TĀNE MAHUTA



5.5 TĀNE MAHUTA

Tāne Mahuta is the atua of the forests and birds, and the son of Ranginui and Papatūānuku. It is Tāne that broke the tight embrace of his parents, forcing Rangi high into the heavens and leaving Papatūānuku on earth to care for their children.

This section addresses issues of significance pertaining to indigenous biodiversity and mahinga kai; the flora and fauna that make up the domain of Tāne. General issues and policy in this section sit alongside local issues described in Part 6 of this IMP.

Ngāi Tahu has a particular interest in indigenous biodiversity, both for its inherent value on the landscape and the ecosystem services it provides, and with regard to mahinga kai. Indigenous flora and fauna has sustained tāngata whenua for hundreds of years, providing food, fibre, building materials, fuel, medicine and other necessities. The relationship between tāngata whenua and indigenous biodiversity has evolved over centuries of close interaction and is an important part of Ngāi Tahu culture and identity.

The protection and enhancement of indigenous biodiversity and mahinga kai underpins many of the issues and policies in this IMP.

"For me, the protection and enhancement of mahinga kai and the ability to continue practices that we have used for hundreds of years is the most important issue that this IMP needs to address" Rei Simon, Wairewa Rūnanga.

Ngā Paetae Objectives

- Regional policy, planning and decision making in the takiwā reflects the particular interest of Ngāi Tahu in indigenous biodiversity protection, and the importance of mahinga kai to Ngāi Tahu culture and traditions.
- (2) The customary right of Ngãi Tahu to engage in mahinga kai activity is recognised, protected and enhanced, as guaranteed by Article 2 of Te Tiriti o Waitangi, and the NTCSA 1998.
- (3) The presence of indigenous biodiversity on the Canterbury landscape is enhanced, both in rural and urban environments.
- (4) The taonga value of indigenous ecosystems as natural capital and provider of essential ecosystem services is increasingly valued in the community.
- (5) Customary use, and therefore mahinga kai, is given effect to as a first order priority for freshwater management in the takiwā.
- (6) Traditional and contemporary mahinga kai sites and species are protected and restored.
- (7) Existing areas of indigenous vegetation are protected, and degraded areas are restored.
- (8) The establishment and spread of invasive pest and weed species is progressively and effectively controlled.
- (9) The protection and enhancement of indigenous biodiversity and mahinga kai occurs through a shared, coordinated effort between tangata whenua, local authorities, conservation groups and communities.

NGĀ TAKE – ISSUES OF SIGNIFICANCE

TÂNE MAHUTA: ISSUES OF SIGNIFICANCE

Issue TM1: Mahinga kai	Loss of mahinga kai areas and opportunities in the takiwā.
Issue TM2: Indigenous biodiversity	The widespread loss of indigenous biodiversity has significant adverse effects on the relationship of Ngāi Tahu with ancestral land, water and sites, and the health of land, water and communities.
Issue TM3: Restoration of indigenous biodiversity	Tângata whenua have a particular interest in the restoration of indigenous biodiversity.
Issue TM4: Weed and pest control	Weed and pest control is critical to the protection and restoration of indigenous biodiversity.
Issue TM5: Use of 1080	Ngāi Tahu continue to have significant reservations about the use of 1080.
Issue TM6: Commercial use of indigenous flora and fauna	Current laws and policy fail to protect the kaitiaki relationship of tāngata whenua with indigenous flora and fauna with regard to the commercial use of indigenous species.

MAHINGA KAI

Issue TM1: Loss of mahinga kai areas and opportunities in the takiwā as a result of:

- (a) Drainage of wetlands, lagoons and waipuna;
- (b) Widespread loss of indigenous ecosystems, habitats and species;
- (c) Poor water quality and quantity;
- (d) Diversion and abstraction of flow from waterways, and dewatering of customary fishing sites;
- Loss of or poor access to traditional mahinga kai areas;
- (f) Loss of physical connections between waterways and waterbodies;
- (g) Acclimatisation (adverse effects on native species as a result of introduced species); and
- (h) Infrastructure barriers to fish passage.

