

## TE TAI TOKERAU WATER TRUST

To undertake the following activity associated with the supply of water to a water storage scheme on Lot 2 DP 479001 (768A Te Ahu Ahu Road, Waimate North), at or about location co-ordinates 1683712E 6091444N:

*Note: All location co-ordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection.*

### **AUT.042560.01.01      Take water from the Waiaruheiti Stream for the purpose of filling water storage reservoirs.**

Subject to the following conditions:

- 1      The rate of taking shall not exceed 250 litres per second.
- 2      The Consent Holder shall install a meter that measures the volume of water taken in cubic metres at least every 15 minutes. The meter shall:
  - (a)    Be telemetered to the Northland Regional Council;
  - (b)    Be suited to the qualities of the water it is measuring (such as temperature, algae content, and sediment content);
  - (c)    Be sealed and as tamper-proof as practicable;
  - (d)    Be installed at the location from which water is taken; and
  - (e)    Have an accuracy within  $\pm 5\%$ .

At all times, safe and easy access shall be provided to the meter for the purposes of undertaking visual inspections and water take measurements.

- 3      The Consent Holder shall verify that the meter required by Condition 2 is accurate. This verification shall be undertaken prior to 30 June:
  - (a)    Following the first taking of water; and
  - (b)    At least once in every five years thereafter.

Each verification shall be undertaken by a person, who in the opinion of the council's assigned monitoring officer, is suitably qualified. Written verification of the accuracy of the meter shall be provided to the council's assigned monitoring officer by 31 July following the date of each verification.

- 4      The Consent Holder shall install and maintain flow measuring devices immediately downstream of the take point. The measuring device shall:

- (a) Record, in litres per second, all flows up to 60 litres per second with an accuracy of  $\pm 10\%$ , at a minimum of 1 record every 15 minutes; and
- (b) Be telemetered to the Northland Regional Council.
- 5 The design and construction of the flow measuring device, as required by Condition 4, shall be undertaken in consultation with the council's Hydrology Department. The flow measuring device shall not be installed until the council's assigned monitoring officer has provided written certification that the water level measuring device is capable of meeting the requirements of Condition 4.
- 6 Prior to exercising the consent for the first time, the flow measuring device required by Condition 4 shall be calibrated by a suitably qualified and experienced person to verify accuracy. The Consent Holder shall forward the details of the person who is to undertake the calibration to the council's assigned monitoring officer at least one week prior to the work being carried out. Confirmation of each calibration shall be forwarded to the council's assigned monitoring officer at least one week prior to exercising the consent for the first time.
- 7 The flow measuring device and intake structure, including pumps, shall be adequately maintained so that they operate effectively at all times.
- 8 The Consent Holder shall only exercise the consent when flows in the Waiauruheiti Stream, as measured using the device required by Condition 4, are greater than 30 litres per second.
- 9 The exercise of this consent shall not reduce the flows in the Waiauruheiti Stream below 30 litres per second, as measured using the device required by Condition 4.
- 10 No water shall be taken between 1 February and 30 April (inclusive).
- 11 The riparian margins of the Waiauruheiti Stream between the take point and 1600 meters downstream shall be planted and maintained with appropriate plant species to provide shading of the stream. Riparian planting shall be completed within 5 years of the commencement of this consent.
- 12 At least one week prior to exercising the consent for the first time, the Consent Holder shall provide a Riparian Revegetation Plan (RRP) for the planting required by Condition 11 to the council's assigned monitoring officer. The RRP shall include, but not be limited to:
- (a) Plan(s) showing the area and extent of the proposed planting area;
  - (b) The plant species that will be planted;
  - (c) Expected timing and staging of planting including an expected completion date; and
  - (d) Details of required maintenance of the planted area.
- 13 A record of the volume of water taken daily in cubic metres shall be kept using the meter required by Condition 2, including nil abstractions. A copy of the records for the period 1 July to 30 June (inclusive) shall be forwarded each year to the council's assigned monitoring officer by the following 31 July. In addition, a copy of these records shall be forwarded immediately to the council's assigned monitoring officer on written request. The records shall be in an electronic format that has been agreed to by the council.

**Advice Note:** *If no water is taken during the period 1 July to 30 June (inclusive) then the Consent Holder is still required to notify the council in writing of the nil abstraction. Water use record sheets in an electronic format are available from the council's website at [www.nrc.govt.nz/wur](http://www.nrc.govt.nz/wur).*

- 14 A screen device shall be installed and maintained on the water intake that limits the intake velocity across the screen to less than 0.3 metres/second and has no holes or slots with a diameter or width greater than 5 millimetres.
- 15 The reticulation system and components shall be maintained in good working order to avoid or minimise leakage and wastage.
- 16 This consent shall lapse on 31 March 2026, unless before this date the consent has been given effect to.

