

Appendix E: Consent CRC143165

Record Number: CRC143165
Record Type: Change in Conditions
Permit Type: Water Permit
Record Holder: Barrhill Chertsey Irrigation Limited
Record Status: Issued - Active
File Number: CRC143165
Previous Record(s): CRC132861
Next Record(s):
Location: Barrhill - Chertsey Area, METHVEN
Description: To divert, take and use water from the Rakaia River.



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

Key Dates:

Event	Date
Change Takes Effect Date	05 May 2014
Given Effect To	20 Mar 2013
Lapses	31 Mar 2018
Expires	28 Jan 2035

Workflow (Only shows if workflow has open tasks):

Task Name	Task Status	Task Status Date
Record Lodgement	Completed - Ready for s88	19 Nov 2013
Complete s88 Check	Completed - Accept Application	22 Nov 2013
Audit Application	Completed	23 Apr 2014
Complete Recommendation	Completed - No Peer/App Review	23 Apr 2014
Make Notification Decision	Completed - Non Notified	02 May 2014
Notify and Issue Final Decision	Completed - NonNtfed Grant	05 May 2014
Make Non Notified Final Decision	Completed	02 May 2014
Finalise Application	Completed	05 May 2014
Manage Objection Period	In Objection Period	
Compliance Audit Check		
Manage Objection Period	In Process - Objection Period	

Conditions:

No	Text
1	<p>The rate at which water is diverted from the Rakaia River:</p> <ol style="list-style-type: none"> at or about map reference NZMS 260 K36:050-393, shall not exceed 40 cubic metres per second; and within an area defined by map references NZMS 260 L36:270-198, L36:277-208, L36:365-150, and L36:350-137, shall not exceed 6 cubic metres per second; and at or about map reference NZMS 260 K36:081-363, shall not exceed 10 cubic metres per second; and between approximate map references Topo50 BX21:0579-6651 and Topo50 BX21:0662-6548, shall not exceed 10 cubic metres per second.
2	<p>The rate at which water is taken from the Rakaia River:</p> <ol style="list-style-type: none"> at or about map reference NZMS 260 K36:057-393, shall not exceed 17 cubic metres per second (the Upper/Original Intake); and at or about map reference NZMS 260 L36:327-164, shall not exceed 3 cubic metres per second (the Lower/Acton Intake); and at or about map reference NZMS 260 K36:081-363, shall not exceed 8 cubic

	<p>metres per second (the Highbank Intake); and</p> <p>d. at or about map reference Topo50 BX21:0704-6486, shall not exceed 5 cubic metres per second (the Barrhill Intake).</p>
3	<p>The net rate of take between conditions 2 a., 2 b. 2 c. and 2d. shall not exceed 17 cubic metres per second.</p> <p>Advisory Note: Whilst the net abstraction authorised by this consent must not exceed 17 cubic metres per second, water that is taken at an upstream location and then discharged back to the river can be taken out at a location downstream of the discharge point for re-use, provided that the total net take along any reach of the river does not exceed 17 cubic metres per second.</p>
WATER SWAP	
4	<p>a. The rate at which water is taken at various locations from the Rangitata Diversion Race (being water diverted and taken from the Rakaia River under this consent or the Rangitata and Ashburton Rivers under consents CRC011237 and CRC011245 or any subsequent replacement consents) shall not exceed 10 cubic metres per second provided that:</p> <ol style="list-style-type: none"> the holder of consents CRC011237 and CRC011245 (or any subsequent replacement consents) is taking water from either the Rangitata and/or Ashburton Rivers; and/or the consent holder is taking water from the Rakaia River and placing that water into the Rangitata Diversion Race and the total amount diverted and taken by the consent holder from the Rangitata Diversion Race does not exceed the total of that taken under condition 4a.i. and ii. <p>b. the water diverted and taken under condition 4 a. may be used in accordance with condition 11.</p> <p>Advisory Note: In accordance with this resource consent and any agreement between the consent holder and the holder of consents CRC011237 and CRC011245:</p> <ol style="list-style-type: none"> the consent holder is authorised to take up to 10 cumecs of water from Rakaia River into the Rangitata Diversion Race for the purposes of providing that water to:- <ol style="list-style-type: none"> the consent holder to divert and take that water from the Rangitata Diversion Race (or to use it within the race) for any purpose specified in condition 11; or the holder of consents CRC011237 and CRC011245 (or any subsequent replacement consents) to divert and take that water from the Rangitata Diversion Race (or to use it within the race) for any of the purposes specified in condition 11. the consent holder is authorised to divert and take discharge up to 10 cumecs of water from the Rangitata Diversion Race (including water taken from the Rakaia, Rangitata and Ashburton Rivers) for any of the uses specified in condition 11) provided that the total divert and take by the consent holder from the Rangitata Diversion race under a. and b. does not exceed 10 cumecs. Nothing in this consent shall prevent: <ol style="list-style-type: none"> the holder of consents CRC011237 and CRC011245 fully exercising its consents to the exclusion of the water swap arrangements described in condition 4 and this Advisory note should it choose to do so. the consent holder exercising its consents without reliance on the water swap described in condition 4 and this Advisory note.

