

Mahaanui Kurataiao Ltd

# Rūnanga Position Statement for Huritini/Halswell Stormwater Management Plan

May 2021

“Ki te kore he māra tī o te tangata, he tangata mate tēnā”



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## Introduction

Ngāi Tahu have a historical relationship and pattern of use in the many catchments within Canterbury. The Crown formally recognised this significance recently with the enactment of the Te Rūnanga o Ngāi Tahu Act 1996 and the Ngāi Tahu Claims Settlement Act 1998. Te Ngāi Tūāhuriri Rūnanga are the kaitiaki Rūnanga for this area. They are responsible for assessing how any activity in their takiwā impacts upon their cultural values, beliefs and practices. Christchurch City Council (CCC) are expected to acknowledge the kaitiaki responsibilities of Te Ngāi Tūāhuriri Rūnanga when writing the Huritini/Halswell Stormwater Management Plan (HSMP).

Christchurch City Council (CCC) have commissioned this CIA to document the concerns of Te Ngāi Tūāhuriri Rūnanga have with respect to the proposed Ōpāwaho/ Heathcote Stormwater Management Plan (HSMP).

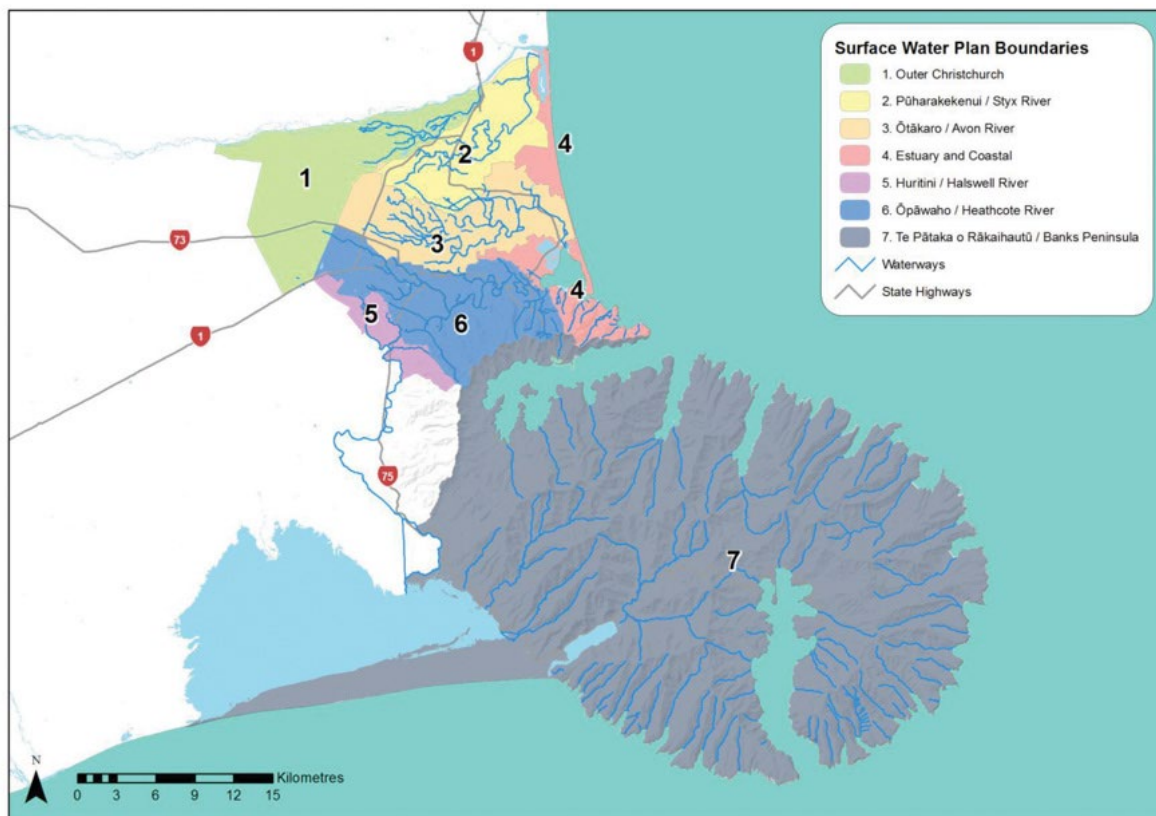
### 1.1 Project Objectives

The objectives of this report are:

- To provide information on the nature and extent of cultural interests, in the area with respect to the south eastern Christchurch area including Heathcote / Ōpāwaho Stormwater Management Plan (HSMP).
- To identify the impacts associated with the proposal that are of concern to Te Ngāi Tūāhuriri Rūnanga; and
- To identify mitigation for impacts or issues identified by Te Ngāi Tūāhuriri Rūnanga.

### 1.2 The areas considered in this report

The focus of this report is the Huritini/Halswell Catchment located in the south of Christchurch City (figure 1). However, we acknowledge that whanau value cultural landscapes ki uta, ki tai; from mountain to sea and therefore, take a holistic approach to catchment management.



**FIGURE 1: AREA COVERED BY THE COMPREHENSIVE STORMWATER NETWORK DISCHARGE CONSENT. OPAWAHO/HEATHCOTE CATCHMENT IS LABELLED 6 (ENVIRONMENT CANTERBURY, 2021)**

### 1.3 Limitation of this report

This CIA represents best endeavours by the Te Ngāi Tūāhuriri Runanga to identify cultural effects of concern. They reserve the right, however, to oppose the proposal or pursue avoidance or mitigation of any subsequent impacts that are identified as a result of further site visits or further discussions with Christchurch City Council.

### 1.4 Consultation with Te Ngāi Tūāhuriri Rūnanga

Te Rūnanga o Ngāi Tahu (TRONT) is the tribal representative body of Ngāi Tahu Whānui (the tribal collective) and is a body corporate duly established on 24 April 1996<sup>1</sup>. The Te Rūnanga

<sup>1</sup> Te Runanga o Ngai Tahu Act 1996, Section 6

o Ngāi Tahu Act 1996 (the Act) provides a detailed description of the takiwā (area) of Ngāi Tahu Whānui, which confirms that the proposal is within the rohe of Ngāi Tahu.<sup>2</sup>

The Act States:

- *Te Rūnanga o Ngāi Tahu shall be recognised for all purposes as the representative of Ngāi Tahu Whānui.*
- *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.*
- *Te Rūnanga o Ngāi Tahu in carrying out consultation under subsection 2 of this section shall seek the views of such papatipu Rūnanga 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 ...<sup>3</sup>*

The Act therefore confirms TRONT's status as the legal representative of the tangata whenua, and the right of the Papatipu Rūnanga to express their own views on this development. The First Schedule of the Act lists the eighteen Papatipu Rūnanga.

The Te Rūnanga o Ngāi Tahu (Declaration of Membership) Order 2001 is supplementary to the Act and sets out the Papatipu Rūnanga and their respective takiwā. Te Ngāi Tūāhuriri Rūnanga who is identified as a constituent Papatipu Rūnanga is therefore recognised by TRONT as the kaitiaki Rūnanga for the area affected by this proposal.

The location of the marae that is at the centre of each of the Rūnanga is shown in Figure 2.

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<sup>2</sup> Te Runanga o Ngai Tahu Act 1996, Section 5

<sup>3</sup> Te Runanga o Ngai Tahu Act 1996, Section 15(1) – 15(3)





## The Proposal

The Christchurch City Council as part of their consent application (CRC214226) to discharge water and contaminants to land or water through existing or future reticulated stormwater network must create stormwater management plans for the seven catchments including the Huritini/Halswell catchment (Figure 3). **The duration of the consent is 25 years.**

The stormwater discharge will occur in accordance with the stormwater management plans (SMP), which will set out environmental targets as well as specific objectives for each catchment. Currently, SMPs have been completed for the Avon, Styx and Halswell Catchments. For the Avon River SMP specifically a cultural impact assessment was carried out which made a range of recommendations. Some of which appear to have been implemented.

