WW all was Ngai Tahu

Mō tātou, ā, mō kā uri ā muri ake nei for us and our children after us

Matariki 2019

Whakapapa

In the beginning there was nothing - Te Kore - then came the night - Te Pō - then the world of light - Te Ao Mārama. Over eons of time, each stage begat the next leading to one of the most significant elements of the Māori creation story in which the sky and earth were locked in an eternal embrace.

The children, who we now know as the Atua of Ranginui (sky father) and Papatūānuku (earth mother), were trapped between their parents in darkness so all of them, except Tāwhirimātea, known as the demi-god of the wind, tried to separate them. All of them failed until one of the sons, Tāne, used his legs to push the sky apart from the earth.

A gift that Io Matua (Te Kore) gave to the Atua was the gift of Mauri. It is the preservation of this Mauri, or life force, that is the essence of conservation for future generations. The next gift obtained by Tāne was Matauranga which came as three kete or baskets of knowledge.

Te Kete Tuatea

Of prayers, incantations and all rituals, acts and formula with all things on earth and universe. This basket is referred to as Te Kete uruuru Rangi (Ritenga and Kawa).

Te Kete Aronui

Of war, agriculture, woodwork, stonework and earthwork, pertaining to celestial and universal information designed to benefit humankind. This basket is referred to as Te Kete uruuru Tau (Whakaaro).

Te Kete Tuauri

Of peace, goodness and love pertaining to human activities and natural phenomena to the kingdom of nature. This basket is referred to as Te Kete uruuru Matua (Matauranga).

Matauranga based values are reflected within the need to protect resources and their Mauri through the use of institutions such as rāhui and tapu.

Te Kete Tuatea, Te Kete Aronui and Te Kete Tuauri combine to form the notion of tikanga. This knowledge or tikanga combines the spiritual, scientific and practical knowledge and are regarded as absolute, as they are derived from divine knowledge. From tikanga comes kawa - the rules, then ritenga - the customs.

The application of tikanga are demonstrated through kawa and ritenga and represent the Māori world view. Tikanga therefore applies to our taonga (being the physical assets) and is applied by kawa and ritenga (protocols, rituals and practices).

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Executive Summary

The purpose of this report is to provide a foundation for resource management agencies and Papatipu Rūnanga planning for freshwater catchment values. It sets out, in broad terms, Te Rūnanga o Ngāi Tahu ki Murihiku values with respect to freshwater. It is a starting point for a continuing process of consultation that will further define: the specific priorities and needs of each Papatipu Rūnanga.

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The importance of mutual understanding of Iwi and Council values cannot be under estimated. We work by integrating these values for the purposes of effective management of resources by councils and effective performance as kaitiaki by Rūnanga.

In order to meet the obligations set out in Part II of the Resource Management Act 1991 (RMA) all environmental managers are obligated to provide for the following:

- 1. To recognise "the relationship of Māori and their cultures and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga" (s6).
- 2. To "take in account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi)" (s8).
- 3. They are also required to have "particular regard to Kaitiakitanga" (s7).

The Treaty of Waitangi guaranteed Māori full rights of ownership to their lands, estates, forests, and fisheries. Whilst Iwi have assumed an increasing role in fisheries management due to customary fishing rights, for freshwater resource management however, the role of Iwi has been limited to one of advocacy. It is the Iwi's view that reliance only on advocacy fails to recognise the nature and extent of the relationships Ngāi Tahu has with freshwater.

Ngāi Tahu has in the past sought to redress deficiencies in their role in freshwater management such as during the settlement negotiations with the Crown. The Ngāi Tahu Claims Settlement Act 1998 contains a number of mechanisms that were established to improve the effectiveness of Ngāi Tahu's participation in the management. These mechanisms are discussed further in this report.

Ngāi Tahu ki Murihiku strive for the highest possible standard of water quality that is characteristic of a particular place and waterway. This means we strive for drinking water quality in water we once drank from, contact recreation in water we once used for bathing or swimming, water quality capable of sustaining healthy mahinga kai in waters we used to source kai.

Water quality definitions, categories and standards need to be determined, measured and assessed with cultural values and indicators alongside scientific information. Such indicators and values centre on the ability of the waterway to support life and the fitness of water for cultural uses. It is the

aspiration of Ngāi Tahu ki Murihiku that by recognizing cultural values alongside scientific values that freshwater management outcomes will improve the quality of freshwater for all people.

For freshwater management in the Murihiku region, Ngāi Tahu ki Murihiku consider that in most areas, water drainage is more of an issue than water abstractions. At one time, the Southland Plains were characterised by an abundance of repo or wetlands. Such areas were rich in biodiversity and an important natural and cultural resource. Ngāi Tahu ki Murihiku promote the restoration of wetlands and riparian areas as part of maintaining and improving water quality, due to the natural pollution abatement functions of such ecosystems. The Iwi require the use of buffer zones, riparian areas, bunds and other mechanisms as mitigation strategies for ensuring the passage of all resource consents.

One of Ngāi Tahu's main concerns about water abstraction is that resource management agencies do not know enough scientifically about the relationship between groundwater and surface water flows. Of particular concern to Ngāi Tahu is when abstractions from groundwater sources are permitted despite concerns being expressed about the possible adverse effects on surface water. Information is necessary on the interaction between groundwater and surface water flows. In the absence of such information, a precautionary approach to allocation for consents is necessary.

Ngāi Tahu ki Murihiku do not believe we should be granting consents for activities where we do not know what the effects may be over the long term. Anything over 25 years is essentially making decisions for the next generation. We also need to ensure that consent duration recognises and provides for changes in technology, thus allowing us to continually improve the way we do things. Our bottom line is to avoid discharge of wastewater (e.g. sewage and stormwater) to water, as such activities have adverse effects on cultural values, including, mauri, wairua, mahinga kai and wāhi tapu. Our preference is for wastewater to be treated to remove contaminants, and then discharged to land via wetlands and riparian areas.