Ngā Kaupapa / Policy

- TM1.1 Ngāi Tahu whānui, both current and future generations, must be able to access, use and protect mahinga kai resources, as guaranteed by Te Tiriti o Waitangi.
- TM1.2 To advocate that the protection and restoration of traditional and contemporary mahinga kai sites and species is recognised and provided for as a matter of national importance under the RMA 1991.

- TM1.3 To progressively enhance and restore mahinga kai resources and sites and the customary use traditions associated with such resources, by:
 - (a) Integrating mahinga kai objectives and policy into regional planning and conservation management documents;
 - (b) Continuing to develop Ngāi Tahu led restoration projects;
 - (c) Creating Mahinga Kai Cultural Parks (see Box -Mahinga Kai Cultural Parks);
 - (d) Organising wānanga, to teach our tamariki about our mahinga kai traditions; and
 - (e) Investigating mahinga kai opportunities for existing protected areas, proposed restoration projects and open place/reserve settings.

Ki Uta Ki Tai

- TM1.4 To promote the principle of Ki Uta Ki Tai as a culturally appropriate approach to mahinga kai enhancement, restoration and management, in particular:
 - (a) Management of whole ecosystems and landscapes, in addition to single species; and
 - (b) The establishment, protection and enhancement of biodiversity corridors to connect species and habitats.

Freshwater management

- TM1.5 To require that freshwater management recognises and provides for mahinga kai, by:
 - (a) Customary use as a first order priority;

- (b) Restoring mahinga kai values that were historically associated with waterways, rather than seeking to maintain the existing (degraded) mahinga kai value of a waterway; and
- (c) Protecting indigenous fish recruitment and escapement by ensuring that waterways flow
 Ki Uta Ki Tai and there is sufficient flow to maintain an open river mouth.

Mahinga kai habitat

TM1.6 To continue to advocate for the protection of indigenous fish species over and above the protection of habitat for salmon and trout. The protection of significant habitats of indigenous fauna is a matter of national importance (RMA s.6).

Remnant areas

- TM1.7 To require that district and regional plans include policy and rules to protect, enhance and extend existing remnant wetlands, waipuna, riparian margins and native forest remnants in the takiwā given the importance of these ecosystems as mahinga kai habitat.
- TM1.8 To require that landowners and commercial land users protect remnant areas of indigenous biodiversity.

He Kupu Whakamāhukihuki / Explanation

Mahinga kai is the customary gathering of food and natural materials and the places where those resources are gathered (Section 167 of the NTCSA 1998). Customary use is the ongoing access to, and sustainable use of mahinga kai resources.

The ability of Ngāi Tahu whānui, current and future generations, to access, use and protect mahinga kai resources, and the history and traditions that are associated with those resources, is an issue of immense significance to tāngata whenua in Canterbury. Following European settlement, the drainage of swamps and wetlands, the felling of bush, the conversion of land to agricultural use, and the introduction of acclimatised species had a devastating effect on mahinga kai resources and sites, and the physical loss of land and access to mahinga kai sites had an equally devastating effect on the ability of tāngata whenua to provide for their own sustenance.

The loss of mahinga kai was the basis for the majority of grievances in the Canterbury region during Te Kereme (the Ngāi Tahu Claim): "The majority of grievances arising in the Canterbury region relate to the loss of the tribe's mahinga kai. It is a loss that cannot be easily documented; the effects of drainage and pollution do not occur overnight. Yet in 1988, when these complaints were expressed to the Tribunal, the devastation of Ngāi Tahu's highly prized taonga was readily apparent to all. The evidence lies in the dried-up lagoons, the poisoned lakes and rivers, the used-up fisheries. Members of Ngāi Tahu can no longer practice a way of life that they used to practice even 20 years ago. Much of the damage, as the history behind the grievances will relate, occurred many years ago. In almost every instance the interests of settlement were placed firmly above those of Ngāi Tahu."¹

Mahinga kai continues to be a cornerstone of Ngāi Tahu cultural well being. Participating in mahinga kai traditions is an important expression of cultural identity, and a means of passing values and knowledge on to current and future generations (see Box - *Sustaining mahinga kai traditions*). The Ngāi Tahu commitment to mahinga kai and customary use implies sustainable use and the need to manage, protect and restore species, habitats and ecosystems to enable such use to occur. Increased abundance of, access to, and use of mahinga kai is a key outcome identified in Ngāi Tahu 2025, as is the need to restore waterways to the point where they support healthy populations of mahinga kai species. Mahinga kai is an important kaupapa in all of the catchment based sections in Part 6 of this IMP.

