
Report 2, Appendix 1
S42A report for application CRC071029

**Before the Hearing Panel appointed by the Canterbury
Regional Council**

IN THE MATTER OF The Resource Management Act 1991

AND

**IN THE MATTER OF Application CRC071029 to take and
use water for irrigation purposes.**

Section 42A Officer's Report

Introduction

Background

- 1. This report forms part of Environment Canterbury's assessment of resource consent application CRC071029 made by Meridian Energy Ltd and the South Canterbury Irrigation Trust (the applicant) for the Hunter Downs Irrigation Scheme (HDIS). This application seeks authorisation to take and use up to 20.5 cubic metres of water per second (cumec) for the irrigation of up to 40,000 hectares between the Waitaki River and Timaru.**
- 2. This report will provide the decision-makers with information and advice relating to the establishment of an environmental flow and allocation regime for the Lower Waitaki River.**

Qualifications

- 3. My name is Jeffrey Allen Page. I am a director of RESPONSEPLANNING Consultants Limited, a three director planning and resource management consultancy established in 2004 specialising in resource management matters. My qualifications include a Bachelor of Surveying (Dist) and Master of Regional and Resource Planning (Dist), both from Otago University. I am a full member of the New Zealand Planning Institute, and have been so since 1996.**
- 4. I began resource management practice in 1992. My first position was as a graduate planner in a private planning consultancy based in Hamilton. Between 1992 and 1997, I held the position of planner for Ruapehu District Council being jointly responsible for the preparation of the Ruapehu District Plan and all Plan administration matters. Following this, between 1997 and 2003 I worked for Environment Canterbury as a senior resource management planner, primarily as project leader for district plan and urban growth matters. I started my jointly owned company in 2004.**
- 5. I have specific knowledge of the Waitaki Catchment Water Allocation Regional Plan (Waitaki Regional Plan). My company provided the Waitaki Catchment Water Allocation Board (the Board) with assistance to prepare its Section 32 Report published at the time the draft Waitaki Regional Plan was publicly notified. It again assisted the Board to prepare its final Section 32 Report published at the time of the Board's decisions (September 2005). I was the project leader for my company on these contracts. In addition, since October 2005 I have provided Environment Canterbury with project co-ordination services relating to its implementation of the Waitaki Regional Plan.**

Scope of Report

- 6. This report is prepared under the provisions of Section 42A of the Resource Management Act 1991 (RMA). This section allows a Council officer or consultant to provide a report to the decision-maker(s) on a resource consent made to the Council, and allows the decision-maker(s) to consider the report at the hearing. Section 41(4) of the RMA allows the decision-maker(s) to request and receive from any person who makes a report under Section 42A "any information or advice that is relevant and reasonably necessary to determine the application".**

7. This report is supplementary to the Section 42A report prepared by Mrs Ensor on behalf of Environment Canterbury (ECan) for the above consent application. Full details of the consent application are provided in Mrs Ensor's report.
8. The purpose of this Section 42A report is to:
 - (a) Identify the provisions of the Waitaki Regional Plan relevant to establishing an environmental flow and allocation regime
 - (b) Outline the existing environmental flow and allocation regime
 - (c) Explore how an environmental flow and allocation may be achieved if the Commissioners are minded to grant this water permit application.
9. Conclusions are not formed, or recommendations made, on 'what' the appropriate environmental flow and allocation regime for the Lower Waitaki River is. Rather, this report provides a view on 'how' the different environmental flow and allocation regimes may be specified in any water permit granted.
10. It is emphasised that the views expressed in this report are not binding on the decision-makers. It cannot be assumed that the decision-makers will reach the same views having considered all the evidence to be brought before them at the hearing by the applicant and submitters.
11. This report is structured as follows:
 - (a) Relevant Waitaki Regional Plan provisions
 - (b) Current situation with respect to Rules 2 and 5 of the Waitaki Regional Plan
 - (c) Existing Lower Waitaki River flow and allocation regime
 - (d) Specifying an environmental flow and allocation regime:
 - (i) Waitaki Regional Plan flow and allocation regime
 - (a) Possible regime: equal priority within Rule 7 limits
 - (b) Possible regime: differing priority within Rule 7 limits
 - (ii) HDIS flow and allocation regime.

Relevant Waitaki Regional Plan provisions

12. Within this section I identify and discuss the relevant provisions in the Waitaki Regional Plan relating to 'how' to establish the allocation regime for the Lower Waitaki River. The provisions are set out in Appendix 1.
13. The key objective is to establish a practical and fair sharing of allocated water during times of low water availability (Objective 5). In the first instance this objective will influence the form of the minimum and low flow conditions that any water permit is subject to. However, Policy 25 recognises that the alternative technique of water user groups may also be used to achieve the objective.