This report covers the function of Te Ao Marama and its role as the Murihiku Iwi representative. Māori perceive water as a holistic and sacred (taonga) entity within which it holds its own life force or 'Mauri'. The Māori worldview promotes that we as humans are 'one' with the environment (Earth mother Papatūānuku). The worldview also promotes that water and rivers are like the life blood of Papatūānuku. The cultural values associated with freshwater can be divided into three overarching sets of values; Te Mana o te Wai, Kaitiakitanga and Tino Rangatiratanga. Each of these themes are explored in this report.

Finally we have included summaries from the Te Tangi a Tauira Iwi Management Plan 2008 and Environment Southland information sources covering the wider values within each of the five river catchments, Oreti, Waiau, Aparima, Matāura and the Mata-au/Clutha and the Waituna Lagoon catchment.

Te Ao Mārama Inc

Ngāi Tahu ki Murihiku formed the entity known as Te Ao Mārama Incorporated. Made up from representatives of Te Runaka o Waihōpai, Te Runaka o Awarua, Te Runaka o Oraka Aparima and Te Runaka o Hokonui, Te Ao Mārama is the articulation of Kaitiakitanga for Murihiku. Te Ao Mārama translated means transcendence into the 'world of light'.

The mission of Te Ao Mārama Incorporated is:

- To give effect to the partnership developed between local authorities and Ngāi Tahu Iwi in Murihiku;
- Work with local authorities to have cultural values and perspectives reflected in plans and policies recognising Statutory Acknowledgements, tōpuni, nohoanga and taonga to ensure that Ngāi Tahu ki Murihiku interests and matters in these areas are safeguarded;
- Recommend consent and concession conditions that address Iwi concerns;
- Be proactive in supporting innovation and new ways of doing things that will have environmental benefits:
- Provide 'Cultural Impact Assessments' where requested by councils or consent applicants;
- Provide support for community conservation projects.

One of the challenges for local authorities is to achieve integrated management of natural and physical resources, as required in sections 30(1)(a) and 31(1)(a) of the Resource Management Act 1991. Integrated management is a necessary condition for achieving sustainable management. Cultural Impact Assessments and Cultural Values Reports are the mechanism for recording Iwi concerns which feed into an integrated management system.

A Cultural Impact Assessment (CIA) is a report assessing the potential impacts of a given proposal on resources and values of importance to tangata whenua. Cultural Value Reports (CVR) explain the cultural interests within a geographic area and or specific resource.

Te Ao Mārama's approach to Cultural Values Reporting

Overarching values which form the basis of reporting for Iwi concerns can be divided into three categories:

• 'Te Mana o te Wai': The role of valuing the living expression of Māori cultural Mauri (energy and flow of life force) of water bodies and taonga species. 'Te Mana o te Wai' is

recognised in the National Statement on Freshwater Policy as: the health and wellbeing of water bodies; the health and wellbeing of people and the health and wellbeing of the environment. 'Te Mana o te Wai' recognises that values setting within the community needs to underpin all regional bodies conservation and environmental management work.

- **Kaitiakitanga**: The actions of Māori cultural guardianship, advocacy and protection.
- **Tino Rangatiratanga**: The exercise of the Treaty of Waitangi, statutory rulings and cultural expression in the protection and restoration of the environment such that the social, health and economic development of the Māori community is integrated.

Integrated Management of the Environment ('Ki uta ki Tai')

Ngāi Tahu ki Murihiku recognises the importance of integrated management between and within agencies recognising 'Ki uta ki Tai' (mountains to the sea) and includes:

- Integration across agencies and legislation
- Integration across natural and physical resources (i.e. water, soil, the coast, etc)
- Integration across outcomes for a given waterway
- Integration of local with regional and national objectives

In exercising governance, the Crown make laws that recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga as a matter of national importance (Resource Management Act 1991). In that regard, local authorities have a significant duty to give effect to these statutory requirements in respect to consultation with, and participation of all Māori, in local government decision making so:

- That it becomes the norm for Ngāi Tahu ki Murihiku values to be embedded in planning documents and management practices used by all agencies working with natural and physical resources and developing environmental policy recognising the principle of 'Ki uta ki Tai'.
- That there is mutual understanding of Iwi and local authority values and responsibilities with respect to the environment, effective management of resources by councils and effective performance of Kaitiakitanga by Ngāi Tahu ki Murihiku.
- That the principle of tino rangatiratanga is enhanced and partnerships formed and extended.
- That authorities understand the principles of the Treaty of Waitangi and that the interests and values of Ngāi Tahu ki Murihiku are protected and enhanced. This includes the safe guarding of all cultural heritage and significant sites and places.

Following is a table of the organisations and the statutory powers and duties in which integrated management is pursued.

