

In the matter of The Resource Management
 Act 1991

and

In the matter of Application CRC081291 &
 CRC082321, by Waitaki
 Vineyard Estates Limited to
 take and use water for
 community water supply,
 frost fighting and irrigation
 purposes

**Decision of hearing commissioner
Michael Conrad Freeman**

Date and location of hearing

29 November 2010 at the Opera House Building, 94 Thames Street, Oamaru

Appearances

Applicant

- Mr Grant Richards, Resource Management Consultant
- Mr Charlie Clarke, The applicant's representative

Submitter

- Ms Isabel Fay Willis

Reporting Officer

- Ms Maria Bartlett, Consents Investigating Officer, Environment Canterbury
-

Decision summary

Resource consent applications CRC081291 and CRC082321 are granted, subject to conditions.

1. Background

- 1.1 I have been appointed and empowered by the Canterbury Regional Council (Environment Canterbury or ECan) to hear and determine these water permit applications.
- 1.2 The following section is a very brief description of the proposal. The details are contained in the application and in the evidence presented at the hearing. The hearing information is available on ECan's website¹. It is therefore not necessary to repeat those details here.

2. Notification and submissions

- 2.1 The initial application was lodged on 10 October 2007 and after a series of events as described in Ms Bartlett's Section 42A (S42A) report, two applications were publicly notified on 3 May 2008 with the following wording and a requested duration of 35 years.

“CRC082321 - to take and use water from bore I40/0157 (200 millimetres diameter and 107 metres deep, located at or about map reference NZMS 260 I40:1558-9430), and bore I40/0641 (150 millimetres diameter and 84 metres deep, located at or about map reference NZMS 260 I40:1653-9443) at a rate of 5.25 litres per second and a volume not exceeding 165,665 cubic metres between 1 July and the following 30 June, for the irrigation of 32.6 hectares of vineyard, pasture and crops and frost protection purposes, at Special School Road, Otekaieke.

CRC081291 - to take and use water from bore I40/0157 (200 millimetres diameter and 107 metres deep, located at or about map reference NZMS 260 I40:1558-9430), and bore I40/0641 (150 millimetres diameter and 84 metres deep, located at or about map reference NZMS 260 I40:1653-9443) at a rate of 0.6 litres per second and a volume not exceeding 18,652 cubic metres between 1 July and the following 30 June, for the community water supply for 12 lots, at Special School Road, Otekaieke.”

- 2.2 Eleven submissions were made on the applications, with two in support and nine in opposition as summarised in the S42A report.

3. Summary of the evidence heard and the hearing

Preliminary matters

- 3.1 My appointment was made on 25 November 2010. I was then informed that the reporting officer for the applications was Ms Maria Bartlett. I advised ECan on 25 November that because Ms Bartlett and I had recently worked together as reporting officers on the Upper Waitaki irrigation resource consent hearing, the applicant and submitters should be contacted to determine whether any party had any concerns with my appointment. I understand that no concerns were raised prior to the hearing. At the hearing, the applicant and Ms Willis confirmed that they had no objection to my appointment.

¹ <http://ecan.govt.nz/get-involved/consent-projects/waitaki-consents/Pages/waitaki-vineyard-estates.aspx>

3.2 A request was received from a submitter, Mr Jarvis (for Otekaieke Downs Trust) via email to ECan on 24 November 2010 to add a number of further comments to the Trust's submission. I was advised on Friday 26 November of this request. My preliminary decision was to accept the further comments because, while a number of the comments appeared to be beyond the scope of the resource consent process, the additional information did not appear to prejudice the applicant. This matter was raised with the applicant's representatives at the hearing and they agreed that they had no objection to the further comments being received.

The applicant's representative

3.3 Mr Grant Richards provided a detailed and extensive statement of evidence that reinforced and extended the technical information included with the assessment of environmental effects provided with the applications. Mr Richards highlighted the following:

- The background to the development proposal and efforts to obtain water from various sources.
- A review of the geology and hydrogeology of the area.
- An assessment of the effects of the proposed abstractions on existing groundwater supplies.
- Clarification that the applicant is proposing to reduce the duration sought to ten years.
- A summary of the applicant's position that the proposed abstraction is from a deep confined aquifer with no connection with local shallow groundwater or local surface waters.
- A review of the section 42A report.
- A review of submitters' concerns.
- A summary of the decision requested including comments on specific conditions.

The submitters

3.4 I have read all the submissions made in response to these resource consent applications. Ms Willis was the only submitter who wished to be heard at the hearing. Ms Willis highlighted her concerns about the proposed applications and specifically considered that:

- The requested rate and annual volume to be excessive.
- Other sources of water have not been explored.
- There would be a reduction in aquifer recharge.
- There would be adverse effects on down-gradient domestic supplies reliant on groundwater bores.
- Recharge areas are not clear.
- No climate change assessment has been incorporated.
- The duration sought is excessive.
- There is a high degree of uncertainty and no mitigation proposed.