Alongside the Stormwater Management Plan the Christchurch City Council have proposed an Environmental Monitoring Programme to collect information to determine if the environmental targets are being met and the potential impacts of stormwater discharges. Within this environmental monitoring programme cultural monitoring (State of the Takiwā) has been proposed to be carried out in the future. This cultural monitoring programme has been proposed to occur every five years, **but has yet to commence.**

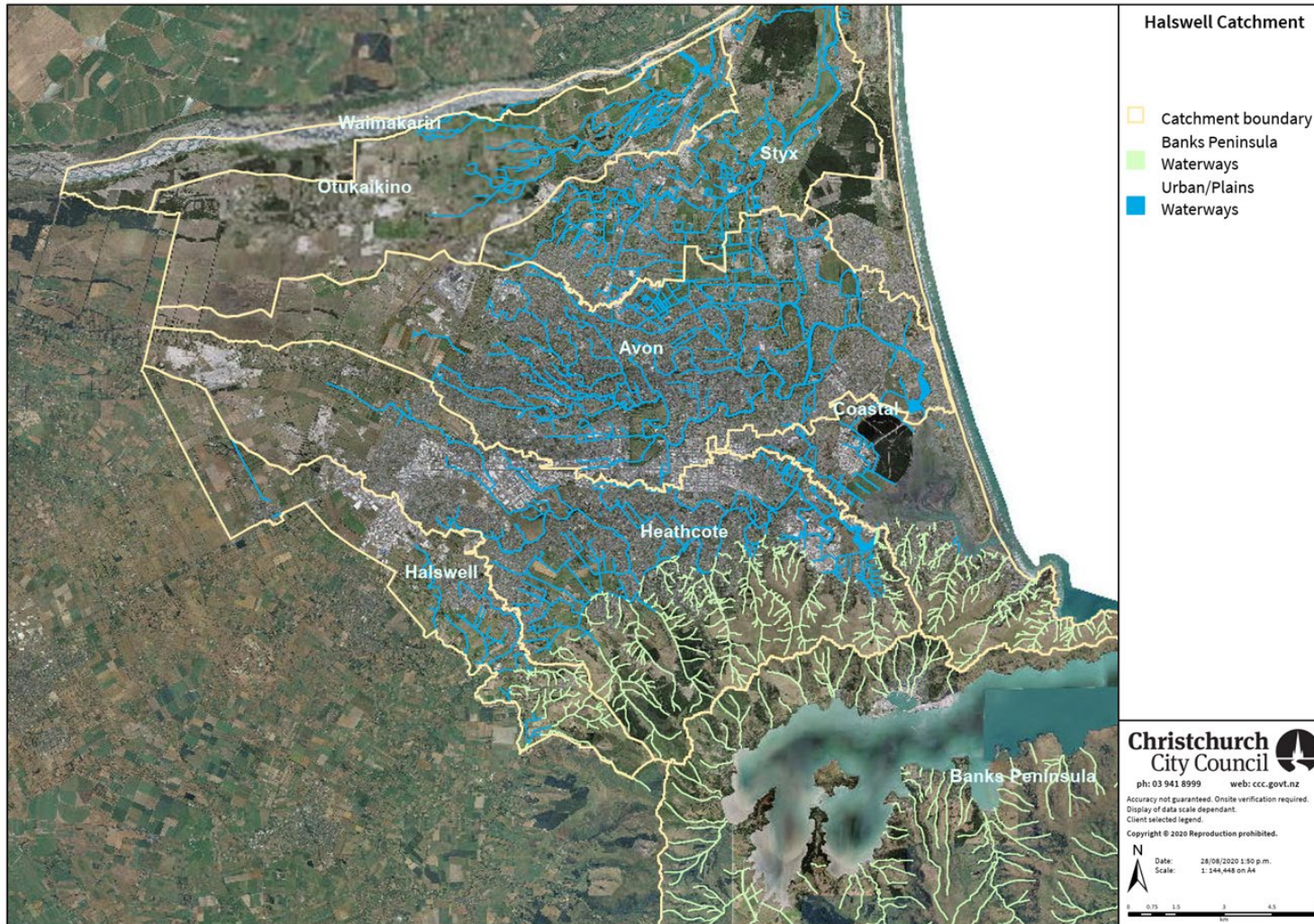


FIGURE 3: HURITINI CATCHMENT MAP

## 2.1 CRC214226 Consent conditions

### Stormwater management plan

The consent holder shall, in consultation with Papatipu Rūnanga and the Christchurch-West Melton and Banks Peninsula Zone Committees (or successor organisations), develop and update as necessary, SMPs to meet the Receiving Environment Targets set out in the conditions of the consent. The purpose of the SMPs shall be to provide:

- a. Specific guidelines for implementation of stormwater management within the catchment to achieve the following objectives:
  - i. Improve ecosystem health,
  - ii. Improve water quality,
  - iii. Maintain flood storage and flow capacity,
  - iv. Enhance mana whenua values;
- b. A description of statutory and non-statutory planning mechanisms to achieve compliance with the conditions of this consent including the Receiving Environment Targets. These mechanisms may include (but are not limited to):
  - i. Relevant objectives, policies, standards and rules in the Christchurch District Plan,
  - ii. Relevant bylaws,
  - iii. Relevant strategies, codes, standards and guidelines;
- c. Mitigation methods to achieve compliance with the conditions of this consent including the Receiving Environment Targets. These methods may include (but are not limited to):
  - i. Stormwater mitigation facilities and devices,
  - ii. Erosion and sediment control guidelines,
  - iii. Education, awareness or site management programmes,
  - iv. Source control systems,
  - v. Prioritising effective stormwater treatment in catchments that discharge in proximity to inanga spawning sites;
- d. Locations and identification of Christchurch City Council water quality and water quantity mitigation facilities and devise;
- e. Identification of areas marked for future development;
- f. Identification of areas subject to known flood hazards;

- g. An interpretation of environmental and cultural monitoring and how this information has been used to develop water quality mitigation methods and practices;
- h. Results from and interpretation of water quantity and quality modelling;
- i. A cultural impact assessment and summary of outcomes resulting from any collaboration with Papatipu Rūnanga on the SMP; and
- j. An assessment of the effectiveness of water quality or quantity mitigation methods established under previous SMPs and identification of any changes in methods or designs resulting for the assessment.

The Christchurch City council intends for the development of SMPs to be a collaborative process, allowing Papatipu Rūnanga to review and comment on draft SMPs. Once finalised they will prepare and submit the SMP, along with supporting technical reports and a cultural impact assessment, to the Canterbury Regional Council for certification. Any amendments to SMPs may not replace the previous version until the amendments have been certified by the RMA Compliance and Enforcement Manager of the Canterbury Regional Council.

The SMPs will be reviewed against the requirements of Condition 4 of the consent by the Christchurch City Council on a 10-yearly basis from the date of certification by the Canterbury Regional Council.

### Engagement with Papatipu Rūnanga

The consent holder shall engage with Papatipu Rūnanga:

- a. In the development and review of the SMPs required under Conditions 4 and 8 and the development of the Implementation Plan required under Condition 11 and 12 of the consent;
- b. At the concept design stage for the installation of stormwater treatment facilities and devices regarding wāhi tapu and taonga
- c. By providing quarterly reports to Mahaanui Kurataiao Ltd on stormwater developments, projects and monitoring under this resource consent;
- d. By the engagement required by Conditions 56 to 58 on responses to modelling;
- e. By providing the investigation report required by Condition 59 on responses to monitoring; and
- f. By holding an annual meeting with Mahaanui Kurataiao Ltd to discuss stormwater works under this resource consent, and Papatipu Runanga input predicted for the next 12-month period.

### Implementation programme and records

An Implementation Plan shall be prepared by the consent holder through engagement with Papatipu Rūnanga and made available to Canterbury Regional Council and Papatipu Rūnanga on request within 12 months of granting of this consent. This plan shall be reviewed by Christchurch City Council every 3 years, concurrent with the Christchurch City Council Long Term Plan.

The Implementation Plan shall include, but not be limited to:

- a. A list and map of proposed stormwater mitigation methods and devices,
- b. A programme of stormwater works for Christchurch City Council and anticipated private development,
- c. A plan for regulatory, investigative, educational and preventative activities or programmes relating to stormwater discharges, including activities undertaken under conditions 39 and 40 and schedules 3 and 4,
- d. Details of budgets for capital works or resourcing that is linked to the Christchurch City Council Long Term Plan.

### Environmental Monitoring and reporting

The Consent Holder shall implement the Environmental Monitoring Program (EMP) attached to this consent, with the purpose of monitoring whether the Receiving Environment Objectives and Attribute Target Levels are being met.

The Consent Holder may review and amend the EMP for the purposes of improved monitoring and/ or to better determine whether the Receiving Environment Objectives and Attribute Target Levels are being met.

The Attribute Target Levels in Schedule 7 for hardness modified copper, lead and zinc concentrations in Banks Peninsula surface water shall be calculated for each monitored waterway following the collection of one year of monitoring data (figure 4).

The Attribute Target Levels in Schedules 7 and 8 for the Waterway Cultural Health Index, Marine Cultural Health Index and State of Takiwā scores, as well as the associated mana whenua values monitoring sites and methodology in the EMP, shall be developed in collaboration with Papatipu Runanga. Updated information shall be incorporated into the certified EMP as an amendment, in accordance with Condition 50, within 24 months of the commencement of this resource consent. Once these scores, sites and monitoring methods are confirmed, monitoring of mana whenua values shall commence.

The water quantity/flood model(s) for the Pūharakekenui/Styx, Ōtākaro/Avon, Ōpāwaho/Heathcote and Huritini/Halswell Rivers shall be updated as necessary to reflect changes in development patterns or modelling parameters at least every 5 years following the commencement of this resource consent. The results of model updates and a description of how they demonstrate compliance with Schedule 10 shall be included in the annual report required under Condition 61 on a 5-yearly basis following commencement of this resource consent.

