

**APPLICANT: RW & ME SUTTON**

**CRC071114 – To divert water at a rate not exceeding 50l/s and with a volume not exceeding 500,000cubic metres of water per year, to a storage dam for irrigation purposes, from Avonlea Stream at or about map reference I40:0961-1262.**

**[]Location of take – surface water**

Water may only be taken from Avonlea Stream, at or about map reference NZMS 260 I40: 0961-1262.

**[]Rate of take and annual volume**

Water shall be diverted into a diversion channel at a rate not exceeding 50 litres per second, with an annual volume not exceeding 500, 000 cubic metres between 1 July and the following 30 June.

**[] Hakataramea River Minimum Flow (Water Harvesting)**

The taking water under this permit shall cease whenever the flows in the Hakataramea River at the SH82 recorder site (map reference I40:112-062) estimated by the Canterbury Regional Council falls below 4.5 cumecs.

**[]Flow meter – diversion**

- (a) The consent holder shall, prior to exercising this consent, install a water level measuring device in a location that will enable the determination of the continuous rate of flow and volume of water being diverted to within an accuracy of 10 percent.
- (b) The measuring device shall, as far as is practicable, be installed at a site likely to retain a stable relationship between flow and water level. The measuring device shall be installed in accordance with the manufacturer's instructions.
- (c) The flow at the measuring site shall be gauged at least every three months whilst this consent is being exercised, and at any other time when required as determined by a site inspection, to be carried out at least once every month.
- (d) Gaugings and site inspections shall be carried out in accordance with the following manuals: Hydrologists Field Manual (NIWA 1991) and Procedure for Rating a Flow Station (NIWA 1993) or any equivalent publication.
- (e) The level of water in the race, and times of abstraction, 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 recording.
- (f) The measuring and recording devices described in clauses (a) and (e) shall be available for inspection at all times by the Canterbury Regional Council.

- (g) All data from the recording device described in clause (e), and the corresponding relationship between the water level and flow, shall be provided to the Canterbury Regional Council on request, and shall be accessible and available for downloading at all times by the Canterbury Regional Council.
- (h) Within one month of the commencement of this consent, at two-yearly intervals thereafter, and at any other time when requested by Canterbury Regional Council, the consent holder shall calibrate the measuring device and provide to the Canterbury Regional Council:
  - (i) a certificate signed by a suitably qualified person certifying the current accuracy of the measuring and recording devices, and also certifying that data from the recording device described in clause (e) can be readily accessed in accordance with clause (f); and
  - (ii) supporting information containing details of the calibration test.

### **[]Fish screen**

- (a) Water shall only be taken when a fish screen with a maximum mesh width and height of 3 millimetres or maximum slot width and height of 2mm is operated and maintained across the intake to ensure that fish and fish fry are prevented from passing through the intake screen;
- (b) The fish screen shall be positioned to ensure that there is unimpeded fish passage to and from the waterway and to avoid the entrapment of fish at the point of abstraction, and to minimise the risk of fish being damaged by contact with the screen face; and
- (c) The fish screen shall be designed and installed in general accordance with Fish Screening: good practice guidelines for Canterbury, NIWZ Client Report : CHC2007. 092, October 2007 and will ensure that:
  - (i) the majority of the screen surface is oriented parallel to the direction of water flow;
  - (ii) where practicable, the screen is positioned in the water column a minimum of 300 millimetres above the bed of the waterway and a minimum of one screen radius from the surface of the water;
  - (iii) the approach velocity perpendicular to the face of the screen shall not exceed 0.06 metres per second if no self-cleaning mechanism exists, or 0.12 metres per second if a self-cleaning mechanism is operational; and
  - (iv) the sweep velocity parallel to the face of the screen shall exceed the design approach velocity.
- (d) The fish screen specified in Condition [] shall be designed or supplied by a suitably qualified person who shall ensure that the design criteria specified in Condition [] of this consent is achieved. Prior to the installation of the fish screen, a report containing final design plans and illustrating how the fish screen will meet the required design criteria, and an operation and maintenance plan for the fish screen shall be provided to Environment Canterbury, Attention: RMA Compliance and Enforcement Manager;
- (e) A certificate shall be provided to Environment Canterbury by the designer or supplier of the fish screen to certify that the fish screen has been installed in accordance with the details provided to Environment Canterbury in accordance

with Condition [] of this consent; and [] The fish screen shall be maintained in good working order. Records shall be kept of all inspections and maintenance, and those records shall be provided to Environment Canterbury upon request.

**[]Efficient use of water**

The consent holder shall take all practicable steps to avoid leakage from pipes and structures.

**[]Review**

The Canterbury Regional Council may, once per year, on any of the last 5 working days of June serve notice of its intention to review the conditions of this consent for the purposes 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.

**[]Lapsing date**

The lapsing date for the purposes of section 125 shall be <between 5 years and 5 years three months, date set for each quarter>.

[]The duration of this consent shall be until 20 May 2033, in order to have the same expiry dates as CRC980511 and CRC980513.