The reporting officer

3.5 Ms Bartlett provided an overview of her comprehensive S42A report, the extensive communication that has occurred between Mr Richards and Ms Bartlett, and highlighted the following:

- The applicant has reduced the scope of the application to the following:
 - the duration sought from 35 to 10 years²,
 - the combined abstraction rate to 5 litres per second,
 - the annual volume requested for community water supply from 18,652 to 10,710 cubic metres
 - the annual volume requested for irrigation and frost protection from 165,665 to 98,005 cubic metres.
- The status of the applications in terms of the requirements of the Waitaki Catchment and Water Allocation Regional Plan (WCWARP).
- The analysis and conclusions of the Sunny Downs resource consent hearing on the annual allocation for this part of the Waitaki catchment. The conclusion of that hearing process was that the appropriate maximum allocation should be 187,000,000 m³/yr. This figure arose from that hearing panel concluding that approximately 37,000,000 m³ of water is available for allocation in addition to the 150,000,000 m³ of water allocated by the WCWARP. The reason for the hearing panel concluding that an additional amount of water is available is because of some inaccurate assumptions made during the formulation of the WCWARP.
- Her estimate of the appropriate total allocation for this part of the Waitaki catchment as 187,000,000 m³ per year. This application together with other current (as at December 2010) applications yet to be processed would bring the total allocation to 182,954,964 m³. Therefore, Ms Bartlett concluded that, in terms of the annual allocation requested and the WCWARP allocation provisions, the applications could be accommodated.
- The priority status of other applications for water in this area. However, after a brief discussion at the hearing, Ms Bartlett agreed to review the assumptions regarding priority for or current applications in this area. This would be done to ensure that priority would be determined on the basis of the current case law of 'first to file'³ rather than the date of 'notifiability'.
- Her overall conclusion that the adverse effects of the proposed activity will be no more than minor, that the proposed activities are not contrary to the policies and objectives in WCWARP and consequently, that the applications can be granted
- The resource consent conditions considered appropriate.

The hearing

3.6 I commend the level of constructive dialogue that has occurred between the applicant's representative and Ms Bartlett prior to commencement of the hearing. This clearly enabled the hearing process to focus on the key technical issues that had not been fully agreed by the parties. The key outstanding issues appeared to be:

² The applicant has modified this earlier position of reducing the duration sought to 10 years, to a requested duration of 20 years as specified in the Right of Reply received on 10 January 2011.

³ Central Plains Water Trust and Anor V Synlait Limited and Anor, CA CA544/2008 (December 2009)

- How to formulate an appropriate feedback control condition that would provide a high level of assurance for other groundwater users that if an appropriate bore interference test was undertaken and it indicated an unacceptable level of interference that an appropriate reduction in the authorised abstraction rate would apply.
- The need for assurance that the annual allocation sought would not result in an exceedence of the appropriate maximum allocation for this part of the Kurow aquifer.

3.7 I asked a number of questions of clarification at the hearing particularly related to the proposed well interference assessment condition suite and the priority status of the application compared to other applications. As a consequence, the applicant and Ms Bartlett agreed to consult on how the proposed well interference conditions could be modified to provide greater certainty to all parties and Ms Bartlett agreed to report back on the matter of priority.

3.8 I also noted that the proposed reduction of the duration sought from 35 years to 10 years appeared to be a consequence of early discussions about possible bore interference effects. I also noted that if a high level of certainty could be provided that any such adverse effects would be addressed then it is possible that the applicant may want to review the issue of the duration sought.

3.9 The hearing was adjourned on 29 November 2009, pending further discussion between the parties about possible refinement of proposed conditions to address the matters described above.

3.10 A revised suite of proposed conditions was provided on 8 December 2010 together with comments from the applicant and Ms Bartlett. I issued a memorandum⁴ to the parties on 9 December 2010 with some preliminary conclusions, further requests for information and suggestions regarding issues relating to aquifer testing.

3.11 I received responses to my memorandum from both Mr Richards and Ms Bartlett on 22 December 2010.

3.12 A right of reply from the applicant was received on 10 January 2011. I closed the hearing on 11 January 2011.

Site visit

3.13 A site visit was carried out in the early evening of 29 November 2010 immediately after the adjournment of the hearing. I was accompanied by Mr Richards, Mr Clarke, Ms Bartlett and Ms Willis. We drove over the site and observed the location of the two bores on the land as well as identifying the approximate location of Mr Hutton's bore, various properties, spring locations and relevant geological features.

4. The principal issues, evaluation and main findings

4.1 In summarising and evaluating the principal issues I have considered the original application and the associated assessment of environmental effects, the further information provided in response to various requests, the submissions made in

⁴ Refer to ECan's website (see footnote 1 for the full website address).

response to the application, the section 42A reports and all the information provided at and subsequent to the hearing.