## 2.2 Environmental Monitoring Programme – Manawhenua

Cultural Monitoring under this consent shall be based on the methodology and sites of the State of the Takiwā reporting. The State of the Takiwā monitoring system was developed by Te Rūnanga o Ngāi Tahu to facilitate tangata whenua to gather, store, analyse and report on information relevant to the cultural health of waterways within their takiwā. State of the Takiwā reporting was conducted in 2007 and 2012 on the Te Ihutai catchment and therefore provide a baseline both pre- and post- the Christchurch 2011 earthquake.

Sites are to be sampled five-yearly in conjunction with surface water quality, instream sediment quality and aquatic ecology measurements. No sites have been selected for State of Takiwā monitoring.

Monitoring will include three State of the Takiwā monitoring methods<sup>4</sup>:

1. Takiwā general site assessment (waterway and costal sites)
2. Cultural Health Index (CHI) assessment waterway sites only
3. Marine Cultural Health Index (MCHI) assessment (costal sites only)

The Environmental monitoring program has suggested that there will be five sites in the Huritini catchment for State of the Takiwā monitoring, however these sites have yet to be selected and will be chosen in conjunction with rūnanga.

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<sup>4</sup> Tipa & Tierney, 2003; Pauling, 2004; Pauling et al 2007; Lang et al 2012; Schweikert et al 2012; McCarthy et al 2013

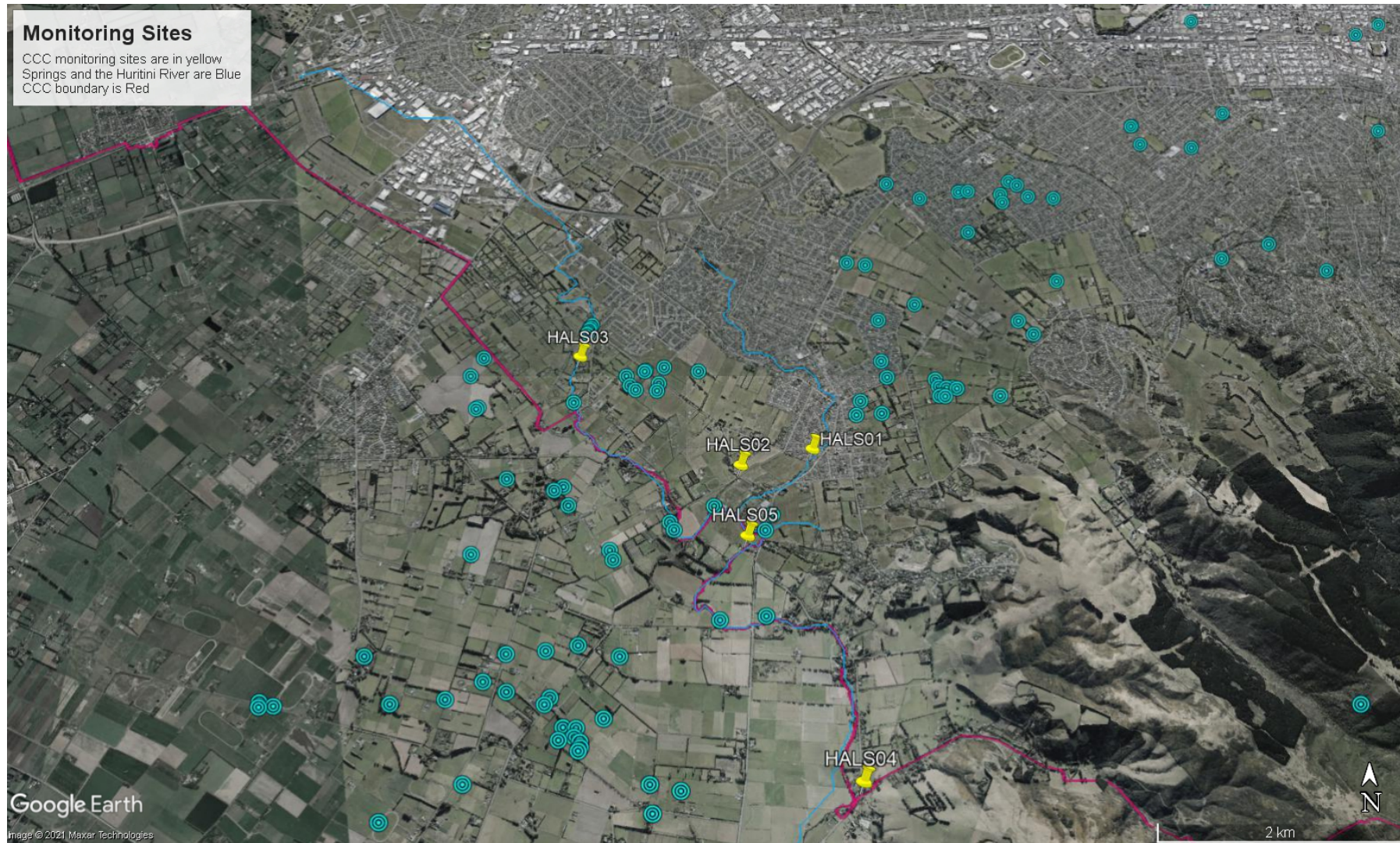


FIGURE 4: MAP SHOWING CCC MONITORING SITES



## 2.3 Huritini/Halswell river health 2020

The Huritini/Halswell catchment is highly modified with both urban expansion and historic industrial site practices impacting surface and groundwater. The catchment is also quite extensive and extends beyond CCC boundaries, with Te Waihora being the eventual receiving waterbody. While the CCC only administers the headwaters of the Huritini, the entire catchment – ki uta ki tai must be considered when contemplating mitigation strategies.

Fish surveys, macroinvertebrate community indices and macrophyte surveys have yet to be completed for this catchment.

The Waterway Health Report Card 2019 gave the Huritini catchment a D grade, with water quality being graded as poor, sediment quality was graded as very good, with little contaminants found in instream sediments. The QMCI value for the catchment indicated moderate pollution.

## 2.4 Huritini/Halswell surface water quality

Monthly sampling of surface water quality is conducted within the Huritini catchment by CCC and the results are captured in the Surface Water Quality Annual Report (2020). The catchment was given an overall poor score for water quality and was rated the worst out of all catchments analysed. The contaminants of greatest concern in the catchment were copper, nitrate, phosphorous and *E. coli*. Nottingham stream at Candys road was found to be the second worst site throughout all catchments and was identified as one of four top priority sites for remediation. The annual report also showed that while there have been minor improvements in the levels of some contaminants within this catchment, the overall health of the Huritini catchment has slightly decreased since 2019 and this is the first year that the catchment has been ranked last. While this decrease in water quality is non-statistically significant, any reduction in water quality or lack of improvement is of concern to kaitiaki.

The recommendations from the report include:

- investigations on how to reduce faecal contamination within the catchment from waterfowl,
- the development of the CCC Healthy Water Bodies Action Plan to achieve healthy water bodies city and Banks Peninsula wide, and
- dry weather discharge investigations to pinpoint pollution sources.

Mana whenua support these recommendations **in principle** and wish to be consulted in the development of these mitigations.

## 2.5 The stormwater system

The stormwater system for the Huritini catchment includes roadside channels, pipes, waterways and treatment facilities, typically detention basins. Street sumps and pipes discharge into the catchment’s waterways after attenuation and treatment, however older residential areas discharge straight into the waterways without treatment (e.g. Nottingham Stream). The industrial area east of Shands Rd discharges stormwater into the Halswell Junction Detention Basin and then into infiltration basins between Springs and Wilmers Roads for additional treatment (Figure 5).

Newer developments in the residential areas south-west of Halswell Junction Road discharge to Knight Stream via treatment basins and wetlands.

## 2.6 Proposed outcomes

The purpose of the Comprehensive Stormwater Network Discharge Consent is to drive planning and actions that will progressively improve the quality of stormwater discharges.

