MANAWHENUA ASSESSMENT OF THE METHVEN AUXILIARY STOCKWATER RACE

Prepared by	Aoraki Environmental Consultancy Limited
Authorised by	Ally Crane General Manager Aoraki Environmental Consultancy Limited (on behalf of Te Rūnanga o Arowhenua)
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Address for service	Aoraki Environmental Consultancy Limited 1/8A Washdyke Flat Road PO Box 885 Washdyke Timaru 7940
Prepared for	Ashburton District Council 2 Baring Square East Ashburton 770

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Contents

1. Who is Arowhenua

Kāi Tahu are Takata[1] Whenua of the Canterbury Region. Kāi Tahu means “people of Tahu”. Kāi Tahu is the iwi comprised of Kāi Tahu Whānui; that is the collective of the individuals who descend from the five primary hapū; Ngāti Kurī, Ngāti Irakehu, Kāti Huirapa, Ngāi Tūāhuriri and Ngāi Te Ruahikihiki. The Charter of Te Rūnanga o Ngāi Tahu established under the Te Rūnanga o Ngāi Tahu Act 1996 (TRoNT Act) constitutes Kāi Tahu as kaitiaki of the tribal interests.

Papatipu Rūnaka are defined in Section 9 of the TRoNT Act. This includes Te Rūnanga o Arowhenua (Arowhenua). Aoraki Environmental Consultancy Limited (AECL) is a legal entity that has been given the mandate by Arowhenua to represent their interests in all environmental matters.

Arowhenua is the representative body of the takata whenua and who hold manawhenua in the traditional takiwā that includes the area between the Rakaia River and the Waitaki River which includes the Ashburton District Council.

Arowhenua also share the area with Ngāi Tūāhuriri and Te Taumutu Rūnanga who have a common interest in the area to the Hakatere (Ashburton River). The Rūnaka have agreed Arowhenua will respond on behalf of all three Rūnaka on Ashburton District Council transitioning away from stockwater delivery.

2. Purpose of this Report

The purpose of this report is to provide a manawhenua assessment of the Methven Auxiliary Stockwater Race. This report further provides considerations for the Stockwater Transition Working Group in making recommendations to Ashburton District Council as they seek to exit a system that provides stockwater through a stockwater network.

This report has been informed by the following information sources:

- Knowledge and information from Arowhenua Rūnaka.
- A site visit by AECL along with the Ashburton District Council Infrastructure Services Support Lead on 26 August 2025;
- BECA, 11/08/2025, Summary of Findings Report – Methven Auxiliary Water Race Network (Ecological Snapshot);
- Information provided by Ashburton District Council including photos and annotated maps; and
- Stockwater Exit Transition Plan – Exit of stockwater service 2024-2027; adopted by Ashburton District Council 18 December 2024.

3. Background

On 26 June 2024, Council adopted its 2024-2034 Long Term Plan (LTP) which included the decision to divest itself from the delivery of the stockwater services by 30 June 2027. To inform the effects of the closures Ashburton District Council established a working group and prepared a plan on how to investigate each of the closures. Ashburton District Council further determined that alongside seeking feedback from the community of the assessments that would be initiated to look at ecological, archaeological, stormwater and cultural reports. With a formal assessment being prepared by AECL on behalf of Te Rūnaka o Arowhenua being a part of this.

This report relates to the Methven Auxiliary stockwater race – refer to Figure 1.

[1] Note on dialect: In Ngai Tahu/Kai Tahu dialect, 'k' is used interchangeably with 'ng'.