- 4.2 The principal resource management issues and actual or potential adverse effects have been discussed in some detail in the section 42A reports and in the evidence provided by the applicant and the submitters. These issues can be summarised as follows:
- The potential adverse effects on the water supply of neighbouring bores, particularly bore I40/0643.
 - The potential cumulative adverse effects on groundwater uses and values.
 - The priority of the applications
- 4.3 I raised concerns in my memorandum about the potential adverse effects on the water supply of bore I40/0644 owned by Ms Willis and whether this bore should be included in the bore interference testing. I received comments from Mr Richards and from Ms Bartlett on this matter. Both have effectively recommended that the bore does not need to be included in the aquifer testing. Ms Bartlett's second addendum S42A report noted that Ms Willis also supports the proposed conditions that do not include her bore in the aquifer testing.
- 4.4 I accept the technical information provided by the applicant and the reporting officer, in particular the evidence that strongly indicates that bore I40/0644 is too shallow and separated from the considerably deeper bore I40/0643 to be at any significant risk of being adversely affected. This can be further reinforced by an additional provision that requires the screening of bore I40/0643 to be restricted to being deeper than 70 metres below ground level.

Potential adverse effects on bore I40/0643 water supply

- 4.5 My assessment of the information available to me is that the potential for adverse effects on Mr Hutton's groundwater supply, as a consequence of the proposed abstractions, is negligible because of the following factors:
- the relatively very low rate of take compared to the estimated scale and size of the water resource and the other existing abstractions within 2 km,
 - the considerable depth of the proposed abstraction and the overlying material that indicates the likelihood of at least a partial overlying confining layer,
 - the distance and topography between the applicant's bore I40/0641 and Mr Hutton's bore I40/0643,
 - the evidence that bore I40/0643 is up-gradient from bore I40/0641, and
 - the condition agreed to by the applicant that provides that water for irrigation cannot be abstracted unless a well interference test undertaken in accordance with ECan guidelines demonstrates that the level of effect is below the acceptable threshold determined in accordance with ECan policies.

- 4.6 There has been extensive discussion between the parties after the adjournment of the hearing on the issue of potential adverse effects on the water supply at bore I40/0643 that could potentially arise as a consequence of the proposed abstractions at bore I40/0641. The reports provided to me at the end of December demonstrate that a high level of agreement has been reached between the parties about the need for an aquifer test to be undertaken in strict accordance with the ECan aquifer test guidelines. A detailed suite of proposed conditions have been developed by the parties. The only outstanding issue appears to be how best to address the matter of access to bore I40/0643.
- 4.7 Ms Bartlett has highlighted one potential limitation of the proposed agreed condition; that it is possible, although unlikely, that the applicant could frustrate the intent of the proposed access condition. I agree that it is theoretically possible that this could occur. However, the evidence does not indicate that the applicant has any such intention. Nevertheless, conditions must be worded in such a way to address such a possible event. I have some concerns that the wording suggested by Ms Bartlett does not quite fully address this specific issue. However, my concerns would be readily addressed by some changes to the proposed condition.
- 4.8 I conclude that with some relatively minor changes to the proposed conditions, any adverse effects on the water supply to bore I40/0643 would be less than minor.

Potential cumulative adverse effects on groundwater uses and values

- 4.9 There appears to be general agreement on the majority of the proposed trigger conditions to manage the uncertainty associated with aquifer allocation. Both Mr Richards and Ms Bartlett (via Ms Aitchison-Earl’s report) effectively acknowledge that there is limited information available to estimate the sustainable allocation from this part of the Kurow aquifer catchment. Mr Richards appears to agree with the first three triggers but not the fourth trigger (which represents approximately a 45% reduction from the maximum 12 month allocation of 99,000 m³). It is not appropriate for me to attempt to review the detailed technical aspects of each proposed trigger. However, I have considered the specific concerns outlined by Mr Richards.
- 4.10 I will outline each concern specified in the applicant’s Right of Reply and my conclusions regarding each matter:

Concern about the proposed fourth trigger	My conclusion
“...the applicant must have reasonable faith that the aquifer is robust and will have recharge necessary to maintain longer term water levels.”	It is not clear what “robust” means in the context of sustainable allocation of groundwater. The trigger levels are designed to provide a ‘feedback response’ in case the abstraction causes a significant reduction in the aquifer water level that would indicate that recharge is being exceeded.
“The relativity of highly variable water chemistry in the aquifer system... which has the effect of	From the all the information provided to me and from my personal technical knowledge of groundwater chemistry, I do

significantly widening aquifer recharge zones to higher rainfall areas located within the two catchments...”	not consider that the range of water chemistry results from a relatively small number of samples is a satisfactory basis for assuming that the groundwater catchment is larger than that identified in Ms Aitchison-Earl’s report.
“The minimal aquifer recharge projections....10% as opposed to the 15% value recommended for use in Council’s policy and rules ref WQN4”	Ms Aitchison-Earl’s report highlights specific uncertainties about the effective recharge area. The Proposed Natural Resources Regional Plan Schedule WQN4 has been recently changed to specific allocations for each identified groundwater zone rather than by reference to a formula. There have been no appeals to the decisions on Schedule WQN4.
“...the aquifer allocation has been determined from a range of narrow and very minimal values	There is uncertainty about the sustainable allocation limits. However, the actual groundwater levels are a direct measure of the extent to which the groundwater resource is being sustainably managed.
“...further protected by ability of Council to reduce maximum abstraction rates and annual take volumes if aquifer water levels at I40/0157 should fail over time.”	The control of instantaneous abstraction rates is used to address potential interference effects not the overall groundwater resource management. I agree that ‘feedback control’ conditions are needed to ensure that abstractions do not exceed recharge.
“Proposed installation of a longterm data loggers at I40/0157 and I40/0641 will provide substantial certainty for Council the applicant and Mr Hutton”	I agree that the measurement and recording of groundwater levels will provide an essential mechanism to provide information on the effect of abstractions on groundwater levels.

