

17 June 2016

Central Plains Water Trust Attn To: Mark Tipper PO Box 9424 Tower Junction Christchurch 8149 Customer Services
P. 03 353 9007 or 0800 324 636

PO Box 345 Christchurch 8140

P. 03 365 3828 F. 03 365 3194 E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Dear Sir/Madam

NOTICE OF RESOURCE CONSENT DECISION(S)

**RECORD NO: CRC167218** 

**NAME: Central Plains Water Trust.** 

The decision of Environment Canterbury is to grant your application(s) on the terms and conditions specified in the attached resource consent document(s). Your resource consent(s) commences from the date of this letter advising you of the decision. The reasons for the decision are:

1. The change in conditions is unlikely to result in any additional adverse effects.

For some activities a report is prepared, with officer recommendations, to provide information to the decision makers. If you require a copy of the report please contact our Customer Services section.

If you do not agree with the consent authority decision, you may object to the whole or any part. Notice of any objection must be in writing and lodged with Environment Canterbury within 15 working days of receipt of this decision.

Alternatively you may appeal to the Environment Court, PO Box 2069, Christchurch. The notice of appeal must be lodged with the Court within 15 working days of receipt of this decision, with a copy forwarded to Environment Canterbury within the same timeframe. If you appeal this decision, the commencement date will then be the date on which the decision on the appeal is determined. If you are in any doubt about the correct procedures, you should seek legal advice.

Environment Canterbury takes every measure to improve both applications and processes, and we appreciate your feedback as an important component in ensuring this occurs. You can complete a consents survey on-line at <a href="http://www.ecan.govt.nz/services/resource-consents/pages/surveys.aspx">http://www.ecan.govt.nz/services/resource-consents/pages/surveys.aspx</a>. Alternatively, you can call our Customer Services Section on 0800 EC INFO who will be happy to complete the survey with you.

Charges, set in accordance with section 36 of the Resource Management Act 1991, shall be paid to the Regional Council for the carrying out of its functions in relation to the administration, monitoring and supervision of resource consents and for the carrying out of its functions under section 35 of the Act.

Our Ref: CRC167218 Your Ref: EC107911

**Contact:** Customer Services

Thank you for helping us make Canterbury a great place to live.

For all queries please contact our Customer Services Section by telephoning (03) 353 9007, 0800 ECINFO (0800 324 636), or email <a href="mailto:ecinfo@ecan.govt.nz">ecinfo@ecan.govt.nz</a> quoting your CRC number above.

Yours sincerely

**CONSENTS PLANNING SECTION** 

# **RESOURCE CONSENT CRC167218**

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 change conditions of CRC160803 - to take water from the

Rakaia River

CHANGE TAKES EFFECT

DATE:

2

17 Jun 2016

EXPIRY DATE: 25 Jul 2047

LOCATION: Rakaia River Intake and Headworks, DARFIELD

#### SUBJECT TO THE FOLLOWING CONDITIONS:

1 Water may only be taken from the Rakaia River at:

- a. reference Topo50 BX21:990-759 and labelled "Take Point" on attached Plan CRC167218, which forms part of this consent, at a maximum rate of 40 cubic metres per second; and
- b. any surface water abstraction point (SWAP):
  - that is authorised via a separate consent to take surface water from the Rakaia River, located between map references Topo50 BX21: 964-781 (Point A) and Topo50 BX21: 229-567 (Point B) as indicated on attached plan CRC167218 and as listed in Schedule CRC167218, attached to and forming part of this consent; and
  - ii. at the maximum consented rate of take specified for that SWAP in Schedule CRC167218.

**Advice note:** This consent does not authorise any diversion of water so any associated diversion will require separate authorisation.

- a. Except as provided for in condition 5., the maximum combined rate at which water may be taken under this consent and resource consent CRC093683 shall not exceed 33.5 cubic metres per second of Band 5 water.
  - b. For the purposes of this condition, 33.5 cubic metres per second is the rate at which water may be taken and not discharged back to the river (as required by consent CRC093683).
- The consent holder shall prepare a Schedule to be referred to as Schedule CRC167218 that forms part of this resource consent. Schedule CRC167218 shall:
  - a. be updated to reflect all current SWAPs that may be used to take water via this resource consent:
  - be provided to Canterbury Regional Council, Attention: Regional Manager, RMA Monitoring and Compliance, prior to the taking of water from any SWAP and whenever it is updated;



Page 2 CRC167218

- c. include a list of SWAPs including the:
  - i. existing water take consent number;
  - ii. SWAP number;
  - iii. Topo50 grid reference of the location of the SWAP;
  - iv. maximum existing consented rate of take;
  - v. maximum existing consented annual volume
  - vi. existing minimum flow restrictions to comply with the Rakaia Water Conservation Order:
  - vii. verification that the SWAP is a direct surface water take;
  - viii. verification that each SWAP meets the provisions of Schedule 2 of the Land and Water Regional Plan attached to and forming part of this resource consent in respect of fish exclusion requirements.

