Oteheni
- Potiki Tautahi
- Taramea
- Te Uku
- Rakaitu

Information about the, location, use and extent of kāika nohoaka is held by Kā Papatipu Rūnaka.

#### **Umu**

Within the New Zealand Archaeology Association (NZAA) scheme there are 33 records describing ovens in the lower Waitaki Valley. Of these, 26 are recorded as single ovens, ranging in size from 1 to 4 metres, some with raised rims, and others without. The remainder of the reports describe collections of ovens clustered together in groups of 2 or more. The areas in which ovens are found are quite diverse – many are located on old stream banks or ancient river terraces, others are on low spurs or ridges, still more in association with other features, such as quarry areas. Large groups of ovens are reported in the area of historically known kāika, such as Te Kapa Pā, where a cluster of 20 or more were observed. Many of the records relating to ovens come from reports rather than

actual field observations, often originating from farmers who had noticed discrete patches of dark soil and heat shattered rock in their paddocks after ploughing. Little detail in terms of size or number can be gained from these examples.

### **Wāhi Mahi Kohātu**

Several prehistoric quarry sites are known in the foothills of the Otekaieke area, and in some areas large pits are also present where subsurface deposits were being mined. Artefacts made from ortho-quartzite have been found throughout the Waitaki Valley and beyond, with literally thousands recovered from the large river mouth site of Te Korotuaheka.

### **Ara Tawhito**

Linkages between sites of significance within the Waitaki Catchments for the present and future generation are important. Linkage can be seen when tracing the paths of activity of ancestors. Hīkoi are increasingly being undertaken by rakatahi and other tribal members today to re-enact the events of historical times. A hīkoi may move from one location to another, the path which is used then becoming part of the significance of the two locations for the duration of the hīkoi. Two or more significant sites may exist outside of any resource use or development but the path of hīkoi may cross the path or footprint of the activity. Yet the path becomes, for the purpose of fulfilling the hīkoi, a part of the significant nature of both the site and the activities which celebrate it. The occupation of the North Otago for hundreds of years, has created a unique and complex landscape with numerous cultural associations and sites of significance.

Significantly, trails from the Waitaki Catchments enable access to:

- the Mackenzie Basin (and onto the Rangitata Catchment);
- the Kakaunui;
- Te Tai Poutini; and
- The Upper Clutha, the written records identify a series of stopovers on route: Papakaio; Te Puna a Maru; Confluence of Awamoko; O tama reu whenua; O tama takou; Ma ka tupua (stream Roberston Saddle); Ōmārama; Whānaukakino; Komako (Omako); Tautukua (tributary of the Lindis); Okatane (Kokotane) Breastburn; and Lake Hāwea

These patterns of occupation and travel are significant because they help us identify the locations where the chance of accidental discovery is high.

Photo 8 Waitaki River 73



73 Photo courtesy of Otago Daily Times

### 6.5.2 Cultural Landscapes Issues in the Waitaki Catchments

- Lack of recognition and implementation of the Cultural Redress components of the Ngāi Tahu Claims Settlement Act 1998 by local government agencies, namely<sup>74</sup>:
  - Statutory Acknowledgements
  - Place names
  - Nohoaka sites
- River and lake management regimes alter cultural landscapes.
- Threats to cultural landscapes with changing land uses including:
  - forestry
  - dairy conversion
  - increased irrigation
  - inappropriate placement of towers
  - infrastructure associated with communication networks on mountains or hilltops within the valley.
- Restricted access to kāika in the Waitaki Catchments.
- The association with limestone formations that provided places to rest and shelter is being lost. There are also concerns regarding archaeological values at such sites are not protected and finds are not reported.

#### Umu:

- Umu destruction by resource use and development.
- Umu may accidentally be destroyed through the inability of developers and resource users to recognise umu.

### 6.5.3 Cultural Landscapes Policies in the Waitaki Catchments

Statutory Acknowledgement areas, Tōpuni areas, Nohoaka sites and Place names:

1. To promote the adoption of Statutory Acknowledgements into regional and district plans and regional policy statements through the formulation of specific objectives, policies and rules, in conjunction with Kā Papatipu Rūnaka for the statutory area:
  - i. Waitaki River<sup>75</sup>
  - ii. Mahi Tikumu (Lake Aviemore)<sup>76</sup>
  - iii. Te Ao Mārama (Lake Benmore)<sup>77</sup>
  - iv. Lake Ōhau<sup>78</sup>
  - v. Whakarukumoana (Lake McGregor)
  - vi. Lake Alexandrina/Takamoana
  - vii. Lake Pūkaki
  - viii. Te Tai o Arai Te Uru (Otago Coastal Marine Area)<sup>79</sup>
2. To promote the recognition of place names amended under the NTCSA 1998 and their use in regional and district plans, policy statements and non-statutory planning documents.
  - i. Te Kohurau/Kurow Hill
  - ii. MacKenzie Pass/Manahuna
3. To encourage the use of Kāi Tahu place names in addition to those amended under the NTCSA 1998.
4. To promote the importance of Tōpuni within the Waitaki Catchments, including:
  - i. Aoraki/Mt Cook<sup>80</sup>

<sup>74</sup> See 4.4 Ngāi Tahu Claims Settlement Act 1998 and Appendix 7 Instruments from the Ngāi Tahu Claims Settlement Act 1998 Relevant to this Plan

<sup>75</sup> See Appendix 8 Statutory Acknowledgement Waitaki River

<sup>76</sup> Appendix 9 Statutory Acknowledgement Mahi Tikumu

<sup>77</sup> Appendix 10 Statutory Acknowledgement for Te Ao Marama

<sup>78</sup> Appendix 11 Statutory Acknowledgement for Lake Ohau

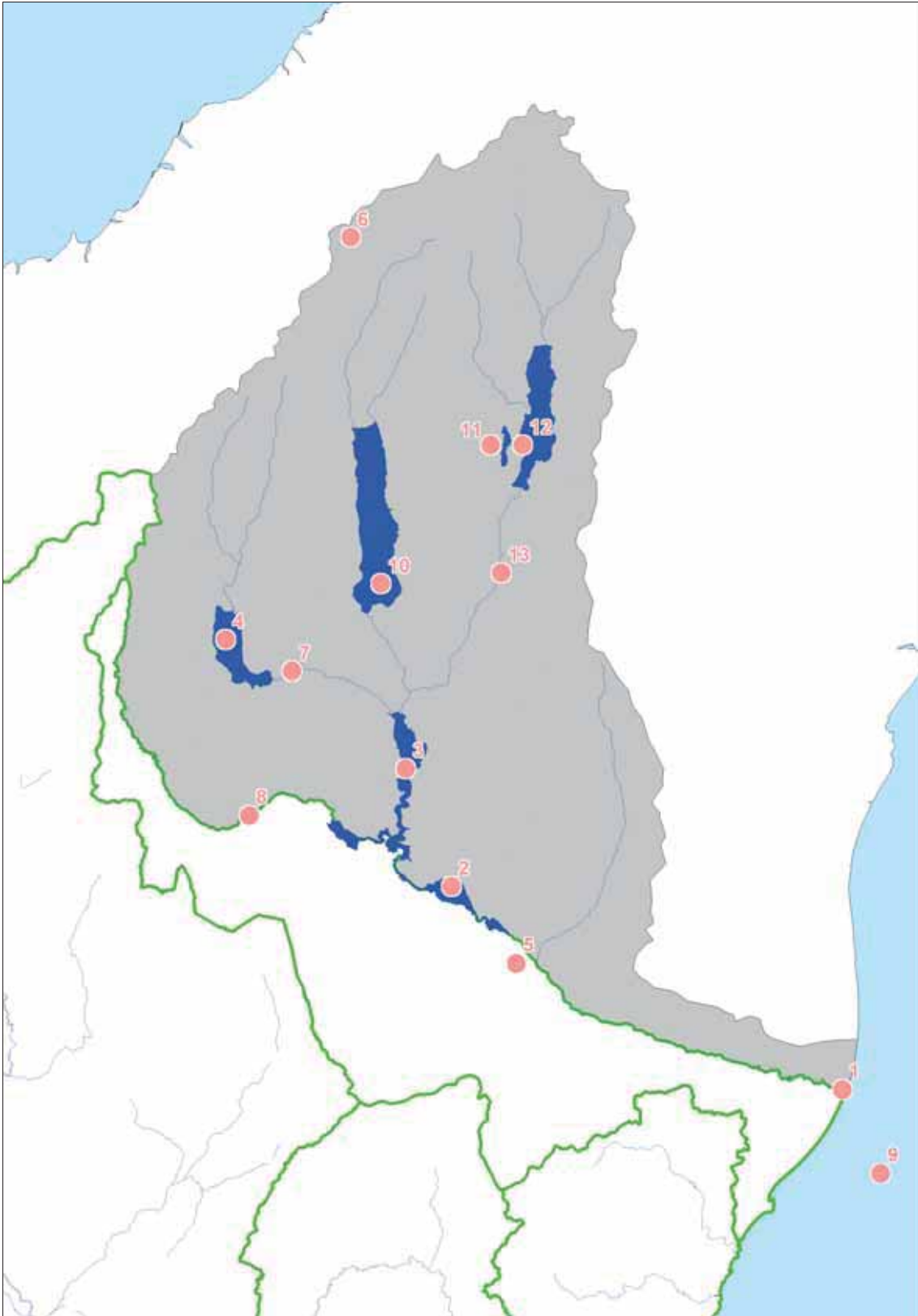
<sup>79</sup> Appendix 28 Statutory Acknowledgement for Te Tai o Arai Te Uru (Otago Coastal Marine Area)

<sup>80</sup> See Appendix 12 Topuni Aoraki/MountCook

5. To promote the recording of Nohoaka sites within regional and district plans and the consideration of Kā Papatipu Rūnaka as an affected party as the occupier of that land:
  - i. Lake Ōhau (2 nohoaka)
  - ii. Ōhau River (2 nohoaka)
  - iii. Ahuriri River
  - iv. Lake Benmore (2 nohoaka)
  - v. Waitaki River (2 nohoaka)
  - vi. Whakarukumoana (Lake McGregor)
  - vii. Lake Alexandrina/Takamoana
  - viii. Lake Pūkaki



**Map 5** Statutory Acknowledgements, Tōpuni, Nohoaka and Place Names in the Waitaki Catchments



**Map 5 Key**

- |  |   |
|--|---|
| 1 Waitaki River - Statutory Acknowledgement, Nohoaka (x2). | 8 Ahuriri River – Nohoaka.  |
| 2 Lake Aviemore - Statutory Acknowledgement.               | 9 Te Tai o Arai Te Uru (Otago Coastal Marine Area) – Statutory Acknowledgement. |
| 3 Lake Benmore - Statutory Acknowledgement, Nohoaka (x2).  | 10 Lake Pūkaki - Statutory Acknowledgement.                                     |
| 4 Lake Ōhau - Statutory Acknowledgement, Nohoaka (x2).     | 11 Whakarukumoana (Lake McGregor) - Statutory Acknowledgement.                  |
| 5 Kurow Hill/Te Kohurau – Place Name.                      | 12 Takepo (Lake Tekapo) - Statutory Acknowledgement.                            |
| 6 Aoraki/Mount Cook – Place Name, Tōpuni.                  | 13 MacKenzie Pass/Manahuna – Place Name.  |
| 7 Ōhau River – Nohoaka (x2).                               |   |



## 7 EAST OTAGO CATCHMENTS *TE RIU O MAHENO*

*This chapter outlines the issues, and policies for the East Otago Catchments. Included in this chapter is a description of some of the Kāi Tahu ki Otago values associated with the East Otago Catchments.*

*Generic issues, objectives and policies for all Catchments across the Otago Region are recorded in Chapter 5 Otago Region.*

The East Otago Catchments have attracted settlement, based on use of coastal forests and their species. The coast provided favourable strategic locations for settlement with its abundant kaimoana resources. Most of the river mouths and estuaries have, over the span of hundreds of years, supported human populations.

### 7.1 EAST OTAGO CATCHMENTS DESCRIPTION *WHAKAAHUATAKA O KĀ RIU O MĀHENO*

On the coast the East Otago Catchments cover the area Matakaea to the Waianakarua and the Kakaunui Catchments and from Shag Point/Matakaea to Puketeraki.

The Waikouaiti Catchment extends inland up the Horse Range to the Brothers Peak skirting southward around the eastern flank of Strath Taieri to the Silverpeaks, then down to the Kilmog/Merton valley with its backdrop of the Pukemaeroero hills running back out to the coast again at Puketeraki.

Another important catchment is the Kakaunui. There was a tauranga waka at the mouth of the Kakaunui. The Kakaunui was an integral part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. It was an important part of the coastal trails north and south with a further trail running from the coast inland and over to the settlement at Te Puna Maru in the Lower Waitaki.

The Kakaunui was a noted indigenous fishery, offering tuna, īnaka, kanakana, kokopu and other species. Other materials provided by the river included raupō, harakeke and watercress. The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the Kakaunui, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Kāi Tahu ki Otago today.

Mahinga kai resources supported both semi-permanent and seasonal occupations, including a kainga on the northern bank of the river near Maheno. The surviving rock art remnants and rock shelters are a particular taonga of the area, providing a unique record of the lives and beliefs of the people who travelled the river.

Protecting the mauri of the Kakaunui, which is a critical element of the spiritual relationship of Kāi Tahu whānui with this river, is a priority.

Although only two Catchments have been specifically referred to, the catchments of the Waihemo, Awamoā, Waianakarua, Kakaho, Kuri, Waiwherowhero, Trotters along with many of the smaller catchments that rise in the coastal lowlands are all significant. Within each of the catchments are sites of significance (only some of which are registered as archaeological sites). All are testament to the occupation and use of the Catchments by Kāi Tahu ki Otago. All Catchments along the East Coast, regardless of their size, were part of the seasonal trails and behaviours of mahinga kai and resource gathering, and hapu and whānau bonding.

A significant feature along the coast is the Moeraki peninsula. Bush remnants on Poutaiki are all that is left of the native bush that once covered the peninsula but it is the sea that shows the true richness of the area. Large kelp beds remain and together with the many reefs and rocky inlets afford shelter to many species of kaimoana. The peninsula is also home to a diverse range of marine mammals and marine birds that are regarded as taonga by Kāi Tahu ki Otago. Urupā, tauraka waka, marae, kāika, pā, reserve lands, and numerous registered archaeological sites are all evidence of the active and continuing association of Kāi Tahu ki Otago with the peninsula and the adjacent lands and seas.

A taonga of immense significance are Te Kaihinaki (the Moeraki boulders) which are found on Hampden Beach. They are a visible link to the voyage of the Araiteuru, are unique, and as such are highly treasured.

Many placenames along the East Coast originate from the Araiteuru. The names of the waves which wrecked the waka, plus the names of the many passengers of the waka are represented in the names of reefs, hills, and mountains of East Otago.

Map 6 East Otago Catchments



## 7.2 WAI MĀORI

### 7.2.1 Wai Māori in the East Otago Catchments

There are a number significant tidal estuaries and river systems within this area, including:

- Kakaunui
- Waianakarua
- Kakaho
- Waimataitai
- Trotters Creek
- Waihemo/Shag River
- Te Hikapupu/Pleasant River
- Mataīnaka/Hawksbury Lagoon
- Waikouaiti River

These estuaries and river systems provide significant habitat for many wading bird species and kōhaka for juvenile fish such as pātiki and īnaka. The associated wetlands also provide important habitat for many species including tuna. In addition, there are also many other smaller catchments that although not separately identified were used and valued by Kāi Tahu ki Otago. Many river mouths, such as the Awamoko, have sites of significance on the north and south riverbanks. Protecting the integrity of these sites is a priority for Kāi Tahu ki Otago.

GENERIC ISSUES, OBJECTIVES AND POLICIES FOR ALL CATCHMENTS ACROSS THE OTAGO REGION ARE RECORDED IN CHAPTER 5 OTAGO REGION

### 7.2.2 *Wai Māori Issues in the East Otago Catchments*

- Nutrient enrichment from sewage discharges and fertilizer run-off contribute to significant algal blooms in Waikouaiti Estuary and Waikouaiti Bay in summer.
- Over-allocation of water in particular in the Waikouaiti, Awamoko, Waihemo and Kakaunui Catchments.
- Lack of a comprehensive management regime for Mataīnaka/Hawksbury Lagoon.
- Upper Catchment land development has exacerbated sediment deposition in lower river Catchments, affecting shellfish and filling in channels.
- Lack of riparian margins free from stock grazing, and the trampling of river margins by stock impacting on īnaka spawning sites.
- Historic drainage and reclamation of estuary margins.
- Coastal subdivision impacting on river margins and river mouths.

### 7.2.3 *Wai Māori Policies in the East Otago Catchments*

1. To promote appropriate use of electric and/or permanent fencing of riparian margins.
2. To promote and participate in collaborative research into the natural processes within river systems in the East Otago Catchments.
3. To encourage collaborative research and monitoring of sediment deposition in the river estuaries in the East Otago Catchments.
4. To encourage and promote the development of a comprehensive management regime for Mataīnaka/Hawksbury Lagoon, utilising Ki Uta ki Tai and the Cultural Health Index.
5. To encourage the Otago Regional Council to promote water saving programmes and efficient water use in the Waihemo and Kakaunui Catchments.
6. To require that any water “savings” are returned to the river systems.
7. To oppose land developments, in particular subdivisions that impact on river systems, including river mouths, in the East Otago Catchments.

### 7.3 WĀHI TAPU

#### 7.3.1 *Wāhi Tapu in the East Otago Catchments*

There are many important wāhi tapu within the East Otago Catchments including:

- Onewhenua at the mouth of the Waihemo/Shag River is a settlement site regarded as being of national archaeological importance.
- Pā Tūwhatawhata/fortified pā situated at Karitāne on Huriawa Peninsula figures prominently in the early inter-hapū relationships within Kāi Tahu as they moved into the south.
- An ancient Waitaha pā, said to have been located near the mouth of the Mataīnaka Hāpua/Lagoon.
- A pā site Te Raka a Hineatea is located at Kātiki.
- Numerous archaeological sites are found in close proximity to many of the river mouths of the East Otago Catchments.
- Archaeological sites, such as umu tī, moa butchery sites and rock shelters, have been identified in the higher country tussock lands of Stoneburn through to Nenthorn. However such inland sites are much harder to locate and there are quite likely to be many remaining unidentified.
- Many wāhi tapu (not all recorded as registered archaeological sites) are found along the coast and on the peninsulas.

#### Urupā

There are a number of urupā in the district known to local hapū and/or whānau. Knowledge of some other burial sites may have been lost to antiquity and may only come to prominence following an erosion event or other land disturbance.

#### 7.3.2 *Wāhi Tapu Issues in the East Otago Catchments*

- Impact of inappropriate land development on coastal sites.
- Lack of sufficient conditions pertaining to the protection of sites being placed on consents for subdivision development.
- Coastal erosion accentuated by certain weather patterns in conjunction with high tides is causing increased damage to archaeological sites at important sites at Doctors Point, Awamoa, and Huriawa.
- Additional housing developments on Huriawa are detrimental to the integrity of Huriawa archaeology.
- Coastal subdivision along the Kakaunui coastline, around river mouths, along river margins, and around Moeraki threatens sites of significance and the association of Kāi Tahu with these areas.
- The movements north and south, together with seasonal patterns of gathering took people to all parts of the East Otago Coastal Catchments and as a result the risk of accidental discoveries is high.

#### 7.3.3 *Wāhi Tapu Policies in the East Otago Catchments*

1. To require the protection of coastal sites of importance from inappropriate land development and use.
2. To require coastal subdivisions consents include conditions to protect sites of significance.
3. To encourage investigation into coastal process in particular at Doctors Point, Awamoa and Huriawa to determine protection methods for sites of importance.
4. To discourage a further housing development on Huriawa.
5. To encourage developers and resource users to contact Kāi Tahu ki Otago in the early stage of their planning to determine the proximity of their development to sites of significance that are recorded in the Resource Inventory.
6. To encourage developers and resource users to adopt an Accidental Discovery Protocol<sup>81</sup>.

81 See Appendix 6 Accidental Discovery Protocol Example

## 7.4 MAHIKA KAI AND BIODIVERSITY *TE REREKA KĒTAKA O KĀ KAIAO ME TE MAHIKA KAI*

### 7.4.1 *Mahika Kai and Biodiversity in the East Otago Catchments*

Studies of the East Otago Catchments have shown that much of the Waikouaiti Catchment was originally covered by forest, although at any one time there were probably also large tracts of pātītī in some inland areas. In the era prior to human arrival the species present in this forest were those which we can still see today in isolated pockets of remnant bush, or as solitary specimens surrounded by grazed pasture, living out their last days with little chance of offspring to carry their genetic inheritance into the future. Without intervention by way of fencing from grazing stock most of these remnants from earlier forests will die without trace within the next human generation or two. Some of the more notable species of this primeval forest were:

- kāpuka/broadleaf
- tōtara
- matai/black pine
- kōwhai
- pahautea/mountain cedar
- tawhai/silver beech.

Similarly the vegetation in other East Otago Catchments has been modified and, as previously stated, Moeraki peninsula, which was once bush clad has one significant remnant on a hill.

Extensive wetlands once existed, especially in the lower East Otago Catchments and estuarine areas, largely covered with harakeke/flax and other wetland species. Before farming practices shaped the land most streams were not confined to deep channels on flat land, and tended to fan out across the land in multiple shallow channels and swamps<sup>82</sup>.

Significant bush remnants exist on the western side of the upper reaches of Waikouaiti River South Branch/Hakariki. Grazing and burning officially ceased in this area in 1982 when it became a Scenic Reserve under the Reserves Act. Bush cover has shown recovery, records show that the bush cover in this area today is more complete than it was in the 1890s<sup>83</sup>. In Waikouaiti River North Branch there remain two significant areas of unlogged podocarp forest in Garden Bush and on the south-eastern slopes of Hikaroroa/Mt Watkin. There are also a few smaller areas of regenerating scrub still remaining in the central catchment (in the gullies and the southern sides of hills). A vegetation survey of these areas concluded that:

*“The catchment of the north branch of the Waikouaiti River contains the best examples remaining in coastal Otago of the tōtara-matai-kahikatea and kōwhai-lacebark-ribbonwood forest which covered the area before Māori occupation. It is the only area where these forest types are contiguous with extensive kānuka forest of a wide range of ages, with tussock grasslands of snow, silver and hard tussock.....and with the distinctive indigenous plant communities of schist outcrops and basalt boulderfields<sup>84</sup>.”*

Accessible tōtara suitable for waka building were sourced within the Waikouaiti area. Abundant mahika kai in the wetlands, bush and coastal environment provided sustenance for the resident population. Gardens were established in bush clearings from the times of earliest contact with Europeans who provided the varieties of potato which were cultivated. Harakeke of exceptional quality was gathered at sites such as Te Umu Koau/Bobbies Head for domestic use and later as a trade item.

Other remnants of indigenous bush are found on Poutaiki, within Trotters Creek Catchment, in the Catchments within Herbert Forest (including a harakeke swamp), in the Waianakarua Reserve which adjoins Herbert Forest, and tussock lands are found in the headwaters of the Kakaunui.

<sup>82</sup> Christie, 1929, written in 1880

<sup>83</sup> Pettinger, 1985

<sup>84</sup> Allen, 1986



#### 7.4.2 *Mahika Kai and Biodiversity Issues in the East Otago Catchments*

- Changes in ecosystem dynamics and estuarine hydrology.
- Impacts on whitebait spawning sites within the East Otago Catchments from sedimentation and grazing.
- Loss of freshwater fish kōhaka areas within the East Otago Catchments.
- Loss of wetlands within the East Otago Catchments.
- Lack of fencing of remnant bush within the East Otago Catchments.
- Potential for the spread of undaria into the East Otago Catchments.

#### 7.4.3 *Mahika Kai and Biodiversity Policies in the East Otago Catchments*

1. To protect the East Otago Catchments from the potential invasion by undaria from the Otago Harbour mole or other areas to the south and north, where it has already become established.
2. To promote the retention of indigenous freshwater fisheries.
3. To encourage the identification and protection of areas that support exclusively indigenous freshwater fisheries.
4. To promote the provision of significant rates relief for landowners working for the retention or enhancement of natural habitat, or the creation of artificial environments on their properties that provide habitat for native flora and fauna.

### 7.5 CULTURAL LANDSCAPES *KĀ KĀIKA KANOHI AHUREA*

#### 7.5.1 *Cultural Landscapes in the East Otago Catchments*

- Along the coast from Puketeraki to Cape Wanbrow there are many areas where the relationship between landform, coastline, sea and Kāi Tahu ki Otago traditions and customs constitute a significant cultural landscape.
- A major settlement area at the time of European contact was at Old Waikouaiti now called Karitāne. The Waikouaiti Native Reserve was set off in 1868 and was eventually surveyed into individual title. Other smaller reserves were subsequently set-aside for special purposes such as fishing easements and tauraka waka/waka landing places or urupā. A regionally important early settlement site was at Onewhenua at the mouth of the Waihemo/Shag River.
- Approximately 500 years ago the Waitaha people had settlements at Onewhenua where they hunted the moa over a wide range of territory and targeted other abundant coastal resources and at Warrington where kaimoana abounded. In the early 1800s Shag Point/Matakaea was a seasonal fishing kāika of Te Matahaere and his people of the Kāti Kane hapū. Waikouaiti, now present day Karitāne, was an old established settlement of the Huirapa and Ruahikihiki hapū of Kāi Tahu.
- During the 1840s Korako (Waikouaiti) was chief. The dominant landscape features as seen from the whare tīpuna/ancestral house Huirapa include Ohineahi/Māori Peak on the Pukemaeroero hills behind the marae, Mt Watkin/Hikaroroa in direct view to the West along with Pahatea/Mt Durdan, Ka iwi o te weka/Mt Baldie focusing around to Matainaka on the coast, Important in the centre foreground flanked by the village of Karitāne is Huriawa.
- Further to the north, Moeraki Peninsula contains many landscapes of cultural significance while the landforms found at the mouths of the Kakaunui and Waianakarua Rivers are also significant.
- Te Kohurau, standing on the boundary of the Kakaunui and Waitaki Catchments is integral to the cultural identity of those from Moeraki
- The inland districts of the Strath Taieri and Maniatoto were entered by following up the Waikouaiti or Waihemo river systems to their sources and from there into the open tussock lands. Another route was from Blueskin Bay through the Silverpeaks. A deeply etched coastal foot trail linking Waikouaiti to settlements in the North and South is still in evidence in some less accessible places that have escaped full development
- As previously stated, the placenames of many of the hills, mountains and coastal landforms represent a link to the travels of Araiteuru.

### 7.5.2 Cultural Landscape Issues in the East Otago Catchments

- Lack of recognition and implementation of the Cultural Redress components of the Ngāi Tahu Claims Settlement Act 1998 by local authorities, namely<sup>85</sup>:
  - Statutory Acknowledgements
  - Place names
  - Nohoaka sites
- Impact of quarrying activities for roading and lime on Hikaroroa and Ohineahi.
- Loss of native bush changing the historic character of the marae environs.
- Impact of new high-value subdivisions in the East Otago coastal environments changing the nature of long-standing community demographics.
- Impact of forestry development on areas of remnant native bush.
- Impact of inappropriately designed housing or urban development which intrudes into historic interpretation or key views of pā sites or other significant cultural landscapes.

### 7.5.3 Cultural Landscape Policies in the East Otago Catchments

#### Statutory Acknowledgement areas, Tōpuni areas, Nohoaka sites and Place names:

1. To promote the adoption of Statutory Acknowledgements into regional and district plans and regional policy statements through the formulation of specific objectives, policies and rules, in conjunction with Kāi Tahu ki Otago for the statutory area:
  - i. Kakaunui River<sup>86</sup>
  - ii. Te Tauraka Poti (Merton Tidal Arm)<sup>87</sup>
  - iii. Matakaea (Shag Point)<sup>88</sup>
  - iv. Te Tai o Arai Te Uru (Otago Coastal Marine Area)<sup>89</sup>
2. To promote the recognition of place names amended under the NTCSA 1998 and their use in regional and district plans, policy statements and non-statutory planning documents:
  - i. Hikaroroa/Mount Watkin
  - ii. Matakaea/Shag Point<sup>90</sup>
3. To encourage the use of Kāi Tahu place names in addition to those amended under the NTCSA 1998.
4. To encourage and promote the importance of Tōpuni within this catchment, including:
  - i. Matakaea (Shag Point)
5. To promote the recording of Nohoaka sites within regional and district plans and the consideration of Kāi Tahu as an affected party as the occupier of that land.
  - i. Waianakarua River
6. To work with local government agencies to identify significant sites and landscapes of importance within the East Otago Catchments.
7. To protect important landscapes, landforms and features of significance within the East Otago Catchments, from inappropriate activities such as quarrying, mining, earthworks, subdivision and roading. To protect trail remnants on the north south coastal trail.

<sup>85</sup> See 4.4 Ngāi Tahu Claims Settlement Act 1998 and Appendix 7 Instruments from the Ngāi Tahu Claims Settlement Act 1998 Relevant to this Plan

<sup>86</sup> See Appendix 13 Statutory Acknowledgement for Kakanui River

<sup>87</sup> See Appendix 14 Statutory Acknowledgement for Te Tauraka Poti

<sup>88</sup> See Appendix 15 Statutory Acknowledgement for Matakaea

<sup>89</sup> See Appendix 28 Statutory Acknowledgement for Te Tai o Arai Te Uru (Otago Coastal Marine Area)

<sup>90</sup> See Appendix 16 Topuni for Matakaea

**Map 7** Statutory Acknowledgements, Tōpuni, Nohoaka and Place Names in the East Otago Catchment



- 1 Kakaunui – Statutory Acknowledgment.
- 2 Te Tauraka Poti (Merton Tidal Arm) - Statutory Acknowledgment.
- 3 Matakaea (Shag Point) - Statutory Acknowledgement, Tōpuni Area, Place Name.
- 4 Mount Watkin/Hikarora – Place Name.
- 5 Te Tai o Arai Te Uru (Otago Coastal Marine Area) – Statutory Acknowledgement.