ORGANISATION	SOURCE OF STATUTORY POWERS AND DUTIES
Regional Councils	 Resource Management Act 1991 Local Government Act 1974 Rating Powers Act 1988 Biosecurity Act 1993 Soil Conservation and Rivers Control Act 1941 (and a number of special statutes) 2 Reserves Act 1977 Ngāi Tahu Claims Settlement Act 1998 Te Rūnanga o Ngāi Tahu Act 1996
District and City Councils	 Resource Management Act 1991 Local Government Act 1974 Rating Powers Act 1988 Reserves Act 1977 Ngāi Tahu Claims Settlement Act 1998 Te Rūnanga o Ngāi Tahu Act 1996
Department of Conservation	 Conservation Act 1987 Marine Reserves Act 1971 Resource Management Act 1991 Ngāi Tahu Claims Settlement Act 1998 Te Rūnanga o Ngāi Tahu Act 1996
Ministry of Fisheries	 Fisheries Act 1996 Ngāi Tahu Claims Settlement Act 1998 South Island Fisheries (Customary Fishing Regulations) 1998 Te Rūnanga o Ngāi Tahu Act 1996
Ministry of Agriculture	Biosecurity Act 1993 Te Rūnanga o Ngāi Tahu Act 1996
Fish & Game Councils	 Conservation Act 1987 Ngāi Tahu Claims Settlement Act 1998 Resource Management Act 1991 Te Rūnanga o Ngāi Tahu Act 1996
Environmental Risk Management Authority	 Hazardous Substances and New Organisms Act 1996 Te Rūnanga o Ngāi Tahu Act 1996
Iwi-based authorities	 Fisheries Act 1996 (taiapure provisions) South Island Fisheries (Customary Fishing Regulations) 1998 Te Rūnanga o Ngāi Tahu Act 1996
Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga	 Te Rūnanga o Ngāi Tahu Act 1996 Ngāi Tahu Claims Settlement Act 1998 South Island Fisheries (Customary Fishing Regulations) 1998 Ngāi Tahu (Tutaepatu Lagoon Vesting) Act 1998 Ngāi Tahu (Pounamu Vesting) Act 1997 Treaty of Waitangi Fisheries Settlement Act 1992

The Māori worldview

Māori perceive the environment in a holistic way, we see ourselves as 'one' with Papatūānuku. As in the nature of Papatūānuku's health so too is the health of our people. The exercise of Kaitiaki relationships with taonga in the environment is vital to the continued expression of Māori culture itself. Te Ao Māori worldview advocates for the protection, preservation and restoration of our environment which is the action of Kaitiakitanga (as guardian and advocate). Water and riverways are the 'living blood' of Papatūānuku and are held in reverence. Cultural practices and the health and wellbeing of Te Ao Māori depends on the ability for Kaitiakitanga to be expressed in the everyday lives of our people and communities.

Te Ao Māori, the Māori worldview, promotes:

- Water is a taonga. Water plays a unique role in the traditional economy and culture of Māori. Without water no living thing, plant, fish or animal can survive.
- Water has an inherent value that should be recognised in the event of potentially
 competing uses. Taonga value refers to values associated with the water itself, the
 resources living in the water and the resources in the wider environs that are sustained by
 the water. Taking, using and disposing of water can have drastic effects on the
 environment and the values that Māori accord to a waterbody.
- Water is a holistic resource. The complexity and interdependency of different parts of the hydrological system should be considered when developing policy and managing water resources.
- Water is a commodity that is subject to competition. An understanding of the significance and value of water to Māori and other stakeholders is necessary to change the existing behaviour from one that prioritises consumptive uses and permits inefficient use towards one that provides for cultural and ecological values as priorities.
- Water has many stakeholders. The interdependency of different parts of the hydrological system creates many stakeholders, including, other organisms and humans (both current and future generations). The RMA 1991 confirms that future generations are also stakeholders. From a Māori perspective, the present generation has an obligation to pass on healthy water resources to future generations.
- Water should be managed at the local level because most threats to waterbodies are local. Responsibility for management should therefore be delegated to organisations that have a personal stake in its overall health and condition.

Te Mana o te Wai

In August 2017 the Government announced a set of changes to the National Policy Statement for Freshwater Manangement. These changes require councils to consider and recognise 'Te Mana o te Wai' such that community values engagement underpins all evolving policy around freshwater. The freshwater forum established by Environment Southland, was developed in response to these changes to the NP statement (Ministry of Environment Changes to Freshwater NPS 2017).

'Te Mana o te Wai is the integrated and holistic well-being of freshwater bodies. The National Policy Statement for Freshwater Management (NPSFM) and the proposed Southland Water and Land Plan (pSWLP) recognise that upholding Te Mana o te Wai requires that in using water we must also provide for Te Hauora o te Taiao (the health and mauri of the environment), Te Hauora o te Wai (the health and mauri of the water) and Te Hauora o te Tangata (the health and mauri of the people).

Water is held in the highest esteem because the welfare of the life that it contains determines the welfare of the people reliant on those resources. Ensuring that water that is meant for drinking is of drinking water quality and that water, where mahinga kai is harvested, is safe to eat from and the water where our kids swim is safe for them to swim in, is our Kaitiaki responsibility as Ngāi Tahu ki Murihiku.

Water Quality

For Ngāi Tahu, the value of Mauri and 'Ki uta ki Tai' describes the life force and flow of energy of sacred waters from the sky father Ranginui to the life blood of Papatūānuku. The use of the term 'Mauri' encapsulates the meaning of 'healthfulness' and vitality of a given water body. Scientifically Mauri can mean:

- Meeting the basic health and safety needs of humans, specifically the provision of freshwater for drinking water.
- Continuity of flow from the mountain source of a river to the sea.
- Life-supporting capacity and ecosystem robustness;
- Protecting traditional cultural values and uses (in addition to its Mauri).
- Protecting biodiversity.
- Aesthetic qualities e.g. clarity, natural character, depth and velocity of flow;
- Providing for economic activities.

Mauri of a water body should not be desecrated. The Mauri is unable to protect itself against unnatural aspects of the environment. If the Mauri of an entity is desecrated or defiled, the resource itself, resource users and others depending on that entity are at risk.

