



MANAWHENUA ASSESSMENT OF THE ALFORD FOREST INTAKE STOCKWATER RACE

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1. Who is Arowhenua

Kāi Tahu are Takata¹ 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 (the Council) transitioning away from stockwater delivery.

2. Purpose of this Report

The purpose of this report is to provide a manawhenua assessment of the Alford Forest Intake 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 29 January 2026;
- 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, the 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 the Council established a working group and prepared a plan on how to investigate each of the closures. The 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 Rūnanga o Arowhenua being a part of this.

This report relates to the Alford Forest Intake stockwater race – refer to Figure 1.

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

5. Assessment of Effects on Values of Arowhenua

5.1 Site Descriptions

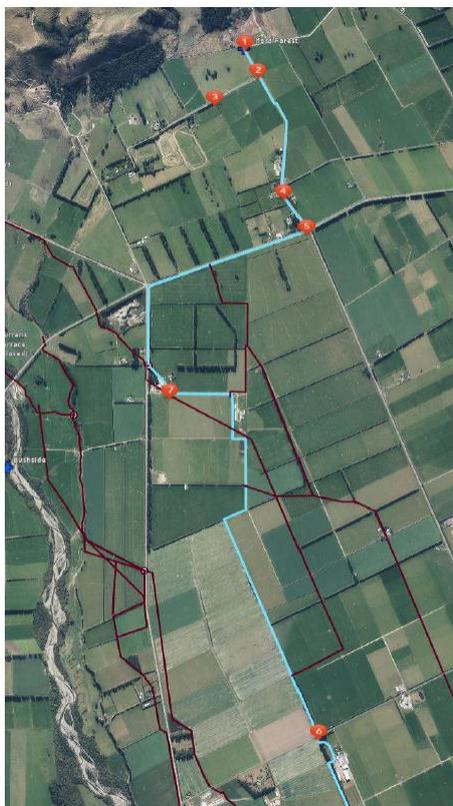


Figure 2. Location of sites visited on 29 January 2026

Intake

Access to the intake was not possible. However, it appears that the source water is a small hill-fed unnamed stream (Figure 3).

Sites 2 and 4

Site 2 scored 'good' on the fish habitat quality, with diverse hydrological features, silt-free cobbles and gravel substrate, diverse and abundant macroinvertebrate habitats.

Site 4 had similar habitat quality, with gravel sediment, with occasional cobbles, riffles and runs, no macrophyte biomass instream. Periphyton cover was low with a thin film of diatoms, consistent with high water quality in the upper catchment and low impact from land-use intensification (Figure 4). Some slumping along the roadside reflects unprotected riparian zone (Figure 5).

Site 6

By the time the water reaches Site 6, little flow remains and it terminates in a small pool in the paddock (Figure 6). During the site visit, no water was flowing out of the culvert pipe. The pooled water at Site 6 will either evaporate, or soak into the ground, over time. With source water originating from a hill-fed stream, flows would be highly responsive to rainfall events. Under drier summer conditions that this year, flow would most likely have terminated before reaching Site 6.

5.2 Water diversion

Manawhenua have been advised by Ashburton District Council (ADC) are still considering where to divert the water, once the channel is closed. One proposed route is to divert into existing channels along Alford Forest Settlement Road, down to Rakaia Gorge Road then push up Carneys Road to then drop into an unnamed creek (Figure 1, red lines).

At the time of the site visit, water was flowing in the channel along Rakaia Gorge Road but had ceased flowing by the time it reached Carneys Road. The channel at Carneys Road was infilled with terrestrial grasses and sediment. This would need cleaning out and re-grading, to ensure water could be pushed up-catchment to join the creek (Figure 5). Based on the topomap, the unnamed creek where the diversion is proposed to terminate, appears to be a branch of the original source water creek (Figure 7). This appears to divert around the base of Alford Hill, with channel diversions marked at two sites (Figure 3). This may provide an alternative route for the water diversion, allowing the source water to remain in its original creek. This was not investigated during the site visit.