## 8 OTAGO HARBOUR CATCHMENT *TE RIU O TE WHĀKA O OTAGO*

*This chapter outlines the issues, and policies for the Otago Harbour Catchment. Included in this chapter is a description of some of the Kāi Tahu ki Otago values associated with the Otago Harbour Catchment.*

*Generic issues, objectives and policies for all Catchments across the Otago Region are recorded in Chapter 5 Otago Region.*

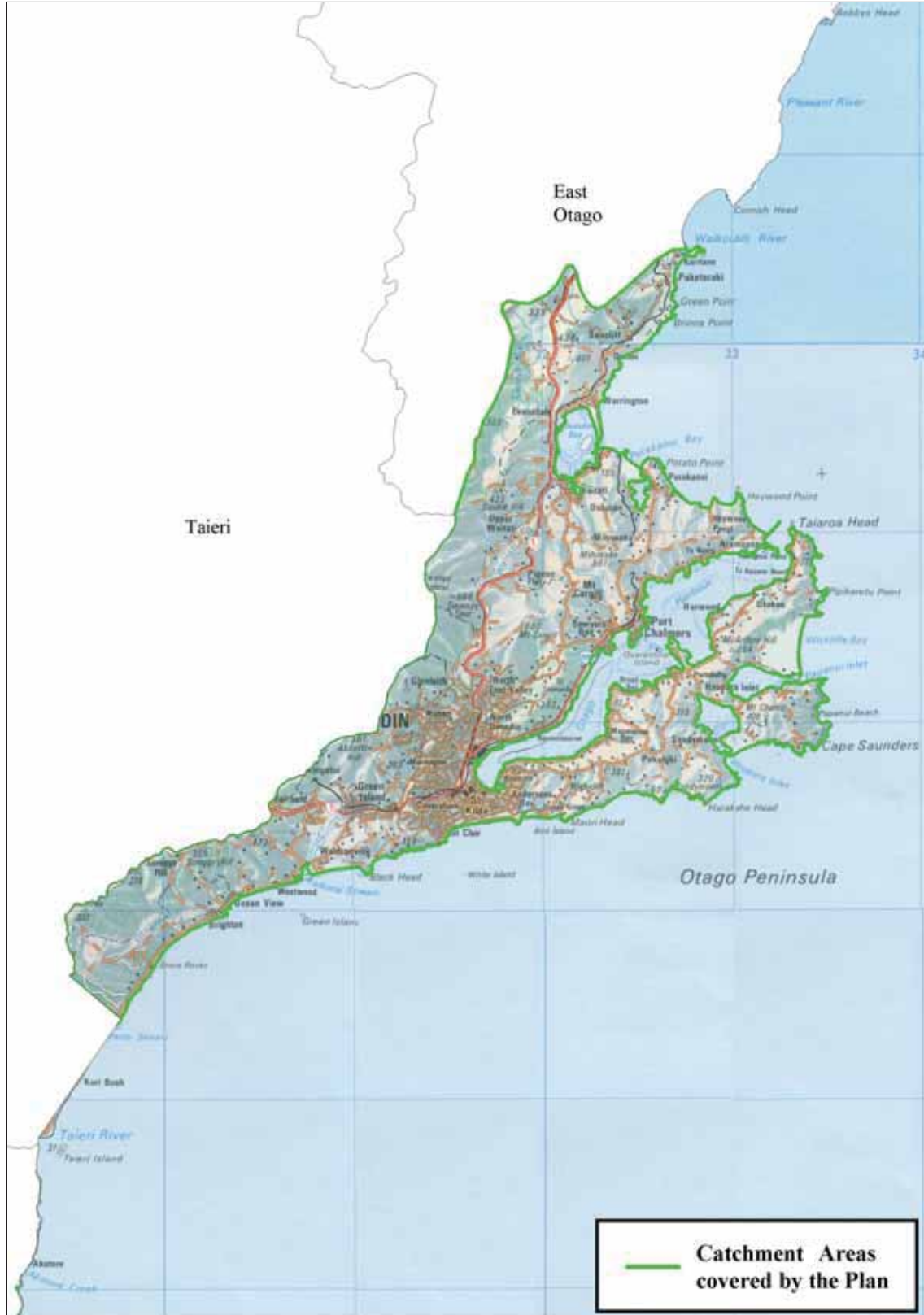
The Otago Harbour Catchment is a special feature of the Otago region and is highly valued by Kāi Tahu ki Otago. The bays near the mouth of the Otago Harbour provided proximity to the ocean, access on the tide to the head of the harbour and at low tide the abundant shellfish beds were a prized resource. Bays and inlets to the north of Otago Harbour and bays and inlets along the coast of Otago Peninsula and south to Taieri Mouth were popular sites for settlements also. The attributes of shelter, easy access to fishing grounds, and bush-clad hills with an abundance of bird life, building material and edible vegetation complemented the strong kaimoana resource that abounded.

### 8.1 OTAGO HARBOUR CATCHMENT DESCRIPTION

#### *WHAKAAHUATAKA O TE RIU O TE WHĀKA O OTAGO*

The Otago Harbour Catchment extends inland from the coast near the Karitāne lookout, up on to the Puketeraki ridge running along to the Kilmog, along the ridge to the east of the Waikouaiti River (South Branch) onward to Swampy Summit. Down to Kaikorai Hill, along the Chain Hills, across State Highway 1 and on to Saddle Hill, following the western ridge from there to Omoua Hill overlooking Henley and following the Taieri River to Taieri Mouth, from there following the coast northward to Puketeraki taking in the estuaries, bays, inlets and harbour.

Map 8 Otago Harbour Catchment



## 8.2 WAI MĀORI AND WAI TAI

### 8.2.1 *Wai Māori and Wai Tai in the Otago Harbour Catchment*

The bays, inlets and coastal area of the Otago Harbour Catchment sustained a rich fishing resource, from the continental shelf off Cape Saunders to Blueskin Bay. Blueskin Bay was also once a kohaka for the right whale, although it is over 150 years since it has seen this activity. The rivers and streams provide an important source of freshwater and sustain a range of fisheries including tuna and īnaka.

GENERIC ISSUES, OBJECTIVES AND POLICIES FOR ALL CATCHMENTS ACROSS THE OTAGO REGION ARE RECORDED IN CHAPTER 5 OTAGO REGION

### 8.2.2 *Wai Māori and Wai Tai Issues in the Otago Harbour Catchment*

- Deterioration of inlet health and impacts on the mauri and life supporting capacity of the sea.
- Increase in domestic water use in the Otago Harbour Catchment.
- Impacts from the dumping of dredge material and reclamation on the mauri of water, mahika kai, aquatic biota, and water quality.
- Lack of progress on iwi fishery management tools in the Otago Harbour Catchment such as mātaimai and taiāpure.
- Point source discharge of wastewater and other contaminants into the Otago Harbour.
- Sewage and ballast discharge from ships.
- Altered erosion and deposition rates and patterns such as erosion impacts on lower harbour lands.

### 8.2.3 *Wai Māori and Wai Tai Policies in the Otago Harbour Catchment*

1. To establish a Mātaimai in the lower harbour/outer peninsula.
2. To promote efficient use of domestic water within the Otago Harbour Catchment, including dual flush toilets in new housing, water efficient shower systems.
3. To require the reticulation of stormwater from roading in the Dunedin central business district and industrial area.
4. To promote best practice methodologies for drain maintenance, diversion and channel cleaning within the Catchment.
5. To promote best practise methods for waterway, river and harbour works that:
  - i. Provide for fish passage at all times.
  - ii. Minimise sedimentation during proposed works.
  - iii. Minimise the risk of contaminants entering any waterway

#### **Monitoring and Research:**

6. To promote and participate in co-ordinated research into the natural processes within the Otago Harbour.
7. To encourage monitoring, including cultural monitoring, of the health of waters within the Otago Harbour and Catchment.
8. To encourage research and monitoring into sediment deposition at Blueskin Bay and Pūrākaunui.
9. To promote research and monitoring of ship movements and impacts from wash within the Harbour.

#### **Discharges:**

10. To require the reticulation of all industrial discharge.
11. To encourage the development of sewerage infrastructure to receive and treat all waste water discharge from tourist vessels.
12. To promote the discharge of all ballast water outside of territorial waters.

#### **Dredging:**

13. To encourage the dumping of all dredging material beyond the continental shelf.
14. Dredging activity should not impact on tuaki and other marine life.

### 8.3 WĀHI TAPU

#### 8.3.1 *Wāhi Tapu in the Otago Harbour Catchment*

A range of land and water burial sites, pā and other sites of significance constitute wāhi tapu in the Otago Harbour Catchment. They hold not only tangible remains of ancestors but are also cultural icons linking tradition and events of the past to present and future. Wāhi tapu represent a basis of cultural context and stability for succeeding generations to express the link to the whenua and nourish their identity. Protocols relating to the protection, access, use and management of such areas are underpinned by cultural values and customs that encourage respect, responsibility and durability.

#### 8.3.2 *Wāhi Tapu Issues in the Otago Harbour Catchment*

- Erosion of burial sites along coastal margins.
- Quarrying of wāhi tapu sites.
- Discharge of sewage to wāhi tapu sites.
- Historical loss of wāhi tapu to development.
- The protection of the abode of Takaroa at Rangiriri.
- Pā sites are being lost or modified.
- Urupā are being exposed or eroded at various times along much of coast.

#### 8.3.3 *Wāhi Tapu Policies in the Otago Harbour Catchment*

1. To protect the abode of Takaroa at Rangiriri from inappropriate development and/or impacts.
2. To protect pā sites from earth disturbance and modification.
3. To protect the integrity of taniwha and creation stories that are often misunderstood and misinterpreted.

### 8.4 MAHIKA KAI AND BIODIVERSITY *TE REREKA KĒTAKA O KĀ KAIAO ME TE MAHIKA KAI*

#### 8.4.1 *Mahika Kai and Biodiversity in the Otago Harbour Catchment*

In pre-contact times the land area of this catchment was almost completely clothed in mature native bush providing for a myriad of needs of takata whenua, be it edible plants and roots, medicinal needs, weaving resources for clothing and daily accessories, firewood, materials for daily hunting and fishing purposes or for whare and waka construction. The forests were festooned with bird life that provided an important source of food and cultural materials for clothing and decorative purposes.

The whole of the coastal area offered a bounty of mahika kai, including a range of kaimoana, sea fishing, eeling and harvest of other freshwater fish in lagoons and rivers, marine mammals providing whale meat and seal pups, waterfowl, sea bird egg gathering and forest birds and a variety of plant resources including harakeke, fern and ti root. In many areas the reliance on these resources increased after the land sales of the 1840s and 1850s, and the associated loss of access to much traditional land-based mahika kai.

#### 8.4.2 *Mahika Kai and Biodiversity Issues in the Otago Harbour Catchment*

- Impact of invasive aquatic species such as exotic seaweeds on kaimoana and wāhi taoka.
- Loss of important cultural species from the Otago Harbour Catchment.
- Impact of commercial and other activities on tuaki.
- Loss of productive fishing reefs.
- Loss of important wetlands.
- Impact of land management and unsustainable fishing practices on freshwater fish species and kaimoana.
- Some mahika kai species within the Otago Harbour Catchment are considered culturally unsafe for consumption.
- Risks to kaimoana from discharges in the Harbour including sedimentation and storm water runoff.



#### 8.4.3 *Mahika Kai and Biodiversity Policies in the Otago Harbour Catchment*

1. To identify and protect mahika kai sites of importance to Kā Papatipu Rūnaka in the Otago Harbour Catchment.
2. To restore and enhance biodiversity with particular attention to fruiting species to facilitate and encourage the breeding of native birds.
3. To encourage the reintroduction of species of importance to Kā Papatipu Rūnaka that are no longer present in the Otago Harbour Catchment.
4. To promote the use of locally sourced genetic plants for landscaping, regeneration and restoration.

#### **Pests and Weeds:**

5. To encourage the eradication of underia.
6. To promote the eradication of all pests and weeds where possible.

### 8.5 CULTURAL LANDSCAPES *KĀIKA KANOHI AHUREA*

#### 8.5.1 *Cultural Landscapes in the Otago Harbour Catchment*

The landscape of the Otago Harbour Catchment evokes a cultural and spiritual meaning to takata whenua signified through layers of tradition, association and use, reinforced by place names that individually reflect a myriad of traditions, events, ancestors, site use, food or other resources and cultural perspectives. The landscape and associated place names are an integral element of an oral culture to recall and pass on to future generations a framework of values, beliefs and traditions that bind our people to the whenua and all its resources.

Many of the place names around the Otago Harbour and the Blueskin Bay area have been lost, many are no longer in active use or are officially recognised. Place names can be descriptive of an area or resource as well as events or people of importance.

#### **Kāika Nohoaka**

The Otago Harbour Coastal area was occupied by Waitaha, Ngati Māmoē and Kāi Tahu in succession, who, over time have merged through whakapapa. Landscape features, mahika kai, resources and names of tūpuna record this history. Prominent headlands, in particular, were favoured for their defensive qualities and became the base for a succession of rakātira and their followers.

Notable pā on the Otago coast include, Mapoutahi (Purakaunui), Pukekura (Taiaroa Head), and Moturata (Taiari Island). Another important centre of population was at Whareakeake, which was important as a pounamu manufacturing settlement.

Smaller population bases were situated at Wharauwerawera/Long Beach, Purakaunui around Blueskin Bay and at Omimi.

Tūpuna such as Waitai, Tukiauau, Whaka-taka-newha, Rakiiamoā, Tarewai, Maru, Te Aparangi, Taoka, Moki II, Kapo, Te Wera, Tu Wiri Roa, Taikawa, and Te Hautapanuiotu are among the many illustrious ancestors of Ngati Māmoē and Kāi Tahu lineage whose feats and memories are enshrined in the landscape, bays, tides and whakapapa of Otago.

The results of the struggles, alliances and marriages arising out of these migrations were the eventual emergence of a stable, organised and united series of hapū located at permanent or semi-permanent settlements along the coast, with an intricate network of mahika kai rights and networks that relied to a large extent on coastal resources. Chiefs such as Korako (several), Tahatu, Honekai, Ihutakuru, Karetai, Taiaroa, Pōtiki, Tūhawaiki, and Pokene being some among a number who had their own villages and fishing grounds. Otago Peninsula (Muaupoko) had many kāika nohoaka with a multitude of hapū occupying them. At one time up to 12 kāika existed in the lower Otago Harbour.

### Umu

As a result of occupation and use over hundreds of years, numerous umu are found across the Otago Peninsula and the coastal hills. The tell-tale signs of umu-tī, especially along many of the hill tops, are a reminder of the once seasonal activity of harvesting young cabbage trees and cooking the tap root in umu from which fructose was extracted.

### Ara Tawhito

The Otago Harbour Catchment was a highway for Kāi Tahu ki Otago. When venturing north, where the present day Aramoana village is you would cross over at the mouth then over the hill to continue the journey northward through Purakaunui.

Tracks and trails that linked north to south and settlements with each other were a necessary feature of a people who lived off the land and travelled incessantly on their seasonal round of mahika kai pursuits.

Travel by sea between settlements and hapū was common. Travel by waka hunua and whale boats (post-contact) was undertaken. Hence tauraka waka occur up and down the coast and wherever a tauraka waka is located there is also likely to be a nohoaka, fishing ground, kaimoana resource, rimurapa with the sea trail linked to a land trail or mahika kai resource. The tūpuna had a huge knowledge of the coastal environment and weather patterns, passed from generation to generation. This knowledge continues to be held by whānau and hapū and is regarded as a taoka. The traditional mobile lifestyle of the people led to their dependence on the resources of the coast.

#### 8.5.2 Cultural Landscapes Issues in the Otago Harbour Catchment

- Lack of recognition and implementation of the Cultural Redress components of the Ngāi Tahu
- Claims Settlement Act 1998 by local authorities, namely<sup>91</sup>:
  - Statutory Acknowledgements
  - Place names
- Nohoaka sites
- Limited Kāi Tahu ki Otago involvement in the management of Pukekura.
- Loss of historical associations with Puke Makamaka and Turi Makamaka (Saddle Hill).
- The destruction of Saddle Hill for quarrying and roading purposes.
- Lack of recognition of rock walls and historical connections to Taranaki prisoners.
- Placement of telecommunications on sensitive landscapes and landforms.
- Impact of coastal erosion, including from shipping wash, on Māori land, wāhi tapu and customary values.
- Impact of tourism on roading and waste management.
- Displacement of traditions and placenames.
- Impact of boat sheds and moorings on visual amenity and landscape.
- Loss of Blackhead.
- Appropriate protection of water burial sites.
- Impact of inappropriate forestry management on coastal hills around Dunedin on and cultural landscapes.

#### 8.5.3 Cultural Landscapes Policies in the Otago Harbour Catchment

Statutory Acknowledgement areas, Tōpuni areas, Nohoaka sites and Place names:

1. To promote the adoption of Statutory Acknowledgements into regional and district plans and regional policy statements through the formulation of specific objectives, policies and rules, in conjunction with Kāi Tahu ki Otago for the statutory area:
  - i. Te Tai o Arai Te Uru (Otago Coastal Marine Area)<sup>92</sup>

<sup>91</sup> See 4.4 Ngāi Tahu Claims Settlement Act 1998 and Appendix 7 Instruments from the Ngāi Tahu Claims Settlement Act 1998 relevant to this Plan

<sup>92</sup> See Appendix 28 Statutory Acknowledgement for Te Tai o Arai (Otago Coastal Marine Area)

2. To promote the recognition of place names amended under the NTCSA and their use in regional and district plans, policy statements and non-statutory planning documents:
  - i. Whareakeake (formally Murdering Beach)
  - ii. Goat Island/Rakiriri
  - iii. Quarantine Island/Kamau Taurua
  - iv. Mount Charles /Poatiri
3. To encourage the use of Kāi Tahu place names in addition to those amended under the NTCSA 1998.
4. To work with local government agencies to identify significant sites and landscapes of importance to Kāi Tahu ki Otago.
5. To protect important landscapes, landforms and features of significance from inappropriate activities such as mining and earthworks, subdivision roading, telecommunications.

**Taiaroa Heads:**

6. To complete the vesting of the “Taiaroa Head lands” in the respective beneficial owners, as per the terms of the NTCSA 1998.
7. To encourage the establishment of a joint management body in conjunction with the Korako Karetai Trust, Dunedin City Council and Minister of Conservation to complete a management plan for the Taiaroa Head reserves and to administer the lands to:
  - i. protect and enhance native wildlife and their habitats
  - ii. protect and enhance scenic qualities, ecological associations and the natural environment
  - iii. conserve wāhi tapu, wāhi taoka, traditional archaeological and other historic sites
  - iv. recognise the needs of shipping
  - v. provide for public appreciation and understanding of the wildlife at Taiaroa head through provision of viewing facilities and interpretation
  - vi. recognise of the mana of Kāi Tahu and in particular the descendants of Korako Karetai
  - vii. provide for public recreation consistent with the aims of the area.

Map 9 Statutory Acknowledgements, Tōpuni, Nohoaka and Place Names in the Otago Harbour Catchment



- 1 Whareakeake (Murdering Beach) – Place Name.
- 2 Goat Island/Rakiriri – Place Name.
- 3 Quarantine Island/Kamau Taurua – Place Name.
- 4 Mount Charles/Poatiri – Place Name.
- 5 Te Tai o Arai Te Uru (Otago Coastal Marine Area) – Statutory Acknowledgement.

## 9 TAIERI CATCHMENTS *TE RIU O TAIERI*

*This chapter outlines the issues, and policies for the Taieri Catchments. Included in this chapter is a description of some of the Kāi Tahu ki Otago values associated with the Taieri Catchments.*

*Generic issues, objectives and policies for all Catchments across the Otago Region are recorded in Chapter 5 Otago Region.*

### 9.1 TAIERI CATCHMENTS DESCRIPTION *WHAKAAHUATAKA O TE RIU O TAIERI*

The Taieri Catchments remain of great significance to Kāi Tahu ki Otago and our long association and interaction within the catchment is widely recorded. Existing in the consciousness of Kāi Tahu ki Otago is awareness of a significant cultural landscape dominated physically by a series of block mountain ranges and valleys running parallel to the coast. When our tīpuna were walking over these mountains they recognised in their shape and appearance a likeness to the combers and rolling waves of the ocean, waves responsible for causing well-known maritime disasters.

In traditional accounts the ocean voyaging waka Araiteuru encountered three big waves followed by a cross wave off the Otago coast. The first wave that assaulted the Araiteuru waka ran inland and became the Old Man Range, the second wave followed and became Raggedy Ridge and the third became represented in Rough Ridge. These three waves were followed by a giant cross-wave, which is represented by the Horse Range. These events are immortalised by these block mountains standing inland, turned to stone, and forever stirring the imagination of succeeding generations of the great deeds of the past.

The large streams and rivers of the Taieri Catchments begin in high altitude sphagnum and cushion bog hollows, flow off bedrock and then lower down flow through deep gorges before emerging onto the plains. The Taieri is a classic example of this, emerging onto the plains in the Styx Basin, and meandering down through it to the Paerau Gorge (now dammed as part of the Maniototo hydro-electric and irrigation scheme) from whence it emerges again to flow in a similar but even more extensive fashion across the Maniototo Basin. It then enters another confined stretch immediately below Waipiata before emerging once more to flow through the wetlands of old Taieri Lake. Collectively these three areas are known as the Upper Taieri Wetlands. At over 300 hectares, it is one of the largest and most important wetland complexes in the country. The area that is protected is less than 2% of the total area of wetland in the complex.

Map 10 Taieri Catchments



## 9.2 WAI MĀORI

### 9.2.1 *Wai Māori in the Taieri Catchments*

Kāi Tahu ki Otago used all areas of the Taieri Catchments as evidenced by the hundreds of mahika kai sites associated with the many waterways, lakes and wetlands in the Upper Taieri, the Strath Taieri and the Lower Taieri Plains. Many of these waterways have been modified, or in the case of Taieri Lake lost, as a result of resource use and development.

Because of the proximity to Dunedin and the history of use, the Waihola/Waipori wetlands are highly valued. The wetlands were once one of the most significant food baskets in the Otago region, and featured in the seasonal activity of the coastal settlements as far away as the Otago Peninsula and harbour area, Purakaunui and Puketeraki. The wetlands were once much larger in water area and deeper than at present, connected by a labyrinth of waterways and having a gravel bed which has now been overlaid by silt and mud.

Lake Waipori was central in a line of lakes, with Waihola to the south, Tatawai adjoining immediately north, and Marama Te Taha further north again. These lakes connected with the Taieri River, and were the main access to the sea through the coastal range lining the eastern side of the Taieri lowlands.

GENERIC ISSUES, OBJECTIVES AND POLICIES FOR ALL CATCHMENTS ACROSS THE OTAGO REGION ARE RECORDED IN CHAPTER 5 OTAGO REGION

### 9.2.2 *Wai Māori Issues in the Taieri Catchments*

- Many of the waterways in the Taieri Catchments, especially in the Upper Taieri and Strath Taieri, are fully allocated or in some instances over-allocated.
- Sluicing in the Upper Taieri and Waipori Catchments led to spoil entering waterways, and ultimately the lakes in the lower Catchment permanently changing the character of the riverbed and low land wetlands.

#### **Dams and other Structures:**

The Waipori River has been changed as a result of the hydroelectric generating use of Lake Mahinerangi as a storage reservoir.

#### **Flow:**

- The interception of the flow from tributaries, and the damming of waterways in the Taieri Catchment prevent the flow from reaching their natural receiving waters, it thus interrupts the continuity of flow from mountains to the sea.
- The annual 10-metre change in lake level at Lake Mahinerangi adversely affects animal, plant and aquatic life.
- The natural seasonal flow regimes throughout the Taieri Catchments have been altered due to the demands of extractive uses and/or power generation.
- The bank erosion in the lower reaches of the Waipori River caused by the nature of the generating flows adds to the sedimentation and eutrophication of Lake Waipori. The lake used to have a gravel bottom, which is now covered in sediment.
- Prolonged periods of minimum flows in the tributaries and main stem of the Taieri River do not provide a regular flushing flow and therefore add to the ill health of the catchment.

#### **Water Takes:**

- Water extractions from the tributaries of the Taieri River can result in dewatering and affect flows in the main stem.
- Cross mixing of waters.

**Land Use:**

- Intensive land use in both the upper and lower Taieri Catchment is affecting water quality.

**Discharges:**

- Point and non-point source discharges to the “Main Drain” and Taieri River.

**9.2.3 Wai Māori Policies in the Taieri Catchments**

1. To discourage any further cross mixing of water.
2. To promote the re-establishment of Lake Taieri as a mahika kai.

**Dams:**

3. To require that a Cultural Impact Assessment is undertaken for any new dams or structures in the Taieri Catchments<sup>93</sup>.
4. To require any new or existing dam consents to provide a regular flushing flow.

**Flow:**

5. To require structures in the Taieri Catchments do not impede or obstruct flows, or fish migration.

**Water Allocation:**

6. To oppose the allocation of any further water from the Upper Taieri and Strath Taieri.
7. To require that the cumulative effects and Ki Uta Ki Tai values are addressed in water allocation in the Taieri Catchment.

**Land use:**

8. To oppose any further dairy conversions in the upper Taieri Catchment.
9. To encourage the Otago Regional Council to enforce consent conditions and environmental standards for current dairying operations.

**9.3 WĀHI TAPU****9.3.1 Wāhi Tapu in the Taieri Catchments**

Because of the long history of use of the Taieri Catchments as a mahika kai, supporting permanent and temporary settlements, there are numerous urupū and wāhi tapu associated with the streams, rivers and wetlands.

Māori archaeological sites within the lower Taieri Catchments include pā, nohoaka, umu, rock-shelters, and find spots. This range of site types is reflective of the richness in diversity of other sites in the wider Taieri lowlands and surrounding hills.

There are comparatively few archaeological sites of Māori origin recorded in the hills west of Maukaatua, yet local historians state that on the inner hills “bleached moa bones and abandoned Māori ovens lay scattered amongst the tussocks”<sup>94</sup>. Reports of “Māori ovens and other relics”<sup>95</sup> alongside the track down the western edge of the Taieri lowlands is more reflective of the higher recorded site density here.

There are a number of known pā sites in the lower Taieri Catchments including:

- Whakaraupuka (Ram Island)
- Marama-te-taha
- Omoua near Henley
- Tu Paritaniwha
- Motupari
- Pā near Poutakahiamaru (Southern end of Lake Waihola).

93 See Section 11.6 Cultural Assessments

94 Shaw and Farrant, 1949:39

95 ibid 51



### 9.3.2 *Wāhi Tapu Issues in the Taieri Catchment*

High likelihood of accidental discovery of archaeological material.

### 9.3.3 *Wāhi Tapu Policies in the Taieri Catchment*

1. To encourage the early reporting of “finds”.
2. To require accidental discovery protocols for any earth disturbance activities within the Taieri Catchment<sup>96</sup>.
3. To require recognition of the tōpuni status of Maukaatua.

## 9.4 MAHIKA KAI AND BIODIVERSITY *TE REREKA KĒTAKA O KĀ KAIAO ME TE MAHIKA KAI*

### 9.4.1 *Mahika Kai and Biodiversity in the Taieri Catchment*

Parts of the Taieri Catchments were heavily forested. The podocarp forest was largely coniferous in the lower Waipori River Valley, with Silver Beech predominating inland around the upper gorge where the valley is narrow and deeply cut as it descends from the ancient schist plains. While tussock predominated in the Upper and Strath Taieri areas, most of the Taieri lowlands were either marshy with rushes, raupō, and harakeke, or waterways. This variety of topography and ground cover supported a diverse range of flora and fauna.

Waihola/Waipori was an important mahika kai resource for Kai Tahu ki Otago. An abundance of tuna, inaka, pātiki and other indigenous fish were available. Waterfowl and fibre resources such as harakeke and raupō were gathered from the wetlands. Spearing, setting hinaki and nets, and bobbing for eel were regular activities on the wetlands. The gathering of young ducks in the moult, and the catching of herons, pukeko and other birds supplemented the broad range of kai available. Mahika kai was also collected from the Lammermoors, Lammerlaws, Rock and Pillar, Upper Taieri Plains, Strath Taieri and Lower Taieri plain.

A number of other settlements further afield were dependent on the mahika kai resources of Waihola/Waipori for sustenance, including Tu Paritaniwha Pā near Momona, Omoua Pā above Henley, Maitapapa (Henley area), the Kaik south of Henley and Takaaihitau near the old Taieri Ferry bridge, in addition to other settlements adjacent to the Taieri River up and downstream of the wetlands. Ōtākou and Puketeraki hapū also made seasonal visits to gather resources and strengthen and maintain the kupenga of whakapapa on which their rights to use those resources were based.

### 9.4.2 *Mahika Kai and Biodiversity Issues in the Taieri Catchments*

- Low flows and/or dewatering of significant reaches of waterways is affecting mahika kai habitat.
- Structures in the Taieri Catchments used to extract water are a barrier to fish passage.
- Land use change, in particular land use intensification impacts the abundance of, diversity, and access to mahika kai species.
- Mahika kai in Lake Waipori/Waihola is adversely affected by the degraded supporting habitat and competition from introduced species.
- Poor riparian zone management throughout the Taieri Catchments affects mahika kai.
- The expansion of exotic fish populations in the Taieri Catchments adversely affects native fish species due to competition and predation.
- Limited restoration activity within the Taieri Catchments.

### 9.4.3 *Mahika Kai and Biodiversity Policies in the Taieri Catchment*

1. To encourage the development of the Taieri River as a “mountains to the sea” corridor.
2. To protect native fish migration.
3. To encourage as a long-term objective the restoration of mahika kai within the Taieri Catchments.
4. To encourage the re-watering of wetland areas on the Taieri Plains.
5. To encourage mahika kai habitat enhancement around Lake Waipori/Waihola.
6. To investigate the reintroduction of native bird species within the Taieri Catchments.