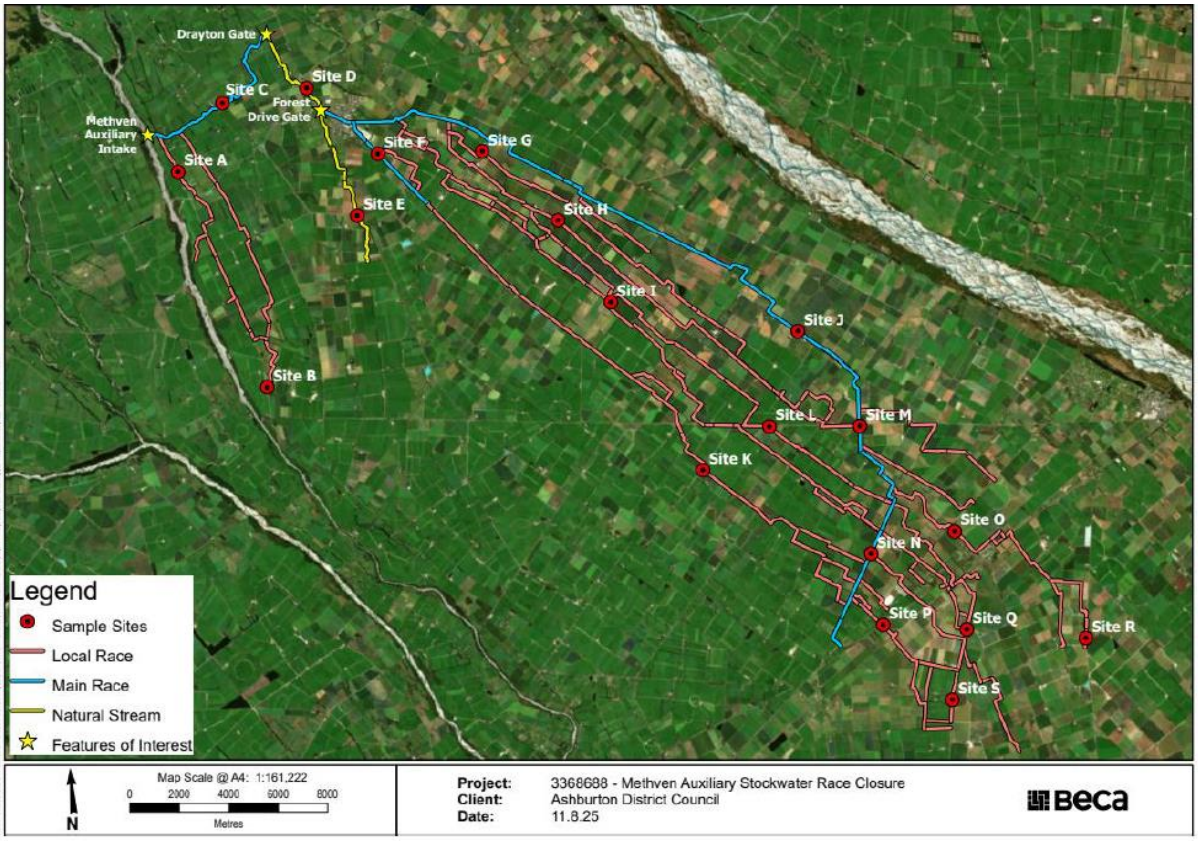

Figure 1: Taken from page 6 of Ecological Snapshot by BECA. Site Map of the Methven Auxiliary stockwater race network including the sample sites assessed in the BECA investigation, the extent of the race network under assessment and the sections of the race network that are classified as a natural stream, main race or local race.

4. Manawhenua Description of Area

For Kāti Huirapa there has been considerable loss of the environment that their ancestors knew and alongside that the species of plants and animals that used to live in the habitat. The following describes the landscape as it was to the tupuna (ancestors) of Arowhenua.

The Methven Auxiliary Stockwater Race shares many similarities to the Pudding Hill stockwater in terms of its relationship to the Rakaia River and surrounds. The intake is however from the Hakatere (North Branch of the Ashburton River).

Both the South and North Branches of the Hakatere River and its associated lakes and wetlands have long been an important landscape and mahika kai. Three Rūnaka share the Hakatere as part of their takiwā - Arowhenua Rūnaka, Taumutu Rūnaka and Kāi Tūāhuriri Rūnaka. In earlier times, the Hakatere was a ara tahito (traditional travel route) where the main foods taken from the river were īnaka, kanakana; tuna, the giant kōkopu, rats, weka, kiwi and waterfowl such as pūtakitaki, were also hunted along the river. The eggs of karoro, tarāpuka and kakīānau were also harvested for food, as were moulting pārera. The Hakatere River is also a Statutory Acknowledgement Area under the Kai Tahu Claims Settlement Act 1998. This is a recognition by the Crown of the special relationship of Ngāi Tahu with the area.