The farmer at property Site 7 has proposed retaining the diversion and creating wetlands at the top of his property and continuing on the channel through his property. The proposed wetlands would be along the line of pine trees. No information on the design of the wetland, proposed planting, or hydraulic regime has been provided and this proposal has not been formally put to the council in writing by the farmer.

Manawhenua request continued involvement in determining how best to manage the intake.

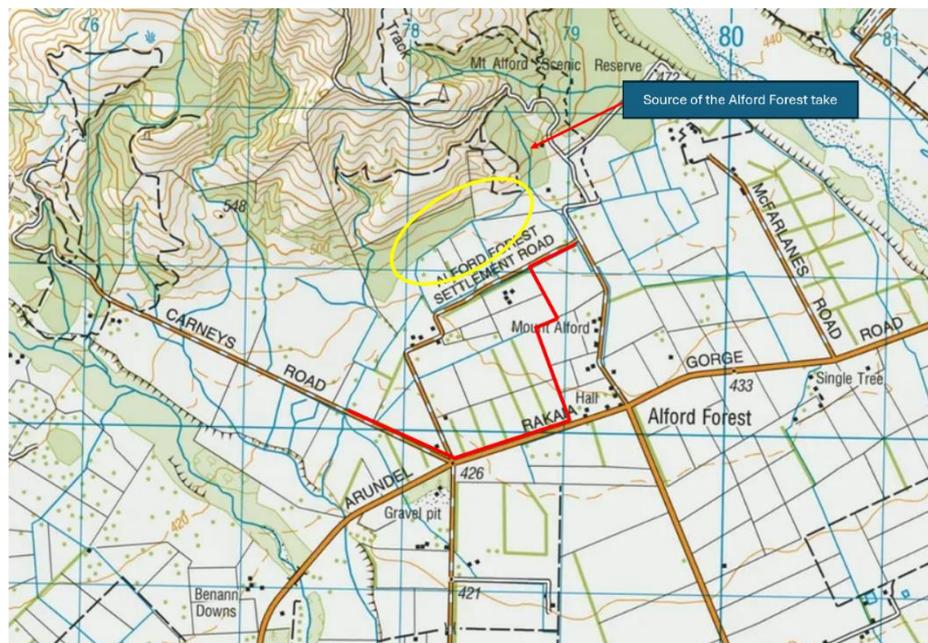


Figure 3. Red arrow indicates the unnamed stream where water is diverted into the Alford Forest stock water race. Red lines indicates the alternate diversion route for the stream water once the channel is closed. Yellow circle indicates area to invest



Figure 4. Alford Forest stockwater race at Site 4.



Figure 5. Alford Forest stock water channel entering culvert as it crosses the road at Site 4. Exposed banks indicate damage from unprotected riparian margins.



Figure 6. Termination of stock race water flow at Site 6. Water was not flowing from the pipe on the day of the visit and pooled water will either evaporate or soak into the ground.



Figure 7. A) Unnamed creek which appears to be a partial diversion of the creek for the source water of the Alford Forest stock water. B) Downstream of the proposed diversion. The unnamed creek appears to be the confluence of two creeks.

5.3 Survey work and if fish salvage needed

If termination of the channel was to occur, eDNA samples should be collected from sites 2 and 7, to determine best course of action for the fish salvage strategy. These samples should be undertaken one month prior to the closure.

If fish salvage is necessary, the following protocols can minimise risk to fish:

- Where practical, fish salvage should be carried out when daytime air temperatures are moderate and overnight temperatures are low. Springtime is ideal
- Hīnaki and gee-minnow nets should be set in areas away from macrophyte beds. Nets should be checked and cleared before dusk and again early morning.
- The use of a scoop bucket on a digger can assist with fish salvage. The scoop should be slowly removed from the flume onto the bank where spotters can quickly salvage any tuna, or other fish, as they move out of the scoop. Scooping of the flume should be carried out no earlier than late morning, when dissolved oxygen levels in the flume have increased from the overnight low.

5.4 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.