

RESOURCE CONSENT CRC136234

Pursuant to Section 104 of the Resource Management Act 1991

The Canterbury Regional Council (known as Environment Canterbury)

GRANTS TO:	Central Plains Water Trust
A WATER PERMIT:	To take water from the Waimakariri River for irrigation purposes.
CHANGE TAKES EFFECT DATE:	27 May 2013
EXPIRY DATE:	18 Nov 2031
LOCATION:	Waimakariri River, WAIMAKARIRI

SUBJECT TO THE FOLLOWING CONDITIONS:

- 1
 - a. Water shall be taken via an existing structural intake, or intakes, or at a new intake, located between map references NZMS 260 L35:276-649 and NZMS 260 L35:394-534, within the area shown on attached plan CRC136234A.
 - b. The maximum rate at which water is taken shall not exceed 1,000 litres per second.
 - c. No water shall be taken between 1 May and 30 August inclusive other than water required for maintenance and testing purposes. The consent holder will give 48 hours prior written notice to the Canterbury Regional Council before commencing such temporary use.
 - d. This consent comprises an A permit as defined in the Waimakariri Regional River Plan.
 - e. For the purposes of this consent the term unmodified flow means the rate of flow in the Waimakariri River as estimated by the Canterbury Regional Council from measurements at the Old Highway Bridge, at or about map reference NZMS 260 M35:818-547, averaged over any 24 hour period plus the sum of all average takes from the river, as estimated by the Canterbury Regional Council, that are being exercised under water permits during the same period, including any consented takes of hydraulically connected groundwater as that term is defined in the Waimakariri River Regional Plan.

Note: A further land use consent may be required for the installation of any new intake structure referred to in condition (1)(a).

- 2 The taking of water under this consent shall only occur:
- a. in conjunction with consent CRC061973 to use water, or any variations of this consent;
 - b. in conjunction with any other consent granted for the use of water authorised to be abstracted under this consent.

NOTE: This consent does not authorise the use of water. The consent holder shall not take water under this permit without a water permit to use water for irrigation.

- 3 Restrictions on taking A permit water whenever the unmodified flow in the Waimakariri River as estimated by the Canterbury Regional Council is:
- a. At or below 41,000 litres per second, no water shall be taken.
 - b. Above 41,000 litres per second and at or below 63,000 litres per second, the maximum rate of abstraction of A permit water shall be calculated as $(u - 41,000) * (a/22,000)$ where:
 1. a is the maximum rate of take;
 2. and u is the unmodified flow in the Waimakariri River.

PROVIDED THAT the maximum rate of take of A permit water by all permit holders does not exceed **(u – 41,000)**, and the consent holder's maximum rate of take does not exceed 1,000 litres per second.

- 4 The taking of water in terms of this permit shall cease for a period of up to 48 hours, on notice from the Canterbury Regional Council, if required to allow measurement of the flow in the Waimakariri River.

- 5 Except as provided for in condition (5)(b);
- a. Should the consent holder choose to abstract water from a gallery within the bed of the Waimakariri River, or directly from a river braid, the gallery or intake shall be located a minimum of 500 metres from any existing abstraction point which is lawfully established at 5th August 2009.
 - b. The applicant may abstract water pursuant to this consent within 500 metres of any existing abstraction point which is lawfully established at 5th August 2009 provided the written approval of the abstractor is obtained.

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- a. The consent holder shall install operate and maintain a fish screen ("the Screen") across any intake it constructs as referred to in condition 1(a) and it shall be designed in accordance with the certified plans approved by the Canterbury Regional Council In accordance with condition (6) (e)(ii).
- b. The Screen shall as far as practical prevent the entrainment, impingement and entrapment of salmonids including adults, fingerlings and fry and for the purposes of this condition this shall be achieved by installing, operating and maintaining the fish screen in accordance with the certified design plans referred to in condition 6(a).
- c. The design plans for the Screen shall be certified by: a chartered engineer with experience in the design and operation of fish screens; and either a fisheries biologist with post graduate qualifications in salmon fisheries or a fisheries biologist with internationally recognised experience in salmon fisheries research. ("the Certifiers").
- d. The appointment of the Certifiers by the consent holder shall be subject to the prior written approval of the Canterbury Regional Council.
- e. Prior to commencement of construction:
 - a. the consent holder shall provide to the Canterbury Regional Council:
 - i. the certified design plans Including the screen slot size, sweep velocity, approach velocity, and, if relevant, an effective by-pass which returns fish to an actively flowing braid of the Waimakariri River;
 - ii. a report from the Certifiers which certifies and explains how the certified design and operation of the Screen: - demonstrate best practice in achievement of condition (6)(b); - take into consideration any relevant regional plan; - take into consideration any regional or national guidelines in relation to fish screen design or any international guidelines that the Certifiers consider relevant.
 - b. the Canterbury Regional Council shall give to the consent holder written notice stating whether or not it approves of the certified design plans, within 20 working days of receipt of those plans and the Certifier's report referred to at condition (6)(e)(i)(2), and such approval shall not be unreasonably withheld.
 - i. The consent holder shall prior to commissioning provide a certificate from a suitably qualified person confirming that construction has occurred in accordance with the

design plans approved by the Canterbury Regional Council.

- ii. Within 24 hours of the Screen becoming damaged or ineffective, the consent holder shall cease taking water and notify the Canterbury Regional Council and advise it of any remedial measures including fish salvage to be implemented. The taking of water shall not recommence until the effectiveness of the Screen has been restored
In accordance with conditions (6)(a) and (6)(b).