**Advice Note:** *An application can be made to the council in accordance with section 125 of the Act to extend the date after which the consent lapses. Such an application must be made before the consent lapses.*

- 17 The council may, in accordance with Section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions annually during the month of July for any one or more of the following purposes:
  - (a) To review the median flow limit; or
  - (b) To deal with any adverse effects on the environment that may arise from the exercise of these consents and which it is appropriate to deal with at a later stage.

The Consent Holder shall meet all reasonable costs of any such review.

**EXPIRY DATE: 28 February 2056**

**APPLICATION NUMBER:** APP.042560.01.01

**Application Type:** Non Notified New

**Applicant Name:** Te Tai Tokerau Water Trust

**Note:** In this decision document, “application”, “activity” and “consent” refer to all activities that are part of the consent application.

## REASONS FOR THE DECISION

This consent is granted pursuant to section 104B of the Resource Management Act 1991 (the Act). In reaching this decision, the council has considered the matters outlined in Part 2 and section 104 of the Act. It has been determined that:

- (1) The adverse effects of the proposed activity on the environment will be no more than minor.
- (2) The proposed activity is consistent with the relevant statutory planning documents and regulations.
- (3) The granting of this resource consent achieves the purposes of the Act.

## Summary of Activity

This is an application for a new resource consent to take water from the Waiaruheiti Stream when flows in the stream are above its estimated median flow of 30 litres per second. The purpose of the take is to fill up water storage reservoirs for horticultural irrigation as part of the Mid-North Water Storage Scheme. Water will eventually be piped at a maximum rate of 250 litres per second to the proposed Otawere Water Storage Reservoir. The applicant has applied to the Minister for the Environment for the construction of the reservoir to be processed under the COVID-19 Recovery (Fast-track Consenting) Act 2020. Until the Otawere reservoir is constructed and operational, water will be piped to several small temporary water storage reservoirs which are yet to be constructed. The applicant is intending to design and construct the smaller reservoirs in accordance with the relevant permitted activity rules, however the final design of these reservoirs is not yet confirmed.

## Regional Plan Rule(s) Affected

As the applicant is not proposing to allow 50% of the river flow above median flow to remain in the stream while taking water, the surface water take is deemed a discretionary activity in accordance with Rule C.5.1.12 of the Proposed Regional Plan for Northland (PRP).

## Actual and Potential Effects (Section 104(1)(a) of the Act)

The adverse effects on the environment of this activity have been determined to be no more than minor for the following reasons:

- An assessment of ecological effects was prepared by Puhoi Stour on behalf of the applicant which includes an assessment of the effects associated with the construction of the intake structure and ongoing operational effects associated with the water take. The assessment concluded that the proposed water take may have some effects on the ecological values of the Waiauruheiti Stream, however with appropriate management measures there is likely to be a low level of effect. Recommendations in the report that relate to the water take include:
  - The use of fish screening with appropriate mesh spacing no greater than 3 millimetres and limiting the velocity of the take to 0.12 metres per second to prevent entrainment and impingement of native fish;
  - Avoiding taking water between February and April to reduce adverse effects on the migration triggers of native fish; and
  - Riparian planting downstream of the take point to provide stream shading. This measure is proposed to minimise the risk of excessive growth of periphyton and macrophytes as a result of a reduction in higher flow events which provide flushing of the stream.
- The applicant has offered to avoid taking water between February and April which has been included as a condition of consent. The applicant has also offered to plant the riparian margins of the stream for a length of 1600 metres downstream of the take point. The applicant has indicated this programme should be completed within 5 years. Conditions of consent have been included to require a riparian revegetation plan to be provided to the council prior to the commencement of the take and for planting to be completed within five years of the commencement of the consent.
- The recommendations provided by Puhoi Stour for the mesh screen spacing and maximum velocity were taken from Rule C.5.1.1 of the PRP (Minor takes – permitted activity). To protect instream fauna, a condition of consent has been included which requires screen devices to be installed and maintained on the water intake that limits the intake velocity across the screen to less than 0.3 metres/second and which have no holes or slots with a diameter or width greater than 5 millimetres. This condition is standard for all surface water take consents and is considered to be appropriate in this case.
- There are two consented water takes located downstream of the proposed take point in the Waitangi River (AUT.041977.01.01 and AUT.002010.01.03). The Waitangi River has significantly higher flows than the Waiauruheiti Stream and there are multiple tributaries providing additional flows between the applicant's take point and the consented takes downstream. The downstream consented takes will be restricted during periods of low flows. However, the applicant cannot take water during such periods. Given the median flow requirement and the additional tributary inputs, it is very unlikely the applicant's take will adversely affect any permitted downstream takes for stock drinking or domestic use.
- The council has no information on median flows within this catchment. As part of this application, the applicant's consultant has provided an estimate of the median flow based on a model it developed for its water storage project in Northland. This model has been independently peer reviewed and the conclusions of this review stated that, in general, the median flow may be predicted by the model with reasonable confidence. The council in this

instance has no reason not to accept the median flows provided in the application, however a review condition has been included in the consent to allow the council to review the consented median flow values if necessary. The applicant is required to install a flow recorder within the stream immediately downstream of the take point. The flow recorder is required to be calibrated and telemetered to ensure the take does not result on depletion of the stream below the estimated median flow.