Cross-reference:

- » Issue TM2: Indigenous Biodiversity
- » General policies on water quality and quantity (Section 5.3 Issues WM6 and WM8)
- » Mahinga kai issues in the catchment sections of Part 6

Sustaining mahinga kai traditions

Ngāi Tahu has begun a cultural renaissance to recognise and replenish its traditions, culture and relationships. It is vital to the future of Ngāi Tahu to ensure that sufficient natural resources continue to be available to provide places and experiences for young Ngāi Tahu to practice the activities of their tūpuna, learn the skills used to manage the environment, know their cultural values, and take pride in the knowledge that their elders have retained to pass along to them.

Source: Statement of Evidence of Te Marino Lenihan; for an application for a WCO on the Hurunui River and Lake Sumner (Hoka Kura) by the NZ and North Canterbury Fish and Game Councils and the NZ Recreational Canoeing Association.

Mahinga Kai Cultural Parks

Mahinga Kai Cultural Park is a concept identified in Ngāi Tahu 2025 to describe a land or marine based natural area managed and/or owned by Ngāi Tahu for the purposes of mahinga kai.

Mahinga Kai Cultural Parks:

- Provide a framework for protecting, enhancing and managing culturally significant sites in the contemporary world in line with our values;
- Are a way of guaranteeing access to mahinga kai as well as protecting, enhancing and managing mahinga kai for the benefit of this and future generations - mõ tātou, ā, mõ kā uri ā muri ake nei;
- Can provide us with a way to continue the work begun by our tupuna to provide for the ongoing protection and use of our mahinga kai;
- Build on the tools developed under our Settlement to further restore rangatiratanga and mana over mahinga kai species and sites;
- Can assist in developing tools for the management of major land based mahinga kai that are otherwise currently out of reach;
- Provide opportunities for Ngāi Tahu Whānui to advocate for the continued protection of our mahinga kai while balancing this with the principles of sustainable use and sustainable management, offering an important and sound alternative to current conservation (or preservation) practices; and
- Can help us address major environmental issues facing mahinga kai through hands-on management that encourages our people to reconnect with their landscape & potentially provide income & employment.

Source: Te Rūnanga o Ngāi Tahu.

INDIGENOUS BIODIVERSITY

Issue TM2: The widespread loss of indigenous biodiversity has significant effects on:

- (a) The relationship of Ngāi Tahu and their culture and traditions with ancestral lands, water and sites;
- (b) Mahinga kai values (see Issue TM1); and
- (c) The health of land, water and communities.

Ngā Kaupapa / Policy

Ngāi Tahu interests in biodiversity

- TM2.1 To require that local authorities and central government actively recognise and provide for the relationship of Ngāi Tahu with indigenous biodiversity and ecosystems, and interests in biodiversity protection, management and restoration, including but not limited to:
 - (a) Importance of indigenous biodiversity to tāngata whenua, particularly with regard to mahinga kai, taonga species, customary use and valuable ecosystem services;
 - (b) Recognition that special features of indigenous biodiversity (specific areas or species) have significant cultural heritage value for Ngāi Tahu;
 - (c) Connection between the protection and restoration of indigenous biodiversity and cultural well-being;
 - (d) Role of mātauranga Ngāi Tahu in biodiversity management; and
 - (e) Role of Ngāi Tahu led projects to restoring indigenous biodiversity (e.g. Mahinga Kai Enhancement Fund; Kaupapa Kēreru).
- TM2.2 To recognise Te Tiriti o Waitangi as the basis for the relationship between central and local government and tāngata whenua with regard to managing indigenous biodiversity, as per the duty of active protection of Māori interests and the principle of partnership.
- TM2.3 To continue to work in partnership with the Department of Conservation, local authorities and the community to protect, enhance and restore indigenous biodiversity.

Significance

TM2.4 To require that criteria for assessing the significance of ecosystems and areas of indigenous biodiversity recognise and provide for ecosystems, species and areas that are significant for cultural reasons.