	FLOW RESTRICTIONS FOR THE RAKAIA TAKE
5	<p>a. The following minimum flow will apply to the abstraction of 14,872.5 L/s of Band 4 water: Whenever the flow (expressed in cubic metres per second) in the Rakaia River, as estimated by the 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, the taking of water in terms of this permit shall cease: Month: JAN FEB MAR APR MAY JUN JUL AUG Flow: 150.5 134.5 131.5 123.5 121.5 122.5 117.5 118.5 Month SEP OCT NOV DEC Flow: 116.5 132.5 155.5 165.5.</p> <p>b. The following minimum flow will apply to the abstraction of 2,127.5 L/s of Band 5 water: Whenever the flow (expressed in cubic metres per second) in the Rakaia River, as estimated by the 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, the taking of water in terms of this permit shall cease: Month: JAN FEB MAR APR MAY JUN JUL AUG Flow: 184.8 168.8 165.8 157.8 155.8 156.8 151.8 152.8 Month SEP OCT NOV DEC 150.8 166.8 189.8 199.8</p>
6	<p>a. The following sharing restriction shall apply to the abstraction of Band 4 water: Whenever the flow (expressed in cubic metres per second) in the Rakaia River, as estimated by the 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 flows shown on the horizontal axis of the annexed Graph CRC990088.6A, then the rate of abstraction permitted in terms of this permit shall not exceed that shown as corresponding on the vertical axis of the annexed Graph CRC990088.6A.</p> <p>b. The following sharing restriction shall apply to the abstraction of Band 5 water: Whenever the flow (expressed in cubic metres per second) in the Rakaia River, as estimated by the 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 flows shown on the horizontal axis of the annexed Graph CRC990088.6B, then the rate of abstraction permitted in terms of this permit shall not exceed that shown as corresponding on the vertical axis of the annexed Graph CRC990088.6B. 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 water sharing regime which complies with the National Water Conservation (Rakaia River) Order 1988, and</p> <ol style="list-style-type: none"> All consent holders in the Water User Group are recording their rate of water abstraction by tamper-proof electronic recording systems such that the abstraction rate and volume of water is measured at least once every 15 minutes, and a record is made at a remote location via telemetry of the recorded abstraction rate and volume; and The recorded data shall not be changed or deleted by any person, unless twelve months have passed since the date of recording; and 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 holder's assistance on site to unlock or remove barriers. All data from the recording devices shall be provided to the Canterbury

	<p>Regional Council on request.</p> <p>v. Four months after the commencement of the Water User Group sharing and during 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 suitably qualified person certifying the accuracy of the measuring and recording devices; then the taking of water in accordance with that determination shall be deemed to be in compliance with all parts of condition 5 and 6 of this consent.</p>
	FISH SCREENS
7	<p>a. Upper/Original Intake:</p> <p>i. Fish screens shall be installed and maintained on the diversion channel and the mesh aperture size of the screen shall not exceed five millimetres except from August 1 to November 15 when the mesh aperture size of the screen shall not exceed 3.8 millimetres; and</p> <p>b. Lower/Acton Intake:</p> <p>i. The consent holder shall, within three years of the first exercise of this consent, design, construct and commission a fish exclusion device to be applied near, at or within, the Acton intake or diversion channel subject to:</p> <p>a. Water shall only be taken when a fish exclusion device with the following design criteria, or a device that achieves the same, or better, level of fish exclusion effectiveness is operated and maintained across the intake to ensure that fish and fish fry are prevented from passing through the intake. Design criteria: a maximum mesh width and height size of three millimetres or slot width of two millimetres, or other such screen system as approved by the Canterbury Regional Council.</p> <p>b. The fish exclusion device 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 face of the exclusion device.</p> <p>c. The fish exclusion device shall be designed and installed to ensure that:</p> <p>i. The majority of the exclusion device surface is oriented parallel to the direction of water flow.</p> <p>ii. Where practicable, the exclusion device is positioned in the water column a minimum of 300 millimetres above the bed of the waterway and a minimum of one exclusion device radius from the surface of the water.</p> <p>iii. The approach velocity perpendicular to the face of the exclusion device 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.</p> <p>iv. The sweep velocity parallel to the face of the exclusion device shall exceed the design approach velocity.</p> <p>d. The fish exclusion device shall be designed or supplied by a suitably qualified person who shall ensure that the design criteria specified in condition 7(b)(i)(b)-(c) of this consent is achieved. Prior to the installation of the fish exclusion device, a report containing final design plans and illustrating how the fish exclusion device will meet the required design criteria, and an operation and maintenance plan for the fish exclusion device shall be provided to the Canterbury Regional Council, attention RMA</p>