4.11 In summary, I am satisfied that all the proposed groundwater level trigger feedback controls are appropriate. While the fourth trigger control provides for a potentially significant reduction in the allocation, if the groundwater level drops to that level it would clearly signal a significant mismatch in the estimates of recharge versus abstraction. From my understanding of the evidence, it appears highly unlikely that groundwater levels would drop to such low levels as a consequence of the proposed abstractions. However, it is in accord with the inherent precautionary approach of the RMA to include such a provision.

4.12 It is possible that some other activity or natural event could significantly reduce groundwater levels. However, given the likely development timeframe outlined by the applicant and the groundwater monitoring information that will be available, I consider that there would be substantial technical information available in the

future to support an application to change these proposed feedback control conditions if the evidence supported such a change.

4.13 I therefore conclude that the proposed conditions would ensure that any cumulative adverse effects on groundwater levels would be less than minor.

Priority of the applications

4.14 I accept the detailed information provided by Ms Bartlett in her addendum S42A report that shows that these applications have priority over other applications.

Tangata whenua values

4.15 After considering the overall proposal, the changes to proposed conditions, the specific submission made by Te Rūnanga O Waihao, and my specific conclusions that adverse effects would be less than minor, I consider that there would be no significant adverse effects on tangata whenua values.

5. Statutory provisions

Status of the applications and key sections of the Resource Management Act

5.1 The applicant and reporting officer agreed that the application CRC081291 which is now proposed by the applicant to be limited to community water supply is a discretionary activity and application CRC082321 is a non-complying activity. I agree with those interpretations. I have therefore considered the applications to be 'bundled together' as non-complying with the application of the relevant provisions and considerations.

5.2 Section 160 of the Resource Management Simplifying and Streamlining Amendment Act 2009 provides for consent applications made prior to that amendment to be processed as if the amendment had not been made. The application(s) was made on 10 October 2007 and therefore the various provisions of the Resource Management Simplifying and Streamlining Amendment Act 2009 do not apply. However, timeframe requirements such as closing the hearing within a specific period after the Right of Reply have been complied with.

5.3 Section 104(1) of the RMA requires that the consent authority must, subject to Part 2, have regard to:

- “a) any actual and potential effects on the environment of allowing the activity;*
- and*
- b) any relevant provisions of -*
 - (i) a national policy statement;*
 - (ii) a New Zealand Coastal Policy Statement;*
 - (iii) a regional policy statement or proposed regional policy statement;*
 - (iv) a plan or proposed plan; and*
- c) any other matter the consent authority considers relevant or reasonably necessary to determine the application.”*

5.4 Section 104B of the RMA states that:

“After considering an application for a resource consent for a discretionary activity or non-complying activity, a consent authority-
(b) may grant or refuse the application, and
(c) if it grants the application, may impose conditions under section 108.”

5.5 Section 104D of the RMA states that:

“104D. Particular restrictions for non-complying activities

(1) Despite any decision made for the purpose of section 93 in relation to minor effects, a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that either -

(a) the adverse effects of the activity on the environment (other than any effect to which section 104(3)(b) applies) will be minor; or

(b) the application is for an activity that will not be contrary to the objectives and policies of -

(i) the relevant plan, if there is a plan but no proposed plan in respect of the activity; or

(ii) the relevant proposed plan, if there is a proposed plan but no relevant plan in respect of the activity; or

(iii) both the relevant plan and the relevant proposed plan, if there is both a plan and a proposed plan in respect of the activity.

(2) To avoid doubt, section 104(2) applies to the determination of an application for a noncomplying activity.”

5.6 Detailed analyses of the relevant objectives of the Canterbury Regional Policy Statement (CRPS), and the WCWARP have been provided in the section 42A report. It is not necessary for me to repeat all the relevant provisions of the CRPS and the WCWARP here.

5.7 Both the reporting officer and the applicant appear to have eventually agreed that, subject to the proposed conditions, the proposed take and use are consistent with the relevant objectives and policies in the CRPS, and the WCWARP. After having given regard to those provisions and considering the detailed conditions that I consider appropriate, I am satisfied that the proposal is consistent with all the relevant plan objectives and policies.

5.8 I conclude, as detailed in section 4 of this report, that provided that there is full compliance with all the proposed conditions (with the changes outlined in sections 4 and 6), the overall adverse effects of the proposed abstractions on the environment would be less than minor. I am therefore satisfied that the requirement of section 104D(1)(a) is met.

5.9 I conclude, as detailed in section 4 of this report and in the context of consideration of the objectives and policies of the CRPS and the WCWARP, that provided that there is full compliance with all the proposed conditions (with the changes outlined in sections 4 and 6), the proposed abstractions would not be contrary to those objectives and policies. I am therefore satisfied that the requirement of section 104D(1)(b) is met.