Protection of remnant and restored areas

- TM2.5 To require that city, district and regional plans include specific policy and rules to protect, enhance and extend existing remnant and restored areas of indigenous biodiversity in the takiwā.
- TM2.6 To showcase existing remnant and restored areas as examples of how future management can improve the cultural health of the takiwā.
- TM2.7 To continue to support those groups and landowners that that are working to maintain, restore and enhance the indigenous biodiversity, and to advocate for projects of interest and importance to Ngāi Tahu.

Integrating indigenous biodiversity into the landscape

- TM2.8 To require the integration of robust biodiversity objectives in urban, rural land use and planning, including but not limited to:
 - (a) Indigenous species in shelter belts on farms;
 - (b) Use of indigenous plantings as buffers around activities such as silage pits, effluent ponds, oxidation ponds, and industrial sites;
 - (c) Use of indigenous species as street trees in residential developments, and in parks and reserves and other open space; and
 - (d) Establishment of planted indigenous riparian margins along waterways.

Biodiversity corridors

TM2.9 To advocate for the establishment of biodiversity corridors in the region, Ki Uta Ki Tai, as means of connecting areas and sites of high indigenous biodiversity value.

Ecosystem services

- TM2.10 To require that indigenous biodiversity is recognised and provided for as the natural capital of Papatūānuku, providing essential and invaluable ecosystem services.
- TM2.11 To work with the wider community to increase community understandings of indigenous biodiversity and the ecosystem services it provides.

He Kupu Whakamāhukihuki / Explanation

Indigenous biodiversity, and the landscapes and ecosystems that support it, is a fundamental part of the culture, identity and heritage of Ngāi Tahu, particularly with regard to mahinga kai and the connection between people and place through resource use (see Issue TM1).

Ngā Pākihi Whakatekateka o Waitaha and Te Pātaka o Rākaihautū have experienced significant land use change and resultant habitat and biodiversity loss over the last century and a half (see Box - *Native forest cover change -Te Pātaka o Rākaihautū*), and this has had a marked effect on Ngāi Tahu mahinga kai values. The degradation and loss of indigenous species and diversity is one of the major factors affecting the poor cultural health of many sites and waterways. For example, a cultural health assessment for Ihutai and its catchment found that 70% of all sites surveyed had less than 15% of the total vegetation cover in native vegetation, and no site had greater than 40% native vegetation dominance (see Part 6, Section 6.5 Ihutai).

Restoring indigenous biodiversity values is one of the most important challenges for the future management in the takiwā. A healthy economy relies on a healthy environment. Indigenous biodiversity, along with air, water and soil, are taonga; they are the region's natural capital, providing a suite of essential ecosystem services (see Box - *Ecosystem services*). Although these services are often taken for granted, they have immense value to cultural, social and economic well being. A major concern for tāngata whenua is that urban and township planning continues to promote, and often prioritise, the planting of exotic species in residential land developments, along waterways and in reserves and open space.

The Treaty of Waitangi provides the basis for the relationship between central and local government and iwi/hapū in managing indigenous biodiversity, as per the duty of active protection of Māori interests and the principle of partnership. The *Christchurch City Council Biodiversity Strategy 2008-2035* (for Ōtautahi and Te Pātaka o Rākaihautū) reflects these obligations, through the provision a vision, goals and objectives for the protection and enhancement of indigenous biodiversity in the region that explicitly recognise the relationship of Ngāi Tahu to biodiversity and the need for a partnership approach to achieve biodiversity outcomes.

Cross reference:

- » Issue TM1: Mahinga kai
- » Issue TM3: Restoration of indigenous biodiversity
- » General policy on wetlands, waipuna and riparian margins (Section 5.3, Issue WM13)

