

FACE TO FACE ENGAGEMENT WITH MANA WHENUA: WAIKOUAITI WTP UPGRADE

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ABSTRACT

"Kāti Huirapa ki Puketeraki have a deep and enduring spiritual connection to the Waikouaiti River. This paramount awa flows through the Kāti Huirapa ki Puketeraki takiwā and has provided nourishment for the people for generations."¹

Kanohi ki te kanohi can mean face to face, eye to eye or in the flesh. Kāti Huirapa ki Puketeraki continue to value this medium of engagement in the age of technology and video conferencing. This paper explains how early *Kanohi ki te kanohi* engagement with mana whenua on their home grounds has been used in the delivery of the Waikouaiti Water Treatment Plant Upgrade.

Dunedin City Council's (DCC) Three Waters team is on a journey toward *te tiriti* partnership with mana whenua. As part of the Waikouaiti Water Treatment Upgrade project DCC and Beca reached out to mana whenua via their consulting arm Aukaha prior to concept design stage to establish a partnership approach to the project.

The project team were directed by Aukaha toward the East Otago Taiāpure Committee (the committee) which meets monthly at Rūnaka premises in Karitāne. One of the ways Kāti Huirapa ki Puketeraki exercise their chieftainship over their local waterways and coasts is through the taiāpure committee and mātaimai reserve. Following attendance at the first committee meeting in May 2021, it was agreed that a project representative should attend monthly to provide real time updates and seek input as the project develops *kanohi ki te kanohi*.

Face to face attendance by a project representative was maintained most months through the decision-making phase of the project from May 2021 until February 2023. The face-to-face nature of the engagement facilitated timely information exchange and the ability for the project team to listen to the concerns of mana whenua and the community as the project evolved.

The nature of the conversation was always respectful but not always straightforward. Project team representatives were regularly and sometimes sternly reminded by kaumātua not to treat this river like any other – it is different. Mana whenua were clear throughout the engagement that the Waikouaiti River is under pressure and that the water take should ultimately

¹ Cultural Impact Assessment Prepared for the Dunedin City Council Waikouaiti Water Treatment Plant Upgrade, Aukaha, 2021

cease and be replaced by an alternative water source. However, medium term improvements were supported in the interim, in part, due to the need to uphold *te hauora o kā tangata me kā hāpori* (the health of the people and the community).

The early and regular *kanohi ki te kanohi* engagement resulted in tangible changes to the project including optimisation of water take rates, new backwash discharge planting solutions, improved access for mana whenua to the awa and mana to mana meetings that will be described in detail in the paper.

The engagement ultimately led to written approval from mana whenua for two resource consent applications related to the work and an ongoing commitment from DCC to continue engagement at key stages and in key supporting management plans as the project moves from design into the delivery stage.

KEYWORDS

Face to Face Engagement, Mana Whenua, Water Treatment Plant.

NOMENCLATURE

Aukaha - a manawhenua-owned consultancy that delivers services across the takiwā of their Papatipu Rūnaka shareholders.

Awa – river, stream, creek

Hauora – health, well-being

Kāti Huirapa ki Puketeraki – The local Kāi Tahu subtribe who hold mana whenua status over the project area in accordance with Kāi Tahu custom.

Kanohi ki te kanohi - face to face, in person, in the flesh

Kāi tahu – iwi of Te Wai Pounamu (the south island), means the 'people of Tahu', linking to their ancestor Tahu Pōtiki. Within the iwi there are five primary hapū (subtribes) being Kāti Kurī, Ngāti Irakehu, Kāti Huirapa, Ngāi Tūāhuriri and Ngāi Te Ruahikihiki.

Kāti Mamoe – Historic Iwi belonging to the South Island and assimilated into Kāi Tahu.

Kaumātua - elder

Kaupapa - topic, policy, matter for discussion, plan, purpose, proposal, subject, programme, theme, issue, initiative

Ki uta ki tai – 'from the mountains to the sea' - the recognition and management of the interconnectedness of the whole environment, from the mountains, springs and lakes, down the rivers to hāpua (lagoons), groundwater, wahapū (estuaries) and to the sea.

Mahika kai – the gathering of foods and other resources, the places where they are gathered and the practices used in doing so

Mātauraka - knowledge, wisdom, understanding

Maumaharataka – memories from the past

Moana - ocean

Mana - prestige, authority, control, power, influence, status, spiritual power, charisma

Mana taunaha or mana tapaptapa - mana bestowed on the landscape by naming

Papatipu - traditionally owned, customary title, ancestral (of land)

Rakatirataka - chieftainship, right to exercise authority, chiefly autonomy, chiefly authority, ownership

Rūnaka - iwi authority, tribal council, board,

Takata tiaki (Tangata Kaitiaki) - local guardians or trustees of specific areas appointed under the Fisheries (Kaimoana Customary Fishing) Regulations 1998 or the Fisheries (South Island Customary Fishing) Regulations 1999.

Takiwā - district, area, territory, vicinity, region

Te hauora o kā tangata me kā hāpori - the health of the people and the community

Te mana o te wai – (mana of the water) – this concept recognises the vital importance of clean, healthy water for maintaining the health of our waterbodies, freshwater ecosystems and the communities that rely upon them for their sustenance and wellbeing.

Te tiriti – refers to Te Tiriti o Waitangi (The Treaty of Waitangi) – New Zealand’s founding document.