Sadly, the Mauri of many waterbodies have been seriously eroded by water use and discharge. Throughout the Murihiku rohe there are examples of point source water pollution caused by the discharge of effluent from industry and sewage plants directly to water. Resource management agencies need to recognise that the direct discharge of treated effluent to water causes significant adverse cultural effects. Too often this distinction is not made.

Discharge to Water

Discharges to water may be point source discharge (e.g. actual discharges to water), or non-point source discharge (e.g. from land to water). Concerns regarding discharge include:

- Impacts on the Mauri of the receiving environment as a result of discharge activities.
- Impacts on mahinga kai and biodiversity as a result of discharge activities.
- Impacts on cultural use of waterways as a result of discharge activities
- Using dilution of pollution as a form of mitigation this may not be culturally acceptable.
- The disposal of treated or untreated sewage to water.
- Agricultural runoff and nitrogen loading in waterways.
- Discharge of stormwater from roads into open drains
- Ongoing legacy degradation especially in lower catchment areas and estuaries.

Traditionally, to Europeans, water has been seen as a versatile transport medium and, because of its ability to break down and assimilate waste, it has been intimately linked to waste disposal. Such use directly conflicted with Māori beliefs, and illustrates the cultural differences in relation to natural resources.

A range of industrial activity occurs in Southland, including wood and meat processing sites, sawmills (e.g. Otautau), dairy factories, fish processing plants and the Tiwai Aluminium Smelter. Ngāi Tahu ki Murihiku have an expectation that Southland industry will continue to achieve high levels of innovation and overall excellence with respect to the environment and protection of cultural and community values. When industry is managed in a good way it gives both Iwi and the wider community confidence.

• Ngāi Tahu ki Murihiku advocates for industry consent durations of 25 years or less. Consent conditions should require operators to periodically review available technology, and provide a report indicating if better technology is available.

- Ngāi Tahu ki Murihiku strives to work with consenting procedures to offer mitigation strategies to alleviate environmental degradation. The Iwi promote riparian planting; wetlands development strategies and protection mechanisms to the flora and fauna of the zones affected by discharge.
- The Iwi advocate that water quality of any surface waterbody or groundwater resource must not be deteriorated due to discharge and industrial activity. The size of a zone of reasonable mixing needs to be determined on a case-by-case basis of which Ngāi Tahu ki Murihiku must be consulted. Factors influencing zone size include: effluent flow rate and concentration; design of the outfall; depth, velocity and rate of turbulent mixing of the receiving water; and ambient concentrations in the receiving water.
- Recognising the sites of taonga species, mahinga kai and traditional uses of the water body are also considered around the environmental zones of the discharge activity:
- Regard for all statutory areas under protection:
- The Iwi require that industry develop environmental management plans, including contingency plans to cope with any faults, breakdowns, natural disasters, or extreme weather events, and avoid any serious environmental effects.

Water Abstractions

Irrigation and stock water is a large consumptive use of water resources in the region, and most water take resource consent applications that Iwi are consulted on are to provide



Sustainable water use is about using what we need, not what we have.

water for farming operations. Abstractions for such operations are largely groundwater sourced.

Water is also abstracted and returned for hydropower generation, from rivers such as the Matāura, Matau-au/Clutha and Waiau.

Ngāi Tahu ki Murihiku believe that a precautionary approach is needed regarding the cumulative impact of takes, and the sustainability of water supply. uncontrolled abstractions from both surface and groundwater sources can have adverse effects on water quality and quantity, and on the Mauri of the water source. In areas such as Riversdale, Kaitiaki Rūnanga have already identified a risk to the groundwater resources as a result of the cumulative effects of groundwater takes in the area.

Ngāi Tahu wish to highlight:

- The legacy of unregulated water abstractions and the need to ensure better management of water take data.
- Impacts on river health from damming and diversions of rivers.
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Taking less is more.

- Increasing demands on water resources as a result of land conversion to dairy.
- Extent of the lack of knowledge about aquifers and their hydrology.
- Water users using what they are allocated, rather than what they need.
- Deterioration of water quality in rivers such as the Öreti as a result of a reduction in water quantity.
- Recognition of the legacy of damage occurring to the Mauri of water systems in the region.

Ngāi Tahu adopts a precautionary principle when making decisions on water abstraction and wishes to:

- Require that scientifically sound, understandable, and culturally relevant information is provided with resource consent applications for water abstractions, to allow Ngāi Tahu ki Murihiku to fully and effectively assess cultural effects.
- Ensure that the cumulative impacts of water abstractions in a given area are managed carefully.
- In the Southland Plains region, the preference of Ngāi Tahu ki Murihiku is for water takes from bores, as opposed to surface water abstractions.
- Recommend, as a condition of consent, that any application for irrigation puts in on-farm rainwater holding facilities, to help with dairy washdown and irrigation.
- Encourage water users to be proactive and use water wisely using best practise methodologies.

Consideration of consent applications for water abstractions should have particular regard to questions of:



on the Southland Plains.

In the southland Plains.

Rain is our most reliable water resource

- How well do we understand the nature and extent of the water resource?
- How well can we monitor the amount of water abstracted?
- Does the land capability (e.g. soil type, vulnerability of underlying groundwater resources) match the land use enabled by irrigation?

• What might happen in the future?(e.g. rainfall and recharge of aquifers, climate change).