- 5.10 As outlined in Ms Bartlett's S42A report, the proposed water metering conditions are consistent with the requirements of the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010.

6. Proposed conditions

6.1 I have decided that these water permit applications can be granted, subject to carefully formulated conditions. I am generally satisfied that the proposed and generally agreed consent conditions would ensure that all adverse effects and policy provisions can be satisfactorily addressed. There are some relatively minor issues that I have concerns about and have included some changes to address those matters. These are outlined as follows:

- A requirement that the applicant use their best endeavours and act at all times in good faith to obtain access to bore I40/0643 to undertake the aquifer testing, and that the aquifer testing must be undertaken unless access to the bore is refused and the consent holder can demonstrate unequivocally that they used their best endeavours and acted in good faith at all times.
- A requirement that any bore screens must be deeper than 70 metres below ground level.
- Clarification that the purpose of CRC081291 is for community domestic water supply.
- Minor modification of the wording of the condition that provides for a water meter installation certificate to be provided to limit the consent authority's ability to require the certificate "at any time" to "at any reasonable time".
- Minor wording changes to enhance the clarity and certainty of some conditions.
- The proposed lapsing date has been extended to 31 December 2016 for each resource consent to ensure that the period is greater than the RMA default period of five years.

7. Decision and reasons

Part 2 Matters

7.1 In considering these applications, I have considered the relevant principles outlined in sections 6, 7 and 8 of the RMA as well as the overall the purpose of the RMA as specified in section 5.

Section 5

7.2 This section of the RMA defines sustainable management. I consider that the application is consistent with the definition in the RMA, noting particularly that the proposed development:

- (a) would provide for the economic wellbeing of people and communities,

- (b) will not compromise the reasonable needs of future generations, nor will it result in adverse effects on the life supporting capacity of water or ecosystems, and
- (c) the adverse effects of the abstraction and use of water can be avoided or mitigated through appropriate conditions.

Section 6

7.3 Section 6 of the RMA lists seven matters of national importance that must be recognised and provided for in this decision. I do not consider that any of those matters are particularly relevant to this proposal.

Section 7

7.4 Section 7 of the RMA lists matters that I must have particular regard to. The matter of particular relevance to the present applications appears to be the following:

“(b) the efficient use and development of natural and physical resources:

...

(g) any finite characteristics of natural and physical resources:

...

(i) the effects of climate change:”

7.5 I am satisfied that particular regard has been given to these matters and that the adverse effects would be less than minor.

Section 8

7.6 Section 8 of the RMA states that “...all persons exercising functions and powers ... shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).”

7.7 The information available to me indicates that granting the applications would not be inconsistent with the Principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

Duration

7.8 The applicant initially reduced the duration sought from the publically notified 35 years, to 10 years. However, the applicant highlighted concerns in the Right of Reply about the implications of this duration given a possible development timetable and has changed the requested duration to 20 years. The reporting officer has indicated (prior to the Right of Reply) that they considered that the initially specified duration of 10 years was appropriate. I am satisfied that the applicant has the ability to change the duration sought to 20 years and that with the proposed conditions together with the changes detailed in sections 4 and 6, the adverse effects would be significantly less than minor.

7.9 I have considered the matters specified in section 1.3.5 of Chapter 1 of the PNRRP. In particular, I have considered the nature and sensitivity of the affected environment and the nature of the proposed activity. Given my conclusions that the adverse effects of the development proposal will be less than minor, and given

the nature and likely development timetable of the proposed development, a duration of 20 years is appropriate for this resource consent.

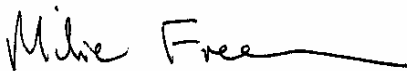
Decision

7.10 For the reasons detailed in this report (sections 4, 5, 6 and 7) and under sections 104, 104B, 104D and 108 of the Resource Management Act 1991, I grant resource consent applications CRC081291 and CRC082321 by Waitaki Vineyard Estates Limited to take and use water for community drinking water purposes (CRC081291) and spray irrigation of a vineyard and lifestyle plantings, and for frost protection (CRC082321), subject to the attached conditions which form part of the resource consents.

Right of appeal

7.11 The parties (the applicant and the submitters) have the right to appeal this decision in accordance with the provisions of section 120 and 121 of the RMA. Any such appeal must state the reasons for the appeal and the relief sought, and must be lodged with the Environment Court and served on the Canterbury Regional Council within 15 working days of receipt of the notice of this decision. A copy of any notice of appeal must be served on the other parties.