## Cultural Effects

The application has been circulated to tangata whenua who have registered with council as having an interest in resource consent applications within the area of the activity. No response has been received by council from tangata whenua through this circulation process.

A Cultural Impact Assessment (CIA) has been provided with the application which was prepared by Hapu of Taiaimai kit e Takutai Moana RMU on behalf of the Hapu of Te Waimate.

The key concerns raised in the CIA include adverse effects on ecological values and freshwater fauna as a result of the high rate of take, the accuracy of the median flow calculation, adverse effects on fish migration, uncertainty around the design and location of the intake structure and adverse effects on the aquatic habitat downstream due to reduced frequency of high flow events. Recommendations and suggested conditions of consent include:

- Avoid taking water between February and April when high flows trigger native fish migration;
- Maintain FRE 3 flow events to flush the stream including a requirement for a minimum number of FRE 3 events per season/year;
- Undertake an ecosystem health survey of the Waiaruheiti Stream;
- Flow gauging of the stream prior to installation of the intake structure as well as the ongoing stream flow data collection and an annual review of the median flow and take rate condition;
- A detailed plan of the water intake structure including the location and fish screen design is provided to the hapū;
- Erosion and sediment controls to be installed and maintained in accordance with the Regional Plan rules. Provide details of erosion and sediment controls and freshwater fauna exclusion prior to construction of the intake structure.
- Limit the intake velocity to 0.12 metres per second and install fish screen with mesh spacing of no greater than 3 millimetres;
- An offset compensation plan for riparian planting upstream and downstream of the take point is developed and implemented with hapū input;
- Reduce the maximum take rate to 125 litres per second;
- Increase minimum flow limit and delay take by 6 hours;
- Install a water meter with data reported to council and hapū. Annual verification of accuracy of the meter;
- Freshwater fauna survey to be undertaken by ecologist with hapū monitoring;
- Implement shorter term of consent;
- Cultural monitoring during construction and ongoing during period of consent.

A condition of consent has been included with the applicant's agreement to limit the take between February and April to minimise adverse effects on fish migration. The applicant has also agreed to develop a riparian revegetation plan and undertake riparian planting downstream of the take point. The CIA recommendations included planting upstream of the take point, however this stretch of the stream is on a separate property, so is outside of the control of the applicant.

There is some confusion in the CIA between the take rate and the maximum intake velocity. As discussed in the previous section, the Puhoi Stour recommended maximum velocity of 0.12 metres per second and mesh spacing of 3 millimetres per second is taken from the PRP permitted activity rule for surface water takes. A condition of consent has been included which requires screen devices to be installed and maintained on the water intake that limits the intake velocity across the screen to less than 0.3 metres/second and which have no holes or slots with a diameter or width greater than 5 millimetres. This condition is standard for all surface water take consents and is considered to be appropriate at this location. The applicant has indicated they will follow NIWA fish screening good practice guidelines when designing their intake structure.

The intake structures and any works associated with these structures have not been considered as part of this application. Any intake structure that cannot meet the requirements of the permitted activity rules of the Regional Plan will require a separate resource consent and any effects associated with those structures would be assessed as part of that application process. The applicant has indicated they are willing to continue to engage with the hapū on the design and construction of the intake structures.

Conditions of consent will require the installation of a water meter as well as a flow measuring device downstream of the take point. These devices will be telemetered to the council and will be required to be calibrated. The water meter will be required to be calibrated within the first year and every five years thereafter as required by the Resource Management (Measurement and Reporting of Water Takes) Regulations 2020. As discussed in the previous section the model used by the applicant to determine median flow is considered to be acceptable, however an additional clause in the review condition has been included to include the ability of the council to review the median flow. Given the level of investment required to establish the scheme including the construction costs associated with development of the dam structures and their associated reservoirs, a longer term of consent is considered reasonable. A lapse period of five years has been applied to the consent.

### **Relevant Statutory Provisions (Section 104(1)(b) of the Act)**

The council has determined that the granting of this resource consent, is consistent with the National Policy Statement Freshwater Management 2020, the objectives and policies contained in Chapters 3 and 4 of the Regional Policy Statement for Northland (RPS), Chapter 6, 7 and 9 of the RWSP and Section D.1, D.2, D.4 and F of the PRP.