Applications for water abstractions may be required to justify the quantities of water requested. Information may need to be provided to Te Ao Märama Inc regarding the proposed water use per hectare, estimated water losses, stocking rates, and the level of efficiency for the scheme. This will enable Iwi to put the quantity of water sought in context, and ensure that a test of reasonableness can be applied to consents. Ngāi Tahu approaches consents processes for abstraction by encouraging:

- Abstraction to be durations not exceeding 25 years on resource consents.
- Oppose any further abstractions/diversions of water from the Waiau River for hydroelectric generation, as current levels of abstractions are having adverse effects on cultural values associated with the river.
- Ngāi Tahu's right to development, as per the Treaty of Waitangi, must be recognised and provided for with respect to water allocation from freshwater resources
- The avoidance of excessive drawdown of aquifer levels as a result of groundwater abstractions, and to ensure that abstractions do not compromise the recovery of groundwater levels between irrigation seasons.
- The establishment of environmental flow regimes must recognise and provide for a diversity of values, including the protection of tangata whenua values.
- Avoid compromising fisheries and biodiversity values associated with spring fed creeks and rivers for the purposes of water abstractions.
- Promote the use of protection tools such as buffer zones or covenants (placed on titles) to
 ensure preservation of areas of indigenous vegetation and other culturally important
 features and places.
- Avoid development on known tauranga waka, cultural, archaeological and mahinga kai sites.
- Ensure that all fish species have uninhibited access between inland and coastal waters.

Kaitiakitanga

Guardianship and advocacy is fundamental to the relationship between Ngāi Tahu and the environment. It is the intergenerational responsibility and right of tangata whenua to take care of the environment and the resources upon which we depend. Kaitiakitanga as a 'right' is supported within the government's 'Te Mana o te Wai' policy changes in 2017 which state that freshwater policies must be generated by the community determining its own values.

The responsibility of Kaitiakitanga is twofold: first there is the ultimate aim of protecting Mauri and second there is the duty to pass the environment to the mokopuna of all future generations in the state that is as good as, or better than, the current state.

Preservation of the integrity of valued waterways is an important aspect of the responsibilities of those members of the Iwi that are identified as Kaitiaki. Values (both tangible and intangible) associated with specific waterbodies include:

- The value of waterways for drinking and traditional sources of mahinga kai food and other cultural materials;
- The value of waterways for swimming and recreational use;
- The continued capacity for future generations to access, use and protect the resource;
- The role of particular waterways in unique tribal creation stories and in historical accounts;
- The proximity of important waahi tapu, settlement or other historical sites in or adjacent to specific waterways; and
- The use of waterways as access routes or transport courses
- The enactment of restoration and protection to a water body by the entity seeking consent and the community.

Exercising Kaitiakitanga also invokes the powers of rāhui' which refers to a restriction placed on an area or resource for a given purpose that prohibits a specific human activity such as the gathering of kai.

The terms of a rāhui vary case by case depending on the reason, severity of restriction and time period for the prohibition. The most common rahui are those associated with spiritual needs such as drownings or accidents in an area and those imposed for resource conservation purposes. Rāhui within resource management practices are slowly gaining increased recognition as evidenced by:

- Sections 6(e), 7(a) and 8 of the Resource Management Act 1991;
- Section 186B of the Fisheries Act 1996, as amended by section 311 of the Ngāi Tahu Claims Settlement Act 1998. This section provides statutory recognition for a properly instituted rāhui; and
- Section 305 of the Ngāi Tahu Claims Settlement Act 1998 that commits the Crown and Ngāi Tahu to the development of Customary Freshwater Fishing Regulations

The value of the role of the Māori community in restoring and protecting the environment through education and community led riparian and pest reduction is a priority for Ngāi Tahu ki Murihiku. Examples such as the Waituna lagoon protection project 'Whakamana te Waituna' (www.waituna.org.nz) offer a good example of Iwi collaboration.

The Iwi desire that the value of Kaitiakitanga in its broadest sense is adopted and recognised by all authorities.

Tino Rangatiratanga

The approach of Te Ao Mārama working within the value of 'Tino Rangatiratanga' includes working with local authorities and other statutory agencies to ensure that cultural values and perspectives associated with freshwater management are reflected in statutory water plans, best practice guidelines and strategies, and in resource consent processes for activities



Our people rely on rivers such as the Matāura River for mahinga kai. There is too much water being applied for and allocated from aquifers and if this is allowed to continue the mauri, or life-force, of our streams and the Matāura Rivers will suffer.

involving freshwater. This work also includes;

- Promoting catchment management planning ('Ki uta ki Tai'), as a means to recognise and provide for the relationship between land and water.
- Promoting the participation of Iwi Maori in conservation projects.
- Protecting and enhancing the customary relationship of Ngāi Tahu ki Murihiku with freshwater resources.
- Maintaining the participation of the Runanga in freshwater management.
- Protection, maintenance and enhancement of mahinga kai.
- Protection of wāhi tapu and wāhi taonga associated with rivers, lakes and wetlands.
- Recognition of the special significance of particular water bodies
- Ngāi Tahu's right to development, as per the Treaty of Waitangi, is provided for with respect to future development and commercial activities in Fiordland, including the export of water.

Ngāi Tahu Claims Settlement Act 1998

The Ngāi Tahu Claims Settlement Act 1998 gives effect to the provisions of the Deed of Settlement, entered into between Ngāi Tahu and the Crown in 1997. The key elements of the Ngāi Tahu settlement, can be summarised as follows:

• Apology: Crown apologises unreservedly to Ngāi Tahu Whānui for the suffering and hardship caused to Ngāi Tahu;

- Aoraki/Mount Cook: gifting of Aoraki, co-management and renaming;
- Cultural Redress: restores effective Kaitiakitanga;
- Non Tribal Redress: provides certainty and results;
- Economic Redress: income generated by tribal assets provides funds for social and cultural development.