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- a. If the consent holder decides to abstract water from a gallery or an intake pumped directly from the Waimakariri River, then before the first exercise of this consent the consent holder shall:
- b. Install an easily accessible straight pipe(s), with no fittings or obstructions that may create turbulent flow conditions, of a length at least 15 times the diameter of the pipe, as part of the pump outlet plumbing or within the mainline distribution system.
 - i. install a water meter(s) that has an international accreditation or equivalent New Zealand calibration endorsement, and has pulse output, suitable for use with an electronic recording device, which will measure the rate and the volume of water taken to within an accuracy of plus or minus five percent as part of the pump outlet plumbing, or within the mainline distribution system, at a location(s) that will ensure the total take of water is measured; and
 - ii. install a tamper-proof electronic recording device such as a data logger(s) that shall time stamp a pulse from the flow meter at least once every 15 minutes, and which is telemetered, as specified in clause (c).
- c. The recording device(s) shall:
 - i. be set to wrap the data from the measuring device(s) such that the oldest data will be automatically overwritten by the newest data (i.e. cyclic recording); and
 - ii. store the entire season's data in each 12 month period from 1 July to 30 June in the following year; and
 - iii. shall be connected to a telemetry system which collects and stores all of the data continuously with an independent network provider who will make that data available in a commonly used format at all times to the Canterbury Regional Council and the consent holder. No data in the recording device(s) shall be deliberately changed or deleted.

- d. The water meter and recording device(s) shall be accessible to the Canterbury Regional Council at all times for inspection and/or data retrieval.
- e. The water meter and recording device(s) shall be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
- f. All practicable measures shall be taken to ensure that the water meter and recording device(s) are fully functional at all times.

8 If the consent holder installs measuring or recording device(s) in accordance with condition (7), then within one month of the installation of the measuring or recording device(s), or any subsequent replacement measuring or recording device(s), and at five-yearly intervals thereafter, and at any time when requested by the Canterbury Regional Council, the consent holder shall provide a certificate to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:

- a. The measuring and recording device(s) has been installed in accordance with the manufacturer's specifications; and
- b. Data from the recording device(s) can be readily accessed and/or retrieved in accordance with clauses (c) and (d) of condition (7).

9 If the consent holder decides to abstract water via a method other than that described in condition (7), then before the first exercise of this consent the consent holder shall:

- a. Install a water level measuring device that has an International accreditation, New Zealand or equivalent calibration endorsement; to continuously measure the diversion of water to within an accuracy of plus or minus five percent.
- b. The measuring device shall, as far as practicable, be installed at a site prior to any storage area or losses from the system and at a site likely to retain a stable rating. The measuring device shall be installed in accordance with ISO1100/1-1981 established standards by a competent/qualified person.
- c. A site inspection of the measuring site shall be carried out at least once every month during the irrigation season for the duration of this consent.
- d. From the time that the taking of water under this consent begins, flows at a site within 100 m of the intake structure shall be gauged in each month of the first 12 months that water is being taken, Velocities shall be measured with a device that has: international accreditation; New Zealand or equivalent calibration endorsement by a

- competent/qualified person in accordance with ISO 2537 1974 standard; or any appropriate update of that standard. Volumetric flow measurements shall be in accordance with the standards set out in the "Hydrologist's Field Manual (Publication 15 of the Hydrology Centre, Christchurch) or any appropriate update of that standard.
- e. Flow gaugings carried out consistent with clause 9(d) shall be carried out at least three times in each irrigation season for the duration of this consent. These gaugings shall be at least one month apart.
 - f. Flow records shall be generated from stage (water level) record by the establishment of a rating curve in accordance with ISO Standard 1100/2-1982 or any appropriate update of that standard.
 - g. If, in generating flow records under clause 9(f), there is a greater than plus or minus four percent deviation from the gauged flows, the consent holder shall investigate the cause of that deviation and report this to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager within seven working days of the deviation being detected.
 - h. Water levels shall be recorded by electronic means, at not greater than fifteen minute intervals, in a tamper-proof recording device such as a data-logger, kept for that purpose. The recorded data shall not be changed or deleted by any person, unless twelve months have passed since the date of the recording.
 - i. The measuring and recording devices shall be available for inspection at all times by the Canterbury Regional Council.
 - j. All data from the recording device described in clause 9(a), shall be provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, on request, and shall be accessible and available for downloading at all times by the Canterbury Regional Council.
 - k. The recording device(s) shall be connected to a telemetry system which collects and stores all of the data continuously with an independent network provider who will make that data available in a commonly used format at all times to the Canterbury Regional Council and the consent holder.
 - l. Within one month of the commencement of this consent, or the installation of a new measuring or recording device, and at five-yearly intervals thereafter, and at any other time when requested by the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, signed by a suitably qualified person certifying the accuracy of the measuring and recording devices installed in accordance with clause 9(a), and also certifying that data from the recording device described in clause 9(h) can be readily accessed in accordance with clause (9)(j).

- 10 The Canterbury Regional Council may, on any of the last five working days of November in any year, serve notice of its intention to review the conditions of this consent for the purpose of dealing with any adverse effect on the environment, which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage.
- 11 The lapsing date for the purposes of section 125 of the RMA shall be 31 December 2024.
- 12 The consent shall expire on 18 November 2031.

Issued at Christchurch on 27 May 2013

Canterbury Regional Council