14. Policy 45 is implemented by Rule 2. Rule 2, Table 3, line xvii, of the Waitaki Regional Plan sets out an 'instream' regime for the Lower Waitaki River. In summary, except within years of very low catchment inflows (\leq 1-in-20 year low inflows), as measured at the Kurow recorder, this new regime provides for:
 - (a) a minimum flow of 150 cumec
 - (b) flushing flows between Waitaki Dam and Black Point of at least 450 m³/s each for a period of 24 hours not less than 7 times per year, with no fewer than 2 of these flows in the period of 1 February to 31 March in every year
 - (c) a maximum allocation limit of 90 cumec.
15. The allocation limit directly influences the amount of water available to abstractors as a discretionary activity. Policy 45(2) is specific to this allocation limit.
16. Rule 25 indicates that any review of the Waitaki Dam permit for the purposes of imposing of the requirements of Rule 2 is only to have effect after five years from the day on which the Waitaki Regional Plan became operative (approximately October 2010)¹.
17. The Waitaki Regional Plan recognises that the flow in the Lower Waitaki River is artificially controlled by the Waitaki Dam, being the last hydro-electric power generation site in the Waitaki Power Scheme, and hence the reliability of downstream users is dependant upon the pattern of flow releases (see the explanation on pg. 45). The 'competition' for water between the needs of the Waitaki Power Scheme and the downstream users is the subject to Policy 46(ii) and Rule 7. In essence, this competition is managed within the Waitaki Regional Plan by it directly addressing the minimum amount of water that must be released past the Waitaki Dam. Policy 46(ii) provides that this minimum amount of water is 80 cumec over and above the minimum flow and level requirements.
18. Rule 7 gives effect to this policy insofar as it establishes a requirement for the consent holder of the Waitaki Dam to provide, within specified limits, flows for the purpose of meeting the actual requirements of abstractors from the Lower Waitaki River. The maximum flow required changes depending on the time of year, ranging from a maximum of 80 cumec between October to March to a minimum of 10 cumec between June and July.
19. Policy 46(ii) and Rule 7 effectively establish the level of reliability that the Waitaki Regional Plan provides for those water permit holders abstracting water from the Lower Waitaki River, and abstracting shallow and connected groundwater.
20. There is considerable debate, and doubt, whether it is possible to review the Waitaki Dam water permit for the purposes of making additional water available to abstractive users (i.e. for Rule 7 purposes). This doubt arises because of the interpretation of section 68(7) of the Resource Management Act – one view being that section 68(7) only provides for the review of existing water permits for the purposes of imposing new minimum flow and level regimes. If the Waitaki Dam water permit cannot be reviewed, the implementation of the anticipated reliability for abstractive users may be delayed until such time as the Waitaki Dam permit is subject to a replacement permit (if granted) or voluntarily changed.
21. It is noted that there is a 10 cumec difference between the allocation limit (90 cumec) specified in Rule 2 (Table 3(xvii)) and the 80 m³/s set out in Policy 46(ii) and Rule 7. While neither the Plan, nor Annex 1, explicitly explain the inter-relationship, these two instantaneous flow rates are interpreted to perform different purposes in the Waitaki Regional Plan. The 90 m³/s allocation limit forms part of the environmental flow regime. It limits the amount of water able

¹ As of the end of September 2007, Environment Canterbury had not begun any review process with respect to this water permit, or any other water permits, within the Waitaki Catchment.

to be allocated as a discretionary activity, thereby protecting flow variability. In contrast, at a planning level the 80 m³/s manages the competition for water between the Waitaki Power Scheme and abstractors from the Waitaki River below the Waitaki Dam. Once Rule 7 is implemented, it limits the maximum amount of water that the Waitaki Dam consent holder can be required to provide in the Lower Waitaki River (using wording from Rule 7). Within this limit, it further provides a high level of reliability for the abstractors below the Dam. Accordingly, the practical implication of the difference between the 90 m³/s allocation limit and 80 m³/s to pass the Waitaki Dam, is the potential reduction in reliability for those abstractors taking water above the minimum flow between the 80m³/s and 90m³/s values.

22. Finally, Policies 15, 16 and 17 set out water efficiency expectations for individual abstractors. Policies 18 and 19 relate to technical efficiency, which is defined in the Waitaki Regional Plan as using a resource in a way that any output is produced at the cost, including avoiding waste (pg. 60). There are no rules which are specific to these policies. The explanation for these policies noted that they provide matters of discretion when considering an application for a resource consent (pg. 34).

Relationship of existing water permits and applications to Rule 2 and Rule 5

23. In this section I set out my current understanding of the existing water permits and the applications for new water permits in the context of Rules 2 and 5 of the Waitaki Regional Plan.
24. Figure 1 places the existing water permits, and the applications for new water permits, in the context of Rule 2, Table 3, of the Waitaki Regional Plan². Overall, it is currently estimated that the cumulative total of existing water permits is approximately 55.4 cumec, with the total instantaneous rate of water consented and sought being 82.8 cumec.

Figure 1: Instantaneous rate of the take or divert of water cumulative authorised by existing resource consents for the Lower Waitaki River

E= existing water permits

A= applications for water permits

T= cumulative total of E and A

		Rule 2, Table 3	Calculated cumulative rate of take or divert authorised by existing resource consents
Water bodies		Allocation limit specified in the environmental flow regimes	
xvii.	Lower Waitaki River	90 m ³ /s not counting any flows abstracted from the Lower Waitaki River above Black Point that are returned to the Lower Waitaki River above Black Point	E = 54.5 m ³ /s A = 27.4 T = 82.8

25. Figure 2 places the existing water permits and the applications for new water permits in the context of Rule 5, Table 6, of the Waitaki Regional Plan³. Lines v, and vi. of Rule 5, Table 6 relate to the annual allocation of activities below the Waitaki Dam. This includes water permits and applications from tributaries of the Lower Waitaki River and the mainstem.