Actions the Council can take through the stormwater management plan must be accompanied by other actions if the Council’s Community Outcome (Healthy Environment) and the Mahaanui Iwi Management Plan objectives are to be realised. Further actions, by the Council and others, include:

- Raise awareness and educate citizens on how to stop contaminants at source from entering stormwater
- Eliminate or reduce contaminants at source (e.g. by substituting for contaminating building materials).
- Remove contaminants from stormwater before they enter natural water.
- Restore waterway corridors to a natural state.
- Restore and plant riparian margins.
- Improve instream habitat by sediment removal, riparian tree planting (for temperature control, bank stability and shelter).
- Improve biodiversity to improve food sources for instream life.
- Performance monitoring of treatment facilities.

| Activity | Motivation for the Activity |
|----------|-----------------------------|
|----------|-----------------------------|

|  |   |
|--|---|
| The Council regulating and acting under regulations to stop the discharge of contaminants  | As required by conditions of CRC214226 (CSNDC)  |
| The Council investigating new means of controlling contaminants at source (e.g. by materials substitution or innovative means of treatment). | As required by conditions of CRC214226 (CSNDC)  |
| The Council and others implementing new or improved contaminant mitigation practices   | Through the proposed Surface Water Improvement Plan 2021 (referred to in section 2.1) |
| The Council and others making progressive environmental improvements such as restoring waterways and their corridors to a natural state      | Community Outcome (Healthy Environment)   |
| Citizen-based awareness and advocacy for clean water and improved biodiversity.  | Kaitiakitanga   |
| Advocacy by Ngāi Tahu for the mana of water and waterways  | Kaitiakitanga. Kawanatanga. Mahaanui Iwi Management Plan                              |



FIGURE 5: STORMWATER NETWORK MAP

## The Statutory Context

### 3.1 Te Tiriti O Waitangi

In 1840, Te Tiriti o Waitangi was signed between the Chiefs of Aotearoa and Her Majesty the Queen of England, formalising an agreement to allow British subjects to settle in areas such as Te Waipounamu, under formal British colonial rule, and which guaranteed to Māori the protection of their taonga for so long as they wished. Such taonga included their waters<sup>5</sup>, land fisheries and mahinga kai.

Te Tiriti o Waitangi reaffirmed these rights thus:

Māori text:

*“Ko te Kuini o Ingarani ka whakarite ka whakaae ki nga Rangatira, ki nga Hapu, ki nga tangata katoa o Nu Tirani, te tino rangatiratanga o rātou whenua o rātou kainga me o rātou taonga katoa. Otiia ko nga Rangatira o te Whakaminenga me nga Rangatira katoa atu, ka tuku ki te Kuini te hokonga o era wāhi whenua e pai ai te tangata nona te whenua, ki te ritenga o te utu e whakarite ai e rātou ko te kai hoko e meatia nei i te Kuini hei kai hoko mona.”*

English Text:

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

The words “their lands and estates, forests, fisheries....” In Te Tiriti o Waitangi encapsulates the right to mahinga kai, to places where the resources are harvested, the activity and business

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<sup>5</sup> The Waitangi Tribunal has defined taonga value as including the value of the water itself, the resources living in the water and the resources sustained by the water.

of gathering kai and includes the type of resources that were caught or gathered. It was upheld by the Waitangi Tribunal that Māori fishing rights have endured to the present day.

### 3.2 National Policy Statement for Freshwater Management

The National Policy Statement for Freshwater Management (2020) requires that regional councils:

- Objective and Policy AA1 – include tangata whenua in engagement and discussion of Te Mana o te Wai;
- Policy CA2 – follow a process for developing freshwater objectives that includes discussion with tangata whenua;
- Policy CB1(aa)(v) – establish methods for monitoring that incorporate Mātauranga Māori;
- Objective and Policy D1 – provide for the involvement of iwi and hapū and ensure tangata whenua values and interests are identified and reflected in the management of fresh water.

### 3.3 Māori Principles for Sustainable Management

Traditional management was founded on a set of cultural values that arose from the Ngāi Tahu worldview. These cultural values include a set of principles upon which the relationship between people and the environment must be based in order to sustain the balance between the needs and demands of humans and the health of the natural world that sustains them. The following principles are significant elements of the Ngāi Tahu worldview which, when understood together, approximate the non-Māori concept of “sustainable management”.

**Rangatiratanga:** Rangatiratanga denotes chieftainship, autonomy, self-determination and rights to exercise authority. Recognition of the Rangatiratanga of assemblies of mana whenua and tangata whenua, such as at Papatipu Rūnanga, is as a requirement under the Treaty of Waitangi.

**Tikanga:** Tikanga Māori are the customs and traditions that have been transferred over generations. The first aspect of tikanga Māori is a set of principles, ideas and beliefs based

on traditional knowledge that has been passed down generation to generation from tupuna. The second aspect is the practice or operational usage of tikanga by a group or individual.

It is important to note that ideas a practices relation to tikanga Māori can differ between hapū and iwi. The concept of the base word 'tika' means to be correct or right.

*Note: the entry of ngā wai a tūtae into a food gathering area goes against Tikanga Māori and is tantamount to an act of disrespect for a place, its kaitiaki, its atua, the species and habitats that reside there, and the people who gather resources from it.*

**Kaitiakitanga:** The principle of guardianship over a rohe. This includes intergenerational responsibilities as resource caretakers and therefore kaitiaki have a responsibility to ensure that there are sufficient resources for future generations and that areas are in good ecological health. Kaitiakitanga also encompasses tohunga and kaitiaki whanau who preserve mātauranga and can interpret signs in the environment, acting as environmental monitors.

*Note: the mana whenua views and positions expressed within this document is but one manifestation of exercising of Kaitiakitanga.*

**Whakapapa:** The principle of cause and effect, descent and transmission: Sustainable management must be predicated on an understanding that all actions cause interconnected cascading effects. Whakapapa accounts for the way in which the universe, earth, sky, oceans, rivers, elements, plants, animals and humans have been created. Ultimately it is whakapapa that connects people to each other, to their ancestors, to their environment and natural resources. For Ngāi Tahu it is whakapapa that links the descent from the gods of creation

*Note: the entry of ngā wai a tūtae into Huritini can be seen as having an effect on those entities (such as species, waters, atua) that are found on the whakapapa of mana whenua/tangata whenua, and therefore are entities with which there is a kinship relation.*

**Taonga Tuku Iho:** The principle of generational continuity and responsibility: Present generations are one with those who have gone before us and those yet to be born. This applies to people and to generations or successive cycles of other species or natural phenomenon. Present generations have an overriding obligation to control the effects of their actions to ensure that resources are passed on to future generations in at least as healthy and productive a condition as they were inherited from the ancestors.

In the Ngāi Tahu worldview, all elements within the world are linked by mutual descent from the atua and the primeval parents, Rakinui and Papatūānuku. Thus, all parts of the environment are related to one another and exist within a mutually inter-dependent whole.

### 3.4 Resource Management Act 1991 (RMA)

The purpose of the Resource Management Act 1991 (RMA) is set out in Section 5(1) as ‘to promote the sustainable management of natural and physical resources.’ ‘Sustainable management’ is defined in Section 5(2) as managing the use, development and protection of natural and physical resources, and any adverse effects of activities on the environment are avoided, remedied or mitigated. It is inclusive of the “cultural wellbeing” of people and communities. The RMA also recognizes the relationship between Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga as a matter of national importance (Part II s. 6(e)), including the protection of sites of significance to Māori, including wāhi tapu (s. 6(f) historic heritage). Section 7 of the Act identifies kaitiakitanga as a matter that particular regard must be given in relation to managing the use, development and protection of natural and physical resources, and section 8 establishes that all persons exercising functions and powers under the Act shall take into account the principles of the Treaty of Waitangi. The Canterbury Regional Policy Statement 2013 sets out policy recognising the appropriate tangata whenua entities that may seek to exercise the aforementioned provisions. It is the task of those who have duties in relation to the RMA ensure active protections towards improved outcomes for all parties.

### 3.5 Local Government Act 2002

Section 4 of the Local Government Act 2002 states:

*“In order to recognise and respect the Crown’s responsibility to take appropriate account of the principles of the Treaty of Waitangi and to maintain and improve opportunities for Māori to contribute to local government decision-making processes, Parts 2 and 6 provide principles and requirements for local authorities that are intended to facilitate participation by Māori in local authority decision-making processes.”*

These principles and requirements are intended to facilitate participation by Māori in local authority decision-making processes in order to give effect to the Crown's obligations under



Te Tiriti. The Local Government and Environment Select Committee in its report to Parliament on the Act clarified that:<sup>6</sup>

*“The ... clause makes clear that Treaty responsibilities lie with the Crown, which is the Treaty partner. **When powers are delegated to local authorities, requirements need to be put in place to ensure that the Treaty is observed.** The clause 12 principles and a set of mechanisms in Part 2 and Part 5 have been included in the bill in order to give effect to the Crown's obligations.”* [emphasis added]

This approach accords with the principle that the Crown cannot evade its obligations under the Treaty by conferring authority on some other body that is inconsistent with the Crown's Treaty obligations.<sup>7</sup>

### 3.6 Iwi Plans

Te Ngāi Tūāhuriri Rūnanga are the kaitiaki Rūnanga for this area. The following iwi management plans apply to this area:

- Tau Maire, Te. Goodall, A. Palmer, D. Tau, Rakihiia. (1990). *Te Whakatau Kaupapa – Ngāi Tahu Resource Management Strategy for the Canterbury Region.*
- Ngāi Tūāhuriri Rūnanga, Te Hapū o Ngāti Wheke (Rāpaki), Te Rūnanga o Koukourārata, Ōnuku Rūnanga, Wairewa Rūnanga, Te Taumutu Rūnanga. (2013). *Mahaanui Iwi Management Plan.*
- Te Rūnanga o Ngāi Tahu (1999). *Freshwater Policy*

Relevant policies from the Mahaanui Iwi Management Plan include, but are not limited to:

**WM6.5** To require that water quality standards in the takiwā are set based on “where we want to be” rather than “this is the point that we can pollute to”. This means restoring waterways and working toward a higher standard of water quality, rather than establishing lower standards that reflect existing degraded conditions.