A significant component of the Ngāi Tahu Settlement is the cultural redress elements, which seek to restore the ability of Ngāi Tahu to give practical effect to its Kaitiaki responsibilities. Relevant "cultural redress" elements of the Ngāi Tahu Settlement include:

Ownership and Control:

• Pounamu/greenstone, high country stations, four specific sites (including Rarotoka/Centre Island, Whenua Hou/Codfish Island, former Crown Tītī Islands) and Waāhi Taonga;

Mana Recognition:

Statutory Acknowledgements, Deeds of Recognition, Tōpuni, Dual Place Names;
 Mahinga kai: Nohoanga, Customary Fisheries Management, Taonga Species
 Management, Coastal Space; Iwi, pursuant to South Island Fisheries (Customary Fishing Regulations) 1998 have some responsibilities in relation to eel management and managing customary harvest of eels.

Management Input:

• Statutory Advisor, Dedicated Memberships, Department of Conservation Protocols, Resource Management Act Implementation, Heritage Protection Review.

Statutory Acknowledgements/Deed of Recognition,

- Tōpuni, Ownership and Control Areas, Place Names, Nohoanga, Taonga Species and Customary Fisheries provisions from the Ngāi Tahu Claims Settlement Act 1998, are contained in Te Tangi a Tauira Iwi Management Plan 2008. Prior to the enactment of the Conservation Act 1987 and Resource Management Act 1991 there were few statutory provisions requiring resource managers to address Iwi interests. Today, conservation managers, pursuant to section 4 of the Conservation Act 1987, are required to "give effect to the principles of the Treaty of Waitangi". Concerns consistently raised by Iwi and the Māori community include:
 - The lack of influence over water quality and the setting of water quality standards, and impact on ability to exercise Kaitiaki responsibilities.
 - Ensuring that Te Ao Mārama is supported through succession to maintain partnerships between local authorities and to assist in the understanding and appreciation of Tikanga Māori throughout Murihiku communities.

- To ensure that economic development and growth do not have implications for Ngāi Tahu ki Murihiku in exercising Kaitiakitanga, or have adverse impacts on the environment and communities.
- That the planning and delivery of council's regulatory roles in achieving outcomes will recognise the potential positive or negative effects that such actions may have on the health and well-being of the whole Murihiku community.
- That a sense of belonging and social responsibility with respect to the surrounding environments is encouraged. This includes supporting activities and events that engage communities within their local environments.
- To ensure that the diversity of our communities is represented in forums and elected bodies to ensure awareness and understanding of differing views and values.

Mahinga Kai

Mahinga kai is one of the pillars of the Ngāi Tahu way of life and is central to Ngāi Tahu ki Murihiku relationships with places, waterways, species and resources, and to the cultural, spiritual, social and economic well-being of Ngāi Tahu. Mahinga kai includes the transfer of traditional knowledge and culture or 'Matauranga'. The practice is complex and encompasses harvesting taonga (resources)(e.g. food, fibres, muds, clays and soil, stonework), the ability to access the resource, the site where gathering occurs, the act of gathering and using the resource, and the health and wellbeing of the resource.

Locations for mahinga kai activity occur throughout all catchments. Some mahinga kai species of relevance include:

- Tuna (eels)
- Kanakana (lamprey)
- Pārera (grey duck)
- Tītī (sooty shearwater)
- Kōau (black shag)
- Wai kōura (freshwater crayfish)
- Inanga (whitebait)
- Waiakahi
- Native k\(\bar{o}\)kopu
- Putangitangi (paradise shell duck)
- Weka
- Water cress, flax and other edible and rongoa Māori plants (healing)

Ngāi Tahu's fishing rights were explicitly protected by the Treaty of Waitangi. Not only was the right to engage in mahinga kai activity confirmed, also included was the right to expect that such activity will continue to be successful as measured by reference to past practice. Unfortunately adverse impacts on freshwater resources have resulted in adverse effects on the diversity and abundance of mahinga kai resources and harvesting activity.

Mahinga kai was and remains one of the cornerstones of Ngāi Tahu existence and culture. Survival was dependent upon knowledge of mahinga kai and the ability to gather resources from the land, waterbodies and the sea. Healthy waterbodies continue to be a direct source of mahinga kai, provide ecosystem support for mahinga kai species and support other significant mahinga kai environments such as forests, riparian habitats and coastal environs. Sadly there are many examples across the Murihiku rohe where inappropriate water management has impacted adversely on mahinga kai. Observable effects include alterations to the abundance and distribution of species, disturbances to the breeding cycles and patterns, loss of access to waterbodies, and the deterioration, reduction and removal of habitat.

Taonga Species

At one time, Murihiku had an abundance of wetlands. These ecosystems were an important natural and cultural resource to Ngāi Tahu ki Murihiku, as they were (and are) rich in biodiversity and important sources of mahinga kai, and provided important ecosystem services such as filtering of contaminants from water and soils.

Schedule 97 (www.legislation.govt.nz/public/1998/0097) of the Settlement Act lists a number of species of plants, shellfish, marine mammals, fish, or birds that Ngāi Tahu has a special taonga relationship with. While the Settlement Act, in sections 287 - 296, lists the obligations in respect of the management of taonga species, in particular recovery planning, Ngāi Tahu will be active in resource management forums to ensure that the habitats and wider needs of these taonga species are protected.

It is an aspiration that Ngāi Tahu Whänui, current and future generations will have the ability to access, use and protect mahinga kai resources, and the history and traditions that are part of customary use of such resources, as guaranteed by the Treaty of Waitangi. The Iwi also aspires to ensure:

- 1. Work towards the restoration of key mahinga kai areas and species, and the tikanga associated with managing those places and species.
- 2. Providing uninhibited fish passage within any waterway linking the high country lakes and rivers to the coast.
- 3. Avoidance of compromising native aquatic species by building dams, culverts and weirs or through any other water abstraction methods.