² See also Appendix 3

³ See also Appendix 4

Figure 2: Cumulative annual volume of water authorised to be taken or diverted by existing resource consents below the Waitaki Dam

Notes: Units = million of m³ per year
 No (e.g. 3). = Allocation in Table 5
 E= existing water permits
 A= applications for water permits
 T= cumulative total of E and A

		Town & community	Industrial & commercial	Tourism & recreational facilities	Agriculture & horticultural activities	Any other activities	Hydro-generation activities
v	Downstream of Waitaki Dam but upstream of Black Point	3 E=2.2 A=0 T=2.2	1 E=32.6 A=0.1 T=31.7	2 E=0 A=0 T=0	150 E=151.8 A=45.4 T=197.2	16 E=0 A=0 T=0	N/A
vi	Downstream of Waitaki Dam but downstream of Black Point	19 E=0 A=0 T=0	8.5 E=16.9 A=0 T=16.9	4.3 E=0 A=0 T=0	1100 E= 688.2 A=293.2 T=981.4	144 E=0 A=0 T=0	N/A

Existing Lower Waitaki River flow and allocation regime

26. In this section I discuss the existing Lower Waitaki River allocation regime that is apparent from an examination of existing water permits.
27. The Lower Waitaki River flow is (generally) a result of the amount of water that passes the Waitaki Dam. The amount of water to pass this Dam is a consequence of four matters:
 - (a) the minimum flow regime specified in the water permit for the Waitaki Dam (CRC905361.2⁴ held by Meridian Energy Limited)
 - (b) the physical ability of Meridian Energy Limited to store water in the wider Waitaki hydro-electricity generation system, particularly in high catchment inflow events
 - (c) the operational capability of the Waitaki Dam
 - (d) the operation of the wider Waitaki hydro-electricity generation system above the Waitaki Dam.
28. In addition, if Meridian's North Bank Tunnel Concept (NBTC) applications are granted, and implemented, the discharge from the Tunnel will influence flows in the Lower Waitaki River. This will primarily be due to the NBTC discharge at Stonewall, resulting in additional flows below Stonewall.
29. For all situations, the influence of these matters will be more pronounced when the Lower Waitaki River is subject to lower flows.
30. The Waitaki Dam Permit CRC905361.2 expires on 30 April 2025. Condition 22 of the permit requires a flow of 120 cumec (or a less amount thereof in accordance with the proviso in that condition) to be maintained in the Waitaki River immediately below the Waitaki Dam⁵.

⁴ to use water up to a maximum rate of 650 cubic metres per second at or about map reference NZMS 260 140:060-101 (Waitaki Power Station) for the purpose of Power Generation

31. An examination of existing water permit minimum and low flow conditions reveals that these are currently organised into a 'band' system⁶, consisting of:
- (a) No minimum or low flow conditions – eg. Waimate District Council CRC940846
 - (b) Cessation of take being required when the flow in the Waitaki River, measured at the Kurow flow recorder, generally falls below 80 cumec (Band 1) – eg. Meridian Energy CRC940497B.3
 - (c) Cessation of take being required when the flow in the Waitaki River, measured at the Kurow flow recorder, generally falls below 80 cumec per second, with a reduction of 50% of the take being required when the flow in the Waitaki River falls below 100 cumec per second (Band 2) – eg. Clarksfield Holdings CRC962259
 - (d) Cessation of irrigation take being required when the flow in the Waitaki River, measured at the Kurow flow recorder, falls below 130 cumec (Band 3) – eg. Irving CRC012641
 - (e) Cessation of take being required when the flow in the Waitaki River, measured at the Kurow flow recorder, generally falls below 80 cumec, but with increasing reductions in take being required when the flow in the Waitaki River falls below 130 cumec (Band 4) – eg. Morven Glenavy CRC000897
 - (f) Cessation of take being required when the flow in the Waitaki River, measured at the Kurow flow recorder, generally falls below 80 cumec, but with increasing reductions in take being required when the flow in the Waitaki River falls below 150 cumec (Band 5) – eg. Lower Waitaki Irrigation Company CRC950649.1
 - (g) Cessation of take being required when the flow in the Waitaki River, measured at the Kurow flow recorder, falls below 80 cumec but with a significant reduction in take being required when the flow in the Waitaki River falls below 130 cumec (Band 6) – eg. Allan CRC992778.1.
32. Accordingly, from this it is reasonable to anticipate that the current minimum flow for the Lower Waitaki River is approximately 80 cumec (also see Appendix 2: Extracts from Officers Report on submissions on the Draft Waitaki Catchment Water Allocation Regional Plan, Ministry for the Environment). Above this, the river flow at which take restrictions occur accord priority between different water permit holders.
33. Therefore, while not explicit from the Waitaki Dam consent, it is thought that the intention of specifying a minimum flow of 120 cumec in that consent is to provide for a minimum flow in the Lower Waitaki River of approximately 80 cumec, with the remaining 40 cumec being available for consented abstraction at a high degree of reliability (approaching 100%).
34. In reality, the interaction between the amount of water passed through the Waitaki Dam and the reliability of downstream abstractive users, has historically not been a significant issue. The record of flows in the Lower Waitaki River indicates that the lowest recorded flows are (except for possibly July) greater than the minimum flow provided for in the Waitaki Dam permit. Accordingly, all existing water permit holders experience a higher reliability than that provided for in their (and Meridian's) permits.