**WM6.8** To continue to oppose the discharge of contaminants to water, and to land where contaminants may enter water.

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<sup>6</sup> Local Government Bill (191-2) (Select Committee report) at 18.

<sup>7</sup> Waitangi Tribunal, “*Rangahau Whanui Overview Report*”, Vol. II, p 485 and “*Ngawha Geothermal Resource Report*”, Wai 304, Waitangi Tribunal. “*Treaty of Waitangi and Local Government*”, POL (01) 270, Cabinet Policy Committee, 1 October 2001, p 4.

**WM6.9** To require that local authorities work to eliminate existing discharges of contaminants to waterways, wetlands and springs in the takiwā, including treated sewage, stormwater and industrial waste, as a matter of priority.

**WM6.10** To require that the regional council classify the following discharge activities as prohibited due to significant effects on water quality:

- a) Activities that may result in the discharge of sewage (treated or untreated), stormwater, industrial waste, animal effluent or other contaminants to water, or onto land where contaminants may enter water.

**WM6.21** To promote the monitoring of water quality and cultural health at hāpua, coastal lakes and river mouth environments, to monitor the health of catchments and assess progress towards water quality objectives and standards.

**WM6.23** To ensure that economic costs do not take precedence over the cultural, environmental and intergenerational costs of poor water quality.

**IH3.1** To improve water quality in the Ihutai catchment by consistently and effectively advocating for a change in perceptions of waterways.

**IH3.2** To require that waterways and waterbodies (including Te Ihutai) are managed to achieve and maintain a water quality standard consistent with food gathering.

**IH3.3** To require that local authorities eliminate sources of contaminants to waterways in the Ihutai catchment, primarily:

- a) Sewage overflows in the Ōpāwaho and Ōtākaro rivers;
- b) Stormwater discharges into all waterways, including small headwater and ephemeral streams, and drains; and
- c) Run-off and discharges into waipuna

**IH3.4** To advocate for the following methods for improving water quality in the catchment:

- a) Avoiding the infiltration of stormwater into the sewage systems, which results in overflow discharges to the rivers and estuary;
- b) Protect and retain margins and set back areas along waterways, and ensure that these are of appropriate width and planted with indigenous species;
- c) Restoration of degraded springs and wetlands; and
- d) Requiring on site and closed stormwater treatment and disposal techniques (that do not discharge to water) for urban developments, public lands and parks.

**IH5.1** To require that the waipuna in the catchment are recognised and managed as wāhi taonga, with particular attention to:

- a) Ensuring that waipuna are protected from the discharge of contaminants;
- b) Ensuring that there are appropriate and effective setbacks from waipuna, to protect from urban development or re-development;
- c) Restoring degraded waipuna; and
- d) Enabling flow to return to waterways in naturalised channels.

### 3.7 The Ngāi Tahu Claims Settlement Act 1998

The Ngāi Tahu Claims Settlement Act includes several provisions that are of relevance to the management of the freshwater resources of catchments, including:

- Inclusion of Statutory Acknowledgements where the Crown recognises the significance of certain areas to Ngāi Tahu;
- Recognition as Statutory adviser to Minister of Fisheries;
- Development of protocols and a closer working relationship with Department of Conservation;
- Identification of taonga species (in schedule 97 of the Act);
- Provision for nohoanga (campsites).

## Mana Whenua Context and Concerns

### 4.1 Traditional History summary

The migration story of Ngāi Tahu from the east coast of the North Island to Canterbury is often told through the oral tradition of the accounts of Moki and his elder brother Tūrakautahi. Moki was the war chief of this expedition and the youngest son of Tūāhuriri, the senior Ngāi Tahu chief of the Ngāi Tūhaitara hapū (later to become Ngāi Tūāhuriri). Moki led the war party south to avenge the death of his father's wives at the hands of Tutekawa.

The arrival of Ngāi Tūhaitara/Ngāi Tahu around the late 17th/early 18th century saw the establishment of a network centred on Te Pa o Turakautahi/Kaiapoi Pā, established by Tūrakautahi. Tau (20XX) translates oral tradition about the dispersal of hapū of Ngāi Tahu to various areas of Canterbury, establishing mana whenua:

“...After a time.... the population increased and because of the ‘warrior like’ (ngākau toa) natures the people began to fight amongst themselves. Therefore, some of them decided to look for a better place. Turakautahi sent out the word that the people were to be separated into their (hapū) groups. Ngāti Hinekakai, Ngāti Hurihia (Urihia) separated to Tuahiwi here, to stay in their own Pā. Afterward the other people were separated, Turakipo to Opawaho, Manuhiri to Koukourārata right down to Whakaraupō. Makō went to Wairewa on the way to Whakaroa and Te Ruahikihiki together with his in-law, Kaweriri were sent to Taumutu. Te Ariki went to Arowhenua together with most of his people Kāti Huirapa....”

In 1868 Hapakuku Kairua, a leading chief from Kaiapoi, made a claim to lands in the Hornby/Halswell area extending to the Landsdowne valley and Tai Tapu. These areas were rich mahinga kai and significant within the overall network of kāinga mahinga kai. The claim was dismissed because the land had already been alienated by the Crown. Hapakuku's claim was given further credence as his descendants and relatives imparted mahinga kai knowledge as part of the 1879 Smith Nairn Commission enquiry into Te Kereme, the Ngāi Tahu claim.

The northern reaches of the Huritini catchment near the Halswell township was referred to as Tau-awa-ā-maka and included Ōwaka, which was an area of waka portage between then Ōpāwaho and Huritini catchments. At the southern Christchurch City Council boundary of the Huritini River is Te Pohatu-whakairo or “The Carved Rock” which is a shallow limestone cave used by Ngāti mamoe as a shelter.

## 4.2 Impacts on Ngā Wai, Mahinga Kai and Taonga Species

Several cultural values are associated with the discharge and treatment of stormwater within the Huritini catchment. Of particular concern to manawhenua are those probable effects of stormwater contaminants on cultural values associated with Ngā Wai, Mahinga Kai and Taonga Species. These are described below:

### Ngā Wai/Wai Māori – Freshwater

Māori see water as central to all life. It is a taonga cared for and passed on by ancestors to provide and sustain life. It is the present generations responsibility to ensure this taonga is in the same or an improved state for future generations.

The whole system approach to kaitiakitanga, ki uta ki tai, reinforces the need to address the impacts on the Huritini catchment as a whole, from the springs and headwaters, to Te Waihora. Entry of untreated stormwater into this freshwater system must be avoided and bank stabilisation must occur to prevent sediment build-up.

**Issue/concern:** *Older suburban areas can have issue with zinc runoff due to poor maintenance of roofing materials. As stormwater directly discharges into the Huritini catchment in the older suburban areas of Halswell, zinc contamination is therefore of concern. Efforts therefore should be made to divert and/or treat stormwater runoff from these areas.*

**Issue/concern:** *Nitrate levels are of significant concern within the Huritini catchment due to extensive agriculture within the catchment.*

**Issue/concern:** *The stormwater outflows of the proposed stormwater network ultimately enter Te Waihora/Lake Ellesmere which is the greater receiving waterbody and is of great cultural significance. Mana whenua are concerned that increases from loading from future developments may have detrimental effects for both local and receiving waterbody ecology.*

**Issue/concern:** *The impacts of climate change are of significant concern to mana whenua. Flood management practises within the catchment need to take into account both sea level rise and the increasing severity of weather patterns. Significant inundation events have been shown to overwhelm the stormwater network and climate change is likely to exacerbate this.*

## Taonga Species and Mahinga Kai

Mana whenua are supportive of mitigations that can improve the current environs and potentially attract recruitment of taonga species. The return of taonga species is in keeping with Ngāi Tahu values of kaitiakitanga; which states that we are the guardians of the land and have an intergenerational responsibility and we should therefore protect and restore it.

Manawhenua does recognise that greater receiving waterbodies such as the Huritini/Halswell River and ultimately Te Waihora are heavily degraded as the result of a variety of anthropogenic activities. Although these environs are heavily degraded, and have been for some time, this should not be used as rationale to allow for continuation or addition of procedures, processes or activities that could exacerbate current conditions. Manawhenua are concerned that the current regime could have detrimental implications for both native and endemic taonga in the wider ecology, and therefore would like reassurance that improvements will be considered wherever possible within the catchment.