Tūpuna - ancestors, grandparents

Wai maori - freshwater

Wai tai – coastal waters

Wāhi tupuna – landscapes and places that embody the relationship of mana whenua and their culture and traditions with their ancestral lands, waters, sites, sacred places and other treasures.

Whenua - land

Whānau - extended family, family group, a familiar term of address to a number of people - the primary economic unit of traditional Māori society.

Kāi Tahu Whānui - Encompassing term meaning all the descendants who have genealogical connection to the Kāi Tahu iwi, including the historic South Island tribes of Kāti Mamoe, Waitaha and Rapuwai.

PRESENTER PROFILE

James Taylor is a Planner based in Dunedin with 19 years’ experience in delivering infrastructure projects. Since moving to Dunedin in 2016 James has focused on water projects in Otago and on building his knowledge on appropriate engagement for these projects with the local Rūnaka.

Korako Edwards is Kaiārahi Taiao | Environmental advisor for Aukaha. Aukaha are a manawhenua owned consultancy who represent the interests of the 5 papatipu rūnaka of wider Otago. Korako draws on his ecology background and

Te Ao Māori lens to continue advancing manawhenua aspirations in environmental policy, science and management.

Merchen Naidoo is a Chemical Engineer with 18 years' experience in planning and delivery of infrastructure projects. His current role is that of Principal Project Engineer in the 3 Waters Capital Delivery Team where he leads the delivery of the Waikouaiti WTP Upgrade.

1. INTRODUCTION

Dunedin City Council (DCC) owns and operates the Waikouaiti Water Treatment Plant (WTP) which treats raw water abstracted from the Waikouaiti River, supplying drinking water to the Waikouaiti, Karitāne and Hawksbury townships. In 2020 a Process Capability Assessment completed for the plant identified a number of areas for improvement including some adjustments necessary for the plant to meet the Drinking-Water Standards for New Zealand 2005 (Revised 2018).

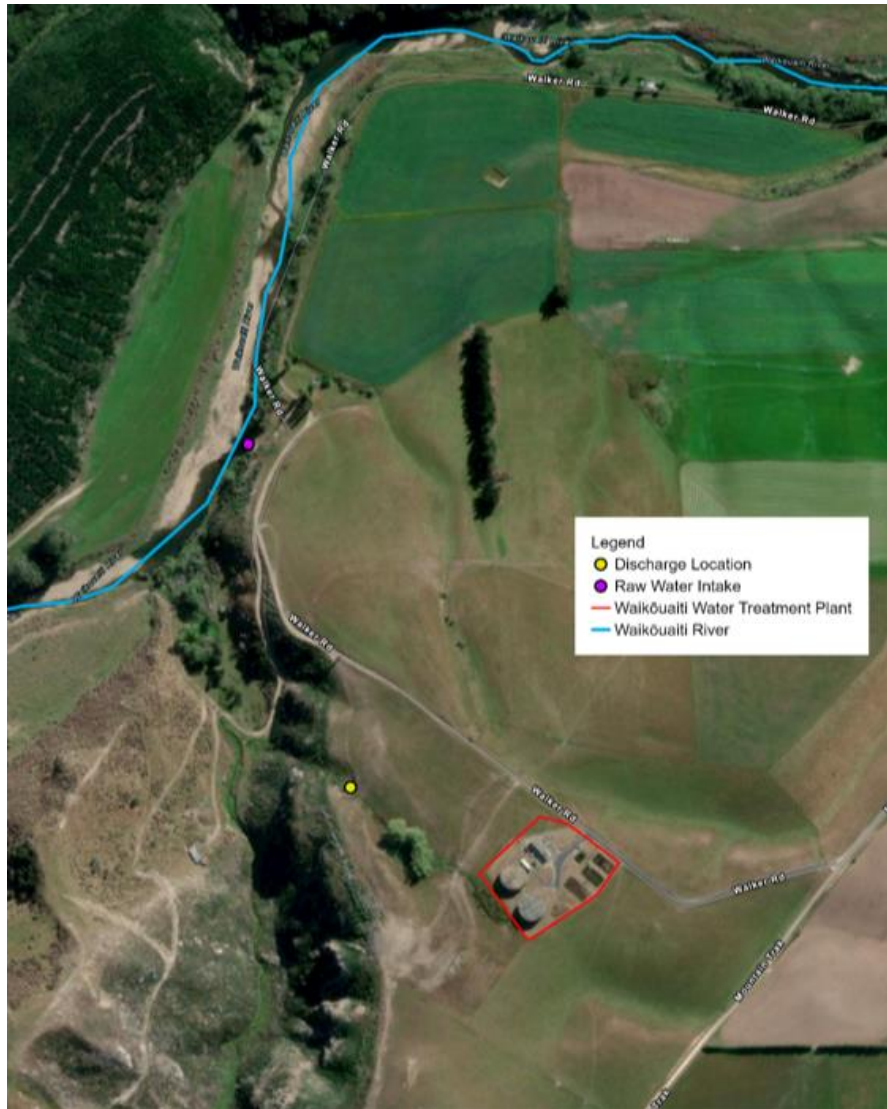


Figure 1: Waikouaiti Water Treatment Plant and Waikouaiti River

Kāti Huirapa ki Puketeraki have a deep and enduring spiritual connection to the Waikouaiti River. This paramount awa flows through the Kāti Huirapa ki Puketeraki takiwā and has provided nourishment for the people for generations.²

In early 2021 DCC commissioned Beca to commence the required investigations, concept design and planning services necessary to identify a path for the upgrade

² Cultural Impact Assessment Prepared for the Dunedin City Council Waikouaiti Water Treatment Plant Upgrade, Aukaha, 2021

of the various components of the Waikouaiti Water Treatment Plant. At the same time DCC also engaged Aukaha, a cultural consulting company owned by mana whenua, to provide a gateway for engagement with mana whenua.