#### 4 Low flow restrictions

a. Except as provided for in conditions 6 and 7, whenever the mean flow for the 24 hour period ending at noon on any one day (expressed in cubic metres per second) in the Rakaia River, as estimated by Canterbury Regional Council from measurements at either the gorge recorder site (at or about map reference NZMS 260 K35:015-424) or the recorder site at Fighting Hill (at or about map reference NZMS 260 K35:997-437), falls below the following flows (Y m³/s), the taking of water in terms of this permit shall cease:

Month:	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flow: (Y m <sup>3</sup> /s)	197	181	178	170	168	169	164	165	163	179	202	212

b. Whenever the mean flow for the 24 hour period ending at noon on any one day (expressed as X cubic metres per second) in the Rakaia River, as estimated by Canterbury Regional Council from measurements at either the gorge recorder site (at or about map reference NZMS 260 K35:015-424) or the recorder site at Fighting Hill (at or about map reference NZMS 260 K35:997-437), exceeds the minimum flow Y as contained in condition 2(a), then the combined abstraction under this consent and consent CRC093683 shall not exceed Z m3/s where:

Z = (X-Y)/2 and Z < 33.5 m3/s

**ADVICE NOTE**: the maximum rate at which water may be taken under this consent and consent CRC093683 above the minimum flows specified in condition 4.a.shall not exceed 33.5 cubic metres.

### 5 Water user group:

Provided that whenever the Canterbury Regional Council, in consultation with a Water Users Group involving two or more consent holders who have determined upon a sharing regime which complies with the National Water conservation (Rakaia River) Order 1988, and:

- a. The Water Users Group has provided the Canterbury Regional Council with a graph defining their combined abstraction rates and volumes; and
- All consent holders in the Water User Group are recording their rates and volumes
  of water abstraction by tamper-proof electronic recording system such that the
  abstraction rates and volumes of water are measured at least every 15 minutes,



Page 3 CRC167218

and all records are made at a remote location via telemetry of the recorded rates and volumes; and

- c. The recorded data shall not be changed or deleted by any person, unless twelve months have passed since the date of recording; and
- d. the measuring and recording devices shall be available for inspection at all times by the Canterbury Regional Council subject to providing adequate protection against vandalism which may require the consent holders assistance on site to unlock or remove barriers; and
- e. all data from the recording device shall be provided to the Canterbury Regional Council on request; and
- f. Four months after the commencement of the Water User Group sharing and every second year of Water User Group sharing thereafter, the consent holder shall provide a certificate to the Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager, signed by a qualified hydrologist certifying the accuracy of the measuring and recording devices; the taking of water in accordance with that determination shall be deemed to be in compliance with all parts of condition 4.b of this resource consent.
- The maximum combined rate at which water may be taken under this consent in combination with resource consents CRC093683, CRC051802.3, CRC051803.2 and CRC990088.3 (or any variations to these consents), including water that will be discharged back to the Rakaia River in accordance with consent CRC093683, shall not exceed 67 cubic metres per second, provided that the consent holder complies with the minimum flow requirements of those consents and water allocation rules in the National Water Conservation (Rakaia River) Order 1988.

a. In the event that any water allocated to another water user is not being taken, the consent holder may take that water provided that the consent holder complies with the minimum flow requirements of that consent and water allocation rules in the National Water Conservation (Rakaia River) Order 1988 and provided written approval has been obtained from the existing consent holder, prior to the take being exercised, that allows the consent holder to take its unused allocated water. The consent holder shall provide the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, written agreement with the water permit holders giving permission for the consent holder to take their unused but allocated water.

NOTE: For the purpose of this consent, written agreement may be in the form of an email, fax or signed written document.

b.

- i. Water may also be taken at times when water is not being taken in accordance with one or more of the consents listed in Table 1.
- ii. The rate at which water may be taken shall not exceed the sum of the individual rates of take for the consents listed in Table 1 not being exercised at that time.
- iii. The consent holder shall meet the minimum flow requirements of each consent listed in Table 1, and shall comply with the National Water Conservation (Rakaia River) Order 1988 at all times.
- iv. This consent shall not derogate from the rights of water of consent holders listed in Table 1.



7

Page 4 CRC167218

Consent	Maximum rate (litres per second)
CRC940052	340
CRC940163	450
CRC990621.2	850
CRC990660	1800
CRC990983.1	2000
CRC940169.1	450
CRC930958B.1	320
CRC990851.1	550
CRC991102.2 and CRC 940486.3	450 (Maximum combined rate)
CRC941177.5	450
CRC941161.2	450
CRC072619	450
CRC941219	450
CRC952433.2	450