Mahinga kai is defined in the Ngāi Tahu Claims Settlement Act 1998 as “the customary gathering of food and natural materials, and the places where those resources are gathered (s. 167). Mahinga kai includes birds, fish and shellfish taken for food. It also includes plants such as pīngao or harakeke, used for weaving or paru (mud) used for dying fibres and is therefore not confined to land cultivated. Therefore, the inclusion of taonga rākau species in riparian planting and stormwater basins is in keeping with mahinga kai values.

Mahinga kai practices require both a sustainable population of taonga species and water quality that is safe to collect from. The discharge of contaminants through stormwater into the Huritini catchment is therefore at odds with mahinga kai practices.

**Issue/Concern:** *Rūnanga are concerned that the water quality objectives stated in the CSNDC are not stringent enough to reduce containment levels to where it will be safe to collect mahinga kai within the Huritini/Halswell catchment. The aspirational water quality levels should match those of groundwater/drinking water to ensure safety and point source contamination should be monitored for.*

Taonga species are native birds, plants and animals of special cultural significance and importance to Ngāi Tahu. Taonga species are largely treasured and prized in a contemporary sense as they link to traditions and whakapapa, and are customary food sources with varying degrees, as directed by statute and relative abundance. The Crown’s settlement with Ngāi Tahu (Ngāi Tahu claims Settlement Act 1998) included recognition of the special traditional relationship that Ngāi Tahu have with taonga species (listed in schedules 97 and 98, see appendix 1 of this document).

The continuation of mahinga kai is of great significance to Ngāi Tahu, as it is intrinsically linked to the continuation and understanding of cultural practices. Mahinga kai was, and is, central to the Ngāi Tahu way of life, being an important social and economic activity and linked to the key principles of Manaakitanga, Kaitiakitanga, Tikanga, Rangatiratanga and Whanaungatanga. Traditional and modern mahinga kai sites associated with freshwater and coastal waters are of immense cultural significance as they represent some of the last remaining intact habitats where taonga species can be harvested by Ngāi Tahu whanau.

Historically the wetlands interconnected through the Huritini catchment provided Ngāi Tahu whanau located at Kaiapoi and Manuka Pa with a large variety of mahinga kai species. The springs and waterways would found throughout the catchment would have supplied kekewai/waikoura, tuna, kanakana, kākahi. The lower reaches of the Huritini flow into Te Waihora and wetlands surrounding the Huritini tributaries would have provided a habitat for Pukeko, Putangitangi, Parera, Weka and others. Around the margins of these wetlands Raupo, Harakeke and Tī kōuka flourished. Raupo could provide food or be used to make buoyant rafts, Harakeke providing strong fibres for clothing, baskets, nets and ropes while the carrot shaped roots and young stems of the Tī kōuka provided the delicacy kauru.

Many of the traditional and contemporary Mahinga kai species are regarded as taonga species. These are the native birds, plants and animals of special cultural significance and importance to Ngāi Tahu and these are listed below:

#### Ika species in the Huritini/Halswell catchment area

| Ingoa Māori             | Common name         | Scientific name                |
|-------------------------|---------------------|--------------------------------|
| Tuna                    | Short-finned eel    | <i>Anguila australis</i>       |
| Tuna heke               | Long finned eel     | <i>Anguila dieffenbachii</i>   |
| Tīpokopoko/Toitōi/Hawai | Common bully        | <i>Gobiomorphus cotidianus</i> |
| Tīpokopoko/Toitōi       | Upland bully        | <i>Gobiomorphus breviceps</i>  |
| Tīpokopoko/Toitōi       | Bluegill Bully      | <i>Gobiomorphus hubbsi</i>     |
| Īnanga                  | Inanga              | <i>Galaxias maculatus</i>      |
| Kēkēwai                 | Freshwater crayfish | <i>Parenehraps. sp</i>         |
| Kanakana                | Lamprey             | <i>Geotria australis</i>       |
| Pātiki/Mohoao           | Black flounder      | <i>Rhombosolea retiaria</i>    |
| Kākahi                  | Freshwater mussels  | <i>Echyridella menziesi</i>    |

In addition to the aforementioned species, other organisms including migratory *Galaxias* sp. could benefit from improved water quality as a result of proposed mitigations such as retention basins and wetlands.

#### Taonga manu species in the Huritini/Halswell catchment area

| Ingoa Māori          | Common name           | Scientific name              |
|----------------------|-----------------------|------------------------------|
| Kōparapara/korimako  | Bellbird              | <i>Anthornis melanura</i>    |
| Hiraka               | Silver eye/wax eye    | <i>Zosterops lateralis</i>   |
| Tūī/kōkō             | Tui                   | <i>Prothemadera</i>          |
| Pīwakawaka/pīwaiwaka | Fantail               | <i>Rhipidura fuliginosa</i>  |
| Kūkupa/Kererū        | Kereru                | <i>Hemiphaga</i>             |
| Ruru koukou          | Morepork              | <i>Ninox novaeseelandiae</i> |
| Riroriro             | Grey warbler          | <i>Gerygone igata</i>        |
| Pūkeko/pākura        | Australasian swamphen | <i>Porphyrio melanotus</i>   |
| Pūtakitaki           | Paradise Shelduck     | <i>Tadorna variegata</i>     |

As the greater receiving waterbody for the Huritini/Halswell catchment is Te Waihora/Lake Ellesmere taonga waterfowl could potentially be affected by activities occurring within the catchment.

#### RĀKAU SPECIES IN THE H CATCHMENT AREA

| Ingoa Māori | Common name    | Scientific name                 |
|-------------|----------------|---------------------------------|
| Ti kōuka    | Cabbage tree   | <i>Cordyline australis</i>      |
| Mātai       | Black Pine     | <i>Prumnopitys taxifolia</i>    |
| Kahikatea   | White pine     | <i>Dacrycarpus dacrydioides</i> |
| Tōtara      | Totara         | <i>Podocarpus totara</i>        |
| Harakeke    | Flax           | <i>Phormium</i> sp.             |
| Pūkio       | Tussock sedges | <i>Carex</i> sp.                |
| Kōwhai      | Kowhai         | <i>Sophora microphylla</i>      |
| Horoeka     | Lancewood      | <i>Pseudopanax crassifolius</i> |
| Houhi       | Lacebark       | <i>Houheria populnea</i>        |
| Manatū      | Ribbonwood     | <i>Plagianthus regius</i>       |
| Kānuka      | Kanuka         | <i>Kunzia ericoides</i>         |



Many of these rākau species form habitats for taonga species and therefore their presence in riparian margins and stormwater basins is necessary for the health of these populations. Additionally, many of the rākau listed above are used in rongoā and/or have other traditional uses and therefore their availability is necessary for the cultural health of the catchment.

**Issue/Concern:** *The lack of riparian planting and native habitats throughout the catchment limits the ability for taonga species to recover within the catchment.*

It should be noted that this is not a complete list of taonga species and there may be species that are or have been present in the catchment, but not recorded. The above-mentioned lists are combined from records and evidence of Tau and Tau (nd.), Crow (2017), Jacob (2018) and Allingham (2005).

With increasing impermeable surfaces (roading, roofing, parking areas) the residential surfaces decrease the grassland and shrubland ecosystems that provide habitat for various waterfowl and bird species and terrestrial invertebrates. Residential development usually leads to significant increases in peak stormwater volumes delivered in shorter time frames with greater contamination loading and higher water temperatures. These events typically degrade the in-stream biota and habitat condition where such remain. The combination of a decline in habitat, biodiversity and water quality indicated the potential for the further decline or loss of taonga species.

The maintenance of the diversity of quality and quantity of resources especially mahinga kai, is important to Ngāi Tahu. In the Ngāi Tahu Claims Settlement Act 1998 mahinga kai refers to Ngāi Tahu interests in traditional food and other natural resources, and the sites where the resources are gathered.

The term mahinga kai, therefore, refers to the whole resource chain, from the mountain tops to the ocean floor. It encompasses social and education elements as well as the process of food gathering, including the way it is gathered, the place it is gathered from, and the actual resource itself.