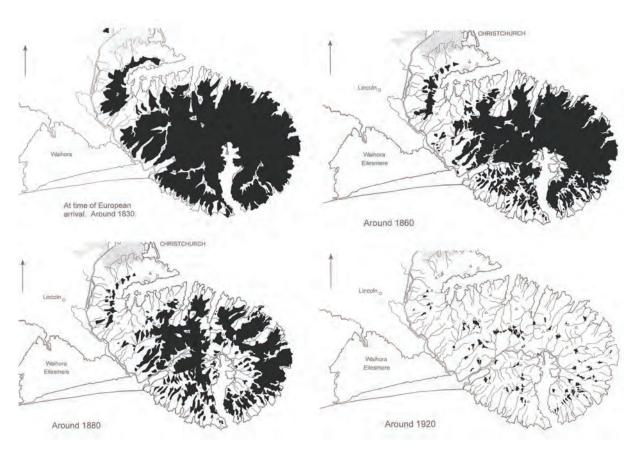
Ecosystem Services

Indigenous biodiversity provides a variety of often unrecognised ecosystem services. These services, which can be provided directly or indirectly, include:

- Regulation of atmospheric carbon levels and temperature, including sequestration of atmospheric carbon by growing forests;
- > The retention of soil by catchment vegetation, thereby reducing erosion and downstream sedimentation;
- Catchment vegetation and wetland moderation of run-off peaks (potentially flooding) and the provision of more consistent water flows in dry conditions;
- Wetland sediment trapping;
- > Nutrient filtering by riparian and wetland vegetation to improve downstream water quality; and
- > Waste decomposition and nutrient recycling.

Source: Planning for indigenous biodiversity. Quality planning: the RMA resource. Ministry for the Environment.

Native forest cover change – Te Pātaka o Rākaihautū



Source: Banks Peninsula Landscape Study. 2007 (Boffa Miskell).

RESTORATION OF INDIGENOUS BIODIVERSITY

Issue TM3: Tāngata whenua have a particular interest in the restoration of indigenous biodiversity.

Ngā Kaupapa / Policy

- TM3.1 To approach the restoration of indigenous biodiversity in the takiwā based on the following principles:
 - (a) Restoration of indigenous biodiversity is about restoring original and natural landscapes, and therefore the mauri of the land; and
 - (b) Restoration of indigenous biodiversity is about restoring the relationship of Ngāi Tahu to important places and resources; including planning for customary use.
- TM3.2 To advocate for an approach to restoration based on 'working with the land rather than against it', including but not limited to:
 - (a) Establishment of long term, intergenerational vision and objectives (50 and 100 years ahead); and
 - (b) Use of natural succession and staged re-planting rather than spraying and burning (e.g. natural succession of indigenous species into areas of gorse and broom; staged underplanting of natives into wetland and lagoon areas full of willow).
- TM3.3 To promote the value of Ngāi Tahu knowledge, tools and tikanga in restoration planning and projects, in particular:
 - (a) The establishment of long term, achievable restoration goals (tāngata whenua are not going anywhere!);
 - (b) Provision of information on the flora and fauna present in pre-European times, based on oral tradition and historical maps; and
 - (c) Use of tools such as State of the Takiwā to provide assessments of current and desired states of cultural health of an area and cultural assessments of restoration requirements and risks.
- TM3.4 To incorporate, where appropriate, mahinga kai objectives into restoration project planning and objectives.
- TM3.5 To require that seeds and plants for restoration projects are appropriate to the area, and as much as possible locally sourced.

- TM3.6 To support local and regional restoration groups and efforts, including but not limited to:
 - (a) Living Streams (community based stream enhancement, Environment Canterbury); and
 - (b) Te Ara Kākāriki Greenway Canterbury (development of an indigenous wildlife corridor across the Ngā Pākihi Whakatekateka o Waitaha).

He Kupu Whakamāhukihuki / Explanation

The restoration of indigenous biodiversity is critical to achieving Ngāi Tahu objectives to increase the abundance, access to and use of mahinga kai. The importance of indigenous biodiversity to mahinga kai is reflected in tāngata whenua perspectives on restoration: that restoration is about restoring the mauri of land and places, and about restoring the relationship of Ngāi Tahu to these places.

Ngāi Tahu have a unique and tested set of tools, practices and knowledge that can provide a valuable basis for restoration projects. Oral tradition and tribal and historical records provide a reliable and accurate source of information to construct a picture of the pre-European settlement landscape and the species that existed in this landscape (e.g. 1880 Taiaroa Maps held by Ngāi Tahu). Tools such as State of the Takiwā provide contemporary assessments of current and desired states of cultural health of an area and can assist with developing restoration goals and objectives.