Since that time the project has developed and changed in many ways, however a consistent and good faith approach for engagement has been established between these three project partners which has ultimately led to a smooth transition into the construction phase of the project.

This paper summarises the projects cultural context, describes how face to face engagement has made engagement with mana whenua genuine and outlines the key outcomes delivered as a result of this engagement.

Overall, the manner of engagement and cultural outcomes achieved within this project have contributed to DCC understanding of Kāti Huirapa ki Puketeraki values resulting in positive steps toward a treaty partner relationship between DCC and mana whenua.



Figure 2: Waikouaiti Water Treatment Plant

2. WAIKOUAITI WATER TREATMENT PLANT PROJECT

The Waikouaiti Water Treatment Plant (WTP) is critical infrastructure providing potable drinking water for the Waikouaiti, Karitāne and Hawksbury townships. The WTP originally dates back to the 1950s with modifications carried out during the 1990s and early 2000s. The current plant process is depicted in Figure 3 below.

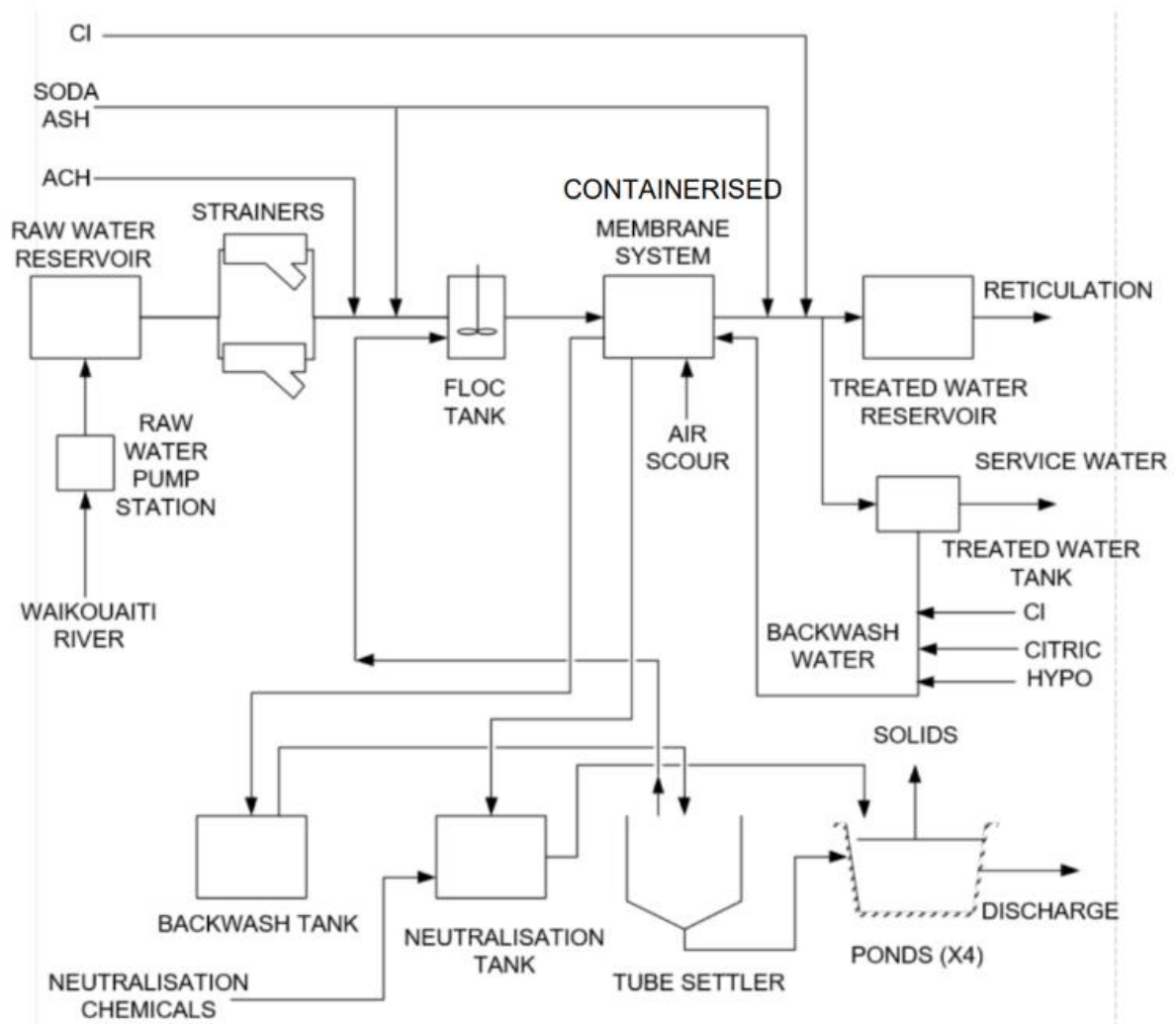


Figure 3: Waikouaiti Existing Process Diagram³

A 2020 Process Capability Assessment (PCA) identified a number of areas that would benefit from improvement including upgrades required to meet Drinking-water Standards for New Zealand 2005 (Revised 2018) (DWSNZ). The following sections outline the aspects of the plant identified for investigation and concept design followed by a confirmation of which aspects have so far moved into delivery phase.