Compliance and Enforcement Manager.

- e. A certificate shall be provided to the Canterbury Regional Council by the designer or supplier of the fish exclusion device to certify that the fish exclusion device has been installed in accordance with the details provided to the Canterbury Regional Council in accordance with condition 7(b)(i)(e) of this consent.
 - f. The fish exclusion device shall be maintained in good working order. Records shall be kept of all inspections and maintenance, and those records shall be provided to the Canterbury Regional Council upon request.
 - g. The consent holder shall supply annually in November each year an update to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, on the progress of installing fish exclusion devices, until required devices are in place.
- c. Highbank Intake
- i. The consent holder shall install, operate and maintain a fish diversion barrier in accordance with the NIWA publication "Fish Screening: Good Practice Guidelines for Canterbury, October 2007", NIWA Client Report CHC2007-092 near, at or within, the Highbank intake or diversion channel subject to:
 - ii. the fish diversion barriers shall have a maximum cross-sectional approach velocity of no greater than 0.12metres per second; and
 - iii. the sweep velocity across the fish diversion barriers shall exceed the approach velocity except where the barrier location and settling pond layout confines the submerged barriers to the extent there is little or no cross flow possible across the submerged barrier installation; and
 - iv. an effective bypass system shall be maintained at all times that water is diverted into the scheme, to connect to an active braid of the river.
 - a. In the event that a fish diversion barrier is damaged so as to be rendered less effective at excluding fish from the take, the consent holder shall repair or replace the fish diversion barrier as soon as practicable, or shall shut down the fish diversion barrier such that water ceases to pass through it. In the event that a fish diversion barrier is shut down, it shall not be reopened until such time as it complies in full with the provisions of condition 7 c. (i) of this consent.
 - b. All incidence of fish diversion barrier shut down shall be recorded by the consent holder and reported to Fish and Game New Zealand within four hours. These records of fish diversion barrier failure shall be forwarded to the Canterbury Regional Council to the attention of the Canterbury Regional Council Compliance and Enforcement Manager, at the end of each irrigation season, or upon request.
 - c. The design plans for the fish diversion barrier shall be certified by an appropriate fisheries expert to confirm that the design, function and operation of the fish diversion barrier is in accordance with the guidelines detailed in condition 7(c).
 - d. Prior to commencement of construction the consent holder shall provide to the Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager:
 - e. the certified design plans showing the sweep velocity, approach velocity, and a by-pass which returns fish to an actively flowing braid of the Rakaia River;
 - f. a report from the certifying fisheries expert which certifies and explains how the certified design and operation of the fish diversion barrier demonstrates compliance with the guidelines detailed in condition 7(c).
 - g. The consent holder shall within 12 months of the construction of the fish diversion barrier undertake monitoring to assess

compliance with condition 7(c)(ii) (maximum approach velocity of no greater than 0.12m/s). If it is found that fish are being impinged due to approach velocity, the necessary adjustments will be made to ensure full compliance with 7(c)(ii).