- 4. That plant pest and animal/bird control programmes avoid adverse impacts on mahinga kai species or to areas of cultural significance.
- 5. Protecting threatened and endangered species.
- 6. Impact of unwanted introduced plant and animal species on indigenous biodiversity.
- 7. Support for landowners who are protecting indigenous bush remnants and other areas of indigenous vegetation.
- 8. Recognising that some native birds rely on non-native plants for food, because traditional food sources have been displaced (e.g. kereru and tree lucerne).

Over time, the majority of Murihiku wetlands have been drained, largely to provide land for farming and agriculture. The drainage of such areas has had an effect on the ability of the land to store and replenish water resources.

- The need to protect existing wetland areas from drainage.
- Use of wetland restoration or establishment as mitigation for land use and discharge activities.
- Impacts of stock on wetland areas and to require that wetlands are fenced in any area where they may be at risk from stock damage.

Riparian areas are the transition zone between water and land. Such areas are often associated with mahinga kai and other customary use activities (mahinga parenga). Riparian areas contain a

range of important plant species; some of which may be used for wāhi Räranga (sources of weaving materials), or rongoä (traditional medicines).

Iwi Management Plan

Major river catchments

Following is a summary of the major river catchments of Murihiku including Ngāi Tahu ki Murihiku cultural associations and significant resource management issues Source: NTCSA 1998; Customary knowledge of Ngāi Tahu ki Murihiku. River Catchment Description. Te Tangi a Tauira (www.es.govt.nz)

Öreti River Catchment

The Ōreti river drains the Southland plains. The river formed one of the main trails from inland Murihiku to the coast, with an important pounamu trade route continuing northward from the headwaters of the Ōreti and travelling via the Mavora Lakes system or Von River Valley, to the edge of Wakatipu and onto the Dart and Routeburn pounamu sources.

There are numerous archaeological sites in the upper catchment, including sites related to stone resources that are considered to be among the oldest in New Zealand.

The kai resources of the Ōreti supported numerous parties venturing into the interior, and returning by mokihi, laden with pounamu and mahinga kai. Nohoanga along the river supported such travel by providing bases from which the travellers could obtain waterfowl, eels and inanga.

- Overall water quality and river health as source of drinking water for Invercargill.
- Mahinga kai and biodiversity.
- River as habitat for tuna this river should produce good tuna.
- Wāhi tapu and protection of culturally significant sites in catchment
- The upper catchment area is considered high risk in terms of activities impacting on unknown archaeological sites.
- Indirect discharges from town sewage schemes and industry.
- Discharges to land and run off to water.
- Intensive stocking in lower catchment areas stock access to river and run off of contaminants from land to water.
- Water quantity of abstractions.
- Relationship between surface water and groundwater flow and Mauri indicators

- Dams and diversions and protection of upper catchment from damming and diversions with flooding of upper catchment areas due to damming and diverting flow would mean we would lose an immensely significant trail that was used by our ancestors.
- Gravel extraction, and potential impacts on nesting birds.
- Riparian management.

Waiau River Catchment

The Waiau river was named during the southern voyages of Tamatea Ure Haea, and his waka Takitimu. Takitimu was wrecked near the mouth of the river (Te Waewae Bay) and the survivors who landed named the river Waiau due to the swirling nature of its waters.

The river was a major travel route connecting Murihiku and Te Ara a Kiwa (Foveaux Strait) to Te Tai Poutini. Summer expeditions to Manapouri for mahinga kai, and access to pounamu, were the main motivations for movement up and down the Waiau.

Numerous archaeological sites and wāhi taonga attest to the history of occupation and use of the river by Ngāi Tahu and Ngāti Māmoe. An important nohoanga site at the mouth of the river was called Te Tua a Hatu. The rangatira Te Waewae had his Kāinga nohoanga on the left bank of the river mouth.

The river was a major source of mahinga kai for Ngāi Tahu, with some 200 species of plants and animals harvested in and near the river. Rahui (reserves) were applied to the mahinga kai resources so that people from one hapū or whānau never gathered kai from areas of another hapū or whānau.

Wāhi ingoa associated with the Waiau are indicators of the range of resources the river provided: Waiharakeke (flax), Papatōtara (tōtara logs or bark), Kirirua (a type of eel found in the lagoon), Te Rua o te Kaiamio (a rock shelter that was a designated meeting place, similar to a marae) and Ka Kerehu o Tamatea (charcoal from the fire of Tamatea).

- Water quality and quantity.
- The river has reasonable water quality due to a large, fast flow.
- Reductions in flow and impacts on river as habitat and maintaining appropriate minimum flow. It is noted that the river can have levels too low at times.
- Mahinga kai and biodiversity.

- Wāhi tapu and protection of culturally significant sites in the catchment.
- Water takes for hydroelectric generation, and effects on overall river health, flow and natural character.
- Changes to the river mouth environment due to changes in flow
- Gravel extraction.
- Due to the Mararoa Weir gravels don't get transported down the river as well as they should.
- Commercial jet boating is popular on this river risk of introducing pests such as didymo.

Aparima River Catchment

The Aparima river drains the Southland plains and the Takitimu Mountains. It is a slow flowing, lowland river. The mouth of the river was a permanent settlement, with associated urupā (burial sites) nearby. The was also an important tauranga waka located here, from which sea voyages were launched to and from Te Ara a Kiwa, Rakiura and the tītī islands. A carved tauihu (canoe prow) has been found in the estuary of the river.

The river was an important source of mahinga kai, particularly shellfish, mussels, paua, tuna and inanga. An eel weir was constructed at the narrows where the Pourakino River enters the Aparima.

There are numerous archaeological sites at the river mouth.