³ Waikouaiti Water Treatment Plant Process Capability Assessment, Beca, 2020

2.2 TREATMENT PLANT CONCEPT DESIGN AND OPTIONEERING SCOPE

Aspects of the plant identified for improvement include:

- **Backwash discharge location⁴** – relocate backwash discharge from upstream of the intake to downstream of the intake, including rock lined swale and riparian planting
- **Raw water pump station improvements** – including a new intake screen to improve the exclusion of small fish and elvers, upgrades to improve the operability of the plant and improvements to reduce the health and safety risk of access for operators. This also includes lowering the intake level to avoid the need to sandbag at certain times of the year.
- **Additional raw water storage** – The existing raw and treated water reservoirs were built in approximately 1950 and are in need of upgrading to repair leaks and improve access. In addition, the treated water reservoir does not include mixing which means that disinfection through use of chlorine is not as effective as it could be if baffles were included in the vessel.

Five different reservoir configurations were considered but the recommended option includes upgrading the existing reservoirs to be used for raw water as well as providing two new reservoirs for treated water storage. Improving disinfection will be addressed separately using a chlorine contact pipe.

This option provides redundancy in both raw and treated water storage so that reservoirs can be taken offline for cleaning and maintenance and doubles the raw water storage volume. Doubling the raw water storage volume means that short term water quality events or similar can be buffered, or water take shut down for a few days.

- **New membrane filtration plant and associated ancillaries** – A containerised membrane plant was installed in 2020 to temporarily address issues with the original membranes. The options include retaining the containerised membrane plant on site or installing a new plant.
- **Taste and odour treatment** – Residents complain about an earthy or metallic taste and a brown or rusty red colour in the treated water. The source of the taste and odour is likely from algae or bacteria, which can produce geosmin and 2-MIB, compounds with a distinct musty, earthy odour. While these compounds do not necessarily pose a health risk, they can negatively influence the consumer's perception of the drinking water safety. This is known to be a common problem with surface water supplies, especially during summer months, where low flowing streams and warmer temperatures can result in higher natural algae levels. Algal toxins have not been detected in the catchment however the presence of taste and odour is an indication of increased toxin risk.
- **Building footprint for future fluoridation** – to be installed if required by the Ministry of Health in the future.
- **Footprint for pH and alkalinity adjustment** – if required in the future.
- **Increased backwash pond capacity** – to allow hydraulic buffering of peak and off-normal discharges, attenuation of water quality variations and improved operation and maintenance. .

⁴ Waikouaiti Water Treatment Plant Upgrade Concept Design Report, Beca, 2022

2.3 DELIVERY PHASE

By September 2023, the backwash discharge relocation and raw water pump station improvement aspects of the project had moved into delivery phase.

The raw water pump station improvement will involve a temporary diversion of the Waikouaiti River to allow a dry working area to upgrade the intake structure and fish screens.

The backwash discharge works will relocate the discharge downstream of the intake and involve the Puketeraki Nursery supplying and installing a 1600m² riparian planting area around the new discharge location.



Figure 44: Waikouaiti Raw Water Intake Structure

3. CULTURAL CONTEXT

3.1 MANA WHENUA ASSOCIATIONS

Kāti Huirapa Rūnaka ki Puketeraki, one of the 18 Papatipu Rūnaka of Kāi Tahu⁵, hold mana whenua status in the project area, which is on the Waikouaiti Awa near the heart of their takiwā in Karitāne



Figure 55: Huirapa Whare (Left) and Maririhau Whare (right), Puketeraki

Kāti Huirapa ki Puketeraki have a deep and enduring spiritual connection to the Waikouaiti River. This paramount awa flows through the Kāti Huirapa ki Puketeraki takiwā and has provided nourishment for the people for generations. The Waikouaiti is acknowledged as the awa in the pepeha of Kāti Huirapa ki Puketeraki whānau. The mountains that comprise the landscape overseeing the Karitāne village are the headwaters of the Waikouaiti catchment and are named after ancestors who crewed ancient waka which voyaged to these lands, including Hikaroroa, Paahatea, Ka Iwi a Weka, Ruatūpāpāku and Kā Tamariki a Heikura.⁶

In Te Ao Māori, names and the naming of landmarks and landscape features is an affirmation of mana by the tribal collective who occupy that area, also known by Kāi Tahu as mana taunaha or mana tapaptapa. In addition to the awa itself, there

⁵ In the south of the South Island, the local Māori dialect uses a 'k' interchangeably with 'ng'. The preference is to use a 'k' so for example southern Māori are known as Kāi Tahu, rather than Ngāi Tahu. See the glossary for a complete definition.

⁶ Kāti Huirapa Rūnaka ki Puketeraki (2014) *Waikōuaiti Mātaitai application*. Source: <http://www.puketeraki.nz/site/puketeraki/Waikouaiti%20Mataitai%20final.pdf>

are two important cultural sites of significance in close proximity to the project area, namely Te Pari Koau and Hakariki.

Hakariki is both the Southern Branch of the Waikouaiti River and also the name used for the confluence of the Waikouaiti north and south branches. Hakariki was an occupation site and notable food gathering site for tuna and kāuru. Te Pari Kōau/ Tupare Kōau are cliffs adjoining the Waikouaiti awa and were used as a site for gathering īnaka, tuna and fern root.