The Methven Auxiliary does not connect to but is near to the Rakaia which was also part of the ara tawhito (traditional travel route).

The stockwater race also sits under Huirapa / Ōpuke (Mount Hutt), which rises to the west of Kā Pākihi-whakatekateka-a-Waitaha (the Canterbury Plains. Along with the nearby mountains, forests, lakes, and wetlands of Ōtūwharekai (the Ashburton Lakes), Huirapa/Ōpuke was part of a rich mahika kai

(food-gathering) area. During the 1879 Smith-Nairn Royal Commission of Inquiry into the Kāi Tahu land claims, Kāi Tahu kaumātua recorded the foods gathered here included kiore (Polynesian rat), weka, kākā, kererū, tūī; and the berries of the native forest trees mātai and hīnau/pōkakā. This included kaika (settlements) associated with mahika kai along the river and near the intake area.

The stockwater races are part of Ōuetō is the plain between the Rakaia River and Hakatere (Ashburton River). In 1880 Kāi Tahu kaumātua recorded Ōuetō as a mahika kai where kiore (Polynesian rat), koreke (quail) and tiroki were gathered.

5. Assessment of Effects on Values of Arowhenua

5.1 Indigenous Species Habitat

Stockwater raceways are managed with the primary purpose of keeping water flowing to properties. This means they are periodically cleared of weed growth, debris and silt. Also, while fenced to exclude stock and having setbacks from cultivation stockwater races typically contain limited or no riparian habitat. Despite this stockwater race networks can still contain habitat that supports indigenous plant and animal species. The Ecological Snapshot shows that all sites for Methven Auxiliary had eDNA results detected for native fish.

The primary concern for Arowhenua is that stockwater races can, in the absence of other waterways, provide habitat for indigenous plant and animal species. With land use altering natural habitats indigenous plant and animal species have diminished in number and locations making any habitat in which they are now living potentially important. Therefore, consideration needs to be given to any closure of stockwater races on indigenous plant and animal species.

AECL did not undertake its own investigations of species within the stockwater races, choosing to rely on the Ecological Snapshot. AECL did however on the site visit look at the suitability of habitat for the species present within a selection of sites where the Ecological Snapshot had indicated species were present – in particular tuna. AECL visited the intake and the following sites from the Ecological Snapshot - A, B, C, E, G, S and K. These sites were selected with ADC as being representative of the Methven Auxiliary and where species of interest to Arowhenua were detected in the eDNA work by BECA. The findings of AECL on the site visit are contained in Table 1.

Table 1 Sites visited, eDNA from Ecological Survey and observations from site visit by AECL

Site	Ecological Survey species eDNA	Observation
Intake	N/A	Could smell tuna in area. Area prone to washing out and reworking which damages the river habitat. Willows have also been included in the works to assist with stabilising the area. Use of willows is not supported by Arowhenua. No fish screen.
A	Upland Bully Canterbury Glaxis Longfin Tuna	Very open drain, very few areas to live / hide.
B	Upland Bully Longfin Tuna	Deep mud. Tuna tracks seen, but no tuna smell. The site is meant to terminate at a soakhole but appears to continue on as a raceway possibly to the river. Has been indigenous planting on area that that continues as a raceway. Figure 2.

C	Upland Bully Canterbury Glaxis Longfin Tuna	Good habitat cover for native fish species – habitat cover largely introduced species. Figure 2.
E	Upland Bully Canterbury Glaxis Longfin Tuna Torrent fish	While looks like a good habitat for species, no obvious signs of species present, noted a lot of snails which suggests not much in area to eat them.
G	Upland bully Torrent fish	Area is unfenced and on site visit the drains had been sprayed and cleared. Little habitat for species to live / hide. Figure 3.
K	Upland bully Torrent fish	This site was particularly dirty water with a scum on the top. Figure 4
S	Upland bully	Area unfenced and sprayed, very few spaces for species to live / hide. Figures 3 and 4.