Table 1 – Other consent holders

#### **Fish Barrier**

9

- Notwithstanding conditions 9. to 24., prior to the taking of water via this resource consent, all water users listed in Schedule CRC167218 of this resource consent shall meet the fish screen requirements outlined in Schedule 2 of the Land and Water Regional Plan, as attached.
  - a. The consent holder shall install and maintain a fish barrier ("Fish Barrier") on the intake works.
    - b. The Fish Barrier shall be installed prior to the abstraction of water authorised by this consent.
- The Fish Barrier shall be designed to ensure the adverse effects on all fishery components are no more than minor using design principles of fish exclusion as approved by Canterbury Regional Council. In particular, the Fish Barrier design shall achieve the following performance objectives:
  - a. exclude all adult fish; and
  - b. exclude at least 95% of juvenile salmonids that have entered the Fish Barrier\_area; and
  - c. as far as reasonably practical all excluded fish shall be returned safely to the main stem of the Rakaia River downstream from the intake.
- 11 Fish Barrier approval process
  - a. Prior to the taking of water pursuant to this consent, the consent holder shall install the Fish Barrier across the intake designed in accordance with the certified plans approved by a person duly authorised by the Canterbury Regional Council.
  - b. The Fish Barrier shall achieve the performance objectives of Condition 10 and for the purposes of this condition this shall be achieved by installing, operating and maintaining the Fish Barrier in accordance with the certified design plans referred to in Condition 11.d
  - c. The design plans for the Fish Barrier shall be certified by:
    - a suitably qualified engineer with experience in the design and operation of fish barriers; and



Page 5 CRC167218

ii. a fisheries biologist with knowledge of salmonid and native fisheries; ("the Fish Barrier Certifiers").

- d. Prior to the commencement of construction of the Fish Barrier, the consent holder shall provide to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager:
  - the certified design plans including the proposed location of the Fish Barrier, proposed Fish Barrier material and size, design sweep velocity, design approach velocity, and an effective by-pass structure and flow which returns fish to an actively flowing braid of the river; and
  - ii. a report from the Fish Barrier Certifiers which certifies the design and operation of the Fish Barrier:
    - a. demonstrate best practice in achievement of Condition 11.b.; and
    - take into consideration regional or national guidelines in relation to fish barrier design and/or any international guidelines that the Fish Barrier Certifiers consider relevant.
  - iii. The report required in condition 11.d.ii. shall also specify any monitoring requirements for the Fish Barrier. The consent holder shall consult with North Canterbury Fish and Game Council and Department of Conservation in preparation of this monitoring programme.

e.

- the Fish Barrier shall consist of an infiltration gallery that generally conforms with concept sketches 10836-20, 10836-21, 10836-22 and 10836-03, provided by Riley Consultants, February 2011, or equivalent as agreed by Canterbury Regional Council;
- ii. the Fish Barrier shall be designed to prevent fish bypassing the Fish Barrier into the canal;
- iii. the Fish Barrier shall be a bed of cobbles of minimum depth of 1.5 metre over the top of an intake pipe, and stone size in the top 0.3 m in the range of 50 mm to 100 mm diameter, and in the lower 1.2 m in the range 100 to 200 mm diameter;
- iv. the velocity over the galleries (the 'sweep velocity') at any time shall be a minimum of 0.5 m/s;
- v. the velocity into the galleries (the 'approach velocity') shall be a maximum of 0.10 m/s;
- vi. the ratio of sweep velocity to approach velocity at any time shall be a minimum of 5.0;
- vii. a fence between the Fish Barrier and the irrigation supply channel to prevent native fish moving overland from the Fish Barrier to the irrigation supply channel;
- viii. an effective bypass system shall be maintained at all times that water is diverted into the scheme, to ensure unrestricted passage is maintained to and from an active braid of the river;
- ix. the bypass channel shall be formed in consultation with North Canterbury Fish and Game Council and Department of Conservation to ensure effective return of fish to an active braid of the river as soon as is reasonably practicable; and
- x. there shall be an effective operation, inspection and maintenance schedule.
- f. A person duly authorised by the Canterbury Regional Council shall give written notice to the consent holder stating whether or not it approves of the certified design plans within 20 working days of receipt of the plans and the Fish Barrier



Page 6 CRC167218

Certifiers' report referred to in Condition 11.d. and such approval shall not be unreasonably withheld.

- g. The consent holder shall, prior to commissioning, provide a certificate from a suitably qualified person confirming that construction of the Fish Barrier has occurred in accordance with the certified design plans approved in accordance with Condition 11.f..
- Any monitoring program required in condition 11.d.iii. shall be subject to the approval of a person duly authorised by the Canterbury Regional Council and shall be conducted for the first five years of operation of the Fish Barrier using appropriate practices, to establish the effectiveness of the Fish Barrier in achieving the performance objectives specified in condition 10 and the effect on juvenile native fish.
- In the event that the Barrier is shown to be not fully effective in achieving the performance objectives in condition 10 the consent holder shall immediately commission a report.
  - a. This report shall be prepared by a fisheries biologist/s with knowledge of salmonid and native fisheries and shall address the consequences of non-compliance on the fisheries of the river and, if appropriate, shall recommend mitigations. Such recommendations may include improvements to fish exclusion and/or enhancements to fish populations such as fishery habitat improvements or other actions considered appropriate by the author/s.
  - b. The report shall be prepared in consultation with North Canterbury Fish and Game Council and Department of Conservation and shall be delivered by the consent holder as soon as reasonably practicable but in any event no later than 6 months of confirmation of non-compliance to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager.
  - c. Within 20 working days of receipt of the report a person duly authorised by the Canterbury Regional Council shall give written notice to the consent holder stating what action it requires, if any, in response to the report and recommendations.
- The incidence of Fish Barrier shutdowns shall be recorded and reported to the North Canterbury Fish and Game Council and Department of Conservation as soon as practicable. Records of screen failure shall be forwarded to Canterbury Regional Council by 31 May each year, or as requested.
- 15 Safety at intake
  - a. Prior to the taking of water pursuant to this consent, the consent holder shall design an intake structure that shall, as far as practicable, prevent water users becoming pinned against or washed into the intake on the Rakaia River.
  - b. The safety features of the intake structure shall be designed in consultation with the Whitewater NZ Incorporated ("Whitewater NZ Inc") and the New Zealand Jet boat Association.
  - c. The intention of the safety features will be to achieve, if reasonably practicable, an overall International Grade 2 standard suitable for racing kayaks.