Dated: 19 January 2011



Mike Freeman

CRC081291 To take and use water

1)	Water may be taken only from bore I40/0641, 150 millimetres diameter and 84 metres deep via screens deeper than 70 metres, at map reference NZMS 260 I40:16530-94439.
2)	<p>Water may only be taken:</p> <p>a) at a maximum combined rate of 5 litres per second in conjunction with resource consent CRC082321, or any replacement resource consent; and</p> <p>b) up to a volume not exceeding 10,710 cubic metres between 1 July and the following 30 June.</p>
3)	Water shall only be used to provide community domestic water supply for an 11 lot subdivision and winery, within the area of land shown in attached Plan CRC081291, which forms part of this consent.
4)	The Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, shall be informed immediately on the first exercise of this consent by the consent holder.
5)	<p>(a) The consent holder shall, prior to taking water under this consent:</p> <p>(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 shall measure the rate and the volume of water taken to within an accuracy of plus or minus five percent as part of the pump(s) outlet plumbing, or within the mainline distribution system, at a location(s) that will ensure the total take of water is measured; and</p> <p>(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 have the capacity to hold at least one season's data of water taken as specified in clauses (b)(i) and (b)(ii), and which is telemetered, as specified in clause (b)(iii).</p> <p>(b) The recording device(s) shall:</p> <p>(i) be set to wrap the data from the measuring device such that the oldest data will be automatically overwritten by the newest data (i.e. cyclic recording); and</p> <p>(ii) store the entire season's data in each 12 month period from 1 July to 30 June in the following year, which the consent holder shall then download and store and provide to the Canterbury Regional Council in a format and standard specified in the Canterbury Regional Councils form for Water Metering Data Collection; and be readily accessible to be downloaded by the Canterbury Regional Council or by a person authorized by the Canterbury Regional Council: RMA Compliance and Enforcement Manager; and</p> <p>(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.</p>

	<p>(c) No data in the recording device(s) shall be deliberately changed or deleted.</p> <p>(d) The 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 (b).</p> <p>(e) The water meter(s) and recording device(s) shall be installed, maintained and operated throughout the duration of the consent in accordance with the manufacturer's instructions and with a minimum straight length of pipe upstream (before the meter) of 10 times the diameter of pipe and a minimum straight downstream (after the meter) length of five times the diameter of pipe.</p> <p>(f) All practicable measures shall be taken to ensure that the water meter(s) and recording device(s) are fully functional at all times and meeting the accuracy stated in clause (a).</p>
6)	<p>Within one month of the installation of any measuring device(s) required in accordance with condition (5), or any subsequent replacement measuring device, and at five-yearly intervals thereafter, and at any reasonable 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 (a list of 'Authorised Water Meter Service Providers - Installers' is available on the Canterbury Regional Council website, www.ecan.govt.nz) certifying, and demonstrating by means of a clear diagram, that the measuring device(s) has been installed in accordance with the manufacturers specifications.</p>
7)	<p>The Canterbury Regional Council may, once per year, on any of the last five working days of March or July, 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.</p>
8)	<p>The lapsing date for the purposes of section 125 shall be 31 December 2016.</p>
	<p>Duration</p>
9)	<p>This consent shall expire 20 years after the date of its commencement.</p>

CRC082321 To take and use water

1)	Water may be taken only from bore I40/0641, 150 millimetres diameter and 84 metres deep via screens deeper than 70 metres, at map reference NZMS 260 I40:16530-94439.
2)	<p>Water may only be taken:</p> <ul style="list-style-type: none"> a) at a maximum combined rate of 5 litres per second in conjunction with resource consent CRC081291, or any replacement resource consent; and b) up to a volume not exceeding 98,005 cubic metres between 1 July and the following 30 June which shall be the maximum combined volume of water taken when exercising this consent and consent CRC081291; except that c) if the standing water level trigger is reached in accordance with Condition 8(b), the volume of water taken between 1 July and the following 30 June shall not exceed a volume of 99,000 cubic metres, which shall be the maximum combined volume of water taken when exercising this consent and consent CRC081291.
3)	Water shall only be used for spray irrigation of 32.3 hectares of a vineyard and lifestyle plantings, and for frost protection, on the area of land shown in attached Plan CRC082321, which forms part of this consent.
4)	The Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, shall be informed immediately on the first exercise of this consent by the consent holder.
5)	<ul style="list-style-type: none"> (a) The consent holder shall, prior to taking water under this consent: <ul style="list-style-type: none"> (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(s) 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 have the capacity to hold at least one season's data of water taken as specified in clauses (b)(i) and (b)(ii), and which is telemetered, as specified in clause (b)(iii). (b) The recording device(s) shall: <ul style="list-style-type: none"> (i) be set to wrap the data from the measuring device such that the oldest data shall 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, which the consent holder shall then download and store and provide to the Canterbury Regional Council in a format and standard specified in the Canterbury Regional Councils form for Water Metering Data Collection; and be readily accessible to be downloaded by the Canterbury Regional Council or by a person