96 See Appendix 6 Accidental Discovery Protocol

## 9.5 CULTURAL LANDSCAPES *KĀIKA KANOHI AHUREA*

### 9.5.1 *Cultural Landscapes in the Taieri Catchments*

#### **Mauka**

Maukaatua stands guard over the interior of Otago and is a dominant feature, visible from many vantage points. Travellers by sea, along the Lower Taieri, travelling inland either side of Maukaatua or returning to the coast from the inlands could not escape the gaze of Maukaatua. The mauka is imbued with spiritual qualities that were respected by the tūpuna. The mauka was likened to a sleeping giant and was said to be the source of strange noises in particular winds or climatic conditions. An urupā is known to be located on the northern shoulder of Maukaatua. As urupā are the resting places of our tūpuna, they are the focus for whānau traditions.

#### **Kāika Nohoaka**

There were many nohoaka sites on the Lower Taieri, particularly within the wetland complex used by food gathering parties, which would travel to the lakes and camp for two to three days to gather kai, to eel, hunt waterfowl and gather flax. There were also permanent or semi-permanent settlements located in a number of locations around the lakes, some on islands in the wetlands system. Maukaatua once sheltered kāika within close proximity of its base at Whakaraupuka.

#### **Wāhi Kohātu**

There are several rock shelters in the catchment used by takata whenua. Given the bleak weather conditions that apply to this part of the country at times throughout the year, these places provided ready-made shelter from the unexpected or sudden arrival of cold fronts. The rock shelters would also be likely encampments during prolonged activities in the upper Catchments.

#### **Ara Tawhito**

The attractiveness of the Taieri Catchments as a mahika kai was enhanced by accessibility:

- from Moeraki to Taieri Lake and the Upper Taieri via the Danseys Pass;
- from Puketeraki / Karitāne to Taieri Lake, the Upper Taieri and Strath Taieri via Shag River Valley and McRaes;
- from Ōtākou - with the direct link to the Taieri River, access via the Taieri to villages on the banks of the Taieri River, up-stream and down, and access by waka to the coast and northward to Ōtākou, kai and other resources gathered from the wetlands could be transported back to these home bases with relative ease.

The rather elongated Taieri and adjoining Tokomariro lowlands ran parallel with the coast, making the fairly direct route a popular way for foot traffic. “The old Māori track following the western side of the Taieri lowlands was still evident in the mid-1800s”<sup>97</sup>. This connected the various nohoaka along the way and was a major north-south access, fording the Taieri River near the current site of Outram township.

Several tracks passed through the Lower Taieri area, following the lowlands, and heading inland<sup>98</sup>. The main road along the western side of the plains to Outram appears to follow the old track to a ford in the Taieri River. Other tracks fell into disuse during the early 1800s. Most travel around the Taieri lowlands, however, was by water craft. The vast network of lakes, rivers, and streams provided the easiest movement around the wetlands and through to the coast via the tidal Taieri River. Waka and paddles feature amongst the considerable number of important taoka unearthed around the Taieri plains in modern times. Landings were strategically located amongst the network of tracks through the region. Many of these localities can only be guessed at these days, but at least one important landing is known on the north western shore of Lake Waipori, at the foot of the leading spur now supporting Prentice Road. Other landings would be sited at the various pā and nohoaka.

97 Shaw and Farrant, 1949: 51.

98 Shaw and Farrant, 1949:30,51

### Wāhi Ingoa

The names Waihola/Waipori are likely Waitaha derivation, with “hola” being the Waitaha form of “hora” meaning flat, spread out or widespread. Waipori may in fact be a misrecording of Waipouri, which is used in many older manuscripts, being a reference to the dark, tannin-stained water the wetland receives from the Waipori River, a heavily wooded Catchment.

#### 9.5.2 Cultural Landscapes Issues in the Taieri Catchments

- Lack of recognition and implementation of the Cultural Redress components of the Ngāi Tahu Claims Settlement Act 1998 by local authorities, namely<sup>99</sup>:
  - Statutory Acknowledgements
  - Place names
  - Nohoaka sites
- Rural residential development in sensitive landscapes throughout the Taieri Catchments particularly in the coastal environment and on mauka.
- Landscapes such as Saddle Hill no longer reflect the creation stories related to the Taniwha traditions.
- The mispronunciation of places names, for example Maukaatua (mow-car-aa-two-aa).
- Impeded access to traditional places of encampment.
- The loss of traditional trails to road networks.

#### 9.5.3 Cultural Landscapes Policies in the Taieri Catchments

Statutory Acknowledgement areas, Tōpuni areas, Nohoaka sites and Place names:

1. To promote the adoption of Statutory Acknowledgements into regional and district plans and regional policy statements through the formulation of specific objectives, policies and rules, in conjunction with Kāi Tahu ki Otago for the statutory area:
  - i. Waihola/Waipori Wetland<sup>100</sup>
  - ii. Te Tai o Arai Te Uru (Otago Coastal Marine Area)<sup>101</sup>
2. To promote the recognition of place names amended under the NTCSA and their use in regional and district plans, policy statements and non-statutory planning documents.
  - i. Taieri Island/Moturata
3. To encourage the use of Kāi Tahu place names in addition to those amended under the NTSCA.
4. To encourage and promote the importance of Tōpuni within this catchment, including:
  - i. Maukaatua Scenic Reserve<sup>102</sup>
5. To promote the recording of Nohoaka sites within regional and district plans and the consideration of Te Rūnaka as an affected party as the occupier of that land.
  - i. Taieri River Nohoaka (3 sites)
6. To protect the unique landscape of the lower Taieri Gorge.
7. To encourage education on the interpretation and pronunciation of place names within the Taieri Catchment.

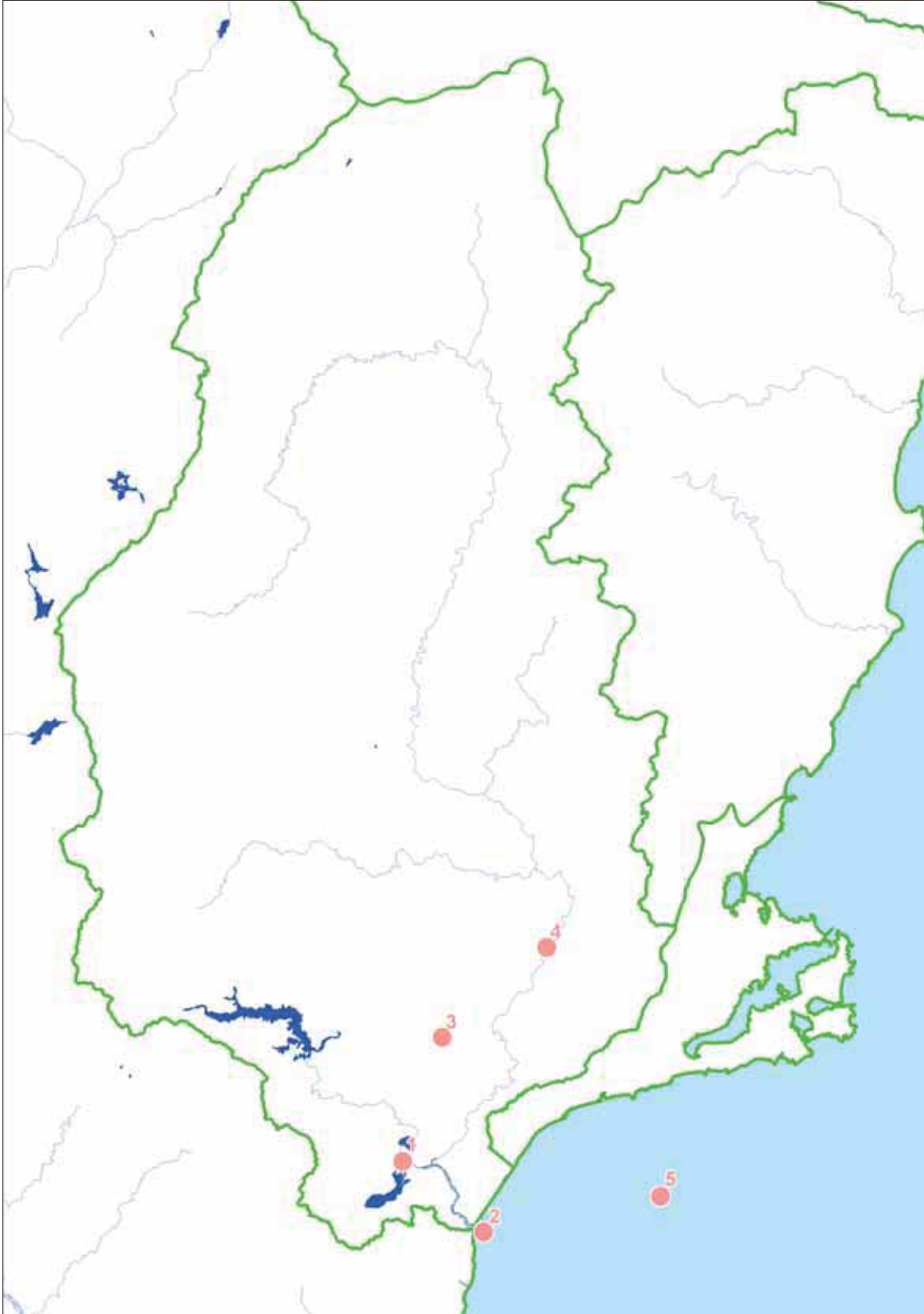
<sup>99</sup> See 4.4 Ngāi Tahu Claims Settlement Act 1998 and Appendix 7 Instruments from the Ngāi Tahu Claims Settlement Act 1998 Relevant to the Plan

<sup>100</sup> See Appendix 17 Statutory Acknowledgement of Waihola/Waipori Wetland

<sup>101</sup> See Appendix 28 Statutory Acknowledgement of Te Tai o Arai Te Uru (Otago Coastal Marine Area)

<sup>102</sup> See Appendix 18 Topuni for Maukaatua Scenic Reserve

**Map 11** Statutory Acknowledgements, Tōpuni, Nohoaka and Place Names in the Taieri Catchment



1. Waihola/Waipori Wetlands – Statutory Acknowledgement.
2. Taieri Island/Moturata – Place Name.
3. Mauka-atua Scenic Reserve – Tōpuni.
4. Taieri River – Nohoaka (x3).
5. Te Tai o Arai Te Uru (Otago Coastal Marine Area) – Statutory Acknowledgement.

## 10 CLUTHA/MATA-AU CATCHMENTS *TE RIU O MATA-AU*

Ko Te Tititēa te mauka  
 Ko Kā Tiri Tiri o Te Moana te tāhuhu  
 Ko Hāwea, Wānaka me Whakātipu-wai-māori ka roto  
 Ko Mata Au te awa  
 Ko Kopuwai, te taniwha  
 Ko Araiteuru te tai  
 Ko Te Moana nui a Kiwa te moana  
 Ko Te Iwi, Ko Kāi Tahu, Kāti Māmoe, Waitaha hoki

*He aha te mea nui o te Ao?  
 He takata, he takata, he takata.  
 Mt Aspiring is the peak  
 The Southern Alps are the backbone  
 Hwea, Wānaka and Whakātipu-wai-māori  
 are the water bodies  
 Mata-au is the river  
 Kopuwai is the guardian  
 Araiteuru is the tide  
 Moana-nui-a-kiwa is the ocean  
 Kāi Tahu, Kāti Māmoe and Waitaha are  
 the people*

*What is the most important thing in the World?  
 It is people, it is people, it is people.*

*This chapter outlines the issues, and policies for the Clutha/Mata-au Catchments. Included in this chapter is a description of some of the Kāi Tahu ki Otago values associated with the Clutha/Mata-au Catchments.*

*Generic issues, objectives and policies for all Catchments across the Otago Region are recorded in Chapter 5 Otago Region.*

The Clutha/Mata-au Catchments and its headwaters were the traditional focus of seasonal migrations for many of the hapū and whānau domiciled in the Araiteuru and Murihiku districts. Its vast length, many tributaries and three large lakes at its headwaters, fed by the mountains in the Ka Tiri Tiri o Te Moana, had much to offer Kāi Tahu ki Otago. The Clutha/Mata-au Catchment was therefore highly valued by all the different hapū and their whānau who used it. The use of these Catchments is an excellent example that typifies our very distinctive lifestyle.

The Clutha/Mata-au is where Kāi Tahu leader, Te Hautapunui o Tu, established the boundary line between Kāi Tahu and Ngāti Māmoe at Pouputunoa (near Clinton). Ngāti Māmoe were to hold mana over the lands south of the river and Kāi Tahu was to hold mana northwards. Eventually, the unions between the families of Te Hautapunui o Tu and Rakiihia of Ngāti Māmoe were to overcome these boundaries.

### 10.1. CLUTHA/ MATA-AU CATCHMENTS DESCRIPTION

#### *WHAKAAHUATAKA O TE RIU O MATA-AU*

The Clutha/Mata-au Catchment centres on the Clutha/Mata-au River and includes all subcatchments within this main Catchment. The geographic area extends inland from Chaslands Mistake/Maka Ti on the coast, to Waipahi and Kingston. It then takes in Lake Wakātipu, Lake Wānaka and Lake Hāwea including all the headwaters and tributaries, and follows the southern boundaries of the Waitaki and Taieri Catchments to the coast at Akatore.

Map 12 Clutha/Mata-au Catchment



## 10.2 WAI MĀORI

### 10.2.1 *Wai Māori in the Clutha/Mata-au Catchments*

The Clutha/Mata-au River takes its name from a Kāi Tahu whānui whakapapa that traces the genealogy of water. On that basis, the Mata-au is seen as a descendant of the creation traditions.

The three lakes at the headwaters of the Clutha/Mata-au River are an important source of freshwater. They are all fed by hukawai, these are waters with the highest level of purity and were accorded traditional classifications by Kāi Tahu ki Otago that recognised this value. Thus they are a puna that sustains many ecosystems important to Kāi Tahu ki Otago.

GENERIC ISSUES, OBJECTIVES AND POLICIES FOR ALL CATCHMENTS ACROSS THE OTAGO REGION ARE RECORDED IN CHAPTER 5 OTAGO REGION

### 10.2.2 *Wai Māori Issues in the Clutha/Mata-au Catchment*

#### Dams:

- Dams throughout the catchment break the continuity of flow from the mountains to the sea.
- Dams are contributing to aggregation at tributary junctions.
- The operating range of Lake Hāwea.
- There has been increased erosion of the banks of the Clutha/Mata-au River.
- Silt loading in the river is adversely affecting water quality.
- Habitats have changed as river flows have been modified.

#### Land Use:

- Lack of reticulated community sewerage schemes.
- Existing sewage schemes are not effectively treating the waste and do not have the capacity to cope with the expanding population.
- Land use intensification, for example dairying in the Poumahaka Catchment.
- Increase in the lifestyle farm units is increasing the demand for water.
- Sedimentation of waterways from urban development.

#### Gravel Extractions:

- Cumulative effects of gravel extractions in the lower Clutha/Mata-au.
- Replenishment rate of gravel in the lower Clutha/Mata-au.
- Effects on aquatic ecosystems.
- Pounamu being found in gravel sourced from the Upper Wakātipu Region.

### 10.2.3 *Wai Māori Policies in the Clutha/Mata-au Catchment*

#### Dams:

1. To oppose the creation of new dams within this Catchment.
2. To require gradual rather than instantaneous ramping to control fluctuations in river flow.
3. To require flow regimes that mimic natural flows.
4. To require effects associated with dam management (e.g. flow issues, changes to waterways upstream downstream, habitat changes, fish passage, inundation of values habitats, health and safety issues, siltation concerns, erosion) are addressed. Where the scale of effects is such that it cannot be addressed to the satisfaction of Kā Papatipu Rūnaka and depending on the legal status of the dam Kā Papatipu Rūnaka may advocate for either the removal of existing dams or decline consent to dam.

#### Sediment and Siltation:

5. To discourage activities that increases the silt loading in waterways or reaches of waterways.
6. To encourage the preparation of a sediment management strategy for the Clutha/Mata-au that describes patterns of deposition, movement, removal and flushing of sediment within the Catchment. Sediment must be managed on a Catchment basis and must be able to move

through the system from the headwaters to replenish coastal habitats that are highly valued by Kā Papatipu Rūnaka. Ad-hoc proposals for sediment removal, gravel takes, engineering river reaches may not be supported if Kā Papatipu Rūnaka cannot see how they are part of a sediment management strategy.

7. To require Contact Energy and the Otago Regional Council to agree on flow levels at which the flushing of sediment is permitted in conjunction with Kā Papatipu Rūnaka.
8. To discourage any inappropriate flushing of sediment at times of low flow or where the impacts are not of a temporary nature.

**Land use:**

9. To encourage the adoption of sound environmental practices, adopted where land use intensification occurs.
10. To promote sustainable land use in the Clutha/Mata-au Catchment.
11. To encourage all consents related to subdivision and lifestyle blocks are applied for at the same time including, land use consents, water consents, and discharge consents.
12. To require reticulated community sewerage schemes that have the capacity to accommodate future population growth.

**Gravel Extraction:**

13. To require all gravel take applications include information on the following:
  - i. cumulative effects and
  - ii. replenishment rates and
  - iii. effects on aquatic ecosystems and
  - iv. effects on indigenous fisheries and
  - v. proposed timing of works and
  - vi. effects on cultural values of Kā Papatipu Rūnaka <sup>103</sup>.
14. To require gravel extractors to comply with the Pounamu Management Plan <sup>104</sup>.

### 10.3 WĀHI TAPU

#### 10.3.1 Wāhi Tapu in the Clutha/Mata-au Catchments

There are a range of wāhi tapu of particular significance within the Clutha/Mata-au Catchments. Urupā are the best modern day example of wāhi tapu, but physical resources such as mountaintops, springs and vegetation remnants are other examples. Urupā and some significant sites of conflict are located all along the Clutha/Mata-au River.

#### 10.3.2 Wāhi Tapu Issues in the Clutha/Mata-au Catchments

- Historic and continuing loss of wāhi tapu sites of significance within the Clutha/Mata-au Catchment from:
  - the creation of the hydro schemes
  - the on-going management of hydro schemes
  - mining activities
  - land use intensification
- Inappropriate use of wāhi tapu information.
- Discovery of Pounamu Artefacts.

#### 10.3.3 Wāhi Tapu Policies in the Clutha/Mata-au Catchment

1. To require that wāhi tapu sites are protected from further loss or destruction.
2. To require accidental discovery protocols for any earth disturbance activities <sup>105</sup>.

<sup>103</sup> See 11.6 Cultural Assessments

<sup>104</sup> See Section 5.9 Pounamu

<sup>105</sup> See Appendix 6 Accidental Discovery Protocol Example



## 10.4 MAHIKA KAI AND BIODIVERSITY *TE REREKA KĀTAKA O KĀ KAIAO ME TE MAHIKA KAI*

### 10.4.1 *Mahika Kai and Biodiversity in the Clutha/Mata-au Catchments*

The Mata-au/Clutha River was part of a mahika kai trail that led inland. Mahika kai sourced from the Mata-au/Clutha Catchment includes indigenous fish and manu such as:

- tuna
- kanakana
- kōkōpu
- moa
- īnaka
- weka.

Mahika kai trails were used by Ōtākou hapū including Ngati Kuri, Ngati Ruahikihiki, Ngati Huirapa and Ngāi Tuahuriri.

The Mata-au/Clutha River gave access to wide inland forest clad plains, and to the lakes and mountains beyond. Here the traveller was greeted by range upon range of mountains, with paths that followed wild river valleys and gorges. When the lakes were reached their waters made burdened travel easier by the use of waka.

Eels in particular were valued and played a significant part in the social order of Kā Papatipu Rūnaka. Kā Papatipu Rūnaka have prized tuna since their ancestors first inhabited Te Wai Pounamu. The places where tuna were harvested are important to whānau and hapū, and the gathering and processing of tuna, still practised in many areas, is a tradition that maintains and strengthens the kinship and social order of whānau through generations. Lake Hāwea and Wānaka were traditionally noted as a rich tuna fishery, with many thousands of the tuna once being caught, preserved and transported back to the kāika nohoaka of coastal Otago.

The Poumahaka was an important mahika kai source for Kā Papatipu Rūnaka and kāika existed in the Catlins and Tautuku areas. The river was particularly noted for its kanakana fishery. Other mahika kai associated with the river included weka and other birds.

The coastal area at the mouth of the Mata-au/Clutha River offered a bounty of mahika kai, including a range of kaimoana, sea fishing, eeling and harvest of other freshwater fish in lagoons and up the river; waterfowl, sea bird eggs gathering and forest birds. Reliance on these resources increased after the land sales of the 1840s and 1850s, and the associated loss of access to much of the traditional land based mahika kai.

### 10.4.2 *Mahika Kai and Biodiversity Issues in the Clutha/Mata-au Catchment*

- Availability of mahika kai and the experience of collecting mahika kai has been affected by modifications in the Clutha/Mata-au Catchments.
- The hydro infrastructure on the main stem of the Clutha/Mata-au has forced mahika kai into the tributaries. Modification of these tributaries by land use change and more recently land use intensification adds to the loss of mahika kai.
- Daily and seasonal fluctuating flows in the main stem and in tributaries adversely affect mahika kai availability and raise safety issues for people collecting mahika kai. The main stem below Roxburgh is an area of particular concern.
- Fish passage both up and down stream is affected by the three structures, most notably Roxburgh Dam, Clyde Dam and Lake Hāwea Control Structure but also culverts and instream structures represent barriers to passage;
- Spread of pest and weed species such as:
  - Hieracium in the high country
  - Lagarosiphon
  - Hares and Rabbits.

**10.4.3 Mahika Kai and Biodiversity Policies in the Clutha/Mata-au Catchment:**

1. To require native fish ingress and egress past all dams and structures.
2. To support programmes and initiatives that enhances mahika kai.
3. To continue to manage weka to enable sustainable use.
4. To source locations for the expansion of the weka population.
5. To encourage customary use practises.

**Pest Control and Management:**

6. To encourage environmental and educational efforts to halt the spread of lagarosiphon and other pest species.
7. To require co-ordinated pest management controls

**10.5 CULTURAL LANDSCAPES KĀIKA KANOHI AHUREA****10.5.1 Cultural Landscapes in the Clutha/Mata-au Catchments****Kāika nohoaka**

The gathering and preparation of food and other bounties of nature in Te Wai Pounamu were based at kāika nohoaka, each situated near a particular resource to be worked. Although largely located along the seacoast in permanent settlements, Kā Papatipu Rūnaka ranged inland on a regular seasonal basis. Sometimes inland kāika could be occupied for several years at a stretch. In the harsh winters inland camps were generally deserted, but in summer eeling and birding parties busily occupied them.

Whakātipu-wai-māori once supported nohoaka and villages that were the seasonal destinations of Otago and Murihiku whānau and hapū for many generations. Permanent settlement sites included:

- Tahuna (near present-day Queenstown)
- Te Kirikiri Pā (located where the Queenstown gardens are today)
- Te Roto (a Ngati Māmoe kāika near the Kawarau Falls)
- Takerehaka (near Kingston)
- Tititea (junction of Kawarau and Shotover Rivers).

**Glenorchy Area**

About 30 prehistoric sites are known to exist within a 20-kilometre radius of Glenorchy. Some of the settlements were probably temporary camps used for working pounamu into pieces small enough to be carried to the coastal settlements. The Dart River/Slip Stream area was also an important camping spot for parties travelling to and from the West Coast via the Hollyford Valley. In 1860 Europeans began to visit the head of the lake and found signs of recent camps, along with eel baskets, stake nets and spears.

**Lakes Wānaka and Hāwea Nga Roto Wānaka me Hāwea**

Waitaha occupants of the Wānaka and Hāwea district suffered during the years of warfare and after a serious battle abandoned the area. The area was occupied again during the nineteenth century by families of Kāti Māmoe and Kāi Tahu who came from their coastal bases for seasonal visits of several months or stays of many years.

At Wānaka the village of Takikarara was situated near Roys Bay. Tradition says that there was a wharekura at this site.

At Lake Hāwea the main settlement was Manuhaea which was at “The Neck” - the narrowest point between Lakes Wānaka and Hāwea. There were several other villages around the lakes and one in the Makarora Valley. The Wānaka and Hāwea area teemed with eels and several traditional accounts mention the enormous size of eels caught in the two lakes.

**Wāhi Mahi Kohātu**

Stone materials important to the economy of Kā Papatipu Rūnaka, such as pounamu, silcrete, porcellanite and schist, were gathered in the interior of Otago. These resources are called kohātu

taoka. Technicians skilled and knowledgeable in the characteristics of stone searched the countryside for useful kinds of stone. Crafts and industries depended on having stone suitable for adzes, chisels, saw-edges, and cutting and grinding implements. Even the remotest mountain recesses of Te Wai Pounamu were methodically prospected. There were two pounamu sources at the head of Lake Wakātipu; the Routeburn Valley and tributaries and the Slip Stream area in the Dart Valley. Pikirakatahi stands as kaitiaki over the pounamu resource and marks the end of a trail, with the tohu to the pounamu resource sitting opposite on Koroka. Pikirakatahi was of crucial significance to many generations that journeyed to that end of Whakātipu-wai-māori and beyond.

#### **Ara Tawhito**

The Clutha/Mata-au River was used as a highway into the interior, and provided many resources to sustain travellers on that journey. Thus there was numerous tauraka waka along it. Most of today's access routes and roads follow trails established by Kā Papatipu Rūnaka. Trails are an indicator of how Kāi Tahu ki Otago used this river. Linkages include:

From the coast trails followed a variety of routes to arrive at the Lakes Region.

- Access from North Otago and South Canterbury to the Lakes was via the Waitaki River and either over the Lindis Pass or up the Ahiriri River and onto the top end of Lake Hāwea via the Hunter River.
- Access from the Otago coast inland was either via the Taieri River up into the Manuherikia catchment and then into the Mata-au/Clutha River, or by following the Clutha/Mata-au River up.
- Access for the South Coast was either up via the Mata-aura River to the bottom end of Lake Wakātipu, or up the Nevis River to the Kawarau Gorge.
- Access from the West Coast was over the Haast Pass to the top end of Lakes Wānaka and Hāwea.

#### **10.5.2 Cultural Landscapes Issues in the Clutha/Mata-au Catchment**

- Lack of recognition and implementation of the Cultural Redress components of the Ngāi Tahu Claims Settlement Act 1998 by local authorities, namely :
  - Statutory Acknowledgements.
  - Place names.
  - Nohoaka sites.
- The power and movement of the Clutha/Mata-au rushing through the restrictive gorges with many rapids has been changed to smooth, slow water.
- Modifications throughout the catchment have resulted in a disassociation between the landscape, the stories and place names.
- Land use intensification, particularly dairying and horticulture, have impacted on the cultural landscapes in the Clutha/Mata-au Catchment.
- Extensive spread of jetties and moorings in particular in Lake Wakātipu, Lake Wānaka and Lake Hāwea and adjacent to nohoaka sites.
- Limited recognition of cultural landscapes and Kā Papatipu Rūnaka interests and values in the landscape.
- The encroachment of subdivisions, lifestyle farms and infrastructure up the sides of mauka.
- Cumulative effects of subdivisions.
- Increasingly tourism ventures want to take clients to culturally significant sites.
- Kā Papatipu Rūnaka use and enjoyment of nohoaka sites (including those recognised under the NTCSA) is affected by access, usefulness of the sites and encroaching inappropriate activities.
- Dust storms at low lake levels.

#### **10.5.3 Cultural Landscapes Policies in the Clutha/Mata-au Catchments**

**Statutory Acknowledgement areas, Tōpuni areas, Nohoaka sites and Place names:**

1. To promote the adoption of Statutory Acknowledgements into regional and district plans and regional policy statements through the formulation of specific objectives, policies and rules, in conjunction with Kā Papatipu Rūnaka for the statutory area:

- i. Lake Hāwea <sup>106</sup>
  - ii. Lake Wānaka <sup>107</sup>
  - iii. Tītītea (Mount Aspiring) <sup>108</sup>
  - iv. Pikirakatahi (Mount Earnslaw) <sup>109</sup>
  - v. Te Wairere (Lake Dunstan) <sup>110</sup>
  - vi. Whakātipu-wai-māori (Lake Wakātipu) <sup>111</sup>
  - vii. Poumahaka River <sup>112</sup>
  - viii. Mata-au (Clutha River) <sup>113</sup>
  - ix. Ka Moana Haehae (Lake Roxburgh) <sup>114</sup>
  - x. Te Tai o Arai Te Uru (Otago Coastal Marine Area) <sup>115</sup>
2. To promote the recognition of place names amended under the NTCSA 1998 and their use in regional and district plans, policy statements and non-statutory planning documents:
    - i. Mount Aspiring/Tītītea
    - ii. Mount Alfred/Ari
    - iii. Dart River/Te Awa Whakātipu
    - iv. Pigeon Island/Wāwāhi Waka
    - v. Pig Island/Mātau
    - vi. Old Man/Range Kopuwai
    - vii. Clutha River/Mata-au
  3. To encourage the use of Kāi Tahu place names in addition to those amended under the NTSCA 1998.
  4. To encourage and promote the importance of Tōpuni within this catchment, including:
    - i. Tītītea (Mount Aspiring) <sup>116</sup>
    - ii. Pikirakatahi (Mount Earnslaw) <sup>117</sup>
    - iii. Te Koroka (Dart/Slipstream) <sup>118</sup>
  5. To promote the recording of Nohoaka sites within regional and district plans and the consideration of Te Rūnaka as an affected party as the occupier of that land:
    - i. Mata-au/ Clutha River (3 nohoaka)
    - ii. Te Wairere (Lake Dunstan)
    - iii. Lake Hāwea (4 nohoaka)
    - iv. Lake Wānaka (2 nohoaka)
    - v. Shotover River (2 nohoaka)
    - vi. Whakātipu-wai-māori (Lake Wakātipu)

#### Jetties and Moorings:

6. To require the development of a strategy in conjunction with the Queenstown Lakes District Council to investigate the viability of public moorings in the Queenstown Lakes District.
7. To require that all moorings situated in the vicinity of nohoaka and camping sites to be publicly available.
8. To require jetties to be at a fixed location and any effects of earthworks or from the ongoing operation of jetties and be remedied or mitigated.
9. To require jetties and moorings to be located where they will not impede or restrict access to lakes, rivers and wetlands.