Advice note: for the purpose of this clause, the International Grade 2 standard shall be consistent with the USA Grade 2 definition: "Straightforward rapids with wide, clear channels which are evident without scouting. Occasional manoeuvring may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful, is seldom needed."



Page 7 CRC167218

- d. The design shall incorporate the following:
  - i. provide and maintain, if practicable, a wide entrance to a diversion channel;
  - ii. provide and maintain a widened forebay upstream from the intake gate, to lower the water velocity in the intake channel to about 0.5 cubic metre per second in median to low flow conditions when the full intake flow is operating;
  - iii. trial a diagonal floating boom across the diversion channel upstream from the intake gate, and adopt this permanently if it proves successful in the opinion of a relevant officer of the Canterbury Regional Council;
  - iv. provide and maintain an inclined trash rack on the upstream face of the intake gate, leading to a safety ledge and exit point: the size of the trash rack shall be such that velocities approaching it do not exceed 1 cubic metre per second;
  - v. the surfaces presented to the water shall be free from sharp protrusions which could injure a person or snag clothing.
- e. The design plans for the intake shall be certified by:
  - i. a suitably qualified person with experience in the design and operation of intake structures; and
  - ii. a person with experience in water safety, particularly for recreational boating and kayaking on rivers; ("the Intake Certifiers").
- f. Prior to the commencement of construction of the intake structure, the consent holder shall provide to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager:
  - i. The certified design plans;
  - ii. A joint report from the Intake Certifiers which certifies the design and operation of the safety features on the intake structures which demonstrates best practice in achievement of Condition 15.a. to 15.d..
- g. A person duly authorised by the Canterbury Regional Council shall give written notice to the consent holder stating whether or not it approves of the certified design plans within 20 working days of receipt of the plans and the Intake Certifiers' report referred to in Condition 15.f.ii. and such approval shall not be unreasonably withheld.
- h. The consent holder shall, prior to commissioning, provide a certificate from a suitably qualified person confirming that construction of the intake structure has occurred in accordance with the certified design plans approved in accordance with Condition 15.g..
- The consent holder shall install, operate and maintain an intake structure designed in accordance with the certified plans approved by a person duly authorised by the Canterbury Regional Council in accordance with Condition 15.g..

j.

- Prior to the first exercise of this consent, the consent holder shall erect and maintain two signs warning of the intake structure at two locations upstream from the intake; and
- ii. the signs shall be at least one metre by two metres, UV ray and weather resistant, and visible on the banks and by in-river users; and
- iii. the location and wording of the signs shall be developed in consultation with Whitewater NZ Inc and to the approval of the Canterbury Regional Council.
- k. The consent holder shall, as far as is practicable, inform all commercial users and recreational boat clubs of the position of the intake, within one month of the start of



Page 8 CRC167218

construction. A copy of the written notice and a list of those parties notified shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager at least 20 working days prior to the construction on the intake.

- I. Within six months of commencement of operation the consent holder shall conduct live tests of the intake under a range of river flow conditions and intake flows, and
  - i. shall invite Whitewater NZ Inc and the New Zealand Jet Boat Association to observe and participate in those tests; and
  - ii. shall invite Whitewater NZ Inc and the New Zealand Jet Boat Association to comment on potential modifications to design and operation.
- m. Within 20 working days after completion of the live trials, the consent holder shall report to Canterbury Regional Council on the tests required in condition 15.l., including the modifications to design and operation of the intake. In particular, the report shall include:
  - i. comments made by Whitewater NZ Inc and the New Zealand Jet Boat Association; and
  - ii. a report from the Intake Certifiers (as set out in condition 15.f.ii. which includes the following:
    - a. comments on the effectiveness of the trial floating boom required in condition 15.d.iii. to aid in preventing water users becoming pinned against and/or washed into the intake; and
    - b. certification that the modifications to the intake safety features will increase the effectiveness of the safety features to prevent water users being pinned against or washed into the intake structure.

n.

- Within 40 working days or such other timeframe as may be agreed by the Canterbury Regional Council, the consent holder shall adopt the modifications to the intake design as identified in the report required in condition 15.m..
- ii. In the event that the report required under condition 15.m.ii. indicates that the floating boom is an effective mechanism to aid in preventing water users becoming pinned against and/or washed into the intake, then the floating boom shall form a permanent part of the safety features of the intake structure.
- The intake screen and trash rack shall be cleaned and maintained on a regular basis such that the performance objective and design requirements to which conditions 15.d. refer are achieved on a continual basis.
- 17 Measurement of water take.