Figure 66: Sites of Cultural Significance near the Waikouaiti Water Treatment Plant and the Waikouaiti Matatai Reserve which is shown as green.

The wider East Otago area, including Karitāne and Waikouaiti, was visited, occupied and gathered from by the tūpuna of Kāti Huirapa Rūnaka ki Puketeraki, including Waitaha tūpuna who explored and settled Te Waipounamu prior to the arrival of Kāti Mamoe and Kāi Tahu. The Waikouaiti awa and surrounding East Otago landscape is steeped in kā kōrero me kā taoka tuku iho (cultural stories, heritage and traditions passed down over the generations).

Battle sites, Pā, urupā, nohoaka, kāika, mahika kai sites and wāhi tapu record the names and stories of the Kāti Huirapa ki Puketeraki tūpuna (ancestors). These significant sites, often referred to as wāhi tūpuna (ancestral places) provide a lens for understanding mana whenua associations and connections with the awa in the past. Throughout colonisation, the ability of mana whenua to continue practices handed down, including mahika kai and the ability to follow kā ara tūpuna (ancestral trails), has been eroded. It is the obligation of mana whenua to enhance and protect the landscape, mahika kai sites and wāhi tūpuna so that mātauraka (knowledge) and maumaharataka (memories) can be handed down to the next generation.

From a Te Ao Māori world view, the whenua (lands), wai māori (freshwaters), wai tai (coastal waters) and moana (ocean) are viewed as holistic and interconnected,

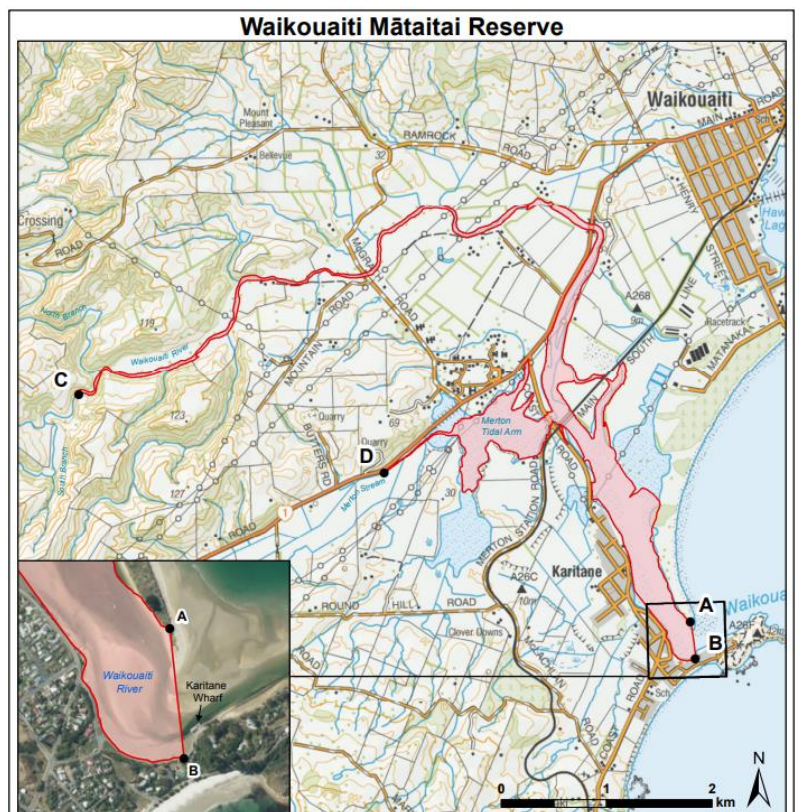
thus when considering the effects of an activity this must be done in a way that acknowledges the wider landscape and interconnected elements of those places.

Another important local feature is the nearby 4ha Maori Reserve land that was set aside as one of the Fenton Reserves in the 1868 under the terms of Kemp's Deed⁷, also known as the 1848 Canterbury purchase. The site is also known as Hakariki and highlighted in Red in Figure 6 above. Whereas many of the farms in the area had roads formed to a driveway access, no formed access to this land was ever provided. This lack of access is a specific local example of how over generations, mana whenua have become more and more disconnected from their mahika kai sites, awa, mauka and wāhi tupuna (ancestral cultural landscapes) through the privatisation of land. Through this process the connections between mana whenua and their mahika kai practice, wāhi tūpuna, their migration trails has been eroded. The progressive alienation of mana whenua from their places of cultural importance diminishes the mana of the people.

3.2 WAIKOUAITI RIVER MĀTAITAI RESERVE AND EAST OTAGO TAIĀPURE

Kāti Huirapa ki Puketeraki have asserted their mana whenua status on, and kaitiakitaka commitment to, the Waikouaiti River through establishment of the Waikouaiti River Mātaitai Reserve (Mātaitai) and East Otago Taiāpure.⁸ Getting a Mātaitai on the river came to fruition after many years of hard work by Kāti Huirapa ki Puketeraki takata tiaki to secure recognition of the importance of the river and the need for mana whenua to have rakatirataka over it. The Ministry of Primary Industries granted the Mātaitai reserve on the 21st of July 2016.⁹ A mātaitai is an identified customary fishing area managed by the tangata whenua through takata tiaki.¹⁰ Commercial fishing is generally prohibited in a mātaitai reserve, which includes the Waikouaiti River. Figure 7 below outlines the mātaitai area including the area of the awa which interacts with the water treatment plant.

Figure 77: Waikouaiti River Mātaitai Reserve



⁷ https://ngaitahu.iwi.nz/our_stories/kemps-deed-1848/

⁸ Customary fisheries management areas: <https://www.mpi.govt.nz/fishing-aquaculture/maori-customary-fishing/customary-fisheries-management-areas-rules-and-maps/>

⁹ Puketeraki.nz website – *Mātaitai application for the waikouaiti river*

¹⁰ Takata tiaki or Tangata Kaitiaki are local guardians of specific areas appointed under the Fisheries (Kaimoana Customary Fishing) Regulations 1998 or the Fisheries (South Island Customary Fishing) Regulations 1999.

The East Otago Taiāpure was established in 1999 and further reaffirms the rakatirataka of Kāti Huirapa ki Puketeraki on the East Otago coastline and the connection between this environment and the Waikouaiti River. The primary vision of the East Otago Taiāpure is to ensure there are healthy, abundant, and accessible coastal fisheries which will be available now and into the future.¹¹

The waters of the Waikouaiti River meet the coastline at Huriawa peninsula and influence water quality in the coastal marine environment, including the areas within the Taiāpure. A fishing reserve exists at the Waikouaiti River mouth which enforces specific take limits on finfish and shellfish, currently including the prohibition of pāua takes within 50m of the mean high-water mark on the Huriawa Peninsula.

Activities in the Waikouaiti River catchment, including mining in the headwaters, forestry, farming and other land uses, and water takes are a risk to the integrity of the fishing reserves within the Taiāpure. The combination of the Taiāpure and mātaimai reserve further signifies the role of Kāti Huirapa ki Puketeraki in ensuring the hauora of the Waikouaiti River and coastal environment under a Ki uta ki tai (from the mountains to the sea) philosophy is protected. In addition to the fishing values, the river mouth is designated as a surf break of national significance.

4. FACE TO FACE ENGAGEMENT

4.1 DIRECTION FOR ENGAGEMENT

Recognising the importance of the Waikouaiti Awa, the Waikouaiti WTP upgrade team approached Aukaha requesting advice regarding the best way to engage with mana whenua on this project. The project team were directed by Aukaha toward the East Otago Taiāpure Committee which meets monthly at Rūnaka premises in Karitāne. Following attendance at the first committee meeting in May 2021, it was agreed that a project representative should attend monthly to provide real time updates and seek input as the project develops *kanohi ki te kanohi*.

4.2 FACE TO FACE ON HOME GROUNDS

Kanohi ki te kanohi can mean face to face, eye to eye or in the flesh. The social meaning of the phrase emphasises physical presence and even a sense of commitment, to whānau (family), to a place, to a kaupapa (purpose). Kanohi kitea is a similar notion, meaning “the seen face” highlighting the importance of “being seen” to strengthen relationships and one’s place of belonging in the community¹². Kāti Huirapa ki Puketeraki continue to value this medium of engagement in the age of technology and video conferencing.

After following through with the recommendation to regularly attend the monthly Taiāpure Committee meeting during the definition and concept design phase of the project between May 2021 and February 2023, relationships were able to form and information was able to be shared in real time. Value was observed

¹¹ East Otago Taiāpure Information Brochure. Accessed 17 August 2023: <http://www.puketeraki.nz/site/puketeraki/files/images/Brochure.pdf>

¹² A O’Carroll, Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health 11(3) 2013

from all parties, as even when there was not much project progress to report, there were always learning opportunities for each party.

4.3 NATURE OF ENGAGEMENT

The nature of the conversation was always respectful but not always straightforward. Previous unfulfilled promises from former DCC staff in years and decades past were raised – especially in the early meetings and project team representatives were regularly and sometimes sternly reminded by kaumātua not to treat this river like any other – it is different as it has a unique cultural context and lifegiving function. However, as the months went on so to the ease of the conversation increased.

Aukaha, as the consultants weaving together the feedback from the Taiāpure committee with the work programme of DCC and Beca, respected the commitment of project staff to attend the monthly meetings, after work hours and on the home grounds to provide transparency and accountability in the developing phases of the WTP upgrades.

In December 2021, after the first nine months of engagement on this project a Cultural Impact Assessment (CIA) was delivered to the project team. The transmission of the CIA from Aukaha included the following note:

*"I'd also like to this moment to commend you and the project team for the engagement you've had with us and in particular, attending the Taiāpure Komiti meetings to keep the rūnaka up to date on the project. From my experience this project has been the best example I've ever seen on early engagement with mana whenua and making the effort to keep the rūnaka up to date kanohi ki te kanohi."*¹³

4.4 CULTURAL IMPACT ASSESSMENT RECOMENDATIONS

The key messages from the CIA provided to DCC in December 2021 are¹⁴:

1. The Waikouaiti River is part of a wider cultural landscape which is imbued with the lived experiences of mana whenua tūpuna. These experiences and the values passed down through the generations inform mana whenua and Kāi Tahu Whānui identity, cultural practices, and approaches to environmental management.
2. Mana whenua have an enduring relationship with the Waikouaiti River. This relationship is evident in place names and sites of significance, archaeological evidence, customary fisheries management areas, and ongoing monitoring which takes place on the river. Collectively these activities and connections highlight the importance of this river to mana whenua.
3. Mana whenua are supportive of the proposed upgrades in the short term to meet the DCC's objectives of providing safe drinking water to the Hawksbury, Karitāne and Waikouaiti communities. However specific recommendations in relation to the upgrade project have been provided.

¹³ Personal communication from Aukaha to Waikouaiti WTP Upgrade Project Team, 8 December 2021.

¹⁴ Cultural Impact Assessment Prepared for the Dunedin City Council Waikouaiti Water Treatment Plant Upgrade, Aukaha, 2021

4. Mana whenua recognise the immediate need for DCC to improve the quality of drinking water at the Waikouaiti WTP to uphold te hauora o kā takata (the health and wellbeing of people).
5. While approval for upgrades is being given in the short term, there are longer term considerations that must be taken into account. DCC must progress the development of an alternative water supply for Karitāne, Waikouaiti and Hawksbury and cease taking water from the Waikouaiti River.
6. In the longer term, mana whenua seeks relocation of the backwash discharge point out of its current location in the gully, recommend the discharge of treated backwash through a constructed wetland and seek options that improve access to the Waikouaiti awa for whānau.
7. Mana whenua want to continue to be involved over the life of this project. This will include consultation and involvement from mana whenua and Aukaha on the implementation of the recommendations of this assessment, including the opportunity to input into proposed erosion and sediment control measures.



Figure 88: Existing backwash discharge location.

5. OUTCOMES

The early and regular *kanohi ki te kanohi* engagement, including the preparation of a cultural impact assessment in advance of the preliminary design stage has resulted in tangible changes to the project including optimisation of water take rates, new backwash discharge planting solutions, opened opportunity to improve access for mana whenua to the awa and mana to mana meetings. These outcomes are discussed below.

5.1 OPTIMISATION OF WATER TAKE RATES

During discussion at the Taiapure Committee, it was made clear that the water take was reducing the mana of the river, and this was undesirable. It also became clear that the larger the instantaneous extraction rate the greater the impact on the mana of the river.

Therefore, as a result of this engagement, the replacement pumps were selected to have variable extraction capability so that they could be programmed to take water at a lower rate over a longer period.

Following on from this initial response, mana whenua were asked whether they prefer the water takes to be biased toward certain times of the day – ie at night or during the day on the basis some fish species were more active at night times. The response in the end was that there was no preference so long as the water was being taken at the lowest rate practical. This is seen as giving effect to the first priority of Te Mana o Te Wai, the health and wellbeing of the waterbody.

Therefore, the change in pump rates facilitated by this engagement was able to reduce the existing impact on the mana of the river.

5.2 NEW BACKWASH DISCHARGE PLANTING SOLUTIONS

The CIA indicated a preference for a new backwash location downstream of the intake via a planted area. Relocating the backwash was also preferred by Public Health South.

A combined site visit was undertaken between the project team and mana whenua representatives where the next overland flow point downstream of the intake structure was identified as a suitable location for the new outlet and for a planting area.

Moving the backwash to this location therefore presented an opportunity for a co-design opportunity through the Runaka's own nursery. The project team worked with the nursery who specified the plant mix for a 1600m² area around the new backwash outlet and then were subsequently engaged to install the plants.

The codesign of the planting area made sure that the planting aligned with other restoration activities undertaken by the community in the Waikouaiti River catchment as it works toward the 200-year vision of restoring the food basket in the river and estuary.

5.3 IMPROVED ACCESS FOR MANA WHENUA TO THE AWA

The CIA also requested that this project be used to improve access to the awa and specifically raised the lack of access for kaumātua to Hakariki. During the site visit to identify the new backwash location this matter was discussed further and stories of troubled access including the need to ask permission from farmers as the paper roads are unmarked and unformed and one cannot practically use them for access. It also became apparent that there was not a clear understanding of existing legal access rights in the community. The project team undertook to prepare a drawing to show legal access to Hakariki (see figure 9 below).