d. Barhill Intake

- i. The consent holder shall install, operate and maintain a rock fish barrier within the settling pond in accordance with the NIWA publication "Fish Screening: Good Practice Guidelines for Canterbury, October 2007", NIWA Client Report CHC2007-092 as necessary to prevent fish entering the pipeline intake. The screen shall:
 - a. Provide a physical barrier to the full flow diverted through the settling pond
 - b. Have a maximum cross-sectional approach velocity no greater than 0.12 metres per second; and
 - c. Have a sweep velocity across the fish barrier at least as high as the approach velocity except where the barrier location and settling pond layout confines the submerged barriers to the extent there is little or no cross flow possible across the submerged barrier installation; and
 - d. Be constructed along with an effective fish bypass system that shall be maintained at all times that water is diverted into the scheme, to connect to an active braid of the river.
 - e. In the event that a fish barrier is damaged so as to be rendered less effective at excluding fish from the take, the consent holder shall repair or replace the fish diversion barrier as soon as practicable, or shall shut down the fish barrier such that water ceases to pass through it. In the event that a fish barrier is shut down, it shall not be reopened until such time as it complies in full with the provisions of condition 7(d)(i)(a) – (d) of this consent.
 - f. All incidence of fish diversion barrier shut down shall be recorded by the consent holder and reported to Fish and Game New Zealand within four hours. These records of fish diversion barrier failure shall be forwarded to the Canterbury Regional Council to the attention of the Canterbury Regional Council Compliance and Enforcement Manager, at the end of each irrigation season, or upon request.
 - g. The design plans for the fish barrier shall be certified by an appropriate fisheries expert to confirm that the design, function and operation of the fish barrier is in accordance with the guidelines detailed in condition 7(d)(i)(a)-(d).
 - h. Prior to commencement of construction the consent holder shall provide to the Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager:
 - i. The certified design plans showing the sweep velocity, approach velocity, and a by-pass which returns fish to an actively flowing braid of the Rakaia River; and
 - ii. A report from the certifying fisheries expert which certifies and explains how the certified design and operation of the fish barrier demonstrates compliance with the guidelines detailed in condition 7(d)(i)(a)-(d) of this consent.
 - i. No less than one calendar month prior to the first use of the scheme, the consent holder shall submit to the Canterbury Regional Council attention: Compliance Manager and copy to Fish and Game New Zealand, a comprehensive monitoring programme prepared by a suitably qualified and experienced independent fisheries expert, as necessary to monitor the function and effectiveness of the fish barrier and fish return channel. The monitoring programme shall include the release and capture of live fish within the screening area to measure the effectiveness of the barrier. Within 12 months of first taking of water through the

	<p>barrier the consent holder shall provide a report to the Canterbury Regional Council (attention: Compliance Manager) and Fish and Game New Zealand from a suitably qualified and experienced independent fisheries expert that details the results of the monitoring programme and provides comment on whether the fish barrier achieves the following performance objectives:</p> <ul style="list-style-type: none"> i. exclude all adult fish; and ii. exclude at least 95% of juveniles salmonids that have entered the settling pond <p>j. In the event that the monitoring demonstrates that the fish barrier is not fully effective in achieving the objectives in condition 7(d)(i)(a)-(d) the consent holder shall immediately commission a report. 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. The report shall be prepared in consultation with North Canterbury Fish and Game Council and the 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.</p> <p>k. In the event that monitoring demonstrates that the fish barrier is not fully effective then the Consent Holder shall ensure that the barrier is modified to level specified in Condition 7(d)(i)(i) and 7(d)(i)(ii), or that recommendations identified in any report commissioned in respect of Condition 7(d)(i)(j) are implemented.</p>
	FISH SCREEN INSPECTION
8	<ul style="list-style-type: none"> a. Upper/Original Intake: Each fish screen in condition 7 a. shall be inspected at maximum intervals of two days for any damage causing fish to pass through the screen, or once every 24 hours period when the flow in the Rakaia River is greater than 300 cubic metres per second, as estimated by the 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). b. Barrhill Intake: The fish barrier shall be inspected at a frequency of no less than once every 48 hours, or once every 24 hours when the Rakaia River flows exceed 300 cubic metres per second as estimated by Environment Canterbury at the Rakaia Gorge recorder site (at or about map reference Topo50 BX20:9142-8080) or the recorder site at Fighting Hill (at or about map reference Topo50 BX20:8961-8199).
	DAMAGE TO FISH SCREEN
9	<ul style="list-style-type: none"> a. Upper/Original Intake <ul style="list-style-type: none"> i. In the event that a screen installed in accordance with condition 7 a. is damaged such that the screen mesh aperture is greater than those specified in condition 7 a., the screen shall be repaired or replaced