⁵ 22 The Grantee shall maintain a flow of at least 120 cubic metres per second in the Waitaki River as measured immediately below the Waitaki Dam (at or about Map Reference I40:060-101), PROVIDED HOWEVER that lower flows shall be maintained whenever considered necessary for emergency public safety purposes, and requested by the Water Resources Manager, Canterbury Regional Council.

⁶ See <http://www.ecan.govt.nz/Our%20Environment/Water/Rivers/Irrigation%20Restrictions/Irrigation-site-restrictions.html?SiteID=136> for Environment Canterbury's published list of water permits within this band system.

35. However, there is the theoretical potential for existing water permits to experience lower levels of reliability than they have historically. This would arise if the flow release pattern from the Waitaki Dam is altered to more closely reflect that specified in the Waitaki Dam permit in the period abstractors wish to take water.

Specifying a flow and allocation regime

Introduction

36. In this section I examine the different ways a flow and allocation regime for the Lower Waitaki River may be specified as part of water permits.
37. A flow and allocation regime has the purpose of balancing the needs of in-stream and abstractive users. It is likely that any regime specified within any new water permit (if granted) in relation to the Lower Waitaki River will need to consist of:
- (a) minimum flow, below which the take must cease
 - (b) low flow, below which restrictions on the take will apply
 - (c) take restriction regime between the specified minimum and low flows
 - (d) maximum instantaneous rates of take
 - (e) maximum annual volumes able to be taken.
38. In order to establish the above, the influence of the consent being considered on the reliability of other water takes, diverts and uses will be an important consideration. Central to this consideration is the relative priority of consented individual abstractors to take water and the reliability 'planned' to be provided.
39. Once (or if) Rule 7 is implemented, this would lead to the reliability concerns primarily arising between:
- (a) Those consented abstractors with priority to take water within the specified minimum additional flows that must pass the Waitaki Dam – for example, in the October to March period, abstractors within the first cumulative 80 cumec; and
 - (b) Individual consented abstractors whose priority results in the need to take water outside of the specified minimum additional flows that must pass the Waitaki Dam.
40. Until Rule 7 is implemented, as a result of Waitaki Dam Permit CRC905361.2, there is the potential for reliability effects between:
- (a) existing consented abstractors with priority to take water from the first 40 cumec of flow over and above the minimum flow in the Lower Waitaki River (80 cumec),
 - (b) existing consented abstractors whose priority results in the need to take water outside of the first 40 cumec of flow; and
 - (c) new abstractors.

Waitaki Regional Plan flow and allocation regime

41. I now consider the flow and allocation regime anticipated by the Waitaki Regional Plan.
42. The Waitaki Regional Plan establishes the parameters of an environmental flow and allocation regime if, generally, a resource consent is to be granted as a discretionary activity. It does not preclude the consideration of alternative environmental flow and allocation regimes outside of the specified rules as a non-complying activity.

43. Policy 46(ii), particularly when contrasted with Policy 26, suggests that once Rule 7 is implemented, all those within the flow thresholds for the different months of the year specified in Rule 7 should expect a very high level of reliability, with:
- (a) The actual take requirements being met for: existing and new consents for town and community water supplies, industrial and commercial activities, tourism and recreation facilities and any other activities; and existing consents for agricultural and horticultural activities.
 - (b) Ninety five percent (95%) of the peak rate of takes being met for new agricultural and horticultural consents.
44. By implication, outside of the thresholds for the different months of the year, abstractors reliability is reliant on the level of control on the flow of Lower Waitaki River flow arising from the operation of the Waitaki Dam.
45. The limitations of this flow and allocation regime approach is that it does not recognise:
- (a) The current situation when Rule 7 is not implemented, and the uncertainty associated with when and if it will be implemented.
 - (b) The current priority between existing water permit holders accorded by the existing priority bands.
46. In my view, the Waitaki Regional Plan is not specific on how a water allocation regime is to be developed and implemented prior to the implementation of Rule 7.
47. Until Rule 7 is implemented there are two possible approaches to developing an allocation regime:
- (a) The first is by establishing reliability 'blocks' within the bounds of Rule 7, and the allocation limit specified in Rule 2 - equal priority within Rule 7 limits
 - (b) The second is by establishing priority (reliability) bands in part reflecting existing priority - differing priority within Rule 7 limits.
48. There is also a third approach, which is establishing a 'first on last off' system. However, this is not a system that reflects the current practice, nor in my view is anticipated by the Waitaki Regional Plan, so I do not further examine this.

Possible regime: equal priority within Rule 7 limits

49. If equal priority is accorded to abstractors within the seasonal maximums specified in Rule 7 above the minimum flow, then the resulting allocation regime may consist of:
- (a) An allocation 'block' up to the seasonal maximum specified in Rule 7, controlled by the same monthly periods as Rule 7 for:
 - (i) existing and new consents for town and community water supplies, industrial and commercial activities, tourism and recreation facilities and any other activities; and existing consents for agricultural and horticultural activities; and
 - (ii) 95% of the peak rate of takes being met for new agricultural and horticultural consents.

This would result in a block as set out in Figure 3 below. The seasonal variation of the consented take would need to form part of the consent.

Figure 3

	October to March	April to September	May to August	June and July
Cessation minimum flow	Lower Waitaki River minimum flow	Lower Waitaki River minimum flow	Lower Waitaki River minimum flow	Lower Waitaki River minimum flow
Low flow restriction flow	80 cumec above Lower Waitaki River minimum flow	50 cumec above Lower Waitaki River minimum flow	20 cumec above Lower Waitaki River minimum flow	10 cumec above Lower Waitaki River minimum flow
Priority during period of low flow	Pro rata reduction	Pro rata reduction	Pro rata reduction	Pro rata reduction

- (b) Over and above this, up to a cumulative allocation of 90 cumec, one or more priority bands, consisting of the last 5% of the peak rate of takes being met for new agricultural and horticultural consents that fit within the allocation 'block' above, and the requirements of any additional consents granted over and above this above, up to a limit of 90 cumec.

This would result in a block as set out in Figure 4 below. Again, the seasonal variation of the consented take would need to form part of the consent.

Figure 4

	October to March	April to September	May to August	June and July
Cessation minimum flow	Lower Waitaki River minimum flow plus 80 cumec	Lower Waitaki River minimum flow plus 50 cumec	Lower Waitaki River minimum flow plus 20 cumec	Lower Waitaki River minimum flow plus 10 cumec
Low flow restriction flow	10 cumec above the cessation minimum flow	40 cumec above the cessation minimum flow	70 cumec above the cessation minimum flow	80 cumec above the cessation minimum flow
Priority during period of low flow	Pro rata reduction	Pro rata reduction	Pro rata reduction	Pro rata reduction

- (c) Over the 90 cumec cumulative allocation, the actual requirements of additional consents granted, possibly with priority accorded using a 'first come last off' approach.

50. There is no need for a flow sharing regime to be imposed on resource consents (both existing and new) in the two blocks within the 90 cumec allocation limit. Rule 2 specifically does not require this. To achieve this, some existing consents would need to be changed.

Possible regime: differing priority within Rule 7 limits

51. Alternatively, if in recognition of the status of Rule 7 priority is to be influenced by the reliability of existing consents, as well as the Waitaki Regional Plan, a priority band system is likely to result. A simplified allocation system to that which currently exists could be achieved as follows:
- (a) a first priority band for consents within the annual allocation limits specified in Rule 6 Table 5 for the first 40 cumec of water (that is those with cessation condition associated the flow of the Lower Waitaki River being 120 cumec or less):
 - (i) for existing and replacement consents for town and community water supplies, industrial and commercial activities, tourism and recreational facilities, other activities and for agricultural and horticultural activities
 - (ii) with a minimum flow condition at which the take or divert must cease being the Lower Waitaki River minimum flow
 - (iii) with no pro rata reductions from 40 cumec above the specified minimum flow required.
 - (b) a second priority band (which could include sub-bands reflecting the current priority accorded by the consents) for cumulative abstractions between 40 and the current 55.4 cumec for consents within the annual allocations limits specified in Rule 6 Table 5:
 - (i) for existing and replacement consents for town and community water supplies, industrial and commercial activities, tourism and recreational facilities, other activities and for agricultural and horticultural activities
 - (ii) with a minimum flow condition at which the take or divert must cease of 40 cumec above the Lower Waitaki River minimum flow
 - (iii) with pro rata reductions from 55.4 cumec above the specified minimum cessation flow.
 - (c) a third priority band for consents within the annual allocation limits specified in Rule 6 Table 5 within the limits specified in Rule 7:
 - (i) for new consents within the cumulative 80 cumec threshold
 - (ii) a minimum flow cessation condition of 55.4 cumec above the specified Lower Waitaki River minimum flow
 - (iii) with pro rata reductions from 80 cumec above the specified minimum flow.

This third priority band would result in a regime as set out in Figure 5 below:

Figure 5

	October to March	April to September	May to August	June and July
Cessation minimum flow	Lower Waitaki River minimum flow plus 55.4 cumec	Dependant on the seasonal variations of the consented water takes in bands 1 and 2 above	Dependant on the seasonal variations of the consented water takes in bands 1 and 2 above	Dependant on the seasonal variations of the consented water takes in bands 1 and 2 above
Low flow restriction flow	24.6 cumec above the cessation minimum flow	Sum to 80 cumec above the Lower Waitaki River minimum flow	Sum to 80 cumec above the Lower Waitaki River minimum flow	Sum to 80 cumec above the Lower Waitaki River minimum flow
Priority during period of low flow	Pro rata reduction	Pro rata reduction	Pro rata reduction	Pro rata reduction

- (d) a fourth priority band within the annual allocation limits specified in Rule 6 Table 5:
- (i) for new consented abstractions banded between 80 and 90 cumec threshold
 - (ii) with a minimum flow cessation condition of 80 cumec above the specified Lower Waitaki River minimum flow
 - (iii) with pro rata reductions from 90 cumec above the specified minimum flow.
- (e) additional priority bands for consents outside of the annual allocation limits and/or 90 cubic metres per second thresholds with:
- (i) a minimum flow cessation condition of 90 cumec above the specified Lower Waitaki River minimum flow
 - (ii) priority accorded on a first come last off approach.

52. Again, there is no need for a flow sharing regime to be imposed on resource consents (both existing and new) within the 90 cumec allocation limit. Rule 2 specifically does not require this. As stated previously, to achieve this some existing consents would need to be changed.

Comment

53. In my view, which allocation regime is settled upon before Rule 7 is implemented is a matter of judgement. Central to this judgment will be what is considered a practical and fair sharing of allocated water during times of low water availability (Objective 5). This is likely to involve consideration of existing and future reliability, and consequent priority between water permit holders.