Te Rūnanga o Ngāti Hine has an iwi/hapu environmental management plan relevant to the location of this activity. The granting of this consent is not contrary to the objectives and policies contained within Section 15 (Water) and Section 20 (Tuna) of the Ngāti Hine Iwi Environmental Management Plan 2008.

### **Duration of the Consent**

A period of 35 years was requested by the applicant and has been determined to be appropriate in the circumstances of the proposal. In determining duration, regard has also been had to Section 37.5 of the RWSP and Section D.2.12 of the PRP.



I confirm that these are the true and correct reasons for the decision to grant resource consent application number APP.042560.01.01:

Name and Signature of  
Authorised Person:



Stuart Savill  
Consents Manager

Date:

30 March 2021

Released under the provision of  
the Official Information Act 1982



# 

**IRIS ID:** REG.042560.01 **Activity:** Take surface water above median flow to fill a water storage reservoir.

**Holder:** Te Tai Tokerau Trust

**Address:**

**Contact Person:**

**Contact Details:**

### 

**Location:**

**Access Information:**

☐ Boat required

**Permission/keys required:** ☐

**Details:**

**Additional Comments:**

### 

☐ Pre-start meeting

☒ Notice of commencement of activity

☐ Receive pre-start plans

☐ Volume records

☐ Maintenance records

☒ Water use records

☐ Engineer's report

☐ Stack testing

☐ Complaints reporting

☐ Ambient monitoring

### 

**Flow Gauging**

☐ Flood flow

☐ Normal flow

☐ Low flow

☐ Extreme low flow

**Inspections of**

☐ Ongoing discharge

☐ Operations/system installation

☐ Public access

☐ Structure conditions

☐ Dust ☐ Smoke

☐ Odour

☐ Event response

☐ Water level

☐ Land use progress

☐ Water meter

☐ Sediment and erosion controls

### 

☐ Sediment ☐ S/W ☐ G/W ☐ Soil ☐ Hazardous Substances ☐ Saline ☐ Air

**General**

☐ Turbidity

☐ BOD

☐ COD

☐ TSS

☐ TOC

☐ Anions

☐ Hardness

☐ Particulate Matter

**Nutrients**

☐ Total N

☐ Total P

☐ DRP

☐ TKN

☒ NH<sub>4</sub>

☐ NNN

**Field Profile**

☐ Temp

☐ DO

☐ pH

☐ Salinity/ Conductivity

**Bacteriological**

☐ Faecal Coliforms

☐ E.Coli

☐ Enterococci

**Heavy Metals**

☐ As

☐ Cu

☐ Cr

☐ Pb

☐ Zn

☐ Cd

☐ Hg

### 

**Month(s)/Season:**

**Upon commencement of take**

**Specific Time of Day and/or High Population:**

**Tide:** ☐ High

☐ Low

### 

☐ Upstream m

☐ Downstream m

☐ Point of discharge m

☐ Recommended mixing zone m

☐ At property boundary

☐ Specific sites (attached map)

Katie McGuire  
Consents Officer - Generalist



**Date:** 10 MARCH 2021

**CMO Name**

**CMO Job title**

*insert signature*

**Date:**

## ADMINISTRATION MATTERS

APP.042560.01.01

Consents Processing Officer (preparation of conditions and decision report):

Signed:   
Katie McGuire  
Consents Officer - Generalist

Date: 19 March 2021

AUTHORISATION IRIS ID NUMBER	ACTIVITY TYPE	ACTIVITY SUB-TYPE	ACTIVITY CLASS	MONITORING OFFICER
AUT.042560.01.01	Water Take	Surface Water Take	Discretionary	Ali McHugh

### REMINDER ACTIONS REQUIRED TO BE COMPLETED PRIOR TO REPORT GOING TO ADMINISTRATOR:

- PLANS FOR DECISION CLEARLY IDENTIFIED AND/OR ELECTRONIC COPIES ON IRIS
- IRIS LOCATION RECORD CREATED FOR EACH ACTIVITY IF REQUIRED
- MONITORING PROGRAMME COMPLETED (not required for FDE)
- SECTION 37 EXTENSIONS ON IRIS THAT PROVIDES AT LEAST THREE WORKING DAYS TO DECISION DUE DATE

### DECISION ENCLOSURE CHECKLIST – (please check the box that is relevant to this consent)

- ☐ Decision to be Sent to Iwi Group(s) – Officers please provide names and addresses
- ☐ Decision to be sent to MPI – UAE for Marine Farms only
- ☐ Transfer of Functions Decision – copy of consent and report to TLA
- ☐ Coastal Sign
  - Number Required ..... – Officer to seek approval for this disbursement from the applicant