**Issue/concern:** *The entry of ngā wai a tūtāe into an environ which is a food-gathering area goes against Tikanga Māori and is tantamount to an act of disrespect for a place, its Atua, its kaitiaki, the species and habitats that reside there and the people that gather resources. Mauri can be denigrated by the entry of ngā wai a tūtāe (wastewater or stormwater into an environ). The entry of ngā wai a tūtāe into the Huritini can be seen as having an effect on those entities*

*(such as species, waters, atua) that are found on the whakapapa of mana whenua/tangata whenua, and therefore are entities with which there is a kinship relation. Levels of Escherichia coli exceeded recommended guidelines at a number of sites within the Halswell catchment during 2019 (Margetts & Marshall 2019). These in turn could potentially impact on the wider receiving waterbodies and traditional mahinga kai environs. Mana whenua would like assurances that sources of contamination be identified, and suitable mitigation is implemented.*

**Issue/concern:** *Mana whenua would like assurances that the proposed stormwater management scheme for the Huritini recognises and provides for the implementation of rāhui or other customary management tools. It is important to mana whenua that the mauri of waterways and mahinga kai are sustained to a standard fit for human consumption, use and/or benefit.*

**Issue/concern:** *Information on the NZFFD shows that species such as kākahi (Echydella menziesi) as well as other taonga were present in streams around Trents road in the upper Halswell catchment in 2019, however recent events such as the motorway expansion has meant that the waterway has been diverted and fishes and other taonga species were relocated. Mana whenua would like assurances that engagement with the rūnanga is prioritised before these activities are undertaken.*

**Issue/concern:** *Although nitrate levels only exceeded guidelines at one of the sites sampled in Margetts and Marshall (2021), mana whenua are aware that other stream parameters are affected long before nitrate levels become toxic. As nitrogen will bind to oxygen in a natural environment, there is always a risk of animals suffering from the effects of oxygen deletion long before nitrate levels themselves become toxic. Therefore, mana whenua would like assurances that mitigations would include substrate additions that could assist with nitrate conversion and in-stream heterogeneity design to include riffles to assist with re-oxygenation.*

**Issue/concern:** *There are some concerns that areas set aside for mitigation may not be sufficient for water quality improvement, therefore, mana whenua would be interested know if the CCC has considered the addition of other methods to compliment treatment. These may include use of denitrifying bioreactors to support nitrate conversion, specifically in areas where nitrate levels exceeded ANZECC guidelines (Margetts & Marshall, 2020), shell bioreactors to assist with metal contamination reduction and/or mechanical devices such as EcolSol™ RSF 4000 solid pollutant filter and Jellyfish® membrane filtration systems.*

## Concluding Comments

### 5.1 Priorities of Ngāi Tūāhuriri Rūnanga

Priorities of Te Ngāi Tūāhuriri Rūnanga include the following:

- Supporting the stormwater management and stormwater control methods that are in tune with cultural values;
- Improving water quality and the associated cultural values of the Huritini catchment;
- Establishing or restoring native habitats of taonga species, including mahinga kai;
- Regular reporting of monitoring data from the Huritini catchment by Christchurch City Council in a suitable manner to rūnanga;
- Cultural monitoring supported by Te Ngāi Tūāhuriri Rūnanga is carried out and used in influencing decision making;
- Providing developers and/or the public with more information for education purposes on stormwater issues and controls as well.

### 5.2 Adverse effects to be avoided

Te Ngāi Tūāhuriri Rūnanga are committed to:

- Protecting the wāhi taonga or wāhi tapu present within the Huritini catchment area;
- Reducing the impacts of stormwater discharge within the Huritini catchment;
- Increasing and enhancing native plants species which creates native habitats for taonga species, provides cultural outcomes and increases the cultural landscape.

When assessing the impacts associated with the proposal Te Ngāi Tūāhuriri Rūnanga want to see the following adverse effects avoided:

- Any loss of habitats or life cycles of taonga species, especially mahinga kai species;
- Any direct or indirect negative impact on taonga species health or abundance, especially mahinga kai species;
- Any impact on wāhi tapu and wāhi taonga.

As is noted above, some of these issues can be addressed by consent conditions and monitoring. Others require ongoing discussions with Te Ngāi Tūāhuriri Rūnanga.

### 5.3 Mana Whenua Requirements

The Christchurch City Council will:

- 1 Engage with mana whenua prior to any proposed changes, enhancements, translocations and/or diversions as opposed to being consulted retrospectively.
- 2 Ensure mana whenua are able to implement their own management strategies which include practices such as rahui, or other customary tools and therefore is also in keeping with treaty principles.
- 3 Increase riparian planting throughout the catchment, especially including trees for shade cover to reduce macrophyte overgrowth;
- 4 Adopt alternative methods of weed control (eg. Shade trees) to prevent the need for manual in-stream weed removal;
- 5 Ensure that all waterways in the catchment are treated to the same standard and managed for mahinga kai collection in the future;
- 6 Conduct studies to investigate the effectiveness of current stormwater treatment facilities (e.g. Stormwater basins);
- 7 Ensure the protection and enhancement of known spring sites;
- 8 Where stormwater treatment facilities can't be installed, ensure that stormwater is diverted into the wastewater system, especially in industrial areas and older residential areas;
- 9 Support State of the Takiwā reporting in the catchment to measure the cultural health of the catchment;
- 10 Conduct a survey of stormwater basins to ensure fish do not get trapped in stormwater treatment facilities

## Bibliography & Appendices

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## 10.2 Appendices

Appendix 1 – Taonga Species Schedule 97a Birds

Appendix 2 – Taonga Species Schedule 97b Birds

Appendix 3 – Taonga Species Schedule 97c Birds, Plants

Appendix 4 – Taonga Species Schedule 97d Plants

Appendix 5 – Taonga Species Schedule 97e Plants, Marine mammals

Appendix 6 – Taonga Species Schedule 97f Freshwater fish, Shellfish

## Appendix 1 Taonga Species Schedule 97a Birds

### Schedule 97 Taonga species

s 287

#### *Birds*

| <b>Name in Māori</b>   | <b>Name in English</b>  | <b>Scientific name</b>   |
|------------------------|-------------------------|--|
| Hoiho                  | Yellow-eyed penguin     | <i>Megadyptes antipodes</i>  |
| Kāhu                   | Australasian harrier    | <i>Circus approximans</i>  |
| Kākā                   | South Island kākā       | <i>Nestor meridionalis meridionalis</i>  |
| Kākāpō                 | Kākāpō                  | <i>Strigops habroptilus</i>  |
| Kākāriki               | New Zealand parakeet    | <i>Cyanoramphus spp</i>  |
| Kakaruai               | South Island robin      | <i>Petroica australis australis</i>  |
| Kakī                   | Black stilt             | <i>Himantopus novaeseelandiae</i>  |
| Kāmana                 | Crested grebe           | <i>Podiceps cristatus</i>  |
| Kārearea               | New Zealand falcon      | <i>Falco novaeseelandiae</i>   |
| Karoro                 | Black-backed gull       | <i>Larus dominicanus</i>   |
| Kea                    | Kea                     | <i>Nestor notabilis</i>  |
| Kōau                   | Black shag              | <i>Phalacrocorax carbo</i>   |
|                        | Pied shag               | <i>Phalacrocorax varius varius</i>   |
|                        | Little shag             | <i>Phalacrocorax melanoleucos brevirostris</i>   |
| Koekoeā                | Long-tailed cuckoo      | <i>Eudynamys taitensis</i>   |
| Kōparapara or Korimako | Bellbird                | <i>Anthornis melanura melanura</i>   |
| Kororā                 | Blue penguin            | <i>Eudyptula minor</i>   |
| Kōtare                 | Kingfisher              | <i>Halcyon sancta</i>  |
| Kōtuku                 | White heron             | <i>Egretta alba</i>  |
| Kōwhiowhio             | Blue duck               | <i>Hymenolaimus malacorhynchos</i>   |
| Kūaka                  | Bar-tailed godwit       | <i>Limosa lapponica</i>  |
| Kūkupa/Kererū          | New Zealand wood pigeon | <i>Hemiphaga novaeseelandiae</i>   |
| Kuruwhengu/Kuruwhengi  | New Zealand shoveller   | <i>Anas rhynchotis</i>   |
| Mātā                   | Fernbird                | <i>Bowdleria punctata punctata</i><br>and <i>Bowdleria punctata stewartiana</i> and <i>Bowdleria</i> |