54. In addition, the Commissioners may like to consider the robustness of the allocation regime settled upon from the point of view of the ability to adapt it to foreseeable change. In particular, over time there are three matters that are likely to influence any allocation regime:
- (a) The implementation of Rule 7, or a variant of this, either through a voluntary change to the Waitaki Dam Permit or at the time of the replacement of this Permit.
 - (b) The review of existing water permits in accordance with the Rule 25
 - (c) The implementation of the efficiency policies within the Waitaki Regional Plan.
55. Neither of the two regimes outlined above are without their advantages or disadvantages. The first regime is possibly the most robust given likely future changes, particularly in relation to water efficiency. However, if new water permits are granted, the first regime may result in a decrease in reliability for existing water permit holders when compared with that currently experienced until such time as Rule 7 is implemented. Once Rule 7 is implemented, a number of the bands within the second regime are no longer needed, but in a practical sense, will become irrelevant and need not be changed with any urgency.

HDIS flow and allocation regime

56. In this section I comment on the HDIS flow and allocation regime set out in the HDIS application.
57. The HDIS flow and allocation regime proposed is:
- (a) A minimum flow of 100 cubic metres per second (calculated by reference to the Kurow flow recorded and net changes from discharges (or diversions) and abstractions between the flow recorder and the point of take for HDIS)
 - (b) A flow restriction regime between 100 and 190 cubic metres per second
 - (c) A maximum rate of take of 20.5 cubic metres per second, or 17.5 cubic metres per second when the Waihao Downs Irrigation Ltd (Waihao Downs) take (if granted) is being exercised
 - (d) A maximum annual volume of take of 251 cubic metres per year, or 213 cubic metres per year when the Waihao Downs take (if granted) is being exercised.
58. No interim flow regime is proposed. In my view this is a reflection of two things:
- (a) The applicant is, in part, the same as the consent holder for the Waitaki Dam. Accordingly, it can make provision for the river flows that are necessary over and above that required by the Waitaki Dam consent to provide the abstractors with high reliable.
 - (b) In addition, historically the amount of water that has passed the Waitaki Dam is sufficient to also provide the abstractors with a high degree of reliability.
59. It is important to note that under the HDIS regime, effectively HDIS is accorded the same priority as existing consented takes, if the same minimum flow is applied to these.
60. In my view, if granted, HDIS fits within, and predominately fills, the 80 cumec allocation threshold identified in Policy 46 and Rule 7. It is currently the first in the resource consent application decision priority queue of the applications for new agriculture and horticulture takes. The take sought is 20.5 cumecs (or 17.5 cumec when the Waihao Downs consent (if granted) is being exercised). As Waihao Downs is further down the priority list (as currently determined), it is appropriate to allocate the full 20.5 cumecs to HDIS.

61. In my view the regime proposed by the HDIS applicant is practicable insofar that it can be reflected in the resource consent conditions for the HDIS take, if so granted, along the lines proposed by the applicant, subject to any further amendments recommended by Mrs Ensor in her s42A report.

Appendix 1: Relevant provisions of Waitaki Regional Plan relating to 'how' to establish the flow and allocation regime

A1.1. Objective 5 is:

To provide for a practical and fair sharing of allocated water during times of low water availability.

A1.2. Policies 15 is:

By ensuring that the rate of abstraction and the annual volume of resource consents for taking, using, damming or diverting water are reasonable for the intended end use, and thereby avoiding significant wastage of water.

A1.3. Policies 16 and 17 set out the specific efficiency expectations for irrigation (Policy 15), and town and community and stock drinking-water supplies (Policy 16).

A1.4. Policy 18 is:

By encouraging and, where appropriate, requiring the water allocation specified on existing resource consents to reflect the actual quantity needed to undertake the activity.

A1.5. Policy 19 is:

By encouraging the piping or otherwise sealing of water distribution systems to minimise water losses and maintain the quality of water and, where appropriate, requiring their progressive upgrade and piping where there is an environmental and/or economic the benefit of so doing, but recognising that some of may provide significant habitats.

A1.6. Policy 24 is:

By allowing consent holders to take water for domestic, stock drinking-water uses and for the processing and storage of perishable produce when rivers or lakes are at or below minimum flows or levels provided the amount taken does not exceed 250 litres per person per day based on the population being supplied at that time, plus actual stock drinking-water requirements, plus the minimum necessary to maintain fire-fighting capability and for the processing and storage of perishable produce. In addition, an allowance may be made for reasonable losses from reticulated supply schemes.

A1.7. Policy 25 is:

By allowing the restrictions on takes and diversions to be achieved by sharing the available water between resource consent holders within a water-users group, provided the total amount taken by any individual does not exceed their resource consent, and the sum of the takes does not exceed the water available above the minimum flow or minimum lake level.

A1.8. Policy 26 relates to restrictions in times of low water availability and is relevant for tributaries of the Lower Waitaki River. It is not directly relevant to HDIS, but I include it for the sake of completion:

By providing a measure of certainty as to the likely frequency of restrictions to consent holders taking or diverting water on a run-of-river basis from upper or mid-catchment tributaries, the Ahuriri catchment, the Hakataramea catchment, or tributaries of the Lower Waitaki River (see Map 2) through setting priority bands. The first priority band will be set to provide a reliability which either:

- a. allows at least 95 percent of the allocation specified on the consent to be taken in any 14-day period from August to May in 6 years out of 10, and at least 75 percent of the allocation specified on the consent to be taken in any 14-day period from August to May in 9 years out of 10; or
- b. if the existing reliability is less than that specified in Policy 26a, maintains the existing reliability.