WEED AND PEST CONTROL

Issue TM4: Weed and pest eradication is critical to the protection and restoration of indigenous biodiversity.

Ngā Kaupapa / Policy

- TM4.1 To require that the interest and relationship of Ngāi Tahu with indigenous biodiversity and mahinga kai is recognised and provided for in pest management strategies, by:
 - (a) Ensuring tangata whenua involvement in setting priorities and designing operations.
- TM4.2 To address weed and pest control strategies and operations based on the following principles, consistent with the protection of Ngāi Tahu values:
 - (a) Articulation of clear strategies of eradication, as opposed to control or management;
 - (b) Use of a range of tools and methods, rather than reliance on a 'silver bullet";

- (c) Working across agencies to align and coordinate efforts to maximise success;
- (d) Minimise the use of hazardous substances, and give preference to natural solutions (trapping possums; establishment of riparian margins for shading aquatic weed);
- (e) Use of timing and techniques that avoid or reduce the impact of operations on mahinga kai and other cultural values;
- (f) Cultural, environmental and community costs must be considered equally alongside economic cost when designing pest control operations; and
- (g) Where the effects or risk associated with a specific method of pest control are unknown or unclear then the precautionary principle is the best approach. This means that an unknown effect does not mean no effect, and that protecting public health before certainty of effect is proven must be the basis of decision making.
- TM4.3 To require that local authorities address the effects of invasive weeds, land and aquatic, on natural areas, indigenous biodiversity and mahinga kai by:
 - (a) Developing lists of what species to avoid in residential gardens due to their potential to spread off site, including but not limited to buddleja and lupin;
 - (b) Developing lists of noxious weeds/plant pests; and
 - (c) Regular monitoring of parks and open space, and waterways for invasions of plant pests.
- TM4.4 To require that council weed control programmes avoid effects on mahinga kai species or areas of cultural significance by:
 - (a) Avoiding certain areas, as identified by tāngata whenua;
 - (b) Use of alternative methods in particular locations, as requested by tāngata whenua; and
 - (c) Aligning the timing of operations with tāngata whenua advice.
- TM4.5 To support private landowners and conservation groups that are undertaking weed and pest control programmes.

He Kupu Whakamāhukihuki / Explanation

Weed and pest eradication is critical to achieving the mahinga kai and biodiversity objectives identified in this plan. Key concerns are the invasion of braided riverbeds by gorse and broom, the spread of willow along waterways, wilding trees and the effects of possums on native forests. Weed and pest invasions can significantly compromise restoration efforts.

Local weed and pest issues in specific catchments are addressed in Part 6 of this plan. Wilding trees are addressed in Section 5.4 (Issue P15). The effects of invasive weeds on the beds and margins of braided rivers is addressed in Section 5.3 (Issue WM15). The use of 1080 for pest control is addressed in Issue TM5 below.

More detail on Ngāi Tahu perspectives on the use of hazardous substances and new organisms for weed and pest control can be found in the *Te Rūnanga o Ngāi Tahu Hazardous Substances and New Organisms Policy Statement* 2008. The policy statement is a resource for cultural risk assessment and decision making on hazardous substances and new organisms based on Ngāi Tahu values., and is the default position for those issues not addressed in this IMP (e.g. biocontrol).

Cross reference:

- » General policy on drain management (Section 5.3 Issue WM14).
- » General policy on activities in the beds and margins of waterways (Section 5.3 Issue WM12).

Information resource:

» Te Rūnanga o Ngāi Tahu Hazardous Substances and New Organisms Policy Statement 2008 Ngāi Tahu Risk Assessment: For a proposal by the Canterbury Broom Group (CBG) to release three new organisms for the biological control of broom (2005). Prepared by D. Jolly and Te Rūnanga o Ngāi Tahu for the Canterbury Broom Group and the Environmental Risk Management Authority (ERMA New Zealand).

PEST CONTROL USING 1080

Issue TM5: Ngāi Tahu continue to have significant reservations about the use of 1080, in particular:

- (a) Aerial application methods;
- Potential effects on waterways, particularly small and ephemeral streams;
- (c) Tāngata whenua involvement in setting priorities and designing operations;
- (d) Effective and appropriate monitoring of non-target impacts, and success rates; and
- (e) Concern that 1080 will be used indefinitely in the region.