	<p>authorized by the Canterbury Regional Council: RMA Compliance and Enforcement Manager; and</p> <p>(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.</p> <p>(c) No data in the recording device(s) shall be deliberately changed or deleted.</p> <p>(d) The 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 (b).</p> <p>(e) The water meter(s) and recording device(s) shall be installed, maintained and operated throughout the duration of the consent in accordance with the manufacturer's instructions and with a minimum straight length of pipe upstream (before the meter) of 10 times the diameter of pipe and a minimum straight downstream (after the meter) length of five times the diameter of pipe.</p> <p>(f) All practicable measures shall be taken to ensure that the water meter(s) and recording device(s) are fully functional at all times and meeting the accuracy stated in clause (a).</p>
6)	<p>Within one month of the installation of any measuring device(s) required in accordance with conditions (5) and (8), or any subsequent replacement measuring device, and at five-yearly intervals thereafter, and at any reasonable 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 the measuring device(s) has been installed in accordance with the manufacturers specifications.</p>
7)	<p>a) No water shall be taken in terms of this permit except for the purpose of complying with this condition, until the consent holder has:</p> <p>(i) conducted an aquifer test in accordance with the methodology in clause (b) below;</p> <p>(ii) provided an analysis of well interference effects, in accordance with the methodology in clause (c) below; and</p> <p>(iii) demonstrated that: (1) EITHER any drawdown experienced at bore I40/0643 will not exceed available drawdown of 3.4 metres as a result of pumping bore I40/0641 at a maximum rate of 5 litres per second; OR (2) pumping bore I40/0641 at a lesser rate is required to ensure that any drawdown experienced at bore I40/0643 does not exceed available drawdown of 3.4 metres.</p> <p>b) The aquifer test referred to in clause (a)(i) shall:</p> <p>(i) be undertaken in accordance with the Aquifer Test Guidelines (2nd Edition), Canterbury Regional Council Report No. R08/25, July 2008, and supervised by a person who has a post-graduate qualification in hydrogeology, groundwater hydrology, engineering geology or a similar post-graduate qualification and who has experience in conducting such aquifer tests;</p> <p>(ii) only be undertaken after details of the qualifications and experience of the</p>

	<p>person supervising the aquifer test have been provided, and after a minimum of two working days written notice of the start date of the test has been provided, to Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager;</p> <ul style="list-style-type: none">(iii) be for the purpose of determining long term well interference effects on bore I40/0643 (located at or about map reference I40:15290-94521);(iv) be undertaken such that the minimum duration of continuous (uninterrupted) pumping of bore I40/0641 is 3 days;(v) be undertaken at a constant measured discharge rate of 5 litres per second;(vi) be undertaken only when there is no abstraction occurring from bore I40/0643 and bore I40/0157; or in the event that abstraction is required from bore I40/0643: either (1) ensure that the bore(s) is/are pumped during the test period, prior to the start of the test and until the completion of the test; or (2) at a minimum, record the times that the pump(s) is/are turned on and turned off during the test period and identify the abstraction rate pumped based on known information regarding pump capacity in relation to each bore;(vii) monitor water levels in the pumping well (bore I40/0641) and the observation bores (bore I40/0157 and bore I40/0643), and take water level measurements in accordance with the specifications in Table 3.2 and Table 3.3 on page 10 of the Aquifer Test Guidelines referred to in clause (b)(i);(viii) monitor water levels in the observation bores for 3 days following the cessation of pumping in bore I40/0641, or until a water level representing a 95 percent recovery is achieved, whichever is the lesser; and(ix) be undertaken such that water pumped from bore I40/0641 does not cause flooding of surrounding land and such that water does not contribute to recharge of the aquifer during testing. <p>c) (i) The results of aquifer testing undertaken in accordance with clause (b), and all test information (including measured water levels, barometric pressures and data analysis) shall be provided to Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, and the owner of bore I40/0643, within three months of the aquifer test occurring, in an Aquifer Test Report, which shall follow the guidelines for reporting included as Appendix D in the Aquifer Test Guidelines referred to in clause (b)(i).</p> <p>(ii) Included with the Aquifer Test Report provided to Canterbury Regional Council (referred to in clause (c)(i)) shall be certification from the supervisor of the aquifer test referred to in clause (b)(i) that the testing has been done in accordance with the Aquifer Test Guidelines (2nd Edition), Canterbury Regional Council Report No. R08/25, July 2008.</p> <p>d) The analysis of well interference effects referred to in clause (a)(ii) shall be:</p> <ul style="list-style-type: none">(i) undertaken using an appropriate method, as identified in Section 4 of the Aquifer Test Guidelines referred to in clause (b)(i), based on the data obtained from the aquifer testing undertaken in accordance with clause (b); and(ii) provided to Canterbury Regional Council, Attention: RMA Compliance and
--	---