A1.9. Policy 27 is:

By giving priority during times of low flows or levels to integrated schemes in which water is used for more than one purpose.

A1.10. Policy 28 relates to the replacement of existing consents, and is:

In considering whether to grant or refuse applications for replacement of existing consents, the consent authority will:

- a. consider whether all reasonable attempts to meet the efficiency expectations of this Plan have been undertaken;
- b. recognise the value of the investment of the existing consent holder; and
- c. maintain the inclusion of the consent, if granted, in any allocation limits and priority bands on the water body concerned.

A1.11. Policy 45 directly relates to the Lower Waitaki River and is:

- (1) By setting an environmental flow regime in the Lower Waitaki River that:
 - (i) maintains
 - a. the physical characteristics (including flow variability) of a dynamic braided river;
 - b. the physical and ecological functioning of the river mouth;
 - c. the connectedness of the main flow with riparian margins, wetlands, and back water areas;
 - d. habitats for aquatic plants, invertebrates, birds and fish;
 - e. support for cultural relationships (including those of Ngai Tahu) was the river;
 - f. the opportunity for people to experience the river's aesthetic characteristics, including openness, naturalist, and magnitude; and
 - g. recreational opportunities;and
 - (ii) enables appropriate access to water quality activities identified in Objective 2, to the extent consistent with Objective 1.
- (2) In deciding whether to grant or refuse consent for an application to take, use, dam or divert water from the Lower Waitaki River upstream of Black Point that it would result in a cumulative peak rate of abstraction greater than 90 cubic metre per second, the consent authority will have regard to the extent to which the exercise of the consent would maintain the matters listed in Policy 45(1)(i).

A1.12. Policy 46 directly relates to the Lower Waitaki River, and is:

By maintaining a flow of water into the Lower Waitaki River downstream of the Waitaki Dam that is sufficient to maintain:

(i) the minimum flow and flushing flows of the environmental flow regime for the Lower Waitaki River;

and

(ii) the aggregate of:

- a. the actual requirements of existing¹⁵ and new¹⁶ consents (at their points of taking) in the Lower Waitaki River for town and community water supplies, industrial and commercial activities, tourism and recreational facilities, and any other activities provided for within the annual allocations for all those activities; and
- b. the actual requirements of exercising existing¹⁵ consents for agricultural and horticultural activities (at their points of taking) into the Lower Waitaki River provided for within the annual allocations for those activities; and
- c. the actual requirements of exercising, up to 95 percent of the peak rate of taking, of new¹⁶ consents for agricultural and horticultural activities (at their points of taking) in the Lower Waitaki River provided for within the annual allocations for those activities;

up to a maximum of 80 cubic metres per second.

¹⁵ Authorised by resource consent in effect on the date this Plan becomes operative; and a consent in replacement of it.

¹⁶ Not authorised by resource consent in effect on the date this Plan becomes operative.

A1.13. The relevant part of Rule 2 Table 3 is:

xvii.	Lower Waitaki River	<ul style="list-style-type: none"> a. A <u>minimum flow</u> from Waitaki Dam to the sea of 150 m³/s, except that: if, throughout the period from 1 November in any year to the following 30 April, the sum of all the catchment inflows above Waitaki Dam as determined by the Canterbury Regional Council are less than, or equal to, the 1-in-20 year inflows, then, during the following period from 1 June to 31 August, a <u>minimum flow</u> equivalent to the <u>natural flow</u> at Waitaki Dam or 150 m³/s whichever is the lesser b. From Waitaki Dam to Black Point, <u>flushing flows</u> of at least 450 m³/s for not less than 24 hours are to be provided no less than 7 times per year, no fewer than 2 of which are to be in the period 1 February to 31 March in every year c. An <u>allocation limit</u> of 90 m³/s not counting any flows abstracted from the Lower Waitaki River above Black Point that are returned to the Lower Waitaki River above Black Point d. All flows in the Lower Waitaki River determined for the purpose of this item xvii are to be based on measurements at the Kurow recorder²¹ and based on 1-hour rolling averages e. No flow-sharing regime
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A1.14. The relevant part of Rule 6 Table 5 is:

Note: units = millions of m³ per year

		<u>Town and Community water supplies</u>	<u>Industrial and commercial activities (outside municipal or town supply areas)</u>	<u>Tourism and recreational facilities</u>	<u>Agricultural and horticultural activities</u>	<u>Any other activities</u>	<u>Hydro-electricity generation</u>
v	Downstream of the Waitaki Dam but upstream of Black Point.	3	1	2	150	16	All other inflows except the flow is that must remain in the rivers, pursuant to the <u>environmental flow regimes</u>
vi	Downstream of the Waitaki dam but downstream of Black Point.	19	8.5	4.3	1100	144	

A1.15. Although not subject to this hearing, and therefore not directly relevant, Rule 7 is:

In addition to the minimum flows and flushing flows of the environmental flow regime for the Lower Waitaki River, the consent-holder for the Waitaki Dam shall provide flows in the Lower Waitaki River sufficient to meet the actual requirements of activities identified in Policy 46(ii) (at their points of taking), up to a maximum of the flows in Table 6.