<sup>106</sup> See Appendix 19 Statutory Acknowledgement for Lake Hāwea

<sup>107</sup> See Appendix 20 Statutory Acknowledgement for Lake Wānaka

<sup>108</sup> See Appendix 21 Statutory Acknowledgement for Tītītea (Mount Aspiring)

<sup>109</sup> See Appendix 22 Statutory Acknowledgement for Pikirakatahi (Mount Earnslaw)

<sup>110</sup> See Appendix 23 Statutory Acknowledgement for Te Waiere (Lake Dunstan)

<sup>111</sup> See Appendix 24 Statutory Acknowledgement for Whakātipu Wai Māori (Lake Whakātipu)

<sup>112</sup> See Appendix 25 Statutory Acknowledgement for Poumahaka River

<sup>113</sup> See Appendix 26 Statutory Acknowledgement for Clutha/Mata-au River

<sup>114</sup> See Appendix 27 Statutory Acknowledgement for Ka Moana Haehae (Lake Roxburgh)

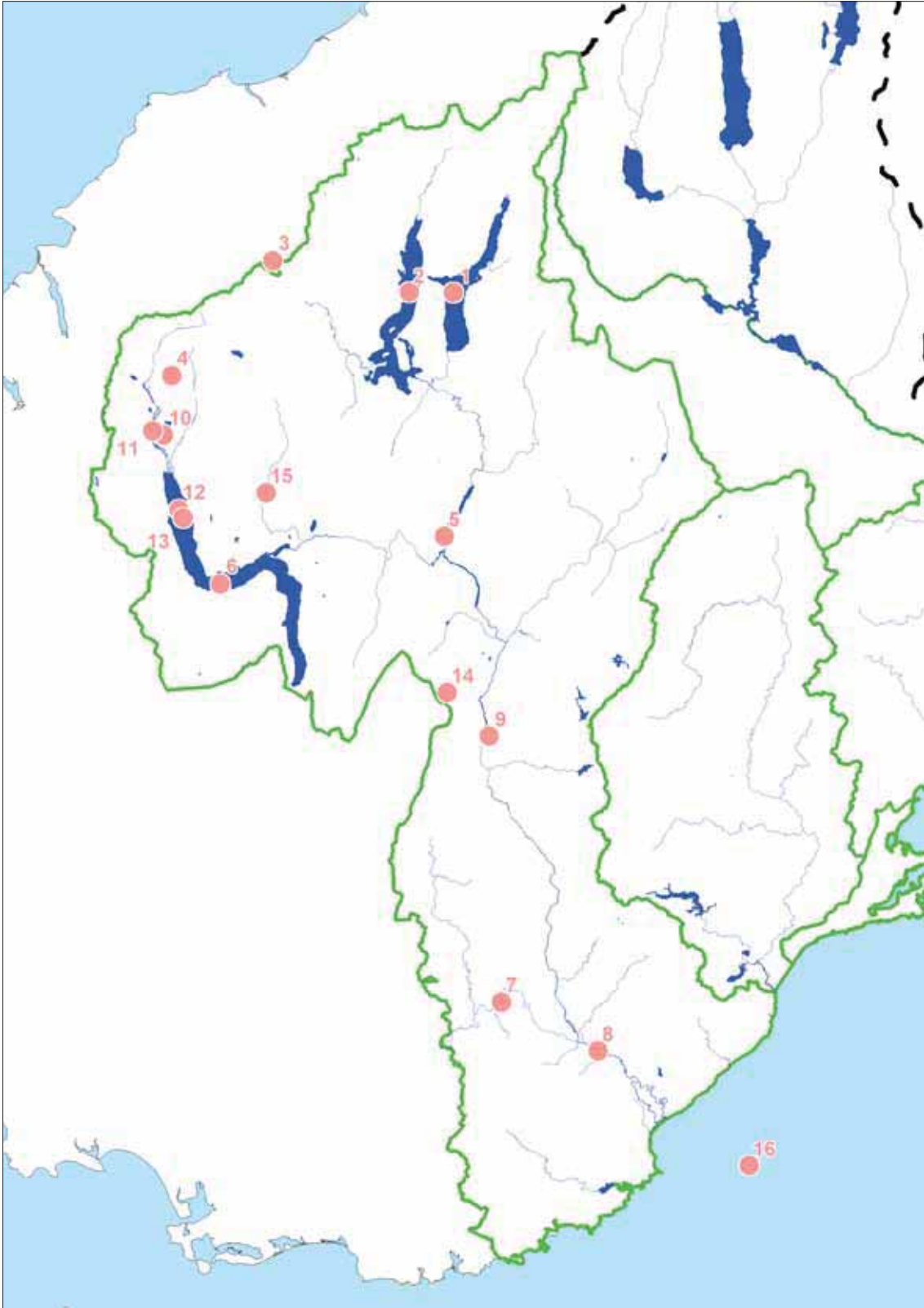
<sup>115</sup> See Appendix 28 Statutory Acknowledgement for Te Tai o Arai Te Uru (Otago Coastal Marine Area)

<sup>116</sup> See Appendix 29 Topuni for Tītītea (Mount Aspiring)

<sup>117</sup> See Appendix 30 Topuni for Pikirakatahi (Mount Earnslaw)

<sup>118</sup> See Appendix 31 Topuni for Te Koroka (Dart Slipstream)

Map 13 Statutory Acknowledgements, Tōpuni, Nohoaka and Place Names in the Mata-au Catchment



- 1 Lake Hāwea – Statutory Acknowledgement Nohoaka (x4).
- 2 Lake Wānaka – Statutory Acknowledgement, Nohoaka (x2).
- 3 Mount Aspiring/Tititea – Place Name, Tōpuni, Statutory Acknowledgement.
- 4 Mount Earnslaw/Pikirakatahi – Place Name, Tōpuni, Statutory Acknowledgement.
- 5 Te Waiere (Lake Dunstan) – Statutory Acknowledgement, Nohoaka.
- 6 Whakātipu-wai- māori (Lake Wakātipu) – Place Name, Nohoaka.
- 7 Poumahaka River - Statutory Acknowledgement.
- 8 Mata-au (Clutha River) – Statutory Acknowledgement, Place Name, Nohoaka (x3).
- 9 Kā moana Haehae(Lake Roxburgh) – Statutory Acknowledgement.
- 10 Mount Alfred/Ari- Place Name.
- 11 Dart River/Te awa Whakātipu – Place Name.
- 12 Pigeon Island/Wāwāhi Waka – Place Name.
- 13 Pig Island/Mātau – Place Name.
- 14 Old Man Range/Kopuwai – Place Name.
- 15 Shotover River – Nohoaka (x2).
- 16 Te Tai o Arai Te Uru (Otago Coastal Marine Area) – Statutory Acknowledgement.





**PART 4**  
**IMPLEMENTATION,**  
**REVIEW AND RESOURCE**  
**INVENTORY**

*Chapters 11 - 12*





## 11 IMPLEMENTATION AND REVIEW

### *TE MAHI O TE MAHI ME TE TIROHAKA HOU*

*This section of the Plan outlines the methods and processes Kāi Tahu ki Otago will undertake and advocate for to achieve the objectives and policies set out in Chapters 5-10 of this Plan, as well as the process for future reviews of this Plan.*

#### 11.1 INTRODUCTION *HE KUPU WHAKATAKI*

Kāi Tahu ki Otago considers that it is imperative to maintain and improve relationships with Local Government Agencies, communities, local and national resource management consultancies and private companies in order to ensure better environmental outcomes and management of te ao tūroa. The establishment of high-level partnerships, joint management agreements, genuine working relationships, and improved consultative processes is the means to achieving this goal.

#### 11.2 KĀI TAHU KI OTAGO PARTICIPATION AND INVOLVEMENT *KO TE URUKA ME TE MAHI KĀTAHI RAWA O KĀI TAHU KI OTAGO*

Kāi Tahu ki Otago participation and involvement in resource management promotes genuine working relationships between parties that should occur in the spirit of a Treaty relationship. Kāi Tahu ki Otago involvement and participation in resource management should consistently and functionally occur at the level of partnership. Kāi Tahu ki Otago want to develop partnerships and joint management agreements with:

- Otago Regional Council
- Dunedin City Council
- Waitaki District Council
- Clutha District Council
- Central Otago District Council
- Queenstown Lakes District Council
- Department of Conservation Otago Conservancy
- Historic Places Trust
- Central Government.

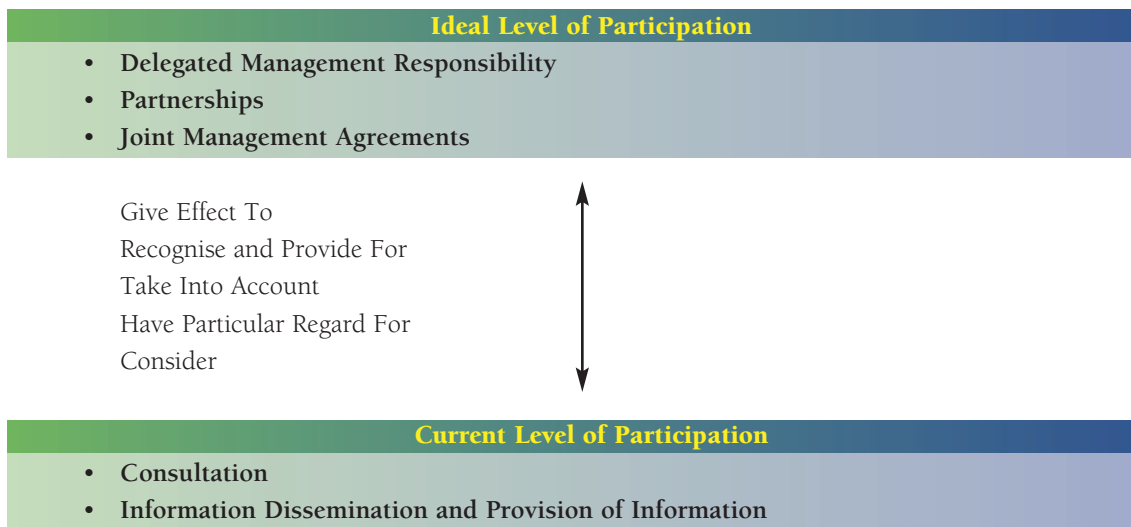
Kāi Tahu ki Otago encourage the use of Section 33 of the Resource Management Act 1991 which allows local authorities to transfer any one or more of their functions, powers or duties to another public authority including an iwi authority. To date, local authorities have not transferred any of their powers, functions or duties to iwi authorities, although there have been requests.

It is recognised that a greater role and higher level of participation will have implications for Kāi Tahu ki Otago such as human resources and financial capacity and will therefore need to be resourced appropriately by various partners.

#### 11.3 LEVELS OF PARTICIPATION *KĀ TAUMATA MAHI*

Kāi Tahu ki Otago participation in resource management varies in levels from merely being informed of decisions that have already been made (low participation) to working partnerships between equals (high participation).

While consultation has achieved some successful outcomes, there is now a need and desire to become involved in higher level partnerships, joint management agreements and decision making in order to achieve the objectives of this Plan.



### 11.3.1 High Levels of Participation Defined

A higher level of participation is characterised by a collaborative relationship between partners who agree on sharing the decision-making responsibilities and management for a specific geographic area and/or set of resources. The collaborative management system that is developed would ideally incorporate the following elements.

1. A relationship is formalised by a legally binding agreement (the collaborative management agreement) that explicitly recognises the rights of the parties to the agreement.
2. Structures, at the governance level, will formalise a relationship further and ensure a mandated forum for interaction.
3. Processes must be formalised to ensure appropriate interaction between the parties to a collaborative management agreement. The most important process is that which ensures that the parties to an agreement are able to participate as equals in decision-making.
4. “Management” refers to the range of functions, powers and responsibilities necessary for the management of a particular area or set of resources.
5. Collaborative management agreements should deliver specific outcomes.
6. Collaborative management responsibilities are to be shared on a fair and equitable basis.
7. Parties to a collaborative management system commit to enhancing each other’s capacity to ensure that the parties to the collaboration are able to sustain the relationship.
8. A collaborative management agreement must include mechanisms that enable the system to be reviewed and amended as the relationship between, and the capacity of, the parties develop.

## 11.4 EFFECTIVE PARTICIPATION THROUGH GOVERNANCE RELATIONSHIPS

### *MĀ TE HONOKA KI KĀ MANA WHAKAHAERE KA WHAI WĀHITAKA*

A relatively recent innovation that has been welcomed by Kāi Tahu ki Otago is the development of relationships at a governance level. A variety of mechanisms that are more benefiting a relationship between equal partners have been established.

Protocols and Memorandums of Understanding (MOU) establish and cement relationships between Kāi Tahu ki Otago and external agencies. MOUs define the macro relationship between Kāi Tahu ki Otago and the Head Office of these external agencies, while protocols establish the micro-relationship at a local level.

Kāi Tahu ki Otago currently have a Memorandum of Understanding with:

- Otago Regional Council
- Public Health South
- Otago District Health Board.

Kāi Tahu ki Otago currently have protocols with:

- Otago Regional Council
- Waitaki District Council
- Dunedin City Council
- Clutha District Council
- Central Otago District Council
- Queenstown Lakes District Council.

#### **11.4.1 Formalising Governance Relationships Policies**

1. Develop MOUs with external agencies to strengthen the relationship with Kāi Tahu ki Otago where deemed appropriate by Kāi Tahu ki Otago.
2. Develop Protocols with external agencies and commercial entities to guide specific actions and responsibilities.
3. Ensure all MOUs/Protocols are updated and reviewed regularly.

#### **11.4.2 Decision Making at a Governance Level.**

1. To seek the appropriate delegation of powers to the iwi authority.
2. To require Kāi Tahu ki Otago representation be clearly visible at all levels within Councils including the decision making level.
3. To ensure Kāi Tahu ki Otago representation is clearly visible at the governance decision-making level.
4. To demonstrate that genuine consideration of advice received during consultation reflects a willingness to change and recognition of differing priorities, concerns and values.
5. To require that decisions that are made need to have equal consideration of technical, cultural and other advice provided, including by Ka Rūnaka.
6. To investigate joint management opportunities for key resources and areas.
7. To allocate resources to the establishment of effective partnerships and joint management opportunities.

### **11.5 EFFECTIVE PARTICIPATION THROUGH CONSULTATION MĀ TE KŌRERO TAHI KĀ WHAI WĀHITAKA**

The essential elements of consultation can be defined as:

- **Prior and informed consent** before any decisions are made that affect the status of takata whenua.
- **Relevant and sufficient information** provided to the consulted party so they can make intelligent, informed and useful decisions;
- **Sufficient time** for both the participation of the consulted party and consideration of advice given;
- **Listening** to what others have to say and considering their responses;
- **Genuine consideration** of that advice, including an open mind and a willingness to change.
- **Silence** shall not be taken as approval.

#### **11.5.1 Information Needs**

Kāi Tahu ki Otago has produced a guideline manual, *Guidelines for Identifying Iwi Concerns during the Resource Consenting Process*<sup>119</sup>; to assist Otago Regional Council staff identify what is of interest to Kāi Tahu ki Otago, the type of information that should accompany consent applications and the timeframes for approvals.

The general information needs of Kāi Tahu ki Otago have been reproduced from this guideline in Appendix 35 Information Needs. As the name suggests, this is a guide only and is not a substitute for kanohi ki te kanohi, consultation.

<sup>119</sup> Guidelines for Identifying Iwi Concerns during the Resource Consenting Process - Unpublished 2003.

### 11.5.2 Policy

The following policies are to guide the implementation and use of the KTKO NRMP 2005.

1. To require all consultation with Kāi Tahu Ki Otago to:
  - occur at the earliest possible stage
  - recognise that the nature and extent of Kāi Tahu ki Otago involvement will be determined by Kāi Tahu ki Otago.
  - support the development of effective relationships.
  - allow sufficient time to make informed decisions.
  - extend beyond asking for opinions, to seeing recommendations and reflecting these in final decisions.
  - occur kanoahi ki te Kanoahi.
  - be adequately supported and resourced.

## 11.6 INPUT INTO PLANNING AND POLICY OF OTHER AGENCIES

### *URU ATU I TE MAHERETAKA ME TE KAUPAPA O KĀ RŌPŪ TORAKAPŪ ANO*

#### 11.6.1 Regional and District Council Annual Planning

Kāi Tahu ki Otago and the Otago Regional Council meet annually to discuss projects for inclusion in the Otago Regional Council Annual Plan. At present District Councils within Otago do not include Kāi Tahu ki Otago in Annual Planning processes. For effective input into annual planning documents Local Government Agencies need to engage with Kāi Tahu ki Otago early in the process, through meetings and provision of information, not merely sending a draft of the Annual Plan for input once it has been developed.

#### 11.6.2 Kāi Tahu ki Otago and Department of Conservation Planning

Each year Kāi Tahu ki Otago representatives meet with Kaupapa Taiao (Te Rūnanga o Ngāi Tahu) and discuss previous project's status and any possible project options for the forthcoming year. Kāi Tahu ki Otago then meet with the Conservator and other senior managers in November to discuss these projects. Following this the Conservator is required to formally respond to Kaupapa Taiao on the outcome of the business-planning meeting. If this is a satisfactory outcome at this point there is sign-off. If not, Kaupapa Taiao hold formal discussions with the Regional General Manager who then corresponds with the Conservator and eventually provides a response to Kaupapa Taiao. Confirmed projects are then bedded into the draft business plan.

#### 11.6.3 Policies for Input into Planning and Policies of other Agencies

1. Local Government Agencies should meet annually 1 month before the Regional and District Council Annual Planning rounds with Kāi Tahu ki Otago.
2. Local Government Agencies planning rounds will take place on a rotating basis between the Local Government Agencies offices and marae.
3. Local Government Agencies should provide Kāi Tahu ki Otago with justifications for projects not carried forward into Annual Plans.
4. In developing Long Term Council and Community Plans councils should consult extensively with Kāi Tahu ki Otago.
5. A meeting between Kāi Tahu ki Otago and the Department of Conservation should be held in November each year at start of the business planning process. Projects to be funded are to be included in the DoC business plan for the subsequent year.
6. There shall be adequate budgets in annual plans that allow local and regional authorities to give effect to Treaty principles and a meaningful consultation process. Should be in annual plan.

## 11.7 CULTURAL ASSESSMENTS *ARO MATAWAI AHUREA*

Cultural Assessments are a "tool" used by Kāi Tahu ki Otago in regards to certain activities and within certain areas. There are different types of Cultural Assessments undertaken, these include Cultural Impact Assessments and Cultural Values Reports.

- Cultural Impact Assessments (CIA) – If a proposed activity has the potential to impact Kāi Tahu ki Otago values to an extent that is of concern a CIA may be required. These assessments provide specific technical advice similar to other reports that an applicant may require when lodging a resource consent application, such as ecology, landscape or engineering reports.

A CIA will enable applicants to be certain about the potential effects of a proposal on Kāi Tahu ki Otago values and clear recommendations can be provided on how applicants can avoid, remedy or mitigate adverse effects.

- Cultural Values Reports (CVR) – Increasingly Kāi Tahu ki Otago is asked to prepare reports that explain the association of Kāi Tahu with a geographic area and/or specific resources. It is similar to a CIA with the principle distinction being that after documenting the cultural values it does not proceed to an assessment of impacts. Often a CVR is not associated with a development proposal e.g. some forestry companies have commissioned them to help them comply with accreditation requirements of the Forestry Stewardship Council.

### **11.7.1 Cultural Assessment Policies:**

1. A Cultural Impact Assessment may be required where:
  - A proposed activity is:
    - Significant in size
    - Multi-consent in nature
  - A proposed activity is either on, adjacent to or will directly impact on a site or species of cultural significance to KTKO.
  - The cultural values associated with the site or in relation to the proposal are not easily assessed and require additional time to that usually applied to an application.
  - The cultural values of the site are not readily known.
2. Cultural Values Reports will be prepared where:
  - It is considered necessary to document the cultural values associated with a geographic area and/or specific resources.
3. KTKO Ltd undertakes Cultural Impact Assessments and Cultural Assessments, at the cost of the applicant.

## **11.8 INCREASED AWARENESS AND CAPACITY BUILDING WHAKATIPU MĀRAMATAKA, WHAKATIPU RAUKAHA**

### **11.8.1 Cultural Monitoring**

All four Rūnaka within Otago are trained and implementing the Cultural Health Index to assess stream health.

Kā Papatipu Rūnaka monitoring is part of the protection of wāhi tapu and wāhi taoka. By having cultural monitors on site, the Rūnaka can be proactive in ensuring that all precautions are taken to protect sites of significance.

### **11.8.2 Cultural Workshops**

Kāi Tahu ki Otago believe it is essential that all Local Government Agency employees and natural resource managers and resource users are competent in cultural values, beliefs, roles, structures and outcomes sought by takata whenua. As such KTKO Ltd has developed several cultural workshop packages aimed at increasing the awareness of resource managers, users and elected members and their capacity to address Kāi Tahu ki Otago values.

Workshop Packages include:

- Creation Traditions
- Kāi Tahu arrival in Te Waipounamu

- Kāi Tahu ki Otago Cultural Values
- Kāi Tahu ki Otago and the Natural Environment
- Te Tiriti o Waitangi
- Ngāi Tahu Claims Settlement Act - Overview and Implementation
- Papatipu Rūnaka - Roles and responsibilities
- Cultural/Marae Protocol
- Consultation with Kāi Tahu ki Otago
- KTKO Ltd – Roles and Responsibility
- Archaeological - Values and Heritage Management
- Pronunciation of Māori words
- Mihimihi
- Waiata

Workshops are 4 hours (depending on the number of components) with 15 attendees being the maximum number per workshop. Workshops are interactive and involve participation through activities and questions. Costs of workshops are dependent on number of participants and components presented. More information about Cultural Workshops is available from KTKO Ltd.

### **11.8.3 Cultural Wānaka for Tourist Operators**

Kāi Tahu ki Otago is concerned by the number of Resource Consent holders particularly in the Lakes District that are not meeting their consent conditions in regards to attending a cultural wānaka. Kāi Tahu ki Otago believe that the Queenstown Lakes District Council should support and facilitate Kāi Tahu ki Otago presentation of these workshops.

Kāi Tahu ki Otago is also aware that there are a number of large concession holders that as part of their concession will need to attend a cultural wānaka.

#### **11.8.3.1 Policies:**

1. All Council staff and councillors should participate annually in a cultural workshop.
2. Resource managers, consultancy firms, should participate in cultural workshops.
3. The Queenstown Lakes District Council will hold an annual Kāi Tahu ki Otago facilitated workshop for consent holders with conditions to attend a wānaka.

## **11.9 IMPLEMENTATION AND USE OF THE KTKO NRMP 2005 *TE WHAKAMAHI I TE MAHERE WHAKAHAERE O KĀ RAWA TAIAO O KĀI TAHU KI OTAGO***

The following policies are to guide the implementation and use of the KTKO NRMP 2005.

### **11.9.1 Implementation and Use Policy**

#### **Accountability for Decision Making**

1. To encourage Local Government Agencies to include Kāi Tahu ki Otago cultural values as part of their evaluation of discretion and restricted discretionary activities for resource consent applications.
2. There must be no further changes to sections or information provided by Kāi Tahu ki Otago once Kāi Tahu ki Otago has signed off including changes to consent conditions.
3. Where seen as necessary by Kāi Tahu ki Otago, Local Government Agencies shall provide notification and explanations of decisions, particularly with reference to how Kāi Tahu ki Otago concerns have been met.

#### **Management Agreements**

4. To encourage capacity building within Papatipu Rūnaka through appropriate resourcing for input into resource management activities.
5. To negotiate contracts for service with management agencies.

### Information

6. To promote understanding of Kāi Tahu ki Otago cultural values by Local Government Agencies, the wider community, and natural resource management consultancies.
7. To encourage the use of Cultural Impact Assessments as a means of providing Kāi Tahu ki Otago cultural and technical input into resource consent activities.

### 11.10 PLAN MONITORING AND REVIEW *MAHERETIA TE TIROHAKA HOU*

This Plan is a living, working document that describes the Kāi Tahu ki Otago values, issues and policies associated with the use development and protection of natural resources within the region. The on going development of policies, building of relationships with Local Government Agencies and monitoring of the environment will keep this Plan alive and ensure that it continues to evolve and grow

The success of the Plan will be measured against the objectives as stated in Chapter 5, Otago Region. The approach of Kāi Tahu ki Otago is not to detail desired environmental outcomes, but rather to focus on long-term objectives and the progress towards these values over time. Objectives are based on the values identified in this Plan.

### 11.11 BROAD SCALE DESIRED OUTCOMES *KĀ WHAIHUA WHĀNUI*

These outcomes provide a benchmark against which Kāi Tahu ki Otago will monitor and review progress in achieving our goals.

- Protection of sites and areas including:
  - Historical trails.
  - Wāhi mahi kohātu.
  - Rock formations.
  - Pā tawhito.
  - Umu.
  - Tauraka ika.
- Enhanced access to historical trails.
- Accidental protocols in place with resource users and developers to protect any taonga that is discovered.
- Protection in key areas of the cultural landscapes surrounding umu.
- Accidental protocols in place with resource users and developers.
- Enhanced access to known sites.
- Accidental protocols in place with resource users and developers to protect the accidental discovery of taonga.
- Protection and, where possible, enhancement of remaining tauraka ika.
- Continuing use of tauraka ika.
- Continued ability to gather kaimoana from sites of significance along the Otago coastline.
- Protection of tauraka waka of historical significance.
- Continuing use, where appropriate, of tauraka waka.
- Protection of remaining kāika.
- Enhanced access to known sites.
- Accidental protocols in place with resource users and developers to ensure the protection of any taonga uncovered.
- Protection of rock art in line with the wishes of Kāi Tahu, as articulated by the kaitiaki Rūnanga.
- Enhanced access to known rock art sites.
- Physical protection of all known urupā.
- Accidental protocols in place with resource users and developers to protect any accidental discoveries.
- Protection of the mana and physical integrity of mauka.
- Protection of the cultural landscapes surrounding mauka.
- Protection of the ability to gather and use valued mahika kai species, from sites, which are easily accessible, and in a healthy condition.
- Protection and, where possible, restoration of wetlands of cultural significance.
- The cultural values of rivers, streams, lakes, wetlands and estuaries are maintained.





## 12 RESOURCE INVENTORY *RĀRAKA RARAUKA*

*This chapter of the Plan outlines the methodology used to develop the Kāi Tahu ki Otago Resource Inventory. It also includes information on the future expansion of the Resource Inventory.*

### 12.1 INTRODUCTION *HE KUPU WHAKATAKI*

In order to protect Kāi Tahu ki Otago values, resource management agencies must possess an appreciation of the sites that are valued and an understanding of the actions necessary to protect those sites. The difficulty for Kāi Tahu ki Otago and resource management agencies to date has been the noticeable absence of appropriate tools and processes that ensure a Kāi Tahu ki Otago perspective is incorporated in management.

Over the summer of 2003/04, a project to prepare a resource inventory for the Otago region was initiated by Kāi Tahu ki Otago with funding assistance from Lotteries Environment and Heritage and the Sustainable Management Fund (Ministry for the Environment). This project was part of the review of the KTKO NRMP 1995 and the development of this Plan. It is a key part of a raft of initiatives that are underway in Otago.

The resource inventory has been developed to facilitate more effective input by Kāi Tahu ki Otago into resource management, and to enable responsive behaviours from external agencies in relation to cultural issues. The Inventory provides site-specific detail and resource specific information to complement the policy direction established in Chapters 5-10.

The Resource Inventory comprises 2 levels of detail:

1. A broad overview of sites of significance to Kāi Tahu within the Otago Region
2. A detailed investigation to identify sites of significance within the Karitāne /Puketeraki area.

### 12.2 METHODOLOGY *KAUPAPA WHAKAHAERE*

Four methods can be used to collect data:

1. Documentary research;
2. River health analyses (Taieri and Kakaunui);
3. Collection of historical photos;
4. Community mapping.

Time was spent reviewing methodologies and identifying appropriate methods of data collection given that we wanted to examine the implicit and deep cultural experiences of Māori when they interact with the environment.

The working group agreed that the preparation of the inventory was not to be reduced to a “dots on a map” exercise. The risk with a “dots on map approach” is that a resource consent is approved because the area where development is to occur does not have a dot on the map. Using mahika kai as an example, it is insufficient to put dots (and by inference protect) all the sites Kāi Tahu ki Otago inhabited while foraging over nearby lands, if all the habitats, spawning grounds for the species that are gathered, and the actual foraging lands themselves are not also identified as dots and instead appear as a blank on the map. A range of methods were utilised to ensure that every effort is made to make connections between the information that is collected and data held in map form.

Another key reason for choosing the final methods was to ensure that this project is not a “one off” collection of data that is static in nature and ultimately limited in use and application. The methods proposed and the data collected are able to be further developed – particularly, so that it is usable in resource management contexts, should Rūnaka so choose.

Each of the four methods used is described in more detail below. Whether the method was used to collect data for the broader scale inventory or the localised model is also explained. Where possible, an attempt is made to explain how the data collected could be further developed by Kā Papatipu Rūnaka.

### 12.2.1 Documentary research

Two individuals gathered data from publicly available sources and information available from Rūnaka members. This information was drawn directly onto maps and formed the basis of the broader scale inventory for the Otago region as a whole. This information can be added to a Geographic Information Systems.