## Appendix 2 Taonga Species Schedule 97b Birds

| Schedule 97   | Ngāi Tahu Claims Settlement Act 1998   | Reprinted as at<br>20 May 2014   |
|---------------|--|--|
| Name in Māori | Name in English  | Scientific name  |
|               |  | <i>punctata wilsoni</i> and<br><i>Bowdleria punctata candata</i>   |
| Matuku moana  | Reef heron   | <i>Egretta sacra</i>   |
| Miromiro      | South Island tomtit  | <i>Petroica macrocephala macrocephala</i>  |
| Miromiro      | Snares Island tomtit   | <i>Petroica macrocephala dannefaerdi</i>   |
| Mohua         | Yellowhead   | <i>Mohoua ochrocephala</i>   |
| Pākura/Pūkeko | Swamp hen/Pūkeko   | <i>Porphyrio porphyrio</i>   |
| Pārera        | Grey duck  | <i>Anas superciliosa</i>   |
| Pateke        | Brown teal   | <i>Anas aucklandica</i>  |
| Pīhoihoi      | New Zealand pipit  | <i>Anthus novaeseelandiae</i>  |
| Pipīwharau    | Shining cuckoo   | <i>Chrysococcyx lucidus</i>  |
| Pīwakawaka    | South Island fantail   | <i>Rhipidura fuliginosa fuliginosa</i>   |
| Poaka         | Pied stilt   | <i>Himantopus himantopus</i>   |
| Pokotiwha     | Snares crested penguin   | <i>Eudyptes robustus</i>   |
| Pūtakitaki    | Paradise shelduck  | <i>Tadorna variegata</i>   |
| Riroriro      | Grey warbler   | <i>Gerygone igata</i>  |
| Roroa         | Great spotted kiwi   | <i>Apteryx haastii</i>   |
| Rowi          | Ōkārito brown kiwi   | <i>Apteryx mantelli</i>  |
| Ruru koukou   | Morepork   | <i>Ninox novaeseelandiae</i>   |
| Takahē        | Takahē   | <i>Porphyrio mantelli</i>  |
| Tara          | Terns  | <i>Sterna spp</i>  |
| Tawaki        | Fiordland crested penguin  | <i>Eudyptes pachyrhynchus</i>  |
| Tete          | Grey teal  | <i>Anas gracilis</i>   |
| Tieke         | South Island saddleback  | <i>Philesturnus carunculatus carunculatus</i>  |
| Titi          | Sooty shearwater/Muttonbird/<br>Hutton's shearwater<br>Common diving petrel<br>South Georgian diving petrel<br>Westland petrel<br>Fairy prion<br>Broad-billed prion<br>White-faced storm petrel<br>Cook's petrel | <i>Puffinus griseus</i> and <i>Puffinus huttoni</i> and <i>Pelecanoides urinatrix</i> and <i>Pelecanoides georgicus</i> and <i>Procellaria westlandica</i> and <i>Pachyptila turtur</i> and <i>Pachyptila vittata</i> and <i>Pelagodroma marina</i> and <i>Pterodroma cookii</i> and <i>Pterodroma inexpectata</i> |

## Appendix 3 Taonga Species Schedule 97c Birds, Plants

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Schedule 97

| <b>Name in Māori</b> | <b>Name in English</b>     | <b>Scientific name</b>                  |
|----------------------|----------------------------|---|
|                      | Mottled petrel             |   |
| Tititipounamu        | South Island rifleman      | <i>Acanthisitta chloris chloris</i>     |
| Tokoeka              | South Island brown kiwi    | <i>Apteryx australis</i>                |
| Toroa                | Albatrosses and Mollymawks | <i>Diomedea</i> spp                     |
| Toutouwai            | Stewart Island robin       | <i>Petroica australis rakiura</i>       |
| Tūi                  | Tūi                        | <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*

| <b>Name in Māori</b> | <b>Name in English</b>    | <b>Scientific name</b>  |
|----------------------|---------------------------|---|
| Akatorotoro          | White rata                | <i>Metrosideros perforata</i>   |
| Aruhe                | Fernroot (bracken)        | <i>Pteridium aquilinum</i> var<br><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>  |
| Kiekie               | Kiekie                    | <i>Freycinetia baueriana</i> subsp<br><i>banksii</i>                            |
| Kōhia                | NZ Passionfruit           | <i>Passiflora tetrandia</i>   |
| Korokio              | Korokio Wire-netting bush | <i>Corokia cotoneaster</i>  |

## Appendix 4 Taonga Species Schedule 97d Plants

| Schedule 97       | Ngāi Tahu Claims Settlement Act 1998 | Reprinted as at<br>20 May 2014                        |
|-------------------|--------------------------------------|---|
| Name in Māori     | Name in English                      | Scientific name                                       |
| Koromiko/Kōkōmuka | Koromiko                             | <i>Hebe salicifolia</i>                               |
| Kōtukutuku        | Tree fuchsia                         | <i>Fuchsia excorticata</i>                            |
| Kōwahi Kōhai      | Kōwhai                               | <i>Sophora microphylla</i>                            |
| Mamaku            | Tree fern                            | <i>Cyathea medullaris</i>                             |
| Mānia             | Sedge                                | <i>Carex flagellifera</i>                             |
| Mānuka Kahikātoa  | Tea-tree                             | <i>Leptospermum scoparium</i>                         |
| Māpou             | Red matipo                           | <i>Myrsine australis</i>                              |
| Mataī             | Mataī/Black pine                     | <i>Prumnopitys taxifolia</i>                          |
| Miro              | Miro/Brown pine                      | <i>Podocarpus ferrugineus</i>                         |
| Ngaio             | Ngaio                                | <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>Botrychium australe</i> and <i>B. biforme</i>      |
| Pātōtara          | Dwarf mingimingi                     | <i>Leucopogon fraseri</i>                             |
| Pīngao            | Pīngao                               | <i>Desmoschoenus spiralis</i>                         |
| Pōkākā            | Pōkākā                               | <i>Elaeocarpus hookerianus</i>                        |
| Ponga/Poka        | Tree fern                            | <i>Cyathea dealbata</i>                               |
| Rātā              | Southern rātā                        | <i>Metrosideros umbellata</i>                         |
| Raupō             | Bulrush                              | <i>Typha angustifolia</i>                             |
| Rautāwhiri/Kōhūhū | Black matipo/Māpou                   | <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                                 |
| Tētēaweka         | 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>                           |

## Appendix 5 Taonga Species 97e Plants, Marine mammals

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| <b>Name in Māori</b> | <b>Name in English</b> | <b>Scientific name</b>   |
|----------------------|------------------------|--|
| Toetoe               | Toetoe                 | <i>Cortaderia richardii</i>  |
| Tōtara               | Tōtara                 | <i>Podocarpus totara</i>   |
| Tutu                 | Tutu                   | <i>Coriaria</i> spp  |
| Wharariki            | Mountain flax          | <i>Phormium cookianum</i>  |
| Whīnau               | Hīnau                  | <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*

| <b>Name in Māori</b> | <b>Name in English</b>                     | <b>Scientific name</b>        |
|----------------------|--|-------------------------------|
| Ihupuku              | Southern elephant seal                     | <i>Mirounga leonina</i>       |
| Kekeno               | New Zealand fur seals                      | <i>Arctocephalus forsteri</i> |
| Paikea               | Humpback whales                            | <i>Megaptera novaeangliae</i> |
| Parāoa               | Sperm whale                                | <i>Physeter macrocephalus</i> |
| Rāpoka/Whakahao      | New Zealand sea lion/<br>Hooker's sea lion | <i>Phocarctos hookeri</i>     |
| Tohorā               | Southern right whale                       | <i>Balaena australis</i>      |

Appendix 6 Taonga Species Schedule 97f Freshwater fish, Shellfish

Schedule 98

Ngāi Tahu Claims Settlement Act 1998

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**Schedule 98**  
**Customary fisheries**

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**Part A**  
**Taonga fish species**

| <b>Name in Māori</b> | <b>Name in English</b> | <b>Scientific name</b>         |
|----------------------|------------------------|--------------------------------|
| Kāeo                 | Sea tulip              | <i>Pyura pachydermatum</i>     |
| Koeke                | Common shrimp          | <i>Palaemon affinis</i>        |
| Kōkopu/Hawai         | Giant bully            | <i>Gobiomorphus gobioides</i>  |
| Kōwaro               | Canterbury mudfish     | <i>Neochanna burrowsius</i>    |
| Paraki/Ngaiore       | Common smelt           | <i>Retropinna retropinna</i>   |
| Piripiripōhatu       | Torrentfish            | <i>Cheimarrichthys fosteri</i> |
| Taiwharu             | Giant kōkopu           | <i>Galaxias argenteus</i>      |

**Part B**  
**Shellfish Species**

| <b>Name in Māori</b>               | <b>Name in English</b> | <b>Scientific name</b>   |
|------------------------------------|------------------------|--|
| Pipi/Kākahi                        | Pipi                   | <i>Paphies australe</i>  |
| Tuaki                              | Cockle                 | <i>Austrovenus stutchburgi</i>   |
| Tuaki/Hākiari, Kuhakuha/<br>Pūrimu | Surfclam               | <i>Dosinia anus</i> , <i>Paphies donacina</i> , <i>Mactra discor</i> , <i>Mactra murchsoni</i> , <i>Spisula aequilateralis</i> , <i>Basina yatei</i> , or <i>Dosinia subrosa</i> |
| Tuatua                             | Tuatua                 | <i>Paphies subtriangulata</i> , <i>Paphies donacina</i>  |
| Waikaka/Pūpū                       | Mudsnail               | <i>Amphibola crenata</i> , <i>Turbo smaragdus</i> , <i>Zedilom spp</i>   |

The background is a solid teal color with decorative, lighter teal swirl patterns in the top-left and bottom-right corners. The swirls are composed of multiple overlapping, curved lines that create a sense of movement and depth.

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