- Water quality and the need to improve water quality
- Mahinga kai and biodiversity
- Impacts of intensive land use activities, particular run off of contaminants from land to water
- Gravel extraction and effects on habitat for birds (e.g. gulls)
- Whitebait stands at the mouth of the river
- Wāhi tapu and the protection of culturally significant sites in the catchment

Matāura River Catchment

The Matāura river drains the Waimea Plains.

Several important Ngāti Māmoe and Ngāti Tahu tupuna are associated with the Matāura River, including the Ngāti Māmoe rangatira Parapara Te Whenua, whose descendents traditionally used the resources of the river, and Kiritekateka, daughter of Parapara Te Whenua, who was captured by Ngāti Tahu at Te Anau.

Tuturau, once a Ngāi Tahu fishing village, was the site of the last inter-tribal Māori war, in 1836. Ngāi Tahu (under Tuhawaiki) repelled the challenge and threat from northern invaders thus the south was kept from passing into the hands of the northern tribes.

The Matāura was noted for its customary native fishery. Te Apa Nui (Matāura Falls) were particularly associated with the taking of kanakana. Inanga remains an important resource on the river. The estuary (known as Toetoe) is a particularly important customary food gathering location.

Matāura Falls are an important feature of the cultural landscape of this river There is a freshwater mātaitai reserve on the Matāura River (which was the first of its kind New Zealand)(www.hokonuirunanga.org.nz), recognising the importance of the river in terms of customary food gathering.

- Water quantity and quality.
- Water abstractions and discharge: use of the river as a water source and a point of discharge for past and current industrial activities (e.g. historical freezing works; pulp and paper).
- Changes to the natural character of the Matāura Falls.
- Mahinga kai and biodiversity.
- Impacts on fish passage at Matāura Falls. Elvers and Kanakana are having difficulty getting upstream from the falls.
- Protection of the mātaitai reserve on the Matāura.
- The river is an important brown trout fishery need to ensure that the customary native fishery is not compromised by the trout fishery.
- Tourism and pressures on the river from tourism activities.
- Wāhi tapu and protection of culturally significant sites in the catchment.

Pomahaka River

The upper catchment is considered reasonably pristine as it runs through high country areas.

Mahinga kai is important for Ngāti Mamoe and Ngāi Tahu kāinga in the Catlins and Tautuku areas. Particularly it is noted for kanakana fishery, but also associated with weka and other manu (birds).

Issues that Ngāi Tahu ki Murihiku raise include:

- Water quantity and quality
- Impacts of intensive land use activities on river health
- Wāhi tapu and protection of culturally significant sites in the catchment
- Mahinga kai and biodiversity.
- River as habitat for Kanakana.

Mata-au/Clutha River Catchment

The river takes its name from a Ngāi Tahu whakapapa that traces the genealogy of water. On that basis, Mata-au is seen as a descendent of the creation traditions.

The Mata-au was part of a mahinga kai trail that led inland and was used by Ōtākou hapū The river was used for the transportation of pounamu from inland areas down to the settlements on the coast. There were numerous tauranga waka along the river, as well as areas known for camping overnight and gathering kai.

The Mata-au is where Ngāi Tahu's leader, Te Hautapunui o Tu, established the boundary line between Ngāi Tahu and Ngāti Mamoe. However, eventually unions between the Iwi overcame these boundaries.

urupā and battle grounds are located along the river. The battleground known as Te Kauae Whakatoro (downstream of Tuapeka) recalls the history of a confrontation between Ngāti Māmoe and Ngāi Tahu that led to the armistice established by Te Hautapunui o Tu.

Of significant cultural importance are the three large lakes at the headwaters of the Mata-au: Lake Wakātipu, Lake Wānaka and Lake Hāwea. The landscape and the lakes and their breathtaking beauty are considered Taonga to Ngāi Tahu.

Issues that Ngāi Tahu ki Murihiku raise include:

Water quality

- Impacts on water quality from land use intensification
- Mahinga kai and biodiversity
- Wāhi tapu and protection of culturally significant sites in the catchment
- Dams and diversions
- Dams on the river for power generation (e.g. Roxburgh Dam, Clyde Dam) impacts on river health and disruption of continuity of flow ('Ki Uta ki Tai')
- Impacts of hydro infrastructure on fish passage
- Build up of gravels above the dam
- Protection of natural variability and character of flow, and the habitats created by such flow
- Flooding
- Gravel extraction especially in lower catchment areas have a cumulative effect

Waituna Catchment

The Waituna catchment is a small, coastal catchment located east of Invercargill. The catchment begins near the western extent of Tramway Road West. From here, it extends and expands southward across lowland plains, incorporating districts of Waituna, Oteramika, Mokotua and Kapuka South.

The Waituna Lagoon was originally opened for gold dredging in the 1890s and then to assist with land drainage. Timber milling operations in the area, followed by one of the greatest recorded fires in Southland in 1907, drastically altered the surrounding lands. Cleared lands subsequently became developed for dairy, beef cattle and sheep farming endeavours. Creeks in the Waituna catchment underwent significant straightening works from the 1950s and are now channelled streams with uniform bank margins. Further drainage and land development took place until 1971, when the Waituna Lagoon and neighbouring wetland areas were reserved for wetland management purposes. In 1976, the Waituna Lagoon and surrounding wetland was included in the area designated as being of international significance under the RAMSAR convention, and was also classified as a scientific reserve in 1983. The scientific status meant iwi were no longer able to harvest mahinga kai from the area, although dispensation was given to allow people to shoot ducks and fish for trout.

- Water quality
- Impacts on water quality from surrounding land use intensification
- Biodiversity
- Wāhi tapu and protection of culturally significant sites in the catchment