Two key points to emphasise are that:

1. all the information that was drawn onto the maps is information that was freely given and/or publicly available; and
2. this was a broad-brush approach that we will build on in subsequent years as more locality studies are completed.

The following sites of significance were recorded on 1:50,000 topographical maps of the Otago region:

- Mauka - important mountains within Otago
- Known urupā - human burial sites
- Traditional place names
- Traditional Kāika - occupation, settlement sites
- Ara tawhito - ancient trails
- Pā Tawhito - ancient pā sites
- Tauraka Waka - canoe mooring sites
- Tauraka Ika - fishing grounds
- Wāhi mahi kohātu - quarry sites
- Māori reserve lands
- Fishing easements
- Wāhi raraka - sources of weaving material of historical significance even if these sites are modified or destroyed today.
- Mahika kai sites of traditional significance even if these sites are modified or destroyed today.
- Repo Raupō - wetlands and swamps of historical cultural significance even if these sites are modified or destroyed today.
- Wāhi tāpuke - buried taoka
- Wāhi kohātu - rock formations of historical significance even if these sites are modified or destroyed today.
- Sites of significance that are included in the Kai Tahu Natural Resource Management Plan 1995 were also marked on the maps.

At the conclusion of this task, the following had been completed:

1. 35 topographic maps (1:50,000) covering the Otago region with a key sites of significance to Kāi Tahu identified; and
2. A database explaining why each of the sites marked on the maps is of significance.

This information is held by KTKO Ltd and is available for use by Kā Papatipu Rūnaka in resource management fora. A subsequent step will be to photograph as many sites as possible for inclusion in the inventory.

### 12.2.2 River Health Analyses

Te Rūnanga o Moeraki and Te Rūnanga Ōtākou have participated in the monitoring of 46 sites in the Taieri and Kakaunui catchments. The method used for assessing the sites in the Cultural Health Index. The monitoring sites are marked on the maps and scores from these analyses are held by the Rūnaka. Over time as the number of sites being actively monitored increases, the results will form a key part of the resource inventory material.

### 12.2.3 Collection of Historical Photos

Rūnaka members were aware of the number of photos held within the Hocken Library. Many of the photos show key habitats and landscapes around Otago. An individual searched the index of historical photos of the Otago region and obtained copies. Methodologies for storing these are yet to be evaluated.

The output from this task was a collection of historical photographs of the Otago landscape, with a particular focus on Waikouaiti, Karitāne, and Puketeraki.

If Rūnaka wanted to, as a subsequent step, this material could be developed in a historical timeframe visually showing changes.

## 12.3 FUTURE DIRECTION ARA WHAKAMUA

It is hoped that over time other Papatipu Rūnaka will replicate the mapping exercise that was piloted with Kāti Huirapa Rūnaka ki Puketeraki.

If the process is to be replicated the following steps are recommended:

1. Define the boundaries of the area that is to be the subject of the investigation;
2. Obtain map(s) and aerial(s) of the area;
3. Identify the key themes (no more than 3 - 4) to be mapped;
4. Identify the information around the key themes that is to be collected;
5. Identify the 15 individuals most likely to hold the information that is sought who are to be interviewed;
6. Identify a junior researcher;
7. Develop questions specific to each of the key themes;
8. Undertake the interviews;
9. Analyse the data collected, which includes determining how best to present the data on the map(s);
10. Prepare maps;
11. Convene a meeting of those interviewed to validate the information that was collected.

## 12.4 INVENTORY FOR THE WAIKOUAITI, KARITĀNE, PUKETERAKI AREA

### *RĀRAKI RAUEMI MŌ KĀ ROHE O WAIKOUAITI, KARITĀNE ME PUKETERAKI*

As part of the overview of the Otago region, the searches of the literature and historical photos had yielded information about the Waikouaiti, Karitāne and Puketeraki area. This complemented the information gathered by other means, most notably the community mapping exercise.

### 12.4.1 Community mapping

The principal method of data collection for the Puketeraki locality model was a community mapping exercise. This method involved documenting aspects of a Rūnaka member's experiences on a map. In other words it is about telling the story of a person's life on a map. This recognises that over time it is individual life experiences that become part of a collective oral tradition.

This technique was not just about obtaining a set of maps for inclusion in a GIS. There were also intangible benefits. Interviews served to reinforce participant's connections to lands and waters. People interviewed were usually surprised to see how much they have used the land and how much they remember.

Please note that it was personal experiences that were sought. Twenty individuals who were identified by the kaitiaki Rūnaka were interviewed. The preference was to interview 20 individuals who are older and, given the focus was to be mahika kai, those who were resource users. Participants identified information which was placed directly onto a map with the exact site being confirmed by the interviewee. While personal experience was recorded, participants were also asked to mark sites that he or she have never used or visited but have knowledge about. In this way a limited amount of historical information was sourced.

The base map was a 1:12,500 aerial photograph of the area with cadastral boundaries marked. The result of the interviews was 20 overlays for the map. These were then collated onto two composite overlays:

- Traditional placenames in the area;
- Sites / areas of significance.

Previous experience had shown that the risk to this type of project is trying to gather too much information, having too many questions, interviews lasting too long and people losing interest and focus. The decision was made to limit the scope of the interviews to key themes (no more than 3 - 4) and define, via semi-structured questions, the information that is to be mapped<sup>120</sup>.

Once the interviews were completed and the information collated onto overlays, a group of those interviewed were invited to attend a group session to discuss the final overlays. This session are used to validate the data on the map.

The outputs from this process were:

- interviews with each member – tape and index;
- map biography for each interviewee;
- two collated overlays that have been validated by the group;
- historical photographs;
- aerial photographs of the Waikouaiti, Karitāne, Puketeraki area;
- a database explaining why the sites are of significance and photographs of 100 of the sites identified in the area.
- Source material that was collected.

It is important to note that the maps represent a resource in themselves. Further themes could be explored in the future and more overlays produced.

#### **12.4.2 Implementation Methods**

1. To ensure “sites of significance” information from Documentary research is available to Papatipu Rūnaka for use in resource management decision-making.
2. To encourage Papatipu Rūnaka to photograph as many recorded “significant sites” as possible for inclusion in the inventory.
3. Cultural Health Index monitoring sites (46) and analyses within the Taieri and Kakaunui catchments is held within the Inventory by Rūnaka. Additional sites to be added over time.
4. Photos showing key habitats and landscapes around Otago collated and copies obtained to be appropriately stored within the Inventory and accessed by Papatipu Rūnaka.
5. Papatipu Rūnaka within the Otago Region to replicate the mapping exercise that was piloted with Kāti Huirapa Rūnaka ki Puketeraki.
6. To identify further areas for the expansion of the Resource Inventory model.
7. To identify appropriate storage and access procedures.

<sup>120</sup> See Appendix 33 Resource Inventory Questionnaire

# APPENDICES

## 1 - 36



### 13 APPENDICES *KĀ TĀPIRITAKA*

#### *Appendix 1 – First Schedule Te Rūnanga o Ngāi Tahu Act 1996*

<b>Te Rūnaka o Kaikoura</b>	The takiwā of Te Rūnaka o Kaikoura centres on Takahanga and extends from Te Parinui o Whiti to the Hurunui River and inland to the Main Divide.
<b>Te Ngāi Tuahuriri Rūnaka</b>	The takiwā of Te Ngāi Tuahuriri Rūnaka centres on Tuahiwi and extends from the Huruni to Hakatere, sharing an interest with Arowhenua Rūnaka northwards to Rakaia, and thence inland to the Main Divide.
<b>Rapaki Rūnaka</b>	The takiwā of Rapaki Rūnaka centres on Rapaki and includes the catchment of Whakaraupō and Te Kaituna.
<b>Te Rūnaka o Koukourarata</b>	The takiwā of Te Rūnaka o Koukourarata centres on Koukourarata and extends from Pohatu Pā to the shores of Te Waihora including Te Kaituna.
<b>Wairewa Rūnaka</b>	The takiwā of Wairewa Rūnaka centres on Wairewa and the catchment of the lake Te Wairewa and the hills and coast to the adjoining takiwā of Koukourarata, Onuku Rūnaka, and Taumutu Rūnaka.
<b>Te Rūnaka o Onuku</b>	The takiwā of Te Rūnaka o Onuku centres on Onuku and the hills and coasts of Akaroa to the adjoining takiwā of Te Rūnaka o Koukourarata and Wairewa Rūnaka.
<b>Taumutu Rūnaka</b>	The takiwā of Taumutu Rūnaka centres on Taumutu and the waters of Te Waihora and adjoining lands and shares a common interest with Te Ngāi Tuahuriri Rūnaka and Te Rūnaka o Arowhenua in the area south to Hakatere.
<b>Te Rūnaka o Arowhenua</b>	The takiwā of Te Rūnaka o Arowhenua centres on Arowhenua and extends from Rakaia to Waitaki, sharing interests with Ngāi Tuahuriri ki Kaiapoi between Hakatere and Rakaia, and thence inland to Aoraki and the Main Divide.
<b>Te Rūnaka o Waihao</b>	The takiwā of Te Rūnaka o Waihao centres on Wainono, sharing interests with Te Rūnaka o Arowhenua to Waitaki, and extends inland to Omarama and the Main Divide.
<b>Te Rūnanga o Moeraki</b>	The takiwā of Te Rūnanga o Moeraki centres on Moeraki and extends from Waitaki to Waihemo and inland to the Main Divide.
<b>Kāti Huirapa ki Puketeraki</b>	The takiwā of Kāti Huirapa ki Puketeraki centres on Karitāne and extends from Waihemo to Purehurehu and includes an interest in Otepoti and the greater harbour of Ōtākou. The takiwā extends inland to the Main Divide sharing an interest in the lakes and mountains to Whakātipu-Waitai with Rūnaka to the south.
<b>Te Rūnanga o Ōtākou</b>	The takiwā of Te Rūnanga o Ōtākou centres on Ōtākou and extends from Purehurehu to Te Matau and inland, sharing an interest in the lakes and mountains to the western coast with Rūnaka to the North and to the South.
<b>Waihopai Rūnaka</b>	The takiwā of Waihopai Rūnaka centres on Waihopai and extends northwards to Te Matau sharing an interest in the lakes and mountains to the western coast with other Murihiku Rūnaka and those located from Waihemo southwards
<b>Te Rūnaka o Awarua</b>	The takiwā of Te Rūnaka o Awarua centres on Awarua and extends to the coasts and estuaries adjoining Waihopai sharing an interest in the lakes and mountains between Whakātipu-Waitai and Tawhititarere with other Murihiku Rūnaka and those located from Waihemo southwards
<b>Te Rūnaka o Oraka Aparima</b>	The takiwā of Te Rūnaka o Oraka Aparima centres on Oraka and extends from Waimatuku to Tawhititarere sharing an interest in the lakes and mountains from Whakātipu-Waitai to Tawhititarere with other Murihiku Rūnaka and those located from Waihemo southwards.

- Hokonui Rūnaka** The takiwā of Hokonui Rūnaka centres on the Hokonui region and includes a shared interest in the lakes and mountains between Whakātipu-Waitai and Tawhītarere with other Murihiku Rūnaka and those located from Waihemo southwards.
- Te Rūnaka o Te Koeti Turanga** The takiwā of Te Rūnaka o Te Koeti Turanga is centred at Makawhio and includes a common interest with other Papatipu Rūnaka in the Poutini region from Kahuraki to Piopiotahi and inland to the Main Divide.
- Te Rūnaka o Kāti Waewae** The takiwā of Te Rūnaka o Kāti Waewae is centred on Arahura and Hokitika and includes a common interest with other Papatipu Rūnaka in the Poutini region from Kahuraki to Piopiotahi and inland to the Main Divide.



## **Appendix 2 – Māori and English Versions of The Treaty of Waitangi**

### **Māori Version of the Treaty**

#### **Ko te tuatahi**

Ko nga Rangatira o te Wakaminenga me nga Rangatira katoa hoki ki hai i uru ki taua wakaminenga ka tuku rawa atu ki te Kuini o Ingarani ake tonu atu te Kawanatanga katoa o o ratou wenua.

#### **Ko te tuarua**

Ko te Kuini o Ingarani ka wakarite ka wakaae ki nga Rangatira ki nga Hapū ki nga tangata katoa o Nu Tirani te tino rangatiratanga o o ratou wenua o ratou kainga me o ratou taonga katoa. Otiia ko nga Rangatira o te Wakaminenga me nga Rangatira katoa atu ka tuku ki te Kuini te hokonga o era wāhi wenua e pai ai te tangata nona te wenua ki te ritenga o te utu e wakaritea ai e ratou ko te kai hoko e meatia nei e te Kuini hei kai hoko mona.

#### **Ko te tuatoru**

Hei wakaritenga mai hoki tenei mo te wakaetanga ki te Kawanatanga o te Kuini. Ka tiakina e te Kuini o Ingarani nga tangata Māori katoa o Nu Tirani ka tukua a ratou nga tikanga katoa rite tahi ki ana mea ki nga tangata o Ingarani.

### ***A Literal Translation Of The Māori Version Of The Treaty***<sup>121</sup>

#### **The First**

The Chiefs of the Confederation and all the Chiefs who have not joined that Confederation give absolutely to the Queen of England forever the complete government over their land.

#### **The Second**

The Queen of England agrees to protect the Chiefs, subtribes and all the people of New Zealand in the unqualified exercise of their chieftainship over their lands, villages and all their treasures. But on the other hand the Chiefs of the Confederation and all the chiefs will sell land to the Queen at a price agreed to by the person owning it and by the person buying it (the latter being) appointed by the Queen as her purchase agent.

#### **The Third**

For this agreed arrangement therefore concerning the Government of the Queen, the Queen of England will protect all the ordinary people of New Zealand and will give them the same rights and duties of citizenship as the people of England.

*The Māori Text version was signed by 512 Chiefs (including those of Kāi Tahu) and by William Hobson, Consul and Lieutenant Governor.*

### **English Version**

#### **Article the First**

The Chiefs of the Confederation of the United Tribes of New Zealand and the separate and independent Chiefs who have not become members of the Confederation cede to Her Majesty the Queen of England absolutely and without reservation all the rights and powers of Sovereignty which the said Confederation or Individual Chiefs respectively exercise or possess, or may be supposed to exercise or to possess over their respective Territories as the sole Sovereigns thereof.

#### **Article the Second**

Her Majesty the Queen of England confirms and guarantees to the Chiefs and Tribes of New Zealand and to the respective families and individuals thereof the full exclusive and undisturbed possession of their Lands and Estates Forests Fisheries and other properties which they may collectively or individually

<sup>121</sup> New Zealand Court of Appeal, 29 June 1987, credited to Professor I. H. Kawharu

possess so long as it is their wish and desire to retain the same in their possession; but the Chiefs of the United Tribes and the individual Chiefs yield to Her Majesty the exclusive right of Preemption over such lands as the proprietors thereof may be disposed to alienate at such prices as may be agreed upon between the respective Proprietors and persons appointed by Her Majesty to treat with them in that behalf.

**Article the Third**

In consideration thereof Her Majesty the Queen of England extends to the Natives of New Zealand Her Royal protection and imparts to them all the Rights and Privileges of British Subjects.

*English Text signed by 30 Chiefs and by William Hobson, Consul and Lieutenant Governor.*

### **Appendix 3 Principles of a Te Rūnanga o Ngāi Tahu Treaty**

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 kawanatanga 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 an 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 Rūnaka.
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 - Taoka Species list**

“Taoka species” means the species of birds, plants, and animals described in Schedule 97 found within the Ngāi Tahu claim area (takiwā of Ngāi Tahu). Section 287 (NTCSA)

**Birds**

Name in Māori	Name in English	Scientific Name
Hoiho	Yellow-eyed penguin	Megadyptes antipodes
Kāhu	Australasian harrier	Circus approximans
Kākā	South Island kaka	Nestor meridionalis meridionalis
Kākāpō	Kākāpō	Strigops habroptilus
Kākāriki	New Zealand parakeet	Cyanoramphus spp.
Kakaruai	South Island robin	Petroica australis australis
Kakī	Black stilt	Himantopus novaezelandiae
Kāmana	Crested grebe	Podiceps cristatus
Kārearea	New Zealand falcon	Falco novaeseelandiae
Karoro	Black-backed gull	Larus dominicanus
Kea	Kea	Nestor notabilis
Kōau	Black shag	Phalacrocorax carbo
	Pied shag	Phalacrocorax varius
	Little shag	Phalacrocorax varius melanolecos brevirostris
Koekoeā	Long-tailed cuckoo	Eudynamys taitensis
Kōparapara/ Korimako	Bellbird	Anthornis melanura melanura
Kororā	Blue Penguin	Eudyptula minor
Kōtare	Kingfisher	Halcyon sancta
Kōtuku	White heron	Egretta alba
Kōwhiowhio	Blue duck	Hymenolaimus malacorhynchos
Kūaka	Bar-tailed godwit	Limosa lapponica
Kūkupa/Kererū	New Zealand wood pigeon	Hemiphaga novaeseelandiae
Kuruwhengu/ Kuruwhengi	New Zealand shoveller	Anas rhynchotis
Mātā	Fernbird	Bowdleria punctata punctata and Bowdleria punctata stewartiana and Bowdleria punctata wilsoni and Bowdleria punctata candata
Matuku moana	Reef heron	Egretta sacra
Miromiro	South Island tomtit	Petroica macrocephala
Miromiro	Snares Island tomtit	Petroica macrocephala dannefaerdi
Mohua	Yellowhead	Mohoua ochrocephala
Pākura/Pūkeko	Swamp hen/ Pūkeko	Porphyrio porphyrio
Pārera	Grey duck	Anas superciliosa
Pateke	Brown teal	Anas aucklandica
Pihoihoi	New Zealand pipit	Anthus novaeseelandiae
Pipīwharau	Shining cuckoo	Chrysococcyx lucidus
Piwakawaka	South Island fantail	Rhipidura fuliginosa fuliginosa
Poaka	Pied stilt	Himantopus himantopus
Pokotiwaha	Snares crested penguin	Eudyptes robustus
Pūtakitaki	Paradise shelduck	Tadorna variegata
Riroriro	Grey warbler	Gerygone igata
Roroa	Great spotted kiwi	Apteryx haastii

## Birds

Name in Māori	Name in English	Scientific Name
Rowi	Okarito brown kiwi	<i>Apteryx mantelli</i>
Ruru koukou	Morepork	<i>Ninox novaeseelandiae</i>
Takahē	Takahē	<i>Porphyrio mantelli</i>
Tara	Terns	<i>Sterna</i> spp.
Tawaki	Fiordland crested penguin	<i>Eudyptes pachyrhynchus</i>
Tete	Grey teal	<i>Anas gracilis</i>
Tieke	South Island saddleback	<i>Philesturnus carunculatus carunculatus</i>
Titī	Sooty shearwater/ Muttonbird/ Hutton's shearwater	<i>Puffinus griseus</i> and <i>Puffinus huttoni</i>
	Common diving petrel	<i>Pelecanoides urinatrix</i>
	South Georgian diving petrel	<i>Pelecanoides georgicus</i>
	Westland petrel	<i>Procellaria westlandica</i>
	Fairy prion	<i>Pachyptila turtur</i>
	Broad-billed prion	<i>Pachyptila vittata</i>
	White-faced storm petrel	<i>Pelagodroma marina</i>
	Cook's petrel	<i>Pterodroma cookii</i> and
	Mottled petrel	<i>Pterodroma inexpectata</i>
Tititipounamu	South Island rifleman	<i>Acanthisitta chloris chloris</i>
Tokoeka	South Island brown kiwi	<i>Apteryx australis</i>
Tōroa	Albatrosses and Molyhawks	<i>Diomedea</i> spp.
Toutouwai	Stewart Island robin	<i>Petroica australis rakiura</i>
Tūi	Tui	<i>Prothemadera novaeseelandiae</i>
Tutukiwi	Snares Island snipe	<i>Coenocorypha aucklandica huegeli</i>
Weka	Western weka	<i>Gallirallus australis australis</i>
Weka	Stewart Island weka	<i>Gallirallus australis scotti</i>
Weka	Buff weka	<i>Gallirallus australis hectori</i>

## Plants

Name in Māori	Name in English	Scientific Name
Akatorotoro	White rata	<i>Metrosideros perforata</i>
Aruhe	Fernroot (bracken)	<i>Pteridium aquilinum</i> var. <i>esculentum</i>
Harakeke	Flax	<i>Phormium tenax</i>
Horoeka	Lancewood	<i>Pseudopanax crassifolius</i>
Houhi	Mountain ribbonwood	<i>Hoheria lyalli</i> and <i>H. glabata</i>
Kahikatea	Kahikatea/White pine	<i>Dacrycarpus dacrydioides</i>
Kāmahi	Kāmahi	<i>Weinmannia racemosa</i>
Kānuka	Kānuka	<i>Kunzia ericoides</i>
Kāpuka	Broadleaf	<i>Griselinia littoralis</i>
Karaeopirita	Supplejack	<i>Ripogonum scandens</i>
Karaka	New Zealand laurel/ Karaka	<i>Corynocarpus laevigata</i>
Karamū	Coprosma	<i>Coprosma robusta</i> , <i>coprosma lucida</i> , <i>coprosma foetidissima</i>
Kātote	Tree fern	<i>Cyathea smithii</i>

## Birds

Name in Māori	Name in English	Scientific Name
Kiekie	Kiekie	<i>Freycinetia baueriana</i> subsp. <i>banksii</i>
Kōhia	NZ Passionfruit	<i>Passiflora tetrandra</i>
Korokio	Korokio Wire-netting bush	<i>Corokia cotoneaster</i>
Koromiko/ Kōkōmuka	Koromiko	<i>Hebe salicifolia</i>
Kōtukutuku	Tree fuchsia	<i>Fuchsia excorticata</i>
Kōwhai Kōhai	Kowhai	<i>Sophora microphylla</i>
Mamaku	Tree fern	<i>Cyathea medullaris</i>
Mania	Sedge	<i>Carex flagellifera</i>
Mānuka /Kahikātoa	Tea-tree	<i>Leptospermum scoparium</i>
Māpou	Red matipo	<i>Myrsine australis</i>
Mataī	Matai/Black pine	<i>Prumnopitys taxifolia</i>
Miro	Miro/Brown pine	<i>Podocarpus ferrugineus</i>
Ngāio	Ngāio	<i>Myoporum laetum</i>
Nīkau	New Zealand palm	<i>Rhopalostylis sapida</i>
Pānako	(Species of fern)	<i>Asplenium obtusatum</i>
Pānako	(Species of fern)	<i>Botyichium australe</i> and <i>B. biforme</i>
Pātōtara	Dwarf mingimingi	<i>Leucopogon fraseri</i>
Pīngao	Pīngao	<i>Desmoschoenus spiralis</i>
Pōkākā	Pokaka	<i>Elaeocarpus hookerianus</i>
Ponga/Poka	Tree fern	<i>Cyathea dealbata</i>
Rātā	Southern rata	<i>Metrosideros umbellata</i>
Raupō	Bulrush	<i>Typha angustifolia</i>
Rautāwhiri/ Kōhūhū	Black matipo/Mapou	<i>Pittosporum tenuifolium</i>
Rimu	Rimu/Red pine	<i>Dacrydium cypressinum</i>
Rimurapa	Bull kelp	<i>Durvillaea antarctica</i>
Taramea	Speargrass, spaniard	<i>Aciphylla</i> spp.
Tarata	Lemonwood	<i>Pittosporum eugenioides</i>
Tawai	Beech	<i>Nothofagus</i> spp.
Tētēaweke	Muttonbird scrub	<i>Olearia angustifolia</i>
Tī rākau/ Tī Kōuka	Cabbage tree	<i>Cordyline australis</i>
Tikumu	Mountain daisy	<i>Celmisia spectabilis</i> and <i>C. semicordata</i>
Titoki	New Zealand ash	<i>Alectryon excelsus</i>
Toatoa	Mountain Toatoa, Celery pine	<i>Phyllocladus alpinus</i>
Toetoe	Toetoe	<i>Cortaderia richardii</i>
Tōtara	Totara	<i>Podocarpus totara</i>
Tutu	Tutu	<i>Coriaria</i> spp.
Wharariki	Mountain flax	<i>Phormium cookianum</i>
Whīnau	Hinau	<i>Elaeocarpus dentatus</i>
Wī	Silver tussock	<i>Poa cita</i>
Wīwī	Rushes	<i>Juncus</i> all indigenous <i>Juncus</i> spp. and <i>J. maritimus</i>

## Marine mammals

Name in Māori	Name in English	Scientific Name
Ihupuku	Southern elephant seal	Mirounga leonina
Kekeno	New Zealand fur seals	Arctocephalus forsteri
Paikea	Humpback whales	Megaptera novaeangliae
Parāoa	Sperm whale	Physeter macrocephalus
Rāpoka/ Whakahao	New Zealand sea lion/ Hooker's sea lion	Phocarctos hookeri
Tohorā	Southern right whale	Balaena australis

## Taoka fish species

Name in Māori	Name in English	Scientific Name
Kāeo	Sea tulip	Pyura pachydermatum
Koeke	Common shrimp	Palaemon affinis
Kōkopu/Hawai	Giant bully	Gobiomorphus gobioides
Kōwaro	Canterbury mudfish	Neochanna burrowsius
Paraki/Ngāiore	Common smelt	Retropinna retropinna
Piripiripōhatu	Torrent fish	Cheimarrichthys fosteri
Taiwharu	Giant kokopu	Galaxias argenteus

## Shellfish species

Name in Māori	Name in English	Scientific Name
Pipi/Kakāhi	Pipi	Paphies australe
Tuaki	Cockle	Austrovenus stutchburgi
Tuaki/Hākiari, Kuhakuha/ Pūrimu	Surfclam	Dosinia anus, Paphies donacina, Mactra discor, Mactra murchsoni, Spisula aequilateralis, Basina yatei, or Dosinia subrosa
Tuatua	Tuatua	Paphies subtriangulata, Paphies donacina
Waikaka/Pūpū	Mudsnail	Amphibola crenata, Turbo smaragdus, Zedilom spp.

Appendix 5 - Spawning Times

APPENDICES

June, July, August	Sept, Oct, Nov	Dec, Jan, Feb	Mar, Apr, May
Banded Kokopu			
Giant Kokopu			
	Longjawed Galaxis		
	Alpine Galaxis		
	Common River Galaxis		
	Kokopara		
	Upland Bully		
Redfinned			
	Bluegilled Bully		
		Piripiri pohatu	
	Cockabully		
		Paraki/Ngäiore	
			Kanakana
	Waikoura		
Mohoao			



## **Appendix 6 - Accidental Discovery Protocol Example**

[ Name of Company ]

### **Purpose**

The purpose of this protocol is:

- To manage and protect the integrity of “known” and “unknown” archaeological sites from undue damage and loss.
- To maximise the opportunity to retrieve physical and archaeological evidence from disturbed sites. In cases where sites clearly are unable to be retained intact, the orderly and systematic removal of archaeological evidence and information of the utmost importance.
- Kōiwi tangata (human skeletal remains) are from time to time unearthed through a range of causes, man made and natural; the dignified and appropriate cultural management of such sites and remains is required.
- To obtain quality information on the lives, activities, foods, resource use, trails and camp sites of Ngāi Tahu ancestors from archaeological sites. Early detection and assessment is dependent on early intervention to manage retrieval of such information.
- Quality historic information on the lives or people, their activities, resource use and structures.

### **Process**

In the event of all discoveries the consent holder shall undertake the following steps:

1. Cease all works immediately.
2. Advise the site supervisor of the find.
3. The site supervisor shall contact an appointed archaeologist to advise on the significance of the find.
4. If the find is of potential significance to Ngāi Tahu, appropriate “contact” person(s) from the Kaitiaki Runanaga must be advised.
5. The Historic Places Trust must be advised in all cases.

### **In cases of wāhi taonga and wāhi tapu**

- The nominated representatives of the Kaitiaki Rūnaka will be consulted by the archaeologist and site supervisor to determine what further actions are appropriate to avoid, reduce, remedy or mitigate any damage.
- [The Company] shall consult with the Kaitiaki Rūnaka on any matters of protocol that they may wish to undertake in relation to the find and prior to the commencement of any investigation.
- The Historic Places Trust shall advise what authorities are required under the Historic Places Act.

### **In cases of suspected kōiwi tangata**

- The site supervisor shall take steps to immediately secure the area to ensure that the remains are not touched, and then notify the police and the nominated representative(s) of the Kaitiaki Rūnaka.
- The site supervisor must ensure that staffs are available to meet and guide Police, Kaumatua and Historic Places staff to the site and to assist with any requests made. The area shall be marked off and if the remains are of Māori origin, Kaumatua will decide what will happen to the remains and advise the Police and other parties of their decision.
- Work may only recommence in the area with the approval of the Police, Kaumatua and the Historic Places Trust.

**In all other cases**

- The archaeologist and site supervisor to determine what further actions are appropriate to avoid, reduce, remedy or mitigate any damage.
- The Historic Places Trust shall advise what authorities are required under the Historic Places Act.

**Responsibilities**

## The Kaitiaki Rūnaka

1. Prior to earth disturbance inform [The Company] of the position of any known sites.
2. To inform [The Company] in accordance with tikanga Māori, if there are any matters of protocol which tangata whenua wish to undertake in relation to the commencement of work or significant events.
3. To provide a list of contact persons and phone, fax and mobile numbers to [The Company].
4. To adopt a policy of guaranteeing response to notification of a “site find” within a 24 hour time frame;
  - (a) this will consist of contacting appropriate people and organisations depending on the nature of the “find”;
  - (b) arranging a time for inspecting the site;
  - (c) co-ordination of the appropriate action to remove or otherwise any archaeological material from the site.

**[The Company]**

1. To require all staff/contractors involved in drilling, earthmoving or mining operations to undertake a training session on the recognition of “in situ” archaeological sites.
2. To implement internal management protocols to ensure staff are aware of the requirement to monitor operations in a way that allows the identification of archaeological sites including wāhi tapu, wāhi taonga, urupā or historic cultural sites.
3. To implement a reporting procedure in the event of a “find” of any archaeological material as described in the Process above.
4. To ensure that [The Company] will meet all statutory obligations under the Historic Places Act 1993 and comply with all conditions of resource consent as they relate to matters of archaeological significance.
5. To provide a copy of the work plan to the Kaitiaki Rūnaka and the Historic Places Trust.
6. To appoint an archaeologist(s) approved by the Kaitiaki Rūnaka to be available during excavations to act as an advisor on identification or protection of wāhi tapu, wāhi taonga, urupā or historic cultural sites. This person(s) to be on-site as required by conditions of resource consent or as required in the event of a discovery.

**Appendix 7 – Instruments from the Ngāi Tahu Claims Settlement Act 1998 (NTCSA 1998)  
Relevant to this Plan**

**Statutory Acknowledgements**

**What are Statutory Acknowledgements?**

A statutory acknowledgement is an acknowledgement by the Crown of the special relationship of Ngāi Tahu with identifiable areas. Namely the particular cultural, spiritual, historical and traditional association of Ngāi Tahu with those areas.

**What is the purpose of Statutory Acknowledgements?**

The purpose of statutory acknowledgements are:

- to ensure that Ngāi Tahu's particular association with certain significant areas in the South Island are identified, and that Te Rūnanga o Ngāi Tahu is informed when a proposal may effect one of these areas
- to improve the implementation of RMA processes, in particular by requiring consent authorities to have regard to Statutory Acknowledgements when making decisions on the identification of affected parties.

**Who may be Affected by Statutory Acknowledgements?**

You may be affected by a Statutory Acknowledgement if you are applying for a resource consent for an activity that is within, adjacent to, or implying upon a statutory area.

**What Happens When You Apply?**

If you are applying for a resource consent for an activity within, adjacent to, or impacting directly upon a statutory area:

- the consent authority must send a summary of your resource consent application to Te Rūnanga o Ngāi Tahu.
- the consent authority must have regard to the Statutory Acknowledgement in going through the process of making a decision on whether Te Rūnanga o Ngāi Tahu is an affected party in relation to the resource consent application.

**Purposes of Statutory Acknowledgement**

Pursuant to section 215, and without limiting the rest of this schedule, the only purposes of this statutory acknowledgement are —

- (a) To require that consent authorities forward summaries of resource consent applications to Te Rūnanga o Ngāi Tahu as required by regulations made pursuant to section 207 (clause 12.2.3 of the deed of settlement); and
- (b) To require that consent authorities, the Historic Places Trust, or the Environment Court, as the case may be, have regard to this statutory acknowledgement in relation to the Waitaki, as provided in sections 208 to 210 (clause 12.2.4 of the deed of settlement); and
- (c) To empower the Minister responsible for management of the Waitaki or the Commissioner of Crown Lands, as the case may be, to enter into a Deed of Recognition as provided in section 212 (clause 12.2.6 of the deed of settlement); and
- (d) To enable Te Rūnanga o Ngāi Tahu and any member of Ngāi Tahu whānui to cite this statutory acknowledgement as evidence of the association of Ngāi Tahu to the Waitaki as provided in section 211 (clause 12.2.6 of the deed of settlement).

### Limitations on Effect of Statutory Acknowledgement

From Section 217 of the Ngāi Tahu Claims Settlement Act 1998

Except as expressly provided in sections 208 to 211, 213, and 215,—

- (a) These Statutory Acknowledgements do not affect, and are not to be taken into account in, the exercise of any power, duty, or function by any person or entity under any statute, regulation, or bylaw; and
- (b) without limiting paragraph (a), no person or entity, in considering any matter or making any decision or recommendation under statute, regulation, or bylaw, may give any greater or lesser weight to Ngāi Tahu's association with these areas (as described in these Statutory Acknowledgements) than that person or entity would give under the relevant statute, regulation, or bylaw, if these statutory acknowledgements did not exist.

Except as expressly provided in this Act, these Statutory Acknowledgements do not affect the lawful rights or interests of any person who is not a party to the deed of settlement.

Except as expressly provided in this Act, these statutory acknowledgements do not, of themselves, have the effect of granting, creating, or providing evidence of any estate or interest in, or any rights of any kind whatsoever relating to, these Statutory Acknowledgement.

#### Nohoanga<sup>122</sup>

The term “nohoanga” (literally “a place to sit”), traditionally referred to the seasonal occupation sites which were an integral part of the mobile lifestyle of our tīpuna as they moved around Te Wai Pounamu in pursuit of various food and other natural resources. This traditional concept has been given contemporary effect in the Crown's Settlement Offer through the provision to Ngāi Tahu of 72 temporary campsites adjacent to lakes and rivers, to facilitate customary fishing and the gathering of other natural resources.

The Crown's Settlement Offer provides that Nohoanga:

- are entitlements to occupy temporarily and exclusively an area of lakeshore or riverbank for the purposes of lawful fishing and the gathering of other natural resources
- May be used for up to 210 days a year between mid-August and the end of April
- Will be approximately one hectare in size
- Will be set back from marginal strips and will be sited so as not to interfere with existing public access or use
- Will be subject to all legislation, bylaws and regulations, and land and water management practices such as weed, pest and river control
- Will be issued on a ten year basis and will be automatically renewed, provided that users leave the sites in a good and tidy condition after use.

If the Crown alienates land on which there is a Nohoanga, or the area becomes unusable – for example due to a river changing course – the Crown will take reasonable steps to provide a replacement site.

Nohoanga should not be confused with the Fenton Entitlements which will be provided as redress for a small number of Ancillary Claims (see Non – Tribal Redress – Ancillary Claims), and which include the right to exclusively use a stretch of waterway.

<sup>122</sup> Te Karaka Special Edition - Crown Settlement Offer - Second Edition pg 37, <http://www.ngatahu.iwi.nz/office-tekaraka-overview.html>.

Nohoanga will provide all Ngāi Tahu with an opportunity to experience the landscape as their tīpuna did, and to rekindle the traditional practices of gathering food and other natural resources, so long an essential part of Ngāi Tahu culture.

### **Tōpuni** <sup>123</sup>

The concept of Tōpuni derives from the traditional Ngāi Tahu tikanga (custom) of persons of rangatira (chiefly) status extending their mana and protection over a person or area by placing their cloak over them or it. In its new application, a Tōpuni confirms and places an ‘overlay’ of Ngāi Tahu values on specific pieces of land managed by DoC. A Tōpuni does not override or alter the existing status of the land (for example, National Park status), but ensures that Ngāi Tahu values are also recognised, acknowledged and provided for.

Each Tōpuni involves three levels of information:

- A statement of the Ngāi Tahu values in relation to the area (just as for the SA and DoR).
- A set of principles aimed at ensuring that DoC avoids harming or diminishing those values - for example “encouragement of respect for the association Ngāi Tahu has with Aoraki”.
- Specific actions which DoC has agreed to undertake to give effect to those principles (such as “educational material will be made available to climbers and all climbing guides explaining that to Ngāi Tahu, standing on the very top of Aoraki denigrates its tapu status”).

The specific actions may change over time as circumstances change, but Conservation Boards will always be required to have particular regard to the Ngāi Tahu values in relation to each area, and to consult and listen to Ngāi Tahu when they prepare plans and strategies in relation to these areas.

Tōpuni will provide very public symbols of Ngāi Tahu mana and rangatiratanga over some of the most prominent landscape features and conservation areas in Te Waipounamu.

### **Place Names**

The Crown’s Settlement Offer provided for 88 place names to be changed. The name Whareakeake replaces the name Murderers Beach (Otago Peninsula), but in all other cases names are to be joint English/Māori names. The one exception is Aoraki / Mount Cook, where the Māori name comes first. These new names will be included on official maps and road signs and explanatory materials as those things are replaced over time.

The New Zealand Geographic Board - the body which is responsible for the official naming of places and landscape features has been given the additional function of encouraging the use of original Māori place names. Ngāi Tahu also has a dedicated seat on the Geographic Board.

The re-establishment of traditional place names in a variety of areas will serve as tangible reminders of our history in Te Waipounamu.

<sup>123</sup> Te Karaka Special Edition - Crown Settlement Offer - Second Edition pg 37, <http://www.ngātahu.iwi.nz/office-tekaraka-overview.html>.

## **Appendix 8 – Statutory Acknowledgement Waitaki River**

### **Statutory Area**

The statutory area to which this statutory acknowledgement applies is the river known as Waitaki the location of which is shown on Allocation Plan MD 118 (S.O. 24723).

### **Preamble**

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

### **Ngāi Tahu Association with the Waitaki**

The name Waitaki (a South island variant of the name Waitangi which is found throughout the North Island) is a common place name throughout Polynesia. Although the specific tradition behind the name has been lost in this case, it literally means “the waterway of tears”, and the Waitaki is often referred to in whakōrero (oratory) as representing the tears of Aoraki which spill into Lake Pukaki and eventually make tier way south along the river to the coast. This image is captured in the whakatauaiki “Ko Waitaki te awa, ka roimata na Aoraki i riringi (Waitaki is the river, the tears spilled by Aoraki)”.

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

The Ngāi Tahu association with the Waitaki extends back to the first human habitation of Te Wai Pounamu. As such, the river is an essential element of the identity of Ngāi Tahu as an iwi. A moa butchery site at the mouth of the river is one of the oldest recorded settlement sites in the island and other sites further up the river are also extremely ancient.

The Waitaki was a traditional route to the mahinga kai resources of inland North Otago and the once bush-clad Waitaki Valley. The use of mokihi (river craft constructed from raupō, or reeds), to carry the spoils of hunting expeditions down the river is particularly associated with the Waitaki, one of the few places where the construction and navigation of these vessels is still practiced to this day.

The river also led to the central lakes district - itself a rich source of mahinga kai - and from there across the Southern Alps to the treasured pounamu resource of Te Tai Poutini (the West Coast). The river served as a major highway for such travels from both North Otago and South Canterbury.

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

In 1877, the leader Te Maiharoa, a descendant of Te Rakaihautu, led his people up the Waitaki to establish a settlement at Te Ao Marama (near modern-day Omarama), to demonstrate his assertion that the interior had not been sold by Ngāi Tahu, and therefore still belonged to the iwi. Although the settlement was eventually broken up by the constabulary, and the people forced to retreat back down the river, the episode is a significant one in the long history of Te Kereme (the Ngāi Tahu Claim).

As well as acting as a route to the inland mahinga kai sources, the river itself provided many forms of kai for those living near it or travelling on it. The Waitaki was and still is noted for its indigneous fisheries, including tuna (eel), Īnaka kokopu and koaro species (whitebait), kanakana (lamprey) and waikoura (freshwater crayfish); with aua (yellow-eyed mullet) and mohoa (black flounder) being found at the mouth. Many of these species are diadromous (migrating between sea and freshwater to spawn).

The extensive wetland areas formerly associated with the river once provided important spawning, rearing and feeding grounds for all of these species and were amongst the richest mahinga kai areas on the river. Although many of these species have now been depleted, the Waitaki remains a nationally important fishery.

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

The Waitaki Valley holds one the country's major collections of rock art, and the river itself seems to have acted as a form of cultural "barrier" in rock art design. The surviving rock art remnants are a particular taonga of the area, providing a unique record of the lives and beliefs of the people who travelled the river.

Because of the long history of use of the river as both a highway and a mahinga kai, supporting permanent and temporary Nohoaka (occupation sites), there are numerous urupū, wāhi tapu and wāhi taonga associated with the river. These are all places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations. Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are a particular focus for whānau traditions.

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

## **Appendix 9 - Statutory Acknowledgement Mahi Tikumu**

### **SCHEDULE 37**

#### **Statutory Area**

The statutory area to which this statutory acknowledgement applies is the Lake known as Mahi Tikumu (Lake Aviemore), the location of which is shown on Allocation Plan MD 492 (SO 19907 (Canterbury Land District) and SO 24731 (Otago Land District)).

#### **Preamble**

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

#### **Ngāi Tahu Association with Mahi Tikumu**

While the man-made Mahi Tikumu is obviously a comparatively recent creation on the landscape, it overlays the path of the Waitaki River, which is very significant to Ngāi Tahu as the pathway of the waters from Aoraki to the sea. Ngāi Tahu whānui always recognise and pay respects to Waitaki as a significant element of their being and identity, a creation of the atua (gods), further moulded by Tu Te Rakiwhanoa and his assistants, one of whom was Marokura who stocked the waterways.

In addition, the lake now covers areas which have been very important in Ngāi Tahu history. A number of nohoaka existed along the former river basin, among the 170 which one record lists as existing in the Waitaki basin.

Many wāhi tapu and wāhi taonga were also drowned by Mahi Tikumu, including a number of rock art sites. Other areas of the lake's catchment are awaiting survey for rock art. Urupā associated with the nohoaka in the area also lie under the lake. These are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations.

An important and productive tuna (eel) fishery existed in the lake, although in more recent times the customary fishery has become depleted. Freshwater mussels (waikakahi) are also available in the shallows. Excellent stands of raupō grow on the edge of the lake, adjacent to the deep water. This hardy plant, which was traditionally used for kai and in the making of mokihi (a type of waka, or canoe, used on inland waterways) is not affected by the heavy frosts of the area or cattle grazing.

The area which the lake now covers was once a major route from coast to coast: to Hāwea and Wānaka via the Lindis pass, and to the West Coast via Okuru or Haast Pass. There was also a trail via the Lindis through into the Central Otago summer resorts, mahinga kai and pounamu resources. Trails linked to seasonal resource gathering lead into the Ōhau, Pukaki and Takapo, Alexandrina and Whakarukumoana catchments.

The area covered by the lake was an integral part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai.

Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the land and waterways. Wai-para-hoanga, meaning literally "water of grinding stone dirt" is a descriptive name for the water that once flowed unhindered in the Waitaki, sourced from Pukaki, Takapo and Ōhau, and ultimately from Aoraki itself.

Notwithstanding more recent man-made changes to the landscape and waterways, the mauri of Mahi Tikumu represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu whānui with the lake.



## **Appendix 10 - Statutory Acknowledgement for Te Ao Marama (Lake Benmore)**

### **SCHEDULE 59**

#### **Statutory Area**

The statutory area to which this statutory acknowledgement applies is the Lake known as Te Ao Marama (Lake Benmore), the location of which is shown on Allocation Plan MD 130 (SO 19857 (Canterbury Land District) and SO 24748 (Otago Land District)).

#### **Preamble**

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

#### **Ngāi Tahu Association with Te Ao Marama**

While the man-made Te Ao Marama is obviously a comparatively recent creation on the landscape, it overlays the path of the Waitaki River, which is very significant to Ngāi Tahu as the pathway of the waters from Aoraki to the sea. Ngāi Tahu whānui always recognise and pay respects to Waitaki as a significant element of their being, and identity, a creation of the atua (gods), further moulded by Tu Te Rakiwhanoa and his assistants, one of whom was Marokura who stocked the waterways.

In addition, the lake now covers areas which have been very important in Ngāi Tahu history. The Ahuriri arm of the lake was the site of Te Ao Marama, the nohoaka that Te Maiharoa was evicted from by the constabulary in the late 1800s. It is in memory of this that the lake is now referred to by the same name. A number of other nohoaka existed in the area the lake now covers, and these were among the 170 which one record lists as existing in the Waitaki basin. One of these was at Sailors Cutting, and was known as Te Whakapiri a Te Kaiokai.

Many wāhi tapu and wāhi taonga were also drowned by Te Ao Marama, including a number of rock art sites, while others still survive. Urupā associated with the nohoaka in the area also lie under the lake. These are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations.

An important and productive fishery exists in the lake, with the Haldane and Ahuriri arms once rich in long finned eels, although in more recent times the fishery has been depleted. Freshwater mussels (waikakahi) are also available in the Ahuriri shallows. Excellent stands of raupō grow on the edge of the lake adjacent to the deep water, this hardy plant, which was traditionally used for kai and in the making of mokihi (a type of waka, or canoe, used on inland waterways) is not affected by the heavy frosts of the area or cattle grazing. The Ahuriri arm was also an important waterfowl and weka habitat.

Strategic marriages between hapū strengthened the kupenga (net) of whakapapa and thus rights to use the resources of the area. These whakapapa rights and relationships still apply to the lake itself.

The area which the lake now covers was once a major route from coast to coast: to Hāwea and Wānaka via the Lindis pass, and to the West Coast via Okuru or Haast Pass. There was also a trail via the Lindis through into the Central Otago summer resorts, mahinga kai and pounamu resources. Trails linked to seasonal resource gathering lead into the Ōhau, Pukaki and Takapo, Alexandrina and Whakarukumoana catchments. These were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the land and waterways.

Wai-para-hoanga meaning literally “water of grinding stone dirt” is a descriptive name for the water that once flowed unhindered in the Waitaki, sourced from Pukaki, Takapo and Ōhau, and ultimately from Aoraki itself.

Notwithstanding more recent man-made changes to the landscape and waterways, the mauri of Te Ao Marama represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu whānui with the lake.

## **Appendix 11 - Statutory Acknowledgement for Lake Ōhau**

### **SCHEDULE 32**

#### **Statutory Area**

The statutory area to which this statutory acknowledgement applies is the Lake known as Ōhau, the location of which is shown on Allocation Plan MD 36 (SO 19838).

#### **Preamble**

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

#### **Ngāi Tahu Association with Lake Ōhau**

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

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

Ōhau was traditionally occupied by the descendants of Te Rakitauhope and was the site of several battles between Ngāi Tahu and Ngati Māmoē. Later, it supported Te Maiharoa and his followers in 1870s when they took occupation of land in the interior in protest against the Crown's failure to honour the 1848 Canterbury Purchase.

As a result of this history of occupation, there are a number of urupā and wāhi tapu associated with the lake. Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. Urupā and wāhi tapu are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations.

Ōhau was an important mahinga kai, and part of a wider mahinga kai trail that ran from Lake Pukaki to the coast. The main foods taken in this area were weka, forest and water fowl and freshwater fish such as tuna (eel) and kokopu.

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

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

**Appendix 12 - Tōpuni Aoraki/Mt Cook****SCHEDULE 80****Description of Area**

The area over which the Tōpuni is created is the area known as Aoraki/Mount Cook located in Ka Tiritiri o te Moana, shown as Aoraki on Allocation Plan MS 1 (SO 19831).

**Preamble**

Under section 239 (clause 12.5.3 of the deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional values relating to Aoraki, as set out below.

**Ngāi Tahu Values Relating to Aoraki**

In the beginning there was no Te Wai Pounamu or Aotearoa. The waters of Kiwa rolled over the place now occupied by the South Island, the North Island and Stewart Island. No sign of land existed.

Before Raki (the Sky Father) wedded Papatūānuku (the Earth Mother), each of them already had children by other unions. After the marriage, some of the Sky Children came down to greet their father's new wife and some even married Earth Daughters.

Among the celestial visitors were four sons of Raki who were named Aoraki (Cloud in the Sky), Rakiroa (Long Raki), Rakirua (Raki the Second), and Rarakiroa (Long Unbroken Line). They came down in a canoe which was known as Te Waka o Aoraki. They cruised around Papatūānuku who lay as one body in a huge continent known as Hawaiiki.

Then, keen to explore, the voyagers set out to sea, but no matter how far they travelled, they could not find land. They decided to return to their celestial home but the karakia (incantation) which should have lifted the waka (canoe) back to the heavens failed and their craft ran aground on a hidden reef, turning to stone and earth in the process.

The waka listed and settled with the west side much higher out of the water than the east. Thus the whole waka formed the South Island, hence the name: Te Waka o Aoraki. Aoraki and his brothers clambered on to the high side and were turned to stone. They are still there today. Aoraki is the mountain known to Pākehā as Mount Cook, and his brothers are the next highest peaks near him. The form of the island as it now is owes much to the subsequent deeds of Tu Te Rakiwhanoa, who took on the job of shaping the land to make it fit for human habitation.

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

The meltwaters that flow from Aoraki are sacred. On special occasions of cultural moment, the blessings of Aoraki are sought through taking of small amounts of its "special" waters, back to other parts of the island for use in ceremonial occasions.

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

The saying "He kapua kei runga i Aoraki, whakarewa, whakarewa" ("The cloud that floats aloft Aoraki, for ever fly, stay aloft") refers to the cloud that often surrounds Aoraki. Aoraki does not always "come out" for

visitors to see, just as that a great chief is not always giving audience, or on “show”. It is for Aoraki to choose when to emerge from his cloak of mist, a power and influence that is beyond mortals, symbolising the mana of Aoraki.

To Ngāi Tahu, Aoraki represents the most sacred of ancestors, from whom Ngāi Tahu descend and who provides the iwi with its sense of communal identity, solidarity and purpose. It follows that the ancestor embodied in the mountain remains the physical manifestation of Aoraki, the link between the supernatural and the natural world. The tapu associated with Aoraki is a significant dimension of the tribal value, and is the source of the power over life and death which the mountain possesses.

### **Appendix 13 - Statutory Acknowledgement for Kakaunui River**

#### **SCHEDULE 23**

##### **Statutory Area**

The statutory area to which this statutory acknowledgement applies is the River known as Kakaunui, the location of which is shown on Allocation Plan MD 120 (SO 24725).

##### **Preamble**

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

##### **Ngāi Tahu Association with the Kakaunui River**

The creation of the Kakaunui relates in time to Te Waka o Aoraki, and the further shaping of the island by Tu Te Rakiwhanoa and his assistants including Marokura who stocked the waterways and Kahukura, who stocked the forests. For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi. The origin of the name "Kakaunui" has been lost, but is likely to refer to swimming in the river.

There was a tauranga waka (landing place) at the mouth of the Kakaunui, which was an important part of the coastal trails north and south. The river was also a part of the seasonal trail of mahinga kai and resource gathering and hapū and whānau bonding. The tūpuna had an intimate knowledge of navigation, river routes, safe harbours and landing places, and the locations of food and other resources on the river. The Kakaunui was an integral part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the river.

The Kakaunui was a noted indigenous fishery, offering tuna (eel), īnaka (whitebait), kanakana (lamprey), kokopu and other species. Other materials provided by the river included raupō, harakeke and watercress. The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the Kakaunui, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today. These mahinga kai resources supported both semi-permanent and seasonal occupations, including a kainga on the northern bank of the river near Maheno. The surviving rock art remnants and rock shelters are a particular taonga of the area, providing a unique record of the lives and beliefs of the people who travelled the river.

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

**Appendix 14 - Statutory Acknowledgement for Te Tauraka Poti (Merton Tidal Arm)****SCHEDULE 60****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the Wetland known as Te Tauraka Poti (Merton Tidal Arm), the location of which is shown on Allocation Plan MD 56 (SO 24722).

**Preamble**

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

**Ngāi Tahu Association with Te Tauraka Poti**

Te Tauraka Poti, fed by the streams known as Kirikiri Whakahoro and Kokonui, was a major mahinga kai for kainga and pā located on the coast north of the Otago Peninsula. The wetlands were a rich source of kai, including tuna (eels), mohoa (black flounder), giant kokopu and water fowl. The wetlands were particularly valued as a spawning ground for inaka (whitebait).

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

As a result of this history of use, there are a number of wāhi taonga within the wetland area, including middens and other evidence of occupation. These are important as places holding the memories of Ngāi Tahu tūpuna.

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

Much of Te Tauraka Poti's continuing significance to Ngāi Tahu lies in the fact that it is the only remaining wetland area of any significance in the vicinity. The mauri of Te Tauraka Poti represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu whānui with the wetland.

**Appendix 15 - Statutory Acknowledgement for Matakaea (Shag Point)****SCHEDULE 41****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the area known as Matakaea Recreation Reserve and Onewhenua Historic Reserve, as shown on Allocation Plan MS 9 (SO 24686).

**Preamble**

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Matakaea.

**Ngāi Tahu Association with Matakaea**

The name Matakaea recalls the tradition of the Arai Te Uru canoe, which capsized off Moeraki. From Moeraki, the crew managed to swim ashore leaving the cargo to be taken ashore by the waves. The crew members fled inland and were transformed into the mountains which form the Southern Alps.

The Arai Te Uru tradition is also important because it explains the origins of kumara. The story originally began with Roko i Tua who came to Aotearoa and met the Kahui Tipua. The Kahui Tipua gave Roko i Tua mamaku (tree fern) to eat. However Roko i Tua preferred the kumara that he had in his belt which he took out and soaked in a bowl of water. The Kahui Tipua tasted the kumara and asked where it was from. Roko i Tua replied saying that the kumara came from "across the sea".

The Kahui Tipua then made a canoe and, under the leadership of Tu Kakariki, went to Hawaiiki and returned with the kumara to Aotearoa. The Kahui Tipua planted the kumara but the crop failed. However, Roko i Tua had also sailed to Hawaiiki on the canoe called Arai Te Uru. Roko i Tua landed at Whangara, Hawaiiki, and learnt the karakia (incantations) and tikanga (customs) connected with planting kumara. Roko i Tua then gave his canoe to two crew members called Pakihiwitahi and Hape ki Tua Raki. The Arai Te Uru returned under the leadership of these two commanders and eventually foundered off the Moeraki Coast at Matakaea.

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

The Matakaea area has been occupied for many centuries and is the site of numerous urupā and wāhi tapu. Urupā are the resting places of Ngāi Tahu tūpuna (ancestors) and, as such, are the focus for whānau traditions. Urupā and wāhi tapu are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations.

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



**Appendix 16 - Tōpuni for Matakaea (Shag Point)****SCHEDULE 83****Description of Area**

The area over which the Tōpuni is created is the area known as Matakaea Recreation Reserve and Onewhenua Historic Reserve, as shown on Allocation Plan MS 9 (SO 24686).

**Preamble**

Under section 239 (clause 12.5.3 of the deed of Settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional values relating to Matakaea (Shag Point), as set out below.

**Ngāi Tahu Values Relating to Matakaea (Shag Point)**

The name "Matakaea" recalls the tradition of the Arai Te Uru canoe, which capsized off Moeraki. From Moeraki, the crew managed to swim ashore, leaving the cargo to be taken ashore by the waves. The crew members fled inland and were transformed into the mountains which form the Southern Alps.

The Arai Te Uru tradition is also important because it explains the origins of kumara. The story originally began with Roko i Tua who came to Aotearoa and met the Kahui Tipua. The Kahui Tipua gave Roko i Tua mamaku (tree fern) to eat. However Roko i Tua preferred the kumara that he had in his belt which he took out and soaked in a bowl of water. The Kahui Tipua tasted the kumara and asked where it was from. Roko i Tua replied saying that the kumara came from "across the sea".

The Kahui Tipua then made a canoe and, under the leadership of Tu Kakariki, went to Hawaiiki and returned with the kumara to Aotearoa. The Kahui Tipua planted the kumara but the crop failed. However Roko i Tua had also sailed to Hawaiiki on the canoe called Arai Te Uru. Roko i Tua landed a Whangara, Hawaiiki, and learnt the karakia (incantations) and tikanga (customs connected with planting kumara). Roko i Tua then gave his canoe to two crew members called Pakihwitahi and Hape ki Tua Raki. The Arai Te Uru returned under the leadership of these two commanders and eventually foundered off the Moeraki Coast at Matakaea.

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

The Matakaea area has been occupied for many centuries and is the site of numerous urupā and wāhi tapu. Urupā are the resting places of Ngāi Tahu tūpuna (ancestors) and, as such, are the focus for whānau traditions. Urupū and wāhi tapu are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations.

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

## **Appendix 17 – Statutory Acknowledgement for Waihola/Waipori Wetland**

### **SCHEDULE 70**

#### **Statutory Area**

The statutory area to which this statutory acknowledgement applies is the Wetland known as Waihola/Waipori, the location of which is shown on Allocation Plan MD 55 (SO 24721).

#### **Preamble**

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

#### **Ngāi Tahu Association with Waihola/Waipori**

The Waihola/Waipori wetlands were once one of the most significant food baskets in the Otago region, and featured in the seasonal activity of the coastal settlements as far away as the Otago Peninsula and harbour area, Purakaunui and Puketeraki. The wetlands were once much larger in water area and deeper than at present, connected by a labyrinth of waterways and having a gravel bed which has now been overlaid by silt and mud.

The names Waihola/Waipori are likely of Waitaha derivation, with "hola" being the Waitaha form of "hōra" meaning flat, spread out or widespread. Waipori may in fact be a misrecording of Waipouri, which is used in many older manuscripts, being a reference to the dark, tanin-stained water the wetland receives from Waipori River, a heavily wooded catchment.

The Waihola/Waipori area was visited and occupied by Waitaha, Ngāti Māmoe and Ngāi Tahu in succession, who through conflict and alliance, have merged in the whakapapa (genealogy) of Ngāi Tahu whānui. The wetland supported a number of pā within its environs and nearby. For example, Whakaraupuka, the pā of the Ngāti Māmoe chief Tukiauaui was located in the area now known as Sinclair Wetlands, although Tukiauaui eventually relocated further to the south as the southward movement of his Ngāi Tahu foes became uncomfortably close.

There were also many nohoaka (temporary campsites) located within the complex, used by food gathering parties which would travel to the lakes and camp on the fringes for two to three days to gather kai; to eel, hunt water fowl and gather flax. There were also permanent or semi-permanent settlements located in a number of locations around the lakes, some on islands in the wetlands system.

A number of other settlements further afield were also dependent on the mahinga kai resources of Waihola/Waipori for sustenance, including Tu Paritaniwha Pā near Momona, Omoua Pā above Henley, Maitapapa (Henley area), the kaik south of Henley and Takaaihitau near the old Taieri Ferry bridge, in addition to other settlements adjacent to the Taieri River up and downstream of the wetlands. Ōtākou and Puketeraki hapū would also make seasonal visits to gather resources and strengthen and maintain the kupenga (net) of whakapapa on which their rights to use those resources were based.

There is an account which tells of a sudden flood which required people trapped on the bank at a place called Whakaraupō, on the network of waterways that link Waihola with Waipori, to hastily construct a mokihi out of raupō to reach safety. A meeting place was opened here in 1901 by the locals, the house was named Te Waipounamu.

For Ngāi Tahu, histories such as these reinforce tribal identity and solidarity and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

Waihola/Waipori was a key mahinga kai resource for Ngāi Tahu based along the Otago coastal region,

where an abundance of tuna (eel), īnaka (whitebait), pātiki (flounder) and other indigenous fish were available. Waterfowl and fibre resources such as harakeke and raupō were also easily accessible from the wetlands. Spearing, setting hinaki and nets, and bobbing for eel were regular activities on the wetlands in the season. The gathering of young ducks in the moult, and the catching of herons, pukeko and other birds supplemented the broad range of kai available from the wetlands.

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

The attractiveness of Waihola/Waipori as a mahinga kai was enhanced by their accessibility. With the direct link to the Taieri River, access via the Taieri to villages on the banks of the Taieri River, upstream and down, and access by waka to the coast and northward to Ōtākou, kai and other resources gathered from the wetlands could be transported back to these home bases with relative ease.

The tūpuna had an intimate knowledge of navigation, river routes, safe harbours and landing places, and the locations of food and other resources on the wetlands. Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the wetlands.

Because of the long history of use of Waihola/Waipori as a mahinga kai, supporting permanent and temporary settlements, there are numerous urupā, wāhi tapu and wāhi taonga associated with the wetlands. These are all places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations. Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are a particular focus for whānau traditions.

The mauri of Waihola/Waipori represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu whānui with the wetlands. The wetlands represent, in their resources and characteristics, a strong element of identity for those who had manawhenua (tribal authority over the area) whose tūpuna were nurtured on the food and resources of the wetlands for generations.

**Appendix 18 - Tōpuni for Maukaatua Scenic Reserve****SCHEDULE 84****Description of Area**

The area over which the Tōpuni is created is the area known as Maukaatua located west of the Taieri Plains, as shown on Allocation Plan MS 23 (SO 24679).

**Preamble**

Under section 239 (clause 12.5.3 of the Deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional values relating to Maukaatua, as set out below.

**Ngāi Tahu Values Relating to Maukaatua**

Maukaatua is an ancient name brought to Te Wai Pounamu from distant homelands, and is one of a number of Māori place names that reappear in a recognisably similar form throughout the Pacific Islands and into Indonesia. The name thus serves as a reminder of the links between Ngāi Tahu and their whānaunga of Te Moana Nui a Kiwa (The Great Ocean of Kiwa—the Pacific Ocean).

Maukaatua stands guard over the interior of Otago and is a dominant feature, visible from many vantage points. Travellers by sea, along the Lower Taieri, travelling inland either side of Maukaatua or returning to the coast from inland could not escape the gaze of Maukaatua. The maunga (mountain) is imbued with spiritual qualities that were respected by the tūpuna (ancestors). The maunga was likened to a sleeping giant and was said to be the source of strange noises in particular winds or climatic conditions.

Maukaatua once sheltered kainga (villages) within close proximity of its base, including one based at Whakaraupuka. The tūpuna had considerable knowledge of places for gathering kai and other taonga, ways in which to use the resources of the land, the relationship of people with the land and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

An urupā (burial site) is known to be located on the north shoulder of Maukaatua. Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of our tūpuna, and are frequently protected by secret locations.

Te Rūnaka Ōtākou has manawhenua (tribal authority over land) and carries the responsibilities of kaitiaki in relation to it. The Rūnaka is represented by the tribal structure, Te Rūnanga o Ngāi Tahu.

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

**Appendix 19 - Statutory Acknowledgement for Lake Hāwea****SCHEDULE 30****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the lake known as Hāwea, the location of which is shown on Allocation Plan MD 37 (SO 24718).

**Preamble**

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

**Ngāi Tahu Association with Lake Hāwea**

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

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

The name Hāwea may derive from Hāwea, tūpuna (ancestor) of the Waitaha hapū, Ngati Hāwea.

Hāwea was traditionally noted as a rich tuna (eel) fishery, with many thousands of the fish once being caught, preserved and transported back to the kainga nohoaka (settlements) of coastal Otago.

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

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

**Appendix 20 - Statutory Acknowledgement for Lake Wānaka****SCHEDULE 36****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the Lake known as Wānaka, the location of which is shown on Allocation Plan MD 38 (SO 24719).

**Preamble**

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

**Ngāi Tahu Association with Lake Wānaka**

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

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

The name "Wānaka" is considered by some to be a South Island variant of the word "wananga" which refers to the ancient schools of learning. In these schools Ngāi Tahu tohunga (men of learning) would be taught whakapapa (genealogies) which stretched back to over a hundred generations and karakia (incantations) for innumerable situations. All of this learning they would be required to commit to memory.

Wānaka was traditionally noted as a rich tuna (eel) fishery, with many thousands of the fish once being caught, preserved and transported back to the kainga nohoaka (settlements) of coastal Otago.

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

In 1836 an eeling party was attacked by Te Puoho, a rangatira (chief) of the North Island Ngati Tama iwi. Te Puoho had plans of conquering Te Wai Pounamu, beginning his campaign at the southern end of the island. He compared his strategy to boning an eel which is started at the tail end of the fish. Having travelled down Te Tai Poutini (the West Coast) to Jackson Bay, Te Puoho crossed Haast Past into Wānaka and Lake Hāwea where he found a Ngāi Tahu eeling party which he captured at Makarora. Two infant girls were captured and eaten. Te Puoho suspected this family was an outpost and so he gave instructions for two guards to follow a young teenager called Pukuharuru who was ordered to show them where the main camp was. However, Pukuharuru managed to escape after dark and alert his father, Te Raki. Te Raki killed the two guards, who were lost without their guide, and the Wānaka families managed to escape the region.

Te Puoho continued his campaign at Tuturau where there were other families fishing. However, some of the people managed to escape to Tiwai Point near Bluff where they lit a warning fire. This fire alerted the southern forces and, under the leadership of Tuhawaiki, Ngāi Tahu prepared to meet Te Puoho at Tuturau. After discussing the situation with the tohunga, Ngāi Tahu were assured of victory. While the priests

chanted their karakia to the gods of war, the heart of the enemy chief appeared before Ngāi Tahu in the firelight, carried by the wings of a bird. With this omen that the gods of war were on the side of Ngāi Tahu, they attacked Te Puoho the next morning.

Te Puoho was shot by a young Ngāi Tahu called Topi and his army was taken captive. The head of Te Puoho was cut from his body and stuck on a pole facing his home in the north. Wānaka is therefore noted in history for its part in what was to be the last battle between North and South Island tribes.

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

**Appendix 21 - Statutory Acknowledgement for Tītītea (Mount Aspiring)****SCHEDULE 62****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the mountain known as Tītītea (Mount Aspiring), located in the Mount Aspiring National Park, as shown on Allocation Plan MS 2 (SO 24665).

**Preamble**

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

**Ngāi Tahu Association with Tītītea**

As with all principal maunga (mountains), Tītītea is imbued with the spiritual elements of Raki and Papa, in tradition and practice regarded as an important link to the primeval parents. Tītītea is a prominent and majestic peak, clearly visible from a number of vantage points in the south, and its role in Ngāi Tahu's creation stories gives rise to its tapu status. From the heights above Te Ana-au (Lake Te Anau), it is a particularly impressive sight when the sun is setting.

The most common Ngāi Tahu name for the mountain known to Pākehā as Mount Aspiring is Tītītea, referring to the mountain's white peak. It is not unusual, however, for places and physical features to have more than one name, reflecting the traditions of the successive iwi who peopled the land. Other names for the mountain include "Makahi Ta Rakiwhanoa" (referring to a wedge belonging to Tu Te Rakiwhanoa) and "Otapahu", which may refer to a type of dogskin cloak.

The Bonar Glacier is known as Hukairoroa Ta Parekiore (which refers to the long, hard glacial ice and crevasses formed by Parekiore). Parekiore was a giant who used to stalk up and down the South and North Islands taking titi (muttonbirds) northwards and returning with kumara. The lakes represent his footprints and the frozen splashes from his footsteps in the south were transformed into glaciers.

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

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

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



**Appendix 22- Statutory Acknowledgement for Pikirakatahi (Mount Earnslaw)****SCHEDULE 51****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the area known as Pikirakatahi (Mount Earnslaw), as shown on Allocation Plan MS 4 (SO 24666).

**Preamble**

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

**Ngāi Tahu Association with Pikirakatahi**

The creation of Pikirakatahi (Mt Earnslaw) relates in time to Te Waka o Aoraki, and the efforts of Tu Te Rakiwhanoa. It is said that during its formation a wedge of pounamu was inserted into this mountain, which is the highest and most prominent peak in this block of mountains. The mountain is also linked to the travels of Rakaihautu, who dug out the great lakes of the interior with his ko (a tool similar to a spade), known as Tu Whakaroria and later renamed Tuhiraki at the conclusion of the expedition.

The origins of the name "Pikirakatahi" have been lost, but it is known that many places and physical features have more than one name, reflecting the traditions of the successive iwi who peopled the land. It is, however, likely that the name relates to Rakaihautu or subsequent people, as most of the prominent lakes, rivers and mountains of the interior take their name from the journey of Rakaihautu.

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

Pikirakatahi was of crucial significance to the many generations that journeyed to that end of Whakātipu-wai-māori (Lake Wakātipu) and beyond. Staging camps for the retrieval of pounamu were located at the base of the mountain, while semi-permanent settlements related to the pounamu trade were located closer to the lake.

Pikirakatahi stands as kaitiaki (guardian) over the pounamu resource and marks the end of a trail, with the tohu (marker) to the pounamu resource sitting opposite on Koroka (Cosmos Peak). The tūpuna (ancestors) had considerable knowledge of whakapapa, traditional trails, places for gathering kai (food) and other taonga, ways in which to use the resources of the land, the relationship of people with the land and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

The retrieval of large amounts of pounamu from this source, so far inland and over a range of physical barriers, attests to the importance of this resource to the economy and customs of the iwi over many generations. The people would also gather native birds for kai, and firewood with which to cook and provide warmth, from the forests covering the lower flanks of Pikirakatahi. Strategic marriages between hapū strengthened the kupenga (net) of whakapapa and thus rights to use the resources of the mountain. It is because of these patterns of activity that Pikirakatahi continues to be important to Rūnaka located in Otago, Murihiku and beyond. These Rūnaka carry the responsibilities of kaitiaki in relation to the area, and are represented by the tribal structure, Te Rūnanga o Ngāi Tahu.

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

**Appendix 23 - Statutory Acknowledgement for Te Wairere (Lake Dunstan)****SCHEDULE 61****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the lake known as Te Wairere (Lake Dunstan), the location of which is shown on Allocation Plan MD 490 (SO 24729)

**Preamble**

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

**Ngāi Tahu Association with Te Wairere**

The name "Te Wairere" refers to the speed with which the river once ran at this point.

The whole of the Mata-au (Clutha River), on which Te Wairere lies, was part of a mahinga kai trail that led inland and was used by Otago hapū including Kāti Kuri, Ngati Ruahikihiki, Ngati Huirapa and Ngāi Tuahuriri. The river was used as a highway into the interior, and provided many resources to sustain travellers on that journey. The river was a significant indigenous fishery, providing tuna (eels), kanakana (lamprey) and kokopu in the area over which Te Wairere now lies. Manu (birds), including moa, were taken from areas adjoining the river, over which the lake now lies.

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

The waterway was also very important in the transportation of pounamu from inland areas down to settlements on the coast, from where it was traded north and south. Because of its location at the confluence of Mata-au and Kawarau Rivers, Te Wairere was an important staging post on journeys inland and down-river. A tauranga waka and nohanga sited at the junction of the two rivers acted as such a staging post. As a result of this history of use and occupation there are a number of wāhi taonga (including rock shelters and archaeological sites) in the area, some of which are now under the waters of the lake. Wāhi tapu are important as places holding the memories and traditions of Ngāi Tahu tūpuna.

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

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

**Appendix 24 - Statutory Acknowledgement for Whakātipu-wai-Māori (Lake Wakātipu)****SCHEDULE 75****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the Lake known as Whakātipu-Wai-Māori (Lake Wakātipu), the location of which is shown on Allocation Plan MD 39 (SO 24720).

**Preamble**

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

**Ngāi Tahu Association with Whakātipu-wai-Māori**

The name Whakātipu-wai-Māori originates from the earliest expedition of discovery made many generations ago by the tūpuna Rakaihautu and his party from the Uruao waka. Rakaihautu is traditionally credited with creating the great waterways of the interior of the island with his famous ko (a tool similar to a spade), known as Tu Whakaroria and renamed Tuhiraki at the conclusion of the expedition.

There are many traditions relating to the lake. One of the most famous tells that the hollow which forms the bed of the lake was created when the people known as Te Rapuwai came upon the giant tipua (ogre) Matau as he lay there in a deep sleep. Matau had been responsible for the disappearance of many small hunting parties and had entrapped a beautiful maiden, Manata. The father of Manata offered her in marriage to the man who could bring her safely home. Matakauri, who was in love with Manata ventured forth, discovering that Matau slept when the northwest wind blew. Matakauri selected a day when the wind was blowing the right way and set forth. He found Manata and, using his mere, he attempted to sever the bonds which held her, but try as he would he failed. Manata began to sob bitterly, and as her tears fell on the cords, they melted away. Matakauri carried Manata back to the village where they became man and wife. However, Matakauri knew that while Matau lived no maiden was safe, so he set forth when again the northwest wind blew, and set fire to the large growth of bracken that acted as a bed for the giant. Matau was smothered in flames, the fat from his body augmenting the fire, until the blaze was so fierce that it burned a hole more than 1,000 feet deep. The snow on the surrounding hills melted and filled the hole, which is known today as Lake Wakātipu.

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

Whakātipu-wai-Māori once supported nohoaka and villages which were the seasonal destinations of Otago and Murihiku (Southland) whānau and hapū for many generations, exercising ahi kā and accessing mahinga kai and providing a route to access the treasured pounamu located beyond the head of the lake. Strategic marriages between hapū strengthened the kupenga (net) of whakapapa and thus rights to use the resources of the lake. It is because of these patterns of activity that the lake continues to be important to Rūnaka located in Murihiku, Otago and beyond. These Rūnaka carry the responsibilities of kaitiaki in relation to the area, and are represented by the tribal structure Te Rūnanga o Ngāi Tahu.

The lake also supported permanent settlements, such as the kāika (village) Tahuna near present-day Queenstown, Te Kirikiri Pā, located where the Queenstown gardens are found today, a Ngati Māmoe kāika near the Kawarau Falls called O Te Roto, and another called Takerehaka near Kingston. The Ngati Māmoe chief Tu Wiri Roa had a daughter, Haki Te Kura, who is remembered for her feat of swimming across the lake from Tahuna, a distance of some three kilometres.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the lake, the relationship of people

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

A key attraction of the lake was the access it provided to seasonal campsites and the pounamu located at the head of the lake at the Dart and Routeburn River catchments, from which countless generations gathered inaka and koko-takiwāi pounamu and transported it back to coastal settlements for fashioning into tools, ornaments and weapons.

Waka and mokihi were the key modes of transport for the pounamu trade, travelling the length and breadth of Whakātipu-wai-Māori. Thus there were numerous tauranga waka (landing places) on the lake and the islands upon it (Matau and Wawāhi-waka). The tūpuna had an intimate knowledge of navigation, river routes, safe harbours and landing places, and the locations of food and other resources on the lake. The lake was an integral part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the roto (lake).

Whakātipu-wai-Māori is an important source of freshwater, the lake itself being fed by hukawai (melt waters). These are waters with the highest level of purity and were accorded traditional classifications by Ngāi Tahu that recognised this value. Thus it is a puna (spring) which sustains many ecosystems important to Ngāi Tahu. The mauri of Whakātipu-Wai-Māori represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu whānui with the lake.

**Appendix 25 - Statutory Acknowledgement for Poumahaka River****SCHEDULE 52****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the River known as Poumahaka, the location of which is shown on Allocation Plan MD 12 (SO 24726).

**Preamble**

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

**Ngāi Tahu Association with the Poumahaka River**

The Poumahaka was an important mahinga kai for Ngati Māmoe and Ngāi Tahu kainga (settlements) in the Catlins and Tautuku areas. The river was particularly noted for its kanakana (lamprey) fishery. Other mahinga kai associated with the river included weka and other manu (birds).

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

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

**Appendix 26 - Statutory Acknowledgement for Mata-au (Clutha River)****SCHEDULE 40****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the River known as Mata-au (Clutha River), the location of which is shown on Allocation Plan MD 122 (SO 24727).

**Preamble**

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

**Ngāi Tahu Association with the Mata-au**

The Mata-au river takes its name from a Ngāi Tahu whakapapa that traces the genealogy of water. On that basis, the Mata-au is seen as a descendant of the creation traditions. For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

On another level, the Mata-au was part of a mahinga kai trail that led inland and was used by Ōtākou hapū including Ngati Kuri, Ngati Ruahikihiki, Ngati Huirapa and Ngāi Tuahuriri. The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the river, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

The river was also very important in the transportation of pounamu from inland areas down to settlements on the coast, from where it was traded north and south. Thus there were numerous tauranga waka (landing places) along it. The tūpuna had an intimate knowledge of navigation, river routes, safe harbours and landing places, and the locations of food and other resources on the river. The river was an integral part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continue to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the river.

The Mata-au is where Ngāi Tahu's leader, Te Hautapunui o Tu, established the boundary line between Ngāi Tahu and Ngati Māmoe. Ngati Māmoe were to hold mana (authority) over the lands south of the river and Ngāi Tahu were to hold mana northwards. Eventually, the unions between the families of Te Hautapunui o Tu and Ngati Māmoe were to overcome these boundaries. For Ngāi Tahu, histories such as this represent the links and continuity between past and present generations, reinforce tribal identity, and document the events which shaped Ngāi Tahu as an iwi.

Strategic marriages between hapū further strengthened the kupenga (net) of whakapapa, and thus rights to travel on and use the resources of the river. It is because of these patterns of activity that the river continues to be important to Rūnaka located in Otago and beyond. These Rūnaka carry the responsibilities of kaitiaki in relation to the area, and are represented by the tribal structure, Te Rūnanga o Ngāi Tahu.

Urupā and battlegrounds are located all along this river. One battleground, known as Te Kauae Whakatoro (downstream of Tuapeka), recalls a confrontation between Ngāi Tahu and Ngati Māmoe that led to the armistice established by Te Hautapunui o Tu. Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations.

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

#### **Purposes of Statutory Acknowledgement**

Pursuant to section 215, and without limiting the rest of this schedule, the only purposes of this statutory acknowledgement are—

- (a) To require that consent authorities forward summaries of resource consent applications to Te Rūnanga o Ngāi Tahu as required by regulations made pursuant to section 207 (clause 12.2.3 of the deed of settlement); and
- (b) To require that consent authorities, the Historic Places Trust, or the Environment Court, as the case may be, have regard to this statutory acknowledgement in relation to the Mata-au, as provided in sections 208 to 210 (clause 12.2.4 of the deed of settlement); and
- (c) To empower the Minister responsible for management of the Mata-au or the Commissioner of Crown Lands, as the case may be, to enter into a Deed of Recognition as provided in section 212 (clause 12.2.6 of the deed of settlement); and
- (d) To enable Te Rūnanga o Ngāi Tahu and any member of Ngāi Tahu whānui to cite this statutory acknowledgement as evidence of the association of Ngāi Tahu to the Mata-au as provided in section 211 (clause 12.2.5 of the deed of settlement).

#### **Limitations on Effect of Statutory Acknowledgement**

Except as expressly provided in sections 208 to 211, 213, and 215,—

- (a) This statutory acknowledgement does not affect, and is not to be taken into account in, the exercise of any power, duty, or function by any person or entity under any statute, regulation, or bylaw; and
- (b) Without limiting paragraph (a), no person or entity, in considering any matter or making any decision or recommendation under statute, regulation, or bylaw, may give any greater or lesser weight to Ngāi Tahu's association to the Mata-au (as described in this statutory acknowledgement) than that person or entity would give under the relevant statute, regulation, or bylaw, if this statutory acknowledgement did not exist in respect of the Mata-au.

Except as expressly provided in this Act, this statutory acknowledgement does not affect the lawful rights or interests of any person who is not a party to the deed of settlement.

Except as expressly provided in this Act, this statutory acknowledgement 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, the Mata-au.

**Appendix 27 - Statutory Acknowledgement for Ka Moana Haehae (Lake Roxburgh)****SCHEDULE 22****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the lake known as Ka Moana Haehae (Lake Roxburgh), the location of which is shown on Allocation Plan MD 491 (SO 24730).

**Preamble**

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

**Ngāi Tahu Association with Ka Moana Haehae**

The name Ka Moana Haehae refers to the joining of two waterways. In this case it refers to the confluence of the Mata-au and Manuherikia Rivers over which the lake lies.

The whole of the Mata-au (Clutha River), on which Ka Moana Haehae lies, was part of a mahinga kai trail that led inland and was used by Otago hapū including Ngati Kuri, Ngati Ruahikihiki, Ngati Huirapa and Ngāi Tuahuriri. The river was used as a highway into the interior, and provided many resources to sustain travellers on that journey. The river was a significant indigenous fishery, providing tuna (eels), kanakana (lamprey) and kokopu in the area over which Ka Moana Haehae now lies. Manu (birds), including moa, were taken from areas adjoining the river, over which the lake now lies.

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

The waterway was also very important in the transportation of pounamu from inland areas down to settlements on the coast, from where it was traded north and south. Thus there were numerous tauranga waka (landing places) along it. The tūpuna had an intimate knowledge of navigation, river routes, safe harbours and landing places, and the locations of food and other resources on the river. The waterway was an integral part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the waterway.

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



## **Appendix 28 - Statutory Acknowledgement for Te Tai o Arai Te Uru (Otago Coastal Marine Area)**

### **SCHEDULE 103**

#### **Specific Area**

The statutory area to which this statutory acknowledgement applies is Te Tai o Arai Te Uru (the Otago Coastal Marine Area), the Coastal Marine Area of the Moeraki, Dunedin Coastal and Molyneaux constituencies of the Otago region, as shown on SO Plans 24250, 24249, and 24252, Otago Land District and as shown on Allocation Plan NT 505 (SO 19901).

Under section 313, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Te Tai o Arai Te Uru as set out below.

#### **Ngāi Tahu Association with Te Tai o Arai Te Uru**

The formation of the coastline of Te Wai Pounamu relates to the tradition of Te Waka o Aoraki, which foundered on a submerged reef, leaving its occupants, Aoraki and his brothers, to turn to stone. They are manifested now in the highest peaks in the Ka Tiritiri o Te Moana (the Southern Alps). The bays, inlets, estuaries and fiords which stud the coast are all the creations of Tu Te Rakiwhanoa, who took on the job of making the island suitable for human habitation.

The naming of various features along the coastline reflects the succession of explorers and iwi (tribes) who travelled around the coastline at various times. The first of these was Maui, who fished up the North Island, and is said to have circumnavigated Te Wai Pounamu. In some accounts the island is called Te Waka a Maui in recognition of his discovery of the new lands, with Rakiura (Stewart Island) being Te Puka a Maui (Maui's anchor stone). A number of coastal place names are attributed to Maui, particularly on the southern coast.

The great explorer Rakaihautu travelled overland along the coast, identifying the key places and resources. He also left many place names on prominent coastal features. Another explorer, Tamatea, sailed along the Otago coast in the waka Tākitimu. After the waka eventually broke its back off the coast of Murihiku, Tamatea and the survivors made their way overland back to the North Island, arriving at the coast by the place Tamatea named O-amaru (Ōamaru).

Place names along the coast record Ngāi Tahu history and point to the landscape features which were significant to people for a range of reasons. For example, some of the most significant rivers which enter the coastal waters of Otago include: Waitaki, Kakaunui, Waihemo (Shag), Waikouaiti, Kāikarāe (Kaikorai), Tokomairiro, Mata-au (Clutha), Pounaweia (Catlins). Estuaries include: Waitete (Waitati), Ōtākou (Otago), Makahoe (Papanui Inlet), Murikauhaka (Mate-au and Koau estuaries), Tahaukupu (Tahakopa estuary), Waipātiki (Wapati Estuary). Islands in the coastal area include Okaihe (St Michaels Island), Moturata (Taiari Island), Paparōa, Matoketoke, Hakinikini, and Aonui (Cooks Head).

Particular stretches of the coastline also have their own traditions. The tradition of the waka (canoe) Arai Te Uru and its sinking at the mouth of the Waihemo (Shag River) has led to the coastal area of Otago being known as Te Tai o Araiteuru (the coast of Arai Te Uru). Accounts of the foundering, the wreckage, and the survivors of this waka are marked by numerous landmarks almost for the length of the Otago coast. The boulders on Moeraki coast (Kai Hinaki) and the Moeraki pebbles are all associated with the cargo of gourds, kumara and taro seed which were spilled when the Arai Te Uru foundered.

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

Because of its attractiveness as a place to establish permanent settlements, including pā (fortified settlements), the coastal area was visited and occupied by Waitaha, Ngati Māmoē and Ngāi Tahu in succession, who, through conflict and alliance, have merged in the whakapapa (genealogy) of Ngāi Tahu whānui. Battle sites, urupā and landscape features bearing the names of tūpuna (ancestors) record this history. Prominent headlands, in particular, were favoured for their defensive qualities and became the headquarters for a succession of rangatira and their followers. Notable pā on the Otago coast include: Makotukutuku (Ōamaru), Te Raka-a-hineatea (Moeraki), Te Pā Katata, Pā a Te Wera, (Huriawa Peninsula), Mapoutahi (Purakaunui), Pukekura (Taiaoroa Head), Moturata (Taieri Island). The estuaries from the Waitaki River to the Chaslands also supported various hapu.

Tūpuna such as Waitai, Tukiauau, Whaka-taka-newha, Rakiāmoa, Tarewai, Maru, Te Aparangi, Taoka, Moki II, Kapo, Te Wera, Tu Wiri Roa, Taikawa, Te Hautapanuiotu among the many illustrious ancestors of Ngati Māmoē and Ngāi Tahu lineage whose feats and memories are enshrined in the landscape, bays, tides and whakapapa of Otago.

The results of the struggles, alliances and marriages arising out of these migrations were the eventual emergence of a stable, organised and united series of hapu located at permanent or semi-permanent settlements along the coast, with an intricate network of mahinga kai (food gathering) rights and networks that relied to a large extent on coastal resources. Chiefs such as Korako (several), Tahatu, Honekai, Ihutakuru, Karetai, Taiaoroa, Potiki, Tuhawaiki, and Pokene being some among a number who had their own villages and fishing grounds. Otago Peninsula (Muaupoko) had many kaunga nohoanga with a multitude of hapu occupying them. At one time up to 12 kainga existed in the lower Otago harbour, some larger and more important than others.

The whole of the coastal area offered a bounty of mahinga kai, including a range of kaimoana (sea food); sea fishing; eeling and harvest of other freshwater fish in lagoons and rivers; marine mammals providing whale meat and seal pups; waterfowl, sea bird egg gathering and forest birds; and a variety of plant resources including harakeke (flax), fern and ti root. In many areas the reliance on these resources increased after the land sales of the 1840s and 1850s, and the associated loss of access to much traditional land-based mahinga kai.

Many reefs along the coast are known by name and are customary fishing grounds, many sand banks, channels, currents and depths are also known for their kaimoana. One example is Poatiri (Mt Charles — Cape Saunders) the name of which refers to a fish hook. Poatiri juts out into the Pacific, close to the continental shelf, and is a very rich fishing ground. Another example is Blueskin Bay which was once a kohanga (breeding ground) for the right whale, although it is well over 150 years since it has seen this activity.

Other resources were also important in the coastal area. Paru (black mud used for dyeing) was obtained from some areas. Some of the permanent coastal settlements, such as those at the mouth of the Mata-au (Clutha River), and at Ōtākou and Purakaunui, were important pounamu manufacturing sites. Trading between these villages to the south and north via sea routes was an important part of the economy.

The Otago coast was also a major highway and trade route, particularly in areas where travel by land was difficult. Pounamu and titi were traded north with kumara, taro, waka, stone resources and carvings coming south. Travel by sea between settlements and hapu was common, with a variety of different forms of waka, including the southern waka hunua (double-hulled canoe) and, post-contact, whale boats plying the waters continuously. Hence tauranga waka (landing places) occur up and down the coast in their hundreds and wherever a tauranga waka is located there is also likely to be a nohoanga (settlement), fishing ground, kaimoana resource, rimurapa (bull kelp — used to make the poha, in which titi were and still are preserved) with the sea trail linked to a land trail or mahinga kai resource. The tūpuna had a huge knowledge of the

coastal environment and weather patterns, passed from generation to generation. This knowledge continues to be held by whānau and hapu and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the coast.

Numerous urupā are being exposed or eroded at various times along much of coast. Water burial sites on the coast, known as waiwhakaheketupapaku, are also spiritually important and linked with important sites on the land. Places where kaitangata (the eating of those defeated in battle) occurred are also wāhi tapu. Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected in secret locations.

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

**Appendix 29 - Tōpuni for Tititea (Mount Aspiring)****SCHEDULE 92****Description of Area**

The area over which the Tōpuni is created is the area known as Tititea (Mount Aspiring) as shown on Allocation Plan MS 2 (SO Plan 24665).

**Preamble**

Under section 239 (clause 12.5.3 of the deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional values relating to Tititea, as set out below.

**Ngāi Tahu Values Relating to Tititea (Mount Aspiring)**

As with all principal maunga (mountains), Tititea is imbued with the spiritual elements of Raki and Papa, in tradition and practice regarded as an important link to the primeval parents. Tititea is a prominent and majestic peak, clearly visible from a number of vantage points in the south, and its role in Ngāi Tahu's creation stories gives rise to its tapu status. From the heights above Te Ana-au (Lake Te Anau), it is a particularly impressive sight when the sun is setting.