	<p>immediately with a screen that complies with condition 7 a., or the damaged screen shut down. Any screen shut down shall not be opened again until a screen that complies with condition 7 is fitted.</p> <p>ii. The incidence of screen shut downs shall be recorded and reported to the North Canterbury Fish and Game Council within four hours. Records of screen failure shall be forwarded to Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager at the end of each irrigation season, or as requested.</p> <p>b. Lower/Acton Intake</p> <p>i. In the event of a fish exclusion device installed in accordance with condition 7 b becoming damaged or ineffective, the consent holder shall, within 24 hours of becoming aware of the failure of the device, notify the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, of the situation, the action that will be taken, as soon as practicable, to correct the failure, and the timeframe within which the repairs will be completed.</p> <p>c. Highbank Intake</p> <p>i. In the event of a fish diversion barrier installed in accordance with condition 7 c. becoming damaged or ineffective, the consent holder shall, within 24 hours of becoming aware of the failure of the device, notify the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, of the situation, the action that will be taken, as soon as practicable, to correct the failure, and the timeframe within which the repairs will be completed.</p> <p>d. Barrhill Intake</p> <p>i. In the event that the fish barrier installed in accordance with condition 7 d. is damaged so as to be rendered ineffective at excluding fish from the pipeline intake, the consent holder shall:</p> <ol style="list-style-type: none"> repair or replace the barrier immediately, or shut down the scheme such that water ceases to pass through the pipeline intake; and for all such incidents, notify the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, of the situation, the action that will be taken, as soon as practicable, to correct the failure, and the timeframe within which the repairs will be completed within 24 hours of becoming aware of the failure of the device, upon request, and at the end of each irrigation season; and ensure that where the scheme is shut down for this reason, it shall not be reopened until such time as the fish barrier is able to comply with the conditions of this consent.
	WATER MEASUREMENT
10	<p>a. Upper/Original Intake</p> <p>i. The rate at which water is taken shall be measured to within an accuracy of 10 percent, and the measurement and the hours during which water is taken shall be recorded. A copy of the records shall be provided to the Canterbury Regional Council upon request.</p> <p>b. Lower/Acton Intake</p> <p>i. The consent holder shall, within three months of the commencement of this consent, install a water level measuring device at the Acton intake; in a location that will enable the determination of the continuous rate of flow and volume of water being taken to within an accuracy of plus or minus 10 percent, and</p> <ol style="list-style-type: none"> 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 and maintained in accordance with the manufacturer's instructions.
- b. The level of water in the race, and times of abstraction, shall be recorded by tamper-proof electronic recording system such that the level of water is measured at least once every 15 minutes, and a record made either on site or at a remote location via telemetry of the recorded levels such that the flow volume through the site may be derived for time increments not exceeding 60 minutes using the current site rating relationship. The recorded data shall not be changed or deleted by any person, unless twelve months have passed since the date of recording.
 - c. The measuring and recording devices described in clauses (a) and (b) 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 holder's assistance on site to unlock or remove barriers.
 - d. All data from the recording device described in clause (b), and the corresponding relationship between the water level and flow, shall be provided to the Canterbury Regional Council on request.
 - e. Maintain a rating curve to convert water levels to flow in accordance with good hydrological practice.
 - f. Four months after the commencement of this consent, and at two-yearly intervals thereafter, 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 that the accuracy of the measuring and recording devices installed in accordance with (a) and (b) and also certifying that data from the recording device described in condition (b) can be readily attained by the consent holder.
- c. Highbank Intake
- i. The consent holder shall, prior to taking water via the Highbank Intake, install a water level measuring device at the Highbank Intake; in a location that will enable the determination of the continuous rate of flow and volume of water being taken to within an accuracy of plus or minus 10 percent, and
 - a. 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 and maintained in accordance with the manufacturer's instructions.
 - b. The level of water in the race, and times of abstraction, shall be recorded by tamper-proof electronic recording system such that the level of water is measured at least once every 15 minutes, and a record made either on site or at a remote location via telemetry of the recorded levels such that the flow volume through the site may be derived for time increments not exceeding 60 minutes using the current site rating relationship. The recorded data shall not be changed or deleted by any person, unless twelve months have passed since the date of recording.
 - c. The measuring and recording devices described in clauses (a) and (b) 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 holder's assistance on site to unlock or remove barriers.
 - d. All data from the recording device described in clause (b), and the corresponding relationship between the water level and flow, shall be provided to the Canterbury Regional Council on request.
 - e. Maintain a rating curve to convert water levels to flow in accordance with good hydrological practice.
 - f. Four months after the commencement of this consent, and at two-yearly intervals thereafter, the consent holder shall provide a