The consent holder shall, prior to the commencement of this consent:

- a. install a water 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 water 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. install a tamper-proof electronic recording device such as a data logger(s), which is telemetered, as specified in clause d..



Page 9 CRC167218

d. the recording device(s) shall be connected to a telemetry system which collects and stores all of the data continuously with a 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.

- e. the water measuring and recording devices described in clauses a. and b. shall be available for inspection at all times by the Canterbury Regional Council, including access to the data recorded in accordance with clause c..
- f. all data from the recording device described in clause b., and the corresponding relationship between the water measuring device and flow as described in clause b. shall be provided to the Canterbury Regional Council annually in the month of June.
- Within six months of the installation of the water measuring or recording device(s), specified in condition 17, or any subsequent replacement water measuring or recording device(s), or at any time when requested by the Canterbury Regional Council, the consent holder shall provide an installation and commissioning form demonstrating by means of a clear diagram, that:
  - a. the water measuring and recording device(s) is 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 condition 17.d. above.
- 19 This consent is subject to the conditions listed in:
  - a. Schedule 1 which is attached to and forms part of this resource consent; and
  - b. Schedule 2: Administrative Conditions as attached to resource consent CRC165680 or any replacements or subsequent variations thereof.
- If the consent holder takes water under condition 7.b., then prior to the abstraction of that water, the consent holder shall ensure that the abstraction authorised by the associated consent listed in Table 1 is connected to a telemetry system which determines whether or not water is being taken ("on/off telemetry").
  - a. The telemetry system shall collect and store 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.
  - b. By 31 July each year, the consent holder shall submit a report outlining compliance with conditions 7.b. of this consent for the previous 12 months, to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager.
- Notwithstanding condition 5.above, Stored Water (as defined in the amended National Water Conservation (Rakaia River) Order 1988) may be taken or diverted provided that:
  - a. The consent holder is listed on the Register (as defined in the amended National Water Conservation (Rakaia River) Order 1988).
  - b. The consent holder complies with any conditions imposed as a condition to being listed on the Register.
  - c. No Stored Water shall be taken, unless the consent holder has requested the release of Stored Water so taken and the holder of the resource consents for the Coleridge Hydroelectric Power Station has subsequently released that Stored Water.
  - d. The total taking or diversion of Stored Water does not exceed the maximum abstraction rate for that consent holder recorded on the Register.
  - e. The total abstraction of water (including Stored Water) does not exceed that specified in conditions 1, 2 or 4.



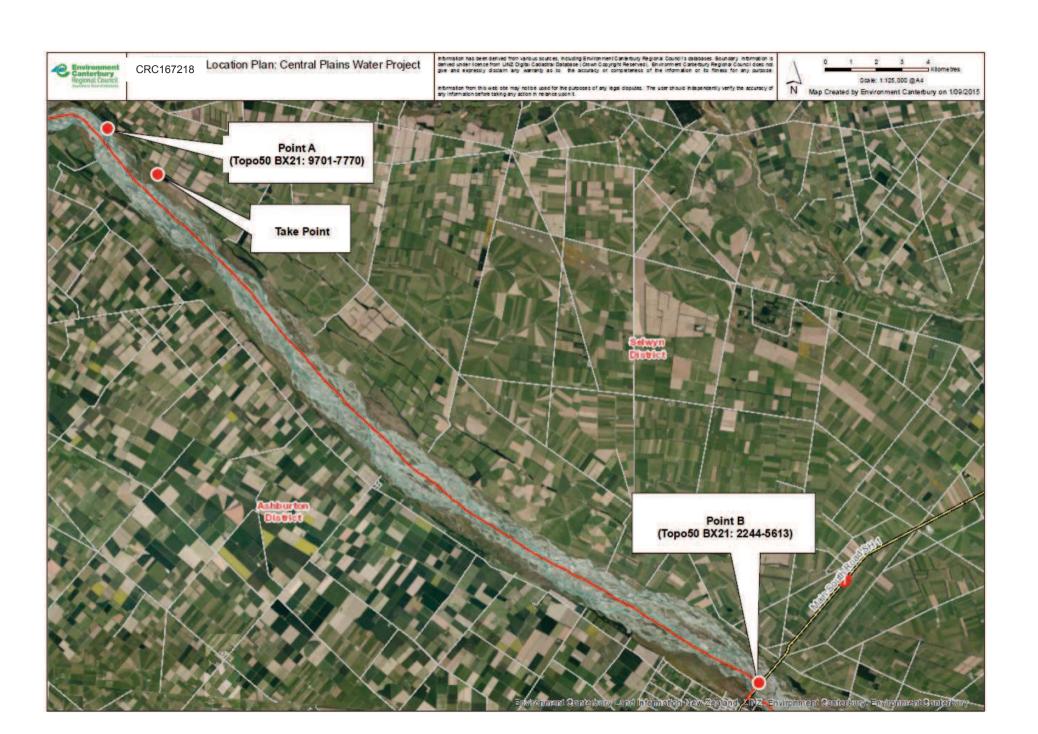
Page 10 CRC167218

- No works shall occur within the:
  - a. DOC Rakaia River Marginal Strip labelled on Plan CRC144916; and
  - b. DOC Site of Terrestrial Significance labelled on Plan CRC144916.