	<p style="text-align: center;">Enforcement Manager within three months of the aquifer test occurring.</p> <p>e) In the event that the consent holder demonstrates, by means of aquifer testing and analysis of well interference effects as described in clauses (b) and (c), that the available drawdown of 3.4 metres in bore I40/0643 will not be exceeded, as described in clause (a)(iii)(1), then the maximum rate of abstraction shall be that included in Condition 2(a).</p> <p>f) In the event that the consent holder demonstrates, by means of aquifer testing and analysis of well interference effects as described in clauses (b) and (c), that the available drawdown of 3.4 metres in bore I40/0643 will be exceeded if bore I40/0641 is pumped at a rate of 5 litres per second, as described in clause (a)(iii)(2), then the maximum rate of abstraction under this consent shall be the rate required to ensure that any drawdown experienced at bore I40/0643 as a consequence of water taken from bore I40/0641 does not exceed the available drawdown of 3.4 metres.</p> <p>g) (i) The aquifer test specified in clause (b) shall be undertaken within 24 months of the installation of a water level measuring device as specified in Condition (8).</p> <p>(ii) The consent holder shall use their best endeavours and act at all times in good faith to obtain access to bore I40/0643 to enable the aquifer test to be undertaken. If, despite the consent holder acting in good faith and using their best endeavours, access is refused to bore I40/0643, then the requirement of Condition (7)(a) shall be deemed to have been complied with, provided that the consent holder provides written evidence to the Canterbury regional Council, Attention: RMA Compliance and Enforcement Manager, that demonstrates unequivocally that the consent holder used their best endeavours and acted in good faith at all times to obtain access to bore I40/0643 to undertake the aquifer test specified in clause (b).</p>
<p>8)</p>	<p>(a) The consent holder shall, prior to exercise of this consent:</p> <p>(i) Install a water level measuring device in bore I40/0157 (at or about map reference NZMS 260 I40:1559-9431) for the purposes of long-term monitoring of water levels in the Kurow Group aquifer and compliance with clause (b) below; and</p> <p>(ii) Install a tamper-proof electronic recording device such as a data logger(s) that shall record a minimum of monthly recording of water levels in bore I40/0157, and have the capacity to hold at least one season's data of water levels as specified in clause (a)(iii).</p> <p>(iii) The recording device shall store the entire season's data in each 12 month period from 1 July to 30 June in the following year, which the consent holder shall then download and store, and provide to the Canterbury Regional Council upon request, and which shall be readily accessible to be downloaded by the Canterbury Regional Council or by a person authorized by the Canterbury Regional Council: RMA Compliance and Enforcement Manager as required.</p> <p>(iv) No data shall be deliberately changed or deleted.</p> <p>(v) The measuring and recording devices described in clauses (a)(i) and (a)(ii) shall be available for inspection at all reasonable times by the Canterbury Regional Council, including access to the data recorded in accordance with</p>

	<p>clause (a)(iii).</p> <p>(vi) The water level measuring device and recording device shall be installed, maintained and operated throughout the duration of the consent in accordance with the manufacturer's instructions.</p> <p>(vii) All practicable measures shall be taken to ensure that the water level measuring device and recording device are fully functional at all times.</p> <p>(b) Following any recorded standing water level in bore I40/0157 (at or about map reference NZMZ 260 I40:15590-94310) that measures:</p> <p>(i) 45 metres below ground level, regardless of any subsequent recovery in water level, the maximum volume that may be taken and used between 1 July and the following 30 June, for the remainder of the consent duration shall be 99,000 cubic metres, which shall be the maximum combined volume of water taken when exercising this consent and consent CRC081291;</p> <p>(ii) 47 metres below ground level, regardless of any subsequent recovery in water level, the maximum volume that may be taken and used between 1 July and the following 30 June, for the remainder of the consent duration shall be 92,408 cubic metres, which shall be the maximum combined volume of water taken when exercising this consent and consent CRC081291;</p> <p>(iii) 49 metres below ground level, regardless of any subsequent recovery in water level, the maximum volume that may be taken and used between 1 July and the following 30 June, for the remainder of the consent duration shall be 81,536 cubic metres, which shall be the maximum combined volume of water taken when exercising this consent and consent CRC081291; and</p> <p>(iv) 53 metres below ground level, regardless of any subsequent recovery in water level, the maximum volume that may be taken and used between 1 July and the following 30 June, for the remainder of the consent duration shall be 54,358 cubic metres, which shall be the maximum combined volume of water taken when exercising this consent and consent CRC081291.</p>
9)	<p>The Canterbury Regional Council may, once per year, on any of the last five working days of March or July, 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.</p>
10)	<p>The lapsing date for the purposes of section 125 shall be 31 December 2016.</p>
	<p>Duration</p>
11)	<p>This consent shall expire 20 years after the date of its commencement.</p>

PLAN CRC082321



Warning

The plan has been prepared for the purpose of a resource consent application only. It does not constitute a guarantee, warranty or representation of any kind. It is subject to the conditions of the resource consent and the applicant must ensure that the plan is consistent with the resource consent conditions.

This Subdivision was approved as

Activity on the day of 20..... subject to the conditions noted in the file.

SUBDIVISION OFFICER

Comprised in: CT 01 193487

Applicants:

Waitaki Vineyard Estates Ltd

CAD and Revit created by:

CAD Solutions

Land Information House
16 Para Para Road
PO Box 913 Invercargill
Phone: 03 545 8999
Fax: 03 548 8427
Email: cad@solutionsgroup.co.nz

Copyright Downloaded by:

Land Solutions Ltd.

e-mail: landgroup@stra.co.nz
Phone: 03-545-8246
Mobile: 0274-314 069
Fax: 03-543-2421
PO Box 577
Wanaka, New Zealand

Waitaki Vineyard Estates Ltd

Grazing Title:

Vineyard Development Structure Plan

Plan Information

Scale: @ A3= 1: 5000

Job No:	CAD File No.:	Sheet:
956	1956.01	1 of 1
Drawn:	Checked:	Scale:
2	M. G. H.	21/08/2006

Associated: