

SHOTOVER DISPOSAL FIELD ALTERNATIVE OPTIONS: POSITION STATEMENT OF KĀI TAHU ON SHORTLISTED OPTIONS

(This position statement has been endorsed by the seven Kāi Tahu papatipu rūnaka with interests in the Kimiākau/ Shotover and Kawarau rivers and the greater Whakātipu area.)

Cultural position on discharge of human wastes

Kāi Tahu consider the direct discharge of human waste to natural water abhorrent.

In traditional Māori knowledge, wai (water) was classified in accordance with its characteristics and ceremonial use. These categories determined how the water could or could not be used. The mixing of water from separate categories was, and still is, considered unacceptable to Māori. In this regard, wastewater which is classified as waikino (polluted water) should not be mixed with other categories of water. Instead, natural mixing of wastewater through land, or a similar environment that provides a natural buffer or transition zone is supported by Kā Rūnaka. To reiterate, the wastewater leaving a treatment plant is considered tapu (prohibited, restricted, forbidden, to be approached with caution). Treatment through natural processes in the land to reach a state of being noa (free from extensions of tapu, ordinary, unrestricted) is the preferred option.

Kāi Tahu associations with the Kimiākau/ Shotover and Kawarau rivers

The Kawarau and Kimiākau/ Shotover rivers are of great cultural significance to coastal Otago hapū as important parts of the network of ara tawhito (trails) that connected them with Lake Wakatipu/Whakatipu-wai-Māori and the greater Wakātipu/Whakātipu pounamu fields. The Kawarau River connected many ara tāwhito, and the name Kimiākau, meaning 'to look for the coast', suggests that the Kimiākau/ Shotover River was a main route to the pounamu fields on Te Tai Poutini/West Coast.

The importance of the Kimiākau/ Shotover River for both its mahika kai values and its place in the great system of ara tawhito seasonally traversed by Kāi Tahu whānui is demonstrated by the establishment, through the Ngāi Tahu Claims Settlement Act (1998), of two nohoaka entitlements along the river. One of these entitlements is located at Tucker Beach, a short distance upstream of the Shotover Delta.

The shores of the Kawarau River were a known and well-frequented moa hunting site, and weka, kākāpō, kea and tuna were also readily available here. Two pā, potentially kāika mahika kai, were located downstream near present-day Gibbston.

Position on shortlisted options for wastewater disposal

Since at least 1998 Kā Rūnaka have expressed:

- their opposition to wastewater discharges to the Kimiākau/ Shotover River;
- their preference for land-based discharge; and
- their view that the Shotover Delta is an unsuitable location for land disposal.

In respect to land-based disposal options, Kā Rūnaka support options that will use natural processes to treat the wastewater and absorb and remove contaminants. A superficial or token contact with the whenua that does not have any additional treatment effect beyond that offered by the treatment plant itself is not sufficient. In order for the mauri of the water to be fully

restored it needs to be cleaned and revitalised through interactions with the forces of nature and Papatūānuku:

- Water passes through Papatūānuku (the earth) to transform and cleanse the polluted water which feeds the surrounding biota and in turn begins to re-invigorate its mauri;
- Tāne (the Atua of the forest and all that dwells within it), uses plants, roots, micro-organisms, birds, and insects that form the natural biological processes to absorb and remove contaminants with the added benefit of significant carbon sequestration and a natural increase in biodiversity;
- Tāwhirimātea (the wind) acts to oxygenate and agitate the water; and
- Tama-nui-te-Rā (the sun) acts to add UV light.

Through the agency of Aukaha and Te Ao Marama Limited, Kā Rūnaka have provided input to the process of assessing and scoring options for disposal of wastewater from the Shotover Wastewater Treatment Plant. Specifically, Aukaha and Te Ao Marama were invited to score options in terms of three criteria:

- The disposal of treated wastewater aligns with tikaka as guided by mana whenua;
- Mō tātou, ā, mō kā uri ā muri ake nei - For us and our children after us; and
- Cultural impacts to sites of significance and access to sites for cultural activities.

As described above, any options relying on discharge to the river without effective land-based treatment are contrary to tikaka. Discharge of wastewater to the river would not uphold the intergenerational obligation to uphold the mauri of the awa and would have a significant negative impact on mahika kai values associated with the awa. Accordingly, it was concluded that such options could only be scored as “fatally flawed” from the cultural perspective.

The shortlisted options comprise:

- Discharge to the Kawarau River via depressions and former river channels in the Delta;
- Discharge via subsurface wetlands in a historical river channel in the Delta into rock-filled flow paths to the Kawarau River; or
- Disposal to land in the adjacent Frankton Flats area by either deep well injection or shallow injection. These options would not provide sufficient capacity to absorb the full wastewater volume and so could not operate independently of the subsurface wetlands option, which would be used to discharge a major portion of the modelled wastewater flow.

Kā Rūnaka understand that the subsurface wetlands would not provide substantive additional treatment of wastewater before it is discharged to the river.

Because all options rely on discharge of significant volumes of wastewater to the Kawarau River, none of them can be considered culturally appropriate.

The consideration of options has been constrained by exclusion of any solutions that do not involve continued use and expansion of the treatment plant in the Shotover Delta. Ongoing reliance on this location is of concern to Kā Rūnaka, particularly due to the proximity to the Kīmiākau and Kawarau rivers and uncertainty about flood hazards arising from climate change. The position of Kā Rūnaka is that a more holistic investigation of wastewater needs and

alternatives for Queenstown is required that is not constrained by continuing to rely on treatment at this location.