## Issued at Christchurch on 17 June 2016

Canterbury Regional Council



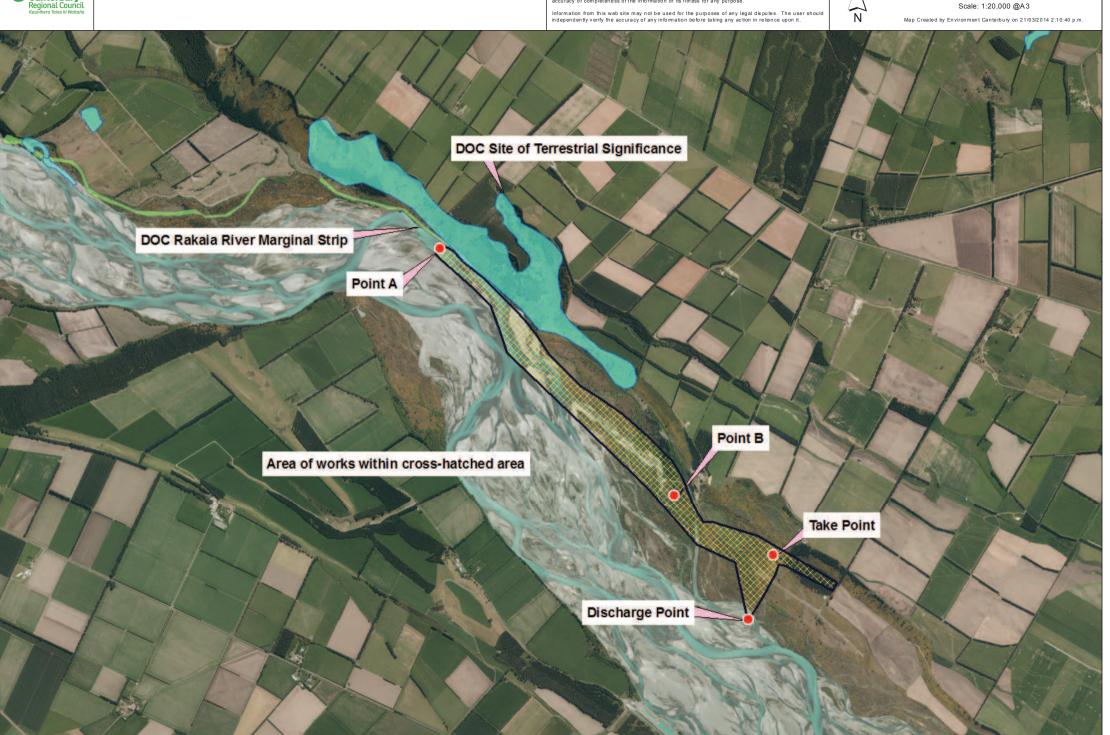




CRC144916 Plan

Information has been derived from various sources, including the aforementioned Council's databases. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). The aforementioned Councils do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.





## **Schedule 1: General Conditions**

#### **General Conditions**

- 1. All practicable measures shall be undertaken to minimise and mitigate adverse effects on property, amenity values, wildlife, vegetation and ecological values.
- 2.
- (a) The consent holder prepare an Environmental Construction Management Plan (ECMP) detailing the construction activities and the procedures that shall be undertaken to comply with the conditions of this consent and to minimise and mitigate effects of construction activities to the greatest extent practicable. .The matters to be addressed in the ECMP shall include the following:
  - (i) General
    - (A) Plan Purpose
    - (B) The practices and procedures to be adopted to achieve compliance with the conditions of the designation
    - (C) Plan Revision and Compliance Issue Resolution Processes
    - (D) ECMP/Management Plan Certification Process
    - (E) Roles and Responsibilities
  - (ii) <u>Mitigation of Adverse Effects</u>
    - (A) Environmental Objectives and Principles
    - (B) Environmental Management Approach and Methods
  - (iii) Plan Requirements and the annual environment report process
- (b) ECMP there will be the following sub-plans to ensure compliance with specific conditions on each consent.
  - (i) Construction Phase Management Plan
  - (ii) Public Health and Safety Plan
  - (iii) Traffic Management Plan
  - (iv) Landscape and Rehabilitation Management Plan
  - (v) Noise and Vibration Management Plan
  - (vi) Terrestrial Ecology Protection Plan
  - (vii) Remediation Action Plan
  - (viii) Waste Management Plan
  - (ix) Hazardous Substances/Spill Contingency Management Plan
  - (x) Archaeological and Heritage Management Plan
  - (xi) Dust Control Management Plan
  - (xii) Mudfish management plan
  - (xiii) Diversion and discharge plan

Note: That the only Management Plans in conditions 2(b)(iv), (ix) and (x) to (xiii) relate to matters within the functions of the Canterbury Regional Council and not those of the Selwyn District Council.