The Ecological Snapshot [section 5.1] suggests slightly higher quality of water in the upper network races compared to the middle and lower network races. Water in the middle and lower network races appear generally appearing to carry higher loads of nutrients and faecal matter than the upper network area. Rapid habitat assessments being good to fair in the upper network sites and fair in the middle and lower network. So, while species are found across the network the conditions they live in declined as the water moved further away from its source.

AECL, when examining the stockwater race, the raceway does provide habitat in which tuna can live. Tuna are a hardy species. Similarly, the other species found in the race network are fairly hardy.

AECL agrees with the Ecological Snapshot [at section 5.4.1] that a full ecological assessment of this the Methven Auxiliary is required to understand the likely impacts on ecological values. It is particularly important to understand the likely full number of fish species in the area. The network has been in place for many years, and it is important to understand the age of the tuna in the area and also how migratory species detected have been accessing into the drains and whether they are inhabiting the area or passing through. It is suggested that further investigation, including further eDNA testing when species are on the move. It is noted that trout and salmon were also detected and AECL is working with first nations tribes in the USA to re-patriate their salmon so it may be important to understand the extent to which these species are also using the race network. It is recommended that AECL is engaged to assist with shaping up the further ecological assessment to ensure traditional knowledge of species and how to find them occurs alongside any other investigations.

While there are ecological values in the raceways it was considered that keeping these open, particularly at the furthest extents, would hold little benefit without a substantive improvement to management of land surrounding the raceways. For example, retaining adequate vegetative buffers that not just reduce overland runoff but also provide shade and habitat.

There is also the concern of AECL that the intake is particularly vulnerable to being washed out and does not have a fish screen. The maintenance works to re-establish the intake and install the fish screen impact on the river and the habitat it provides. If the intake is closed AECL recommends working with Arowhenua to develop a programme to restore and maintain this section of the river.

Arowhenua also agrees with the conclusions in the Ecological Snapshot that once a full ecological impact assessment is undertaken this informs a fish salvage and relocation plan is developed to support any closure plan. The fish salvage work being done in a phased manner with the closure providing sufficient time for fish species to move habitat.

Figure 2 Sites C (left) and B (right) showing vegetation cover

Figure 3 Site M (left) and G (right) showing absence of vegetation cover

Figure 4 Site K showing condition of water (left) Site S showing cover (right)

5.2 Water Returned to the Rivers

Arowhenua has also consistently raised concerns about the irrigation network mixing water with water in the system coming from as far away as the Rakitata River. Arowhenua considers water has its own mauri (lifeforce). Water is known for what it supports with each waterway supporting different species within it flowing through different habitats. The tūpuna of Arowhenua also put water to different uses depending on where it come from and what was needed of that water body or what it provided. Arowhenua respected the waterbody for the uses that water needed from it – whether for food, drinking water or spiritual uses. For Arowhenua there are also the unknowns and the effects that can be had, for example to tuna who can track to a specific river across the ocean.

Arowhenua has consistently requested as raceways are permanently closed that the water is returned to rivers from which they come from.

At the time of writing this report, Arowhenua has been unable to ascertain the effect of removing the water in the stockwater race that augments Mount Harding stream. Arowhenua is however concerned with unnatural mixing of water where water from one water source would not naturally find its way into another, and this would need to be considered in any proposal to augment water.

5.3 Stopping Raceways

Where raceways are closed, there is a preference by Arowhenua that these are filled in. Where this is not practical, for example because of land drainage functions, then they are closed so there is no flow of water into the closed portion from a river or drain.

If the closed raceway terminates at a river, then this portion is closed or managed so there is no risk of fish getting into the closed raceway. Where this section remains open to convey drainage / stormwater then it is managed to ensure sediments and contaminants cannot enter the river.