Ngā Kaupapa / Policy

- TM5.1 Papatipu Rūnanga will assess proposals for the use of 1080 as pest control on a case by case basis, allowing for:
 - (a) Different perspectives between hapū in the takiwā; and
 - (b) Different local scenarios, including timing, location and method of use, and provisions to avoid or mitigate cultural issues.
- TM5.2 To require early consultation, with good quality, culturally relevant information for any proposal to use 1080 in the takiwā.
- TM5.3 Papatipu Rūnanga will use the following framework to assess the degree of cultural acceptability or unacceptability of 1080 use:
 - (a) The use of 1080 for pest control is likely be opposed where:
 - (i) It involves aerial application in areas where access is not a significant issue;
 - (ii) There are culturally significant sites, including mahinga kai sites and resources;
 - (iii) There is a cultural risk to water, as identified by tāngata whenua, including small and ephemeral streams or degraded waterways;
 - (iv) There is no clear plan for monitoring non target impacts and success rates; and
 - (v) Iwi/hapū have not been involved in setting priorities or designing operations.
 - (b) The use of 1080 may be supported where tangata whenua can determine that:
 - (i) The timing and design of operations reflect local conditions;
 - (ii) The toxin will be used alongside other methods such as trapping and hunting, to maximise success;

- (iii) The potential non target impacts are clearly identified, including those identified by tāngata whenua;
- (iv) Tāngata whenua are involved in setting priorities and designing operations, including monitoring operations; and
- (v) There is a tangible and significant environmental or cultural benefit.

Alternatives

TM5.4 To continue to advocate for research and investigation into alternatives to the use of 1080.

He Kupu Whakamāhukihuki / Explanation

Ngāi Tahu has worked with the Animal Health Board, Department of Conservation, Land Information New Zealand, Environmental Risk Management Authority (now the Environmental Protection Agency), and local government on issues associated the use of 1080 for pest control since 2001. While there is no singular Ngāi Tahu view on the use 1080, there has been a shift from opposing 1080 to working proactively with operators and government to address tāngata whenua concerns about the way 1080 is managed and used, and who is involved in the process, particularly with regard to addressing cultural risks to water and non target species.

General policy in this IMP does not support or oppose the use of 1080. Rather, the focus is on providing guidance on cultural issues of concern (see Box - *Examples of cultural issues associated with 1080 use*), and enabling the different hapū to consider proposals based on local conditions and the specific detail of proposed operations.

"The mainstream definition of waterways means that small waterways and ephemeral streams get hit by 1080. Despite assurances that it is water soluble, we cannot be certain that there are no effects, particularly because the resilience of many of our waterways is already compromised." Terrianna Smith, Te Taumutu Rūnanga.

"If we find that 1080 has killed 5 possums, but also 5 kererū, does this justify the use of 1080?" Uncle Waitai Tikao, Ōnuku Rūnanga.

Information resource:

- » Te Rūnanga o Ngāi Tahu Hazardous Substances and New Organisms Policy Statement 2008.
- » Cultural Impact Assessment for a global consent application by Environment Canterbury to use 1080 in the Canterbury region of the control of rabbits, possums and wallabies (2008). Prepared by D. Jolly for Environment Canterbury.

Examples of cultural issues associated with 1080 use

- Adverse effects on the mauri of a waterway if 1080 enters water. Such effects may be tangible (e.g. reducing water quality), or intangible (e.g. the relationship of tangata whenua with the waterway).
- Adverse effects on mahinga kai, and on human health, if 1080 is consumed directly or indirectly (via carcasses) by tuna.
- Adverse effects on mahinga kai, and on human health, if there is uptake of 1080 via soil or water by culturally important plants, including mahinga kai, rongoā and plants used for weaving. Even if plants do not absorb 1080, it is unlikely that tāngata whenua would feel comfortable gathering cultural materials in an area where 1080 is used.
- Potential effects on wāhi tapu values, including urupā.
 In some instances, it may be culturally unacceptable to use 1080 in locations with these values.
- Cumulative effects on soil, water and mahinga kai resources, as a result of the long term use of 1080.

Source: CIA for a global consent application by Environment Canterbury to use 1080 in the Canterbury region (2008).