- 3. The ECMP shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager at least 30 working days prior to the commencement of works.
- 4. The consent holder may, at any time, submit to the Canterbury Regional Council, Attention: RMA Complicance and Enforcement Manager an amended Environmental Construction Management Plan provided it is for the purpose of improving the efficiency and/or quality of the construction works, and/or better avoiding, mitigating or remedying adverse effects.
- 5. At least 20 working days prior to the start date of the works, the consent holder shall notify the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, in writing, of the proposed start date.

### Mudfish Management Plan

6.

- (a) Prior to exercising this consent, the consent holder shall commission a suitably qualified expert with knowledge and experience with assessments of Canterbury Mudfish populations to prepare a Mudfish Management Plan in consultation with the Department of Conservation.
- (b) The purpose of the Mudfish Management Plan is to ensure that the scheme effects on Canterbury Mudfish (*Neochanna burrowsius*) populations and their habitat within the Central Plains Water Enhancement Scheme area are no more than minor.
- (c) The expert as defined in condition 6(a) shall survey the scheme area for Canterbury Mudfish populations and habitats prior to preparing the Plan.
- (d) The Mudfish Management Plan shall include the following:
  - (i) a map identifying Canterbury Mudfish populations and potential habitats within the scheme area and their current state; and
  - (ii) an assessment of the potential effects on the Canterbury Mudfish populations and their habitat from changes in flows and water levels in wetlands, ponds, water races, rivers and streams, and from works within the beds of rivers, water races and or streams, or in wetlands; and
  - (iii) mitigation or offset measures that the consent holder shall adopt to ensure that the effects on the Canterbury Mudfish and their habitat will be no more than minor. Mitigation and offset measures may include, but not be limited to, the following:
    - (A) mechanisms to exclude predators/competitors from mudfish habitat in areas where predators/competitors are currently unable to regularly access the habitat prior to the Scheme being commissioned;
    - (B) mechanisms to manage beneficial water levels in mudfish habitats;
    - (C) enhancements of mudfish habitats through fencing, planting, and pest control;
    - (D) proposed translocation or re-establishment of populations in suitable areas.
  - (iv) a strategy to make available and communicate the plan information and requirements to scheme landowners and operators; and
  - (v) recommended ongoing monitoring and reporting requirements to demonstrate that the plan implementation has been effective and that effects of the scheme on mudfish in the area are no more than minor.

7.

- (a) The consent holder shall submit the Mudfish Management Plan to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager to certify that the Plan meets the objectives set out in condition 6(b).
- (b) The consent holder shall submit the name and qualifications of the author of the Mudfish Management Plan to the Canterbury Regional Council with the Mudfish Management Plan.
- (c) The Canterbury Regional Council shall give written notice to the consent holder stating whether or not the Mudfish Management Plan complies with condition 6 within 20 working

- days of receiving the Mudfish Management Plan.
- (d) Any amendments to the Mudfish Management Plan shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager. The amendments shall be certified by a suitably qualified person with experience and knowledge with assessments of Canterbury Mudfish populations, that the amended Mudfish Management Plan meets the objectives set out in condition 6(b).
- (e) The consent holder shall report on the effectiveness of the plan, and effectiveness of any mitigation or offset measures implemented, at least at five yearly intervals (by 30 June each fifth year), or more frequently if recommended in the plan. The report shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager.
- 8. The consent holder shall adhere to the Mudfish Management Plan, or any amendments to the Mudfish Management Plan, at all times.
- 9. Where activities involve works in the beds and margins of rivers or water courses, the consent holder shall ensure:
  - (a) Fish and Game New Zealand Central South Island Region and The Department of Conservation are notified of the intention to carry out works, and their intended type, no less than two working days prior to their commencement.
  - (b) all practicable measures shall be undertaken to:
    - (i) keep to established tracks and stream crossings; and
    - (ii) prevent debris, soil and vegetation entering the watercourse; and
  - (c) the activity shall not restrict access to flood control structures and/or flood control vegetation for the purposes of their repair or maintenance.
  - (d) Birds
    - (i) The consent holder shall ensure that prior to any mechanical works being carried out in the period 1 September to 1 February:
      - (A) a suitably qualified and independent person, with experience and expertise in the identification of avifauna that nest in riverbeds and their breeding sites, inspects the proposed area of works, no earlier than eight working days prior to any works being carried out, and locates any breeding sites of the bird species listed in Appendix A;
      - (B) the person carrying out the inspection prepares a written report that identifies all the located bird breeding or nesting sites and provides copies of that report to the consent holder and the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager;
      - (C) the name and qualifications of the person carrying out the inspection are provided to the Canterbury Regional Council with the report;
      - (D) any person carrying out works authorised by this consent are informed of any bird breeding or nesting sites located; and
      - (E) where work ceases for more than 10 days, the site will be re-inspected for bird breeding and nesting sites in accordance with parts (a) to (d) of this condition.
    - (ii) As far as practicable, vehicles and/or machinery shall not operate within 100 metres of birds which are nesting or rearing their young in the bed of the river. Where this is not practicable the consent holder will arrange either relocation as recommended by and under the supervision of the expert as defined in condition 9(d)(i)(A), or alternatively offset mitigation of equivalent value to avifauna as recommended by that expert.