	<p>certificate to the Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager, signed by a suitably qualified person certifying that the accuracy of the measuring and recording devices installed in accordance with (a) and (b) and also certifying that data from the recording device described in condition (b) can be readily attained by the consent holder.</p> <p>d. Barrhill Intake:</p> <ol style="list-style-type: none"> i. The consent holder shall, prior to taking water via the Barrhill Pipeline Intake, install a flow measuring device at the pipeline intake in a location that will enable the determination of the continuous rate of flow and volume of water being taken to within an accuracy of plus or minus 10 percent, and <ol style="list-style-type: none"> a. The measuring device shall be installed and maintained in accordance with the manufacturer's instructions. b. The level of water in the Barrhill settling pond, and times of abstraction via the pipeline intake, shall be recorded by tamper-proof electronic recording system such that the level of water is measured at least once every 15 minutes, and a record made either on site or at a remote location via telemetry of the recorded levels such that the flow volume through the site may be derived for time increments not exceeding 60 minutes using the current site rating relationship. The recorded data shall not be changed or deleted by any person, unless twelve months have passed since the date of recording. c. The measuring and recording devices described in clauses (a) and (b) 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 holder's assistance on site to unlock or remove barriers. d. All data from the recording device described in clause (b), and the corresponding relationship between the water level and flow, shall be provided to the Canterbury Regional Council on request. e. Maintain a rating curve to convert water levels to flow in accordance with good hydrological practice. f. Four months after the commencement of this consent, and at two-yearly intervals thereafter, 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 that the accuracy of the measuring and recording devices installed in accordance with (a) and (b) and also certifying that data from the recording device described in condition (b) can be readily attained by the consent holder.
11	<p>Water may only be used to:</p> <ol style="list-style-type: none"> a. irrigate up to 40,000 hectares of land: <ol style="list-style-type: none"> i. within Areas 1 to 8, shown on the attached plan (CRC990088.3 which forms part of this consent); and/or ii. on any land between the Rakaia and Rangitata Rivers covered by a separate consent to use water (if required); and b. to fill on-farm storage reservoirs; and c. to generate electricity.
12	<p>For properties located in Area 6 which border the Rakaia River, water shall only be supplied if the property has a farm management plan which prohibits the alteration of river protection</p>

	works and the removal of riparian vegetation without first obtaining the written approval of the Canterbury Regional Council River Engineer. A copy of this farm management plan must be lodged with the Canterbury Regional Council before the consent holder can supply water to these properties.
13	The combined use of water from this consent and any other consent for the irrigation of properties utilising existing consented water abstractions shall not exceed the higher of the irrigation application rates listed on those existing consents or that allowed under this consent.
14	Water may only be supplied to properties where the combined effect of the irrigation water from this consent and from any other consent held for irrigation shall comply with the following criteria: <ul style="list-style-type: none"> a. The average rate that irrigation water is applied to the land, including the combined rate of application from any other water source, shall not exceed the existing consented rate or 5.2 mm/day; b. The irrigation water shall be used in a manner that takes all practicable steps to: <ul style="list-style-type: none"> i. Ensure that the volume of water used for irrigation does not exceed that required for the soil to reach field capacity; and ii. Avoid leakage from pipes and structures; and iii. Avoid the use of water onto non-productive land such as impermeable surfaces and river or stream riparian strips.
15	A steel grill shall be placed over the inlet to the box culvert intake structure in condition 7 a., and as far as is practicable shall be positioned such that it minimises the probability of water users becoming pinned against it.
16	Signs warning of the position of the intake structure in condition 7 a., shall be erected at points upstream of the intake that are used by the public to enter the Rakaia River.
17	A warning sign visible from 50 metres upstream shall be erected adjacent to the intake in condition 7 a.
18	All commercial users and recreational boat clubs shall, as far as is practicable, be informed in writing of the position of the intake in condition 7 a., within one month of the start of construction of the intake.
19	The Canterbury Regional Council may, on the last working day of June each year, 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, including any adverse effects arising from the inefficient use of water.
20	The lapsing provisions of section 125 of the Resource Management Act 1991 shall not apply until after the expiry of five years from the date of the commencement of this consent.
21	The Canterbury Regional Council may, on any of the last five working days of June 2015, 2020, 2025 and 2030, serve notice of its intention to review the conditions of this consent for the purposes of: <ul style="list-style-type: none"> a. altering the rate of abstraction to correspond to the actual rate of water usage; and/or b. amending the minimum flow restrictions in condition (5) to reflect any changes in the abstraction rate of the other abstractors from the river.

22	<p>Notwithstanding conditions (5) and (6) above, Stored Water (as defined in the amended National Water Conservation (Rakaia River) Order 1988) may be taken or diverted provided that:</p> <ul style="list-style-type: none">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 17 cubic metres per second.