The most common Ngāi Tahu name for the mountain known to Pākehā as Mount Aspiring is Tititea, referring to the mountain's white peak. It is not unusual, however, for places and physical features to have more than one name, reflecting the traditions of the successive iwi who peopled the land. Other names for the mountain include "Makahi Ta Rakiwhanoa" (referring to a wedge belonging to Tu Te Rakiwhanoa) and "Otapahu", which may refer to a type of dogskin cloak.

The Bonar Glacier is known as Hukairoroa Ta Parekiore (which refers to the long, hard glacial ice and crevasses formed by Parekiore). Parekiore was a giant who used to stalk up and down the South and North Islands taking titi (muttonbirds) northwards and returning with kumara. The lakes represent his footprints and the frozen splashes from his footsteps in the south were transformed into glaciers.

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

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

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

**Appendix 30 - Tōpuni for Pikirakatahi (Mount Earnslaw)****SCHEDULE 87****Description of Area**

The area over which the Tōpuni is created is the area known as Pikirakatahi (Mount Earnslaw) as shown on Allocation Plan MS 4 (SO 24666).

**Preamble**

Under section 239 (clause 12.5.3 of the deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural spiritual, historic, and traditional values relating to Pikirakatahi (Mount Earnslaw), as set out below.

**Ngāi Tahu Values Relating to Pikirakatahi (Mount Earnslaw)**

The creation of Pikirakatahi (Mt Earnslaw) relates in time to Te Waka o Aoraki, and the efforts of Tu Te Rakiwhanoa. It is said that during its formation a wedge of pounamu was inserted into this mountain, which is the highest and most prominent peak in this block of mountains. The mountain is also linked to the travels of Rakaihautu, who dug out the great lakes of the interior with his ko (digging stick), known as Tu Whakaroria and later renamed Tuhiraki at the conclusion of the expedition.

The origins of the name "Pikirakatahi" have been lost, but it is known that many places and physical features have more than one name, reflecting the traditions of the successive iwi who peopled the land. It is, however, likely that the name relates to Rakaihautu or subsequent people, as most of the prominent lakes, rivers and mountains of the interior take their name from the journey of Rakaihautu.

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

Pikirakatahi was of crucial significance to the many generations that journeyed to that end of Whakātipu-wai-māori (Lake Wakātipu) and beyond. Staging camps for the retrieval of pounamu were located at the base of the mountain, while semi-permanent settlements related to the pounamu trade were located closer to the lake.

Pikirakatahi stands as kaitiaki (guardian) over the pounamu resource and marks the end of a trail, with the tohu (marker) to the pounamu resource sitting opposite on Koroka (Cosmos Peak). The tūpuna (ancestors) had considerable knowledge of whakapapa, traditional trails, places for gathering kai (food) and other taonga, ways in which to use the resources of the land, the relationship of people with the land and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

The retrieval of large amounts of pounamu from this source, so far inland and over a range of physical barriers, attests to the importance of this resource to the economy and customs of the iwi over many generations. The people would also gather native birds for kai, and firewood with which to cook and provide warmth, from the forests covering the lower flanks of Pikirakatahi. Strategic marriages between hapū strengthened the kupenga (net) of whakapapa and thus rights to use the resources of the mountain. It is because of these patterns of activity that Pikirakatahi continues to be important to Rūnaka located in Otago, Murihiku and beyond. These Rūnaka carry the responsibilities of kaitiaki in relation to the area, and are represented by the tribal structure, Te Rūnanga o Ngāi Tahu.

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

**Appendix 31 - Tōpuni for Te Koroka (Dart/Slipstream)****SCHEDULE 91****Description of Area**

The area over which the Tōpuni is created is the area known as the Dart/Slipstream Special Area as shown on Allocation Plan MS 306 (SO 24707).

**Preamble**

Under section 239 (clause 12.5.3 of the deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional values relating to Te Koroka (Dart/Slipstream), as set out below.

**Ngāi Tahu Values Relating to Te Koroka (Dart/Slipstream)**

The creation of Te Koroka relates in time to Te Waka o Aoraki, and the efforts of Tu Te Rakiwhanoa. The area is also linked to the travels of Rakaihautu, who dug out the great lakes of the interior with his ko (digging stick), known as Tu Whakaroria and renamed Tuhiraki at the conclusion of the expedition.

The actual slip from which the pounamu is gathered is known as Te Horo.

The name of the mountain where the pounamu vein occurs is Koroka (or Koloka). When viewed from the right vantage point, Koroka resembles a reclining giant, the pounamu exiting the mountain, in fact, from the mouth of the giant. Captain Cook's men were informed while moored in Dusky Sound, of the giant in the interior that emits pounamu from his mouth.

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

Te Koroka area itself represented the end of a trail. Staging camps for the retrieval of pounamu were located at the base of the mountain, with semi-permanent settlements located closer to the lake. The tūpuna (ancestors) had considerable knowledge of whakapapa, traditional trails, places for gathering kai (food) and other taonga, ways in which to use the resources of the land, the relationship of people with the land and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

The retrieval of large amounts of pounamu from this source, so far inland and over a range of physical barriers, attests to the importance of this resource to the economy and customs of the iwi over many generations. Pounamu transported back to coastal settlements was fashioned into tools ornaments and weapons. The types of pounamu gathered were inaka and koko-takiwāi. Strategic marriages between hapū strengthened the kupenga (net) of whakapapa and thus rights to access the pounamu resource. It is because of these patterns of activity that Te Koroka continues to be important to Rūnaka located in Otago, Murihiku and beyond. These Rūnaka carry the responsibilities of kaitiaki in relation to the area, and are represented by the tribal structure, Te Rūnanga o Ngāi Tahu.

The actual area from which pounamu was collected is now, and was in traditional times, under a tapu until an appropriate karakia (incantation) and ceremony was performed to permit access and retrieval of a taonga that was of the highest value to iwi. The area is largely unmodified since it was last visited by the ancestors and is a taonga to be treasured. Periodic storms reveal, on the slopes below the "collection" site, large boulders of pounamu, brought to the surface through raging torrents of water rushing down the maunga (mountain).

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



**Appendix 32 – Statutory Acknowledgement for Aoraki (Mount Cook)****SCHEDULE 14****Statutory Area**

The statutory area to which this statutory acknowledgement applies is the area known as Aoraki/Mount Cook located in Ka Tiritiri o te Moana (the Southern Alps), as shown on Allocation Plan MS 1 (SO 19831).

**Preamble**

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

**Ngāi Tahu Association with Aoraki**

In the beginning there was no Te Wai Pounamu or Aotearoa. The waters of Kiwa rolled over the place now occupied by the South Island, the North Island and Stewart Island. No sign of land existed.

Before Raki (the Sky Father) wedded Papatūānuku (the Earth Mother), each of them already had children by other unions. After the marriage, some of the Sky Children came down to greet their father's new wife and some even married Earth Daughters.

Among the celestial visitors were four sons of Raki who were named Aoraki (Cloud in the Sky), Rakiroa (Long Raki), Rakirua (Raki the Second), and Rarakiroa (Long Unbroken Line). They came down in a canoe which was known as Te Waka o Aoraki. They cruised around Papatūānuku who lay as one body in a huge continent known as Hawaiiki.

Then, keen to explore, the voyagers set out to sea, but no matter how far they travelled, they could not find land. They decided to return to their celestial home but the karakia (incantation) which should have lifted the waka (canoe) back to the heavens failed and their craft ran aground on a hidden reef, turning to stone and earth in the process.

The waka listed and settled with the west side much higher out of the water than the east. Thus the whole waka formed the South Island, hence the name: Te Waka o Aoraki. Aoraki and his brothers clambered on to the high side and were turned to stone. They are still there today. Aoraki is the mountain known to Pākehā as Mount Cook, and his brothers are the next highest peaks near him. The form of the island as it now is owes much to the subsequent deeds of Tu Te Rakiwhanoa, who took on the job of shaping the land to make it fit for human habitation.

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

The meltwaters that flow from Aoraki are sacred. On special occasions of cultural moment, the blessings of Aoraki are sought through taking of small amounts of its "special" waters, back to other parts of the island for use in ceremonial occasions.

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

The saying "He kapua kei runga i Aoraki, whakarewa whakarewa" ("The cloud that floats aloft Aoraki, for ever fly, stay aloft") refers to the cloud that often surrounds Aoraki. Aoraki does not always "come out" for visitors to see, just as that a great chief is not always giving audience, or on "show". It is for Aoraki to



choose when to emerge from his cloak of mist, a power and influence that is beyond mortals, symbolising the mana of Aoraki.

To Ngāi Tahu, Aoraki represents the most sacred of ancestors, from whom Ngāi Tahu descend and who provides the iwi with its sense of communal identity, solidarity, and purpose. It follows that the ancestor embodied in the mountain remains the physical manifestation of Aoraki, the link between the supernatural and the natural world. The tapu associated with Aoraki is a significant dimension of the tribal value, and is the source of the power over life and death which the mountain possesses.

**Appendix 33 Resource Inventory Questionnaire****General questions**

1. If you were to choose 5 sites in the area what would you want us to protect what would they be?
2. What places in the area were significant to your whānau?
  - a. What stories were you taught about specific places?
  - b. What old placenames can you remember for sites around the area?
  - c. What areas were you taught to respect because they were wāhi tapu?
  - d. Where there areas where you were told not to go near?
  - e. Can you remember sites of kāika that are no longer present?
  - f. What urupā can you recall?

**Questions re water**

3. Were any waterbodies set aside for different uses or valued differently?
  - a. Any wai tapu?
4. What waterbodies can you remember visiting with your whānau when you were growing up? What were they used for?

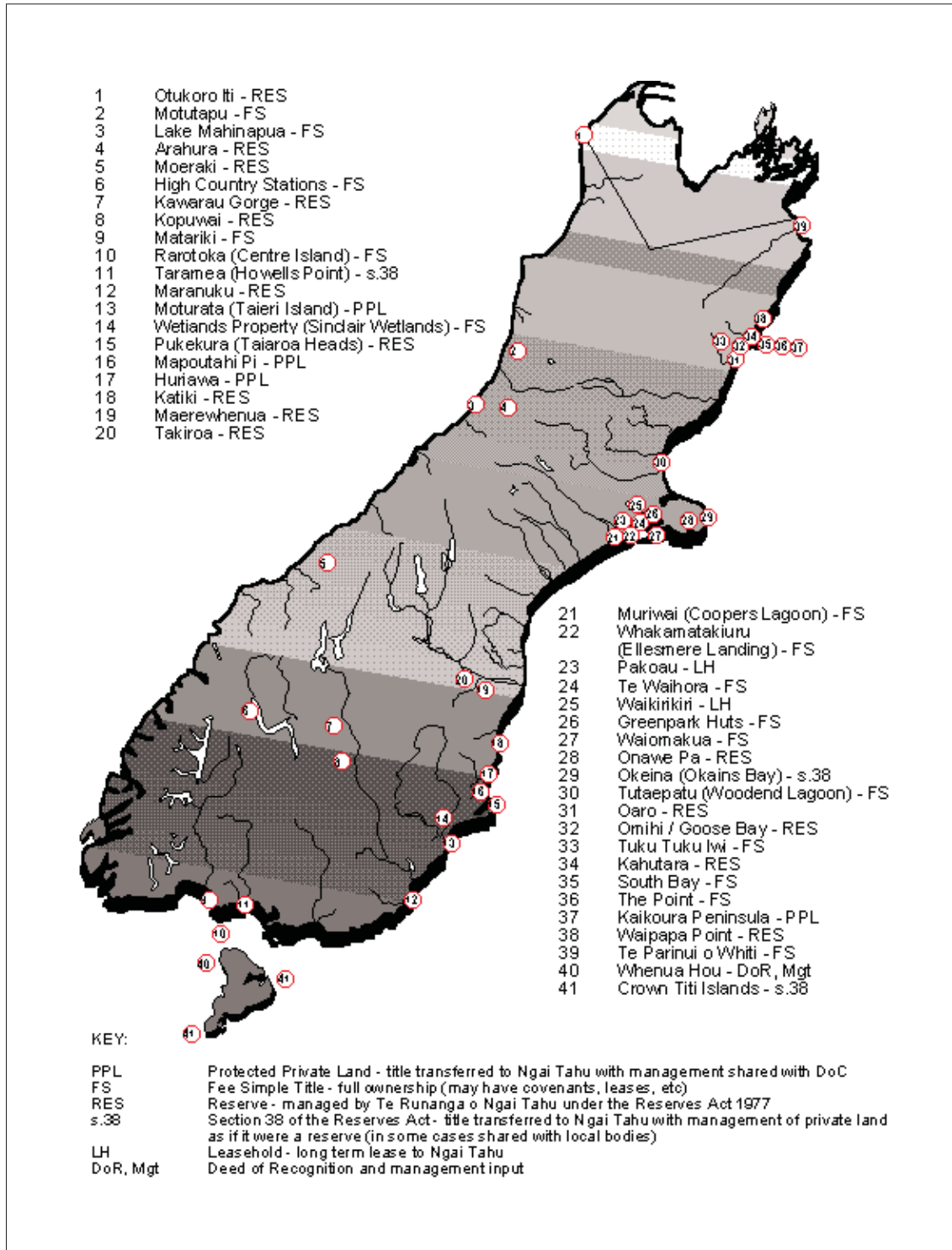
**Questions re mahika kai**

5. What mahika kai did you gather when you were younger?
6. What places can you remember visiting to gather kai when you were growing up?
  - a. Places where you have gathered materials (fish, plant, rocks, minerals)
  - b. Places where you visited for other purposes
  - c. Habitats and sites critical to the survival of important mahinga kai populations; e.g. special type of kelp for poha, where koura shed their shells, where whitebait spawn, breeding grounds, spawning beds etc.
7. What mahika kai do you gather today?
8. What places do you use today?

**Questions re traditional management**

9. What traditional practices do you recall being taught when you were younger? What traditional practices do you still practise?

Appendix 34 – Wahi Taonga: Ownership and/or Control Sites <sup>124</sup>



124 <http://www.Ngaitahu.iwi.nz/office-claim-cultural-overview.html>.

### Appendix 35 Information Needs

#### Wai Māori

Consenting and other activities that can impact wai māori:

- Groundwater extraction
- Damming
- Water Extraction
- Earthworks
- Afforestation
- Wetland drainage
- Weed and pest control
- Gravel Takes
- Diversions
- Discharges
- Privatisation
- Dairy Conversion
- Land clearance
- Reclamation of wetlands
- Instream activities
- New irrigation
- Willow clearance
- Land use change
- Subdivision
- Waste Disposal

General information needs to ensure informed decision making by Kā Papatipu Rūnaka:

- Description of the proposed activity and how it will affect the availability, supply, use and quality of water.
- Description of the existing condition of the aquatic environment, including status and presence of taoka species and mahika kai habitats and species.
- Description of how the existing environment, as seen by visitors to the site, will change as a result of the activity.
- List all other consents that have been applied for and/or that are necessary to enable the use or development to proceed.

#### Biodiversity and Mahika Kai

Consenting and other activities that can impact biodiversity and mahika kai (in addition to those above):

- Land clearance
- Subdivision
- Waste Disposal to Land
- Wetland drainage
- Dredging
- Increased recreational usage
- Tourism ventures – coastal or marine based
- Land use (especially intensification and conversion)
- Waste Disposal to lands adjacent to the coastal environment
- Earthworks
- Instream activities / structures
- Introduction of new species
- Infilling / reclamation of wetlands
- Marine farms
- Weed and pest control
- Privatisation (impacts on access to sites and species)
- Infilling / reclamation in coastal areas
- Constructing or repairing physical structures within the coastal environment

General information needs to ensure informed decision making by Kā Papatipu Rūnaka:

- Describe the proposed activity.
- Advise whether a mahika kai survey was undertaken to determine existing status of mahika kai and the effect of the activity on habitats and species.
- Advise the existing condition of any affected wetland.
- Advise whether the proposal will result in direct damage to the marine environment from: the operation of equipment/machinery, construction of structures on the seabed, introduction of debris or contaminants.
- Identify whether the proposed new activity will result in any additional uses of natural resources within the coastal environment.
- Advise of monitoring that is proposed to ensure that valued species are not impacted by the proposed activity as a result of construction and/or operation.

### Wāhi tapu

Consenting activities that can impact on wāhi tapu.

- Accidental discovery
- Land use change
- Inundation
- Damming
- Earthworks
- Privatisation
- Land clearance
- Contamination
- Subdivision

Information needs to ensure informed decision making by Papatipu Rūnaka:

- Describe the existing land uses
- Describe the proposed activity
- Identify areas where a relatively unmodified environment remains intact
- Describe any proposed land preparation techniques associated with the proposal e.g. root raking
- Advise whether an archaeological/cultural investigation has been undertaken
- Explain accidental discovery protocols that have been agreed to ensure appropriate care of cultural resources that remain on the ground surface or a buried just beneath it
- Advise of any physical protection proposed to protect known sites of significance.

### Cultural landscapes

Consenting activities that can impact on Cultural Landscapes:

- Increased recreational activity
- Land use change e.g. forestry
- Contamination of the land
- Earthworks
- Inundation - damming
- Subdivision
- New irrigation schemes
- Accidental discovery
- Land clearance
- Extraction of water
- Privatisation
- Waste disposal to surrounding lands
- Reclamation /infilling
- Constructing physical structures

Information needs to ensure informed decision making by Papatipu Rūnaka:

- Describe the existing land uses
- Describe the proposed activity
- Describe any proposed land preparation techniques associated with the proposal e.g. root raking
- Advise how the existing environment as seen by visitors to the site will change as a result of the activity
- Explain accidental discovery protocols that have been agreed to ensure appropriate care of cultural resources that remain on the ground surface or a buried just beneath it
- Identify areas where a relatively unmodified riparian margins remain
- Advise whether vegetation is to be re-established around structures/earthworks so that bare soil is not exposed to erosive forces.

### Coasts

Consenting activities that can impact on Coastal values (in addition to those identified in Mahika Kai and Biodiversity above):

- Over harvesting
- Reclamation /infilling
- Discharges
- Dredging
- Marine farms
- Tourism
- Waste disposal
- Earthworks impacting on the coastal environment
- Physical structures
- Privatisation
- Increased recreational activity
- Land use change
- Land clearance

Information needs of to ensure informed decision making by Papatipu Rūnaka:

- Proposed activity
- Advise whether the proposal will result in direct damage to the marine environment from: the operation of equipment/machinery, construction of structures on the seabed, introduction of debris or contaminants
- Identify whether the proposed new activity will result in any additional uses of natural resources within the coastal environment
- Advise of monitoring that is proposed to ensure that valued species are not impacted by the proposed activity as a result of construction and/or operation.

### **Pounamu**

Consenting activities that can impact on Pounamu values:

- Gravel Extraction
- Tourism activities
- Earth disturbance.

Information needs to ensure informed decision making by Papatipu Rūnaka:

- existing land uses
- proposed activity
- proposed method of operation
- procedures to be undertaken if pounamu is sourced with the gravel extraction
- proposed methods of avoiding, remedying or mitigating impacts on pounamu values.

**Appendix 36 Contact Details**

Te Rūnanga o Moeraki  
Corner Tenby and Haverford Street  
MOERAKI

Kāti Huirapa Rūnaka ki Puketeraki  
C/O Post Office  
KARITĀNE

Te Rūnanga o Ōtākou  
R.D.2  
ŌTĀKOU

Hokonui Rūnanga  
PO Box 114  
GORE

KTKO Ltd  
258 Stuart Street  
PO Box 446  
DUNEDIN  
Phone 03 477 0071  
Fax 03 4770072





# GLOSSARY



## 14 GLOSSARY *PAPAKUPU*

Ahi kā	Continued occupation according to traditional law of Māori tenure (“keeping the fires burning”).
Anadromous	Migrates from sea to freshwater to spawn.
Ara Tawhito	Ancient Trails.
Aruhe	Edible fernroot.
Atua	God, supernatural being.
Avulsion	Sudden removal of land, for example, by a flood.
Contra preferentem	The words of a deed are construed more strongly against the grantor (Hinde & Hinde).
Diadromy	Migrates up or downstream, or to or from the sea.
Eutrophication	Process involving increased fertility of water due to presence of high nutrient levels, often accompanied by extreme plant growth and/or algal bloom.
Galaxias	Native fish species.
Hapū	Sub-tribe, extended whānau.
Harakeke	Flax.
Hau kāika	People that uphold the ahi kā of a particular area.
Heritage Order	provision made within a district plan to give effect to a requirement made by a heritage protection authority under s.189 or s.189A of the RMA-91.
Hikoi	Journey.
Hinaki	Pots.
Hui	Meeting, assembly.
Inanga/Īnaka	A variety of whitebait; also a variety of pounamu.
Iwi	Tribe.
Iwi authority	The authority which represents an iwi and which is recognised by that iwi as having the authority to do so.
Kaha	Strength.
Kāi Tahu	Descendants of Tahu, the tribe.
Kāi Tahu ki Otago	The four Papatipu Rūnaka and associated whānau and rōpū of the Otago Region.
Kāi Tahu whānui	The collective of the individuals who descend from one or more of the of the five primary hapū of Kāi Tahu, Kāti Māmoe and Waitaha.
Kāika/Kaik’	Settlement.
Kāika/Kaingā nohoaka	Place of residence.
Kaimoana	Food obtained from the sea.
Kaitiaki	Guardian.
Kaitiakitaka	The exercise of customary custodianship, in a manner that incorporates spiritual matters, by takatawhenua who hold Manawhenua status for particular area or resource.
Kanohi ki te Kanohi	Eye to eye or face to face.
Kanakana	Lamprey.
Karakia	Prayer, incantation.
Ka Tiritiri o te Moana	Southern Alps.
Kaumatua	Respected elder.
Kawanataka	Governance.
Kawenata	Covenant.
Kekeno	Fur seals.
Ki Uta Ki Tai	Mountains to the Sea.

Koaro	A variety of whitebait.
Kāiwi Takata	Human skeletal remains.
Kohaka	Breeding Ground.
Kohātu Taoka	Treasured Stone Resources.
Kokopara	Giant kokopu (common).
Koparapara	Bellbird.
Kōrero	Discussion.
Kotukutuku	Native fuchsia.
Koura	Crayfish.
Kukupā	Native wood pigeon, kereru.
Kupenga	Net.
Mahika Kai	Places where food is produced or procured.
Mahika Mataitai	Places where food is obtained from the sea or seashore.
Makaa	Barracoutta
Mana	Authority, prestige, influence.
Mana Whenua	Customary authority or rangatiratanga exercised by an iwi or hapū in an identified area.
Manaaki	Show kindness to, look after, entertain.
Manawhenua	Those who exercise customary authority or rakatirataka.
Manuhiri	Visitor, guest.
Marae	Courtyard, meeting place for takata whenua.
Marine Reserve	Marine reserve declared under the Marine Reserves Act 1971.
Matauraka Māori	Māori knowledge
Mate	Death.
Mauri	Essential life force or principle; a metaphysical quality inherent in all things both animate and inanimate. (Ngāi Tahu Fresh Water Policy)
Mauka	Mountain.
Miro	A native tree species.
Moana	Sea, lake.
Mohoao	Black Flounder.
Mokopuna	Grandchild, descendant.
Murihiku	That area south of the Waitaki River.
Nga Whenua Kawenata	An agreement entered into under s.27A of the Conservation Act 1987.
Rāhui	Form of restriction on access to a certain resource for a particular time
Noa	Free from tapu, ordinary.
Non-diadromous	Do not migrate.
Pā	Fortification.
Papakāika	Traditional settlement or settlement on traditional land.
Papatipu	Original Māori land.
Papatipu Rūnaka/Rūnanga	Traditional Rūnaka.
Papatūānuku	Earth mother.
Paraki/Ngāiore	Common Smelt
Pātiki	Flounder.
Piripiri Pohatu	Torrent Fish.
Poha	Kelp bag (used for storing preserved food).
Pou	Post.
Pounamu	Nephrite, greenstone, jade.
Pukerero	
Pūrākau	Stories.
Putakitaki	Paradise shelduck.

Rāhui	Temporary protection of a resource.
Rakau	Tree.
Rakātira	Chief.
Rakātirataka	Chieftanship, decision-making rights.
Raupō	Bulrush.
Rimurapa	Bull kelp – used to make the poha in which titi were and still are preserved.
Rohe	Boundary.
Rohe potae	Traditional tribal area.
Rōpū	Group.
Rūnaka/Rūnanga	Local representative group or community system of representation.
Ruru	Morepork, native owl.
Samonid	Salmon and trout species.
Taiapure	Local fishery declared under Part IIIA of the Māori Fisheries Act 1989.
Takaroa	Deity of the sea.
Takata	Person.
Takatapora	Pākehā/European (lit. “boat people”).
Takata whenua	The iwi or hapū that holds mana whenua in a particular area.
Takiwā	Area, region, district.
Tangi	Bereavement ceremony.
Taniwha	Legendary serpent-like creature.
Taoka	Treasure.
Taoka Tuku Iho	Treasure handed down from the ancestors.
Tapu	Sacred.
Tauihu	Prow of the waka.
Tauraka Ika	Fishing ground.
Tauraka Waka	Canoe mooring site.
Te Ao Tūroa	The natural environment.
Te Tai o Arai Te Uru	Coastal Otago Marine Area
Te Wai Pounamu	The South Island.
Ti (kouka/rakau)	Cabbage tree; also edible products from ti.
Tiaki	Guardianship.
Tikanga	Lore and custom.
Tikanga Atawhai	Funding provided by the Department of Conservation for specific iwi initiated projects.
Tikaka	Customary values and practices.
Tino Rangatirataka	Full chiefly authority.
Titi	Muttonbird, sooty shearwater.
Tohu	Marker.
Tohuka	Specialist in a particular field of expertise.
Tohuka Whakairo	Master carver.
Tōroa	Albatross.
Trophic	Of nutrition.
Tuaki	Cockle.
Tuhituhi neherā	Rock art.
Tuna	Eel.
Tupapaku	Human corpse.
Tūpuna wāhine	Female ancestor.
Tūpuna/tūpuna	Ancestor.
Turangawaewae	Place of belonging through ancestral rights linked to land, place to stand.
Umu-tī	Earth oven used for cooking ti.

Urunga Waka	Canoe landing site.
Urupā	Burial place.
Wāhi Ingoa	Placenames.
Wāhi Kohātu	Rock Formation.
Wāhi Mahi Kohātu	Quarry Sites.
Wāhi Taoka	Resources, places and sites treasured by Manawhenua.
Wāhi Tapu	Places sacred to takata whenua.
Waiata	Song.
Waikoura	Freshwater lobster.
Wairua	Life principle, spirit.
Waka	Canoe.
Waka Hunua	Double Hulled Canoe.
Wānaka/Wānanga	Customary learning method.
Water Conservation Order	Order made under s.214 of the RMA-91 for the purpose of recognising and sustaining outstanding amenity or intrinsic value of waters and protecting outstanding characteristics.
Waterway	Water in a river, stream, lake, pond, wetland, estuary or aquifer, or any part thereof, including land water margins, beds and banks which the mauri of the waterway is reliant on.
Weka	Woodhen.
Whakama	Shame.
Whakapapa	Genealogy.
Whakataukī	Proverb, saying.
Whānau	Family.
Whānui	Large, extended, broad.
Whare	House.
Whare Kai	Dining hall
Whare Kura	School of Learning.
Whare Tūpuna/Wharenuī	Ancestral meeting house.
Whenua	Land.

# BIBLIOGRAPHY





## 15 BIBLIOGRAPHY RĀRAKI PUKAPUKA

- BEATTIE, James Herries (1994) *Traditonal Lifeways of the Southern Māori*. Edited by Atholl Anderson. University of Otago Press.
- CHRISTIE, Rev J. (1929) *A History of Waikouaiti*. 2nd Edition (Written in 1880). Christchurch Press.
- CRENGLE, H. TIPA, (2002) *Cultural Impact Assessment – Project Aqua*  
G. DAVIS, K. ALLINGHAM,  
B. SYMON, A.
- DACKER, Bill (1990) *The People of the Place: Mahika Kai*. NZ 1990 Commission.
- ELLISON, E. (1993) *Pukekura Pā: A Site Survey*. Report to Te Rūnaka Ōtākou Inc. Unpublished.
- O'REGAN, H.M. (1995) *Fourth Year Dissertation*, Māori Studies Department, Otago University, Unpublished.
- OTAGO REGIONAL COUNCIL (2004) *Regional Plan: Water for Otago*.
- (2001) *The Climate of Otago. Patterns of Variation and Change*.
- (1991) *The Shag River Catchment*.
- (1991) *Taieri River Catchment. Soil and Water Resource Management Issues and Options*.
- PETTINGER, R. (1985) *A History of the Silver Peaks*. Lands and Surveys Department. DOC.
- SHAW, M. S. & FARRANT, E. (1949) *The Taieri Plain : Tales of the years that are gone*. Whitcombe & Tombs, Christchurch.
- SUTHERLAND, G. (1962) *Coast Road & River: The Story of Taieri Mouth, Taieri Beach, Glenledi and Akatore*. Clutha Leader Print, Balclutha.
- TE PUNI KOKIRI (1993) *Mauriora Ki Te Ao. Introduction to Environmental and Resource Management Planning*. Te Puni Kokiri.
- TE RŪNANGA O NGĀI TAHU (2003) *Te Rūnanga o Ngāi Tahu Beached Marine Mammal Protocol - Draft*.
- (2002) *Te Rūnanga o Ngāi Tahu Pounamu Resource Management Plan*.
- (1998) *Te Karaka Special Edition - Crown Settlement Offer-Second Edition*.

- TIPA, G & TEIRNEY, L. (2003) *A Cultural Health Index for Streams and Waterways* published by Ministry of Environment.
- WAITANGI TRIBUNAL (1995) *Ngāi Tahu Ancillary Claims Report*. Brooker and Friend, Wellington NZ.
- (1992) *Ngāi Tahu Sea Fisheries Report*. Brooker and Friend, Wellington NZ.
- (1991) *Ngāi Tahu Report*. Brooker and Friend, Wellington NZ.