For the purposes of this condition birds are defined as those bird species listed in Appendix A.

### (e) Fish

- (i) Prior to any works being carried out in the period 1 October to 30 March the consent holder shall:
  - (A) Commission a suitably qualified and independent person, with experience and expertise fish migration provides a report certifying that the effects from the proposed works on fish migration will be no more than minor; and
  - (B) submit the report to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, along with the name, qualifications and experience of the author of that report.
- (ii) No works in flowing water shall take place in the Selwyn, Hororata and Hawkins River during the trout spawning period of 1 May to 30 September
- (f) The activities, structures and any associated equipment, materials, or debris, shall not obstruct or alter the passage of water in a manner that causes:
  - (i) an increase in the risk or potential for flooding of surrounding land;
  - (ii) destabilisation of lawfully established flood control vegetation, flood control structures or any other lawfully established structures within the beds of rivers;
  - (iii) an increase in erosion of river beds or banks;
- (g) The works shall not prevent the passage of fish, and all practicable measures shall be undertaken to prevent the stranding of fish in pools or channels.
- (h) Machinery shall be free of plants and plant seeds prior to use in the riverbed.
- (i) No plant species listed in Schedule BLR1 of Chapter 6 "Beds and margins of lakes and rivers" of the Proposed Canterbury Natural Resources Regional Plan shall be planted.
- (j) To prevent the spread of Didymo or any other aquatic pest, the consent holder shall ensure that activities authorised by this consent are undertaken in accordance with the Biosecurity New Zealand's hygiene procedures.
  - Note: You can access the most current version of these procedures from the Biosecurity New Zealand website <a href="http://www.biosecurity.govt.nz">http://www.biosecurity.govt.nz</a> or Canterbury Regional Council Customer Services.
- (k) Within forty working days of the completion of the construction works, the consent holder shall supply the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, a complete set of "as-built" plans confirming the location of the works.
- (I) Within forty working days of completion of the construction works, the consent holder shall report to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, certifying that all construction debris or other materials from the construction works has been removed.
- (m) The consent holder shall maintain and keep a complaints register for all aspects of all operations in relation to construction activities. The register shall detail the date, time and type of complaint, cause of the complaint, and action taken by the consent holder in response to the complaint. The register shall be available to the Canterbury Regional Council upon their request.
- (n) All disturbed areas shall be stabilised and/or revegetated following completion of the works.
- (o) No structure and/or site works shall preclude existing access to the riverbed.

# **Accidental Discovery**

- 10. This protocol shall cover archaeological sites, historic sites and historic buildings classified under the Historic Places Act 1993. Where appropriate, all contractors, project managers and stakeholders shall be inducted into the protocol and made aware of their individual responsibilities under the protocol.
  - (a) In the event of any disturbance of Koiwi Tangata (human bones) or taonga (treasured artefacts), the Requiring Authority shall immediately:
    - (i) Advise the Te Rūnanga o Ngāi Tahu, Te Taumutu Rūnanga, or their representative, and the Canterbury Regional Council of the disturbance;
    - (ii) Cease earthmoving operations in the affected area until the area containing the Koiwi Tangata or taonga has been clearly demarcated, and Kaumatua and archaeologists have certified that it is appropriate for earthmoving to recommence.
  - (b) In the event of accidental discovery of archaeological remains, the following steps shall be taken:
    - (i) All activity affecting the immediate area shall cease and the Regional Archaeologist of the New Zealand Historic Places Trust shall be contacted:
    - (ii) The site shall be secured to ensure that the remains are not further disturbed;
    - (iii) Further works affecting the remains will not commence until either:
      - (A) The Regional Archaeologist of the New Zealand Historic Places Trust has confirmed in writing that the archaeological provisions of the Historic Places Act 1993 do not apply; or
      - (B) The requirements of the archaeological provisions of the Historic Places Act 1993 have been met, and if required, and archaeological authority has been granted by the New Zealand Historic Places Trust.
  - (c) If human remains / koiwi tangata are located, in addition to the above steps, the Runanga representative for the area and the New Zealand Police must be contacted.
  - (d) The above protocol shall only be amended in consultation with the New Zealand Historic Places Trust (NZHPT) Te Rūnanga o Ngāi Tahu and Te Taumutu Rūnanga. Once finalised, copies shall be lodged with those parties and the Canterbury Regional Council prior to any construction commencing.

				Schedule CRC10	67218			
Existing consent holder	Existing resource conesnt number	Abstraction point (SWAP)	Maximum rate of abstraction on existing consent	Current consented band restriction	Degree of hydraulic connection	Existing fish screen minimum size	Schedule 2 fish screen provisions (outlined in the Land and Water Regional Plan	Maximum annual volume (cubic metres)