COMMERCIAL USE OF INDIGENOUS FLORA AND FAUNA

Issue TM6: Current laws and policy fail to recognise, provide for and protect the kaitiaki relationship of tāngata whenua with indigenous flora and fauna and mātauranga Māori with regard to the commercial use and development of indigenous species (e.g. bioprospecting, genetic modification and Intellectual Property Rights in genetic material).

Ngā Kaupapa / Policy

- TM6.1 The protection of taonga species (see Box *What are Taonga species?*) and mātauranga Ngāi Tahu from inappropriate commercial use and development is critical to the protection of Ngāi Tahu culture and identity.
- TM6.2 The Crown has a duty under the Te Tiriti o Waitangi to provide active protection of the kaitiaki relationship

of tāngata whenua with indigenous flora and fauna, and mātauranga Ngāi Tahu.

- TM6.3 To support the Waitangi Tribunal's findings on the WAI 262 claim (2011) that:
 - (a) Reforms to current laws and policies controlling research into, commercial use of and intellectual property in taonga species and traditional knowledge are required so that the interests of kaitiaki can be fairly and transparently provided for.
- TM6.4 Researchers and bioprospectors cannot use mātauranga Ngāi Tahu without consent of Ngāi Tahu.
- TM6.5 The use of taonga species or mātauranga for commercial gain must include benefits to iwi.
- TM6.6 To recognise the role of the Te Rūnanga o Ngāi Tahu Hazardous Substance and New Organism (HSNO) Committee to provide guidance from a Ngāi Tahu perspective on matters involving genetic modification, bioprospecting and new organisms.
- TM6.7 To recognise the Te Rūnanga o Ngāi Tahu Hazardous Substances and New Organisms Policy Statement 2008 as a resource for cultural risk assessment and decision making on genetic modification and new organisms.

He Kupu Whakamāhukihuki / Explanation

Tāngata Whenua have a longstanding relationship with indigenous flora and fauna, one that includes rights to access, protect, conserve, use and protect native species. The Treaty of Waitangi requires the active protection of the kaitiaki relationship of tāngata whenua with indigenous flora and fauna.

Many indigenous species are of increasing interest to scientists and researchers involved in bioprospecting, genetic modification, and intellectual property law, particularly patents and plant variety rights. However, the current legislative environment does little to recognise or support the relationship of tāngata whenua with indigenous flora and fauna, or to protect mātauranga Māori relating to specific species. The result is that individuals and organisations are largely able to conduct research, obtain Intellectual Property rights in, and commercialise, genetic and biological resources in taonga species, without informing kaitiaki or obtaining their consent.

These issues are addressed by the WAI 262 claim to the Waitangi Tribunal (sometimes known as the Native Flora and Fauna claim). WAI 262 addresses a range of issues on how New Zealand's law and policy affect Māori culture and identity, including the protection of taonga species and mātauranga Māori, intellectual property and the commercial use of the biological and genetic resources of indigenous flora and fauna.

The findings of the Tribunal are found in the report Ko Aotearoa tēnei: A Report into Claims Concerning New Zealand Law and Policy Affecting Māori Culture and Identity (2011). Importantly, the Tribunal recommended a number of specific legislative reforms so that the rights and interests of iwi and hapū can be fairly and transparently considered alongside other interests.

Information resource:

» Te Rūnanga o Ngāi Tahu Hazardous Substances and New Organisms Policy Statement 2008.

What are Taonga species?

'Taonga species' in this IMP refer to species of flora and fauna that are significant to the culture and identity of iwi or hapū - for example, because there is a body of inherited knowledge relating to them, they are related to the iwi or hapū by whakapapa, and the iwi or hapū is obliged to act as their kaitiaki.

This is the definition used by the Waitangi Tribunal in their report on the WAI 262 Claim - Ko Aotearoa tēnei: A Report into Claims Concerning New Zealand Law and Policy Affecting Māori Culture and Identity (2011).

This definition includes, but is not limited to, those species identified as Taonga species in the NTCSA 1998.

ENDNOTES

¹ Waitangi Tribunal, 1995. *Ngāi Tahu Ancillary Claims Report,* Chapter 2 (Canterbury Ancillary Claims).