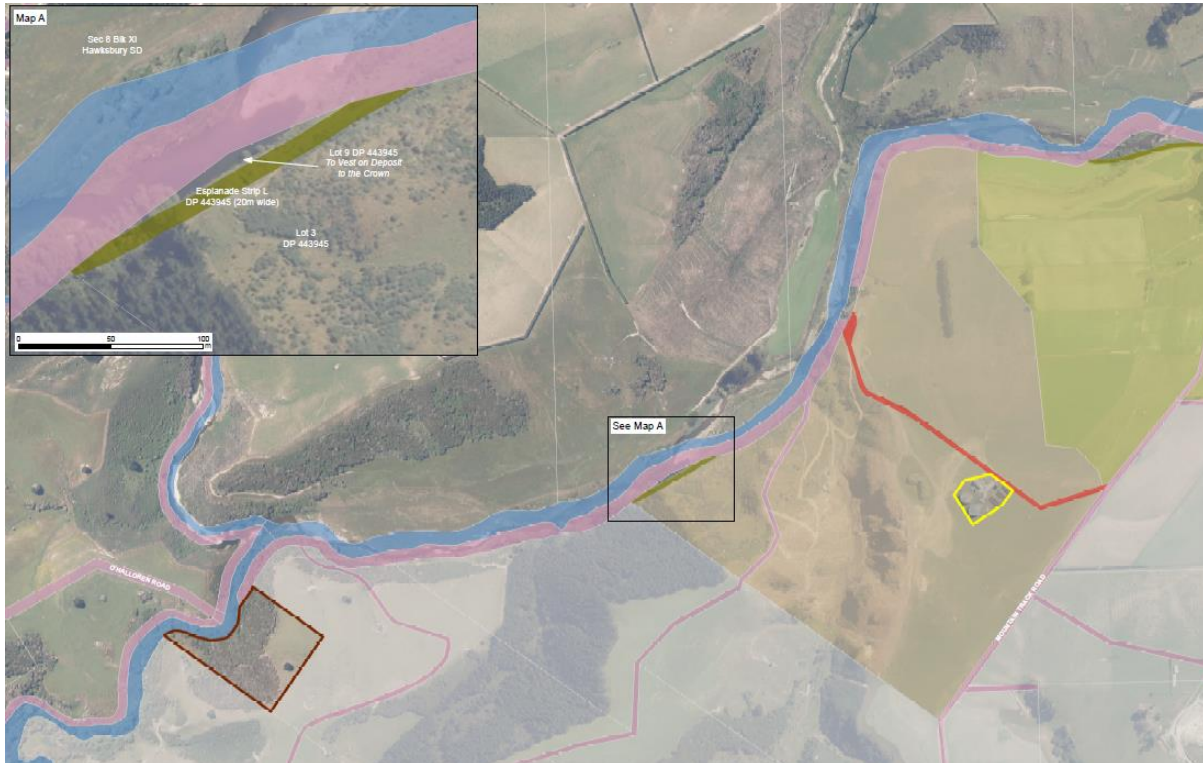












Figure 99: Plant and Hakariki Access Diagram

Figure 9, shows that adjoining the river is a paper road, and a recent subdivision has provided an esplanade strip so that both practical and legal access is provided from the Waikouaiti Water Treatment Plant. However, the access to the water take structure at the River for DCC is via a private easement.

As DCC was involved in negotiations with the landowner regarding land takes to facilitate the project DCC also sought agreement from the landowner for mana whenua to use the DCC right of way.

As part of the land purchase agreement the landowner has agreed to enter into an access

Legend

-  Waikouaiti Maori Reserve Trust
 -  Waikouaiti Water Treatment Plant
 -  Esplanade Strip
 -  Easement (RoW) in favour of DCC (private)
 -  119 Ramrock Rd
 -  118 Mountain Rd
 -  2905 Waikouaiti-Waitati Rd
 -  Land Parcels
- Road and River Parcels
-  Hydro
 -  Legal road

agreement direct with the Rūnaka and their nominated representative.

5.4 UNDERSTANDING THE CORRECT PROCESS FOR ECOLOGICAL INVESTIGATIONS

One of the first actions was completing an ecological investigation in the river around the intake structure to identify fauna and flora at the site so that an Ecological Assessment of Effects could be produced.

The project team invited Aukaha and Mana Whenua to attend the ecological investigations which included fishing to identify species present. The fishing was completed under a 2021 ecologist permit from Fisheries New Zealand under the Conservation Act.

During the investigations a large trout was caught, and a mana whenua representative asked if this trout could not be released as they are a predator to many of the smaller native fish species in the awa. However, the project ecologist said he was required to release it under the terms of his permit from Fisheries New Zealand.

Later, at the next Taiapure committee meeting, the project team were asked how they were able to undertake this work within the mātaihai without authorization from the committee. After taking this away, Fisheries New Zealand provided an update to their conditions to exclude mātaihai areas, requiring agreement of the relevant mātaihai committee for ecological investigation work.

Subsequent ecological work for the project in the awa was completed only after first obtaining the approval of the mātaihai committee.

5.5 MANA TO MANA MEETING AND WRITTEN APPROVAL

After 18 months of engagement and attendance at the Taiapure Committee meetings, the plan for the first stage of upgrade works had been completed and written approval from the Runaka for the required consents was required. A mana-to-mana meeting was then held between Runaka representatives and the project team, including the DCC 3 Waters Group Manager. The mana-to-mana meeting demonstrated an understanding from DCC of the importance of the awa and making sure that mana was met with mana when key requests were to be formally made.

Subsequent to the mana to mana meeting the Runaka granted their written approval for the required resource consents for the project.

6. CONCLUSIONS

A key learning from this project is that formalised engagement with mana whenua over an extended time frame allows trust and common understanding to develop. As part of this, co-design initiatives involving mana whenua as part of the project team can help to shape and direct progress so that the needs of all stakeholders are specifically addressed.

As a working example, the Waikouaiti Water Treatment Scheme has been able to address wider iwi concerns around impacts on water, and access to water and traditional food gathering sites, as part of the water treatment scheme development.

The relationships and communication channels established between Iwi and Dunedin City Council will provide a foundation for ongoing engagement on a range of water infrastructure projects that are planned for the district. Given the changing policy settings and the reflected importance of Te Mana o Te Wai, these relationships will be essential for the successful roll out of water work in Dunedin City in future.

As outlined above, the Waikouaiti River is of extremely important value to Mana Whenua and therefore upholding te mana o te wai in this context required carefully considered engagement with mana whenua.

The engagement was not perfect but it was early, consistent, face to face and on Rūnaka home grounds - it demonstrated positive steps forward for DCC

Overall, the manner of engagement and cultural outcomes achieved within this project have contributed to improved understanding of key values and outcomes sought by the parties and contributed in positive steps toward a treaty partner relationship between DCC and mana whenua.

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