Table 6: Provisions of the flows into the Lower Waitaki River

Month	Flow is to be provided above the minimum flow (in m ³ /s)
October to March	80
April and September	50
May and August	20
June and July	10

A1.16. Further, Rule 25 relates to applications of rules to existing consents. This rule is:

- (1) This rule applies to the extent that the exercise of an existing water permit (not being a deemed permit) in compliance with its conditions would contravene Rule 2.
- (2) By section 68(7) of the RMA, Rule 2 shall affect the exercise of an existing water permit to which this rule applies:
 - (i) in the Maerewhenua catchment, from the expiry of 7 years after the day on which this Plan becomes operative;
 - (ii) except in the Maerewhenua catchment, from the expiry of 5 years after the date of which this Plan becomes operative.

Appendix 2: Extracts from Officers Report on submissions on the Draft Waitaki Catchment Water Allocation Regional Plan, Ministry for the Environment

Existing flow regime in the lower Waitaki River

- 5.28 There is some confusion over the existing minimum flow in the lower Waitaki River. Submitters have asked for “the existing minimum flow of 80 m³/s”, “the existing minimum flow of 120 m³/s”, “the existing minimum flow regime” and “the status quo for river flows”. The analysis below (paragraphs 5.29 to 5.34) uses existing information on minimum flows in the lower Waitaki River and measured river flows in the lower Waitaki River to assist with clarification on what submitters are requesting.
- 5.29 The existing minimum flow (defined as water that must remain in the river) is inherent in conditions on existing resource consents to take, use, dam or divert water from the lower Waitaki River. An assessment of the river flows at which abstraction is restricted, as contained in existing resource consents, is outlined in Information Provided to the Board by Canterbury Regional Council in November 2004. The table below was part of a Canterbury Regional Council presentation given to the lower Waitaki River Management Strategy meetings at Glenavy. Although the total consented take does not match the amount later provided to the Board in the inventory of existing resource consents, the table summarises the overall effect of low flow restrictions set in conditions on existing resource consents to take water from the lower Waitaki River.

Table 1: Illustration of existing environment flow regime in the lower Waitaki River

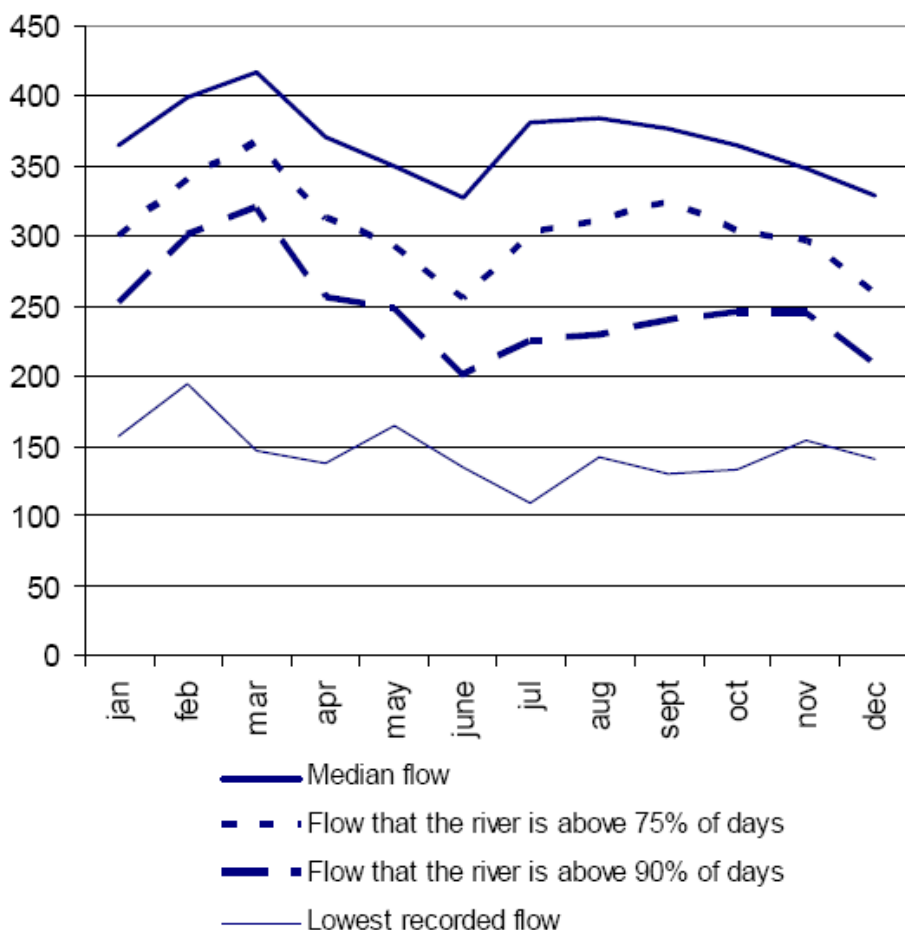
When Kurow recorder is	Total consented take is
>150	53.1
<150	52.1
<148	51.1
<146	50.1
<144	49.1
<142	48.1
<140	47.1
<138	46.1
<136	45.1
<134	44.1
<132	43.1
<130	38.5
<120	32.7
<110	27.0
<90	19.9
<80	4.0

Source: Canterbury Regional Council: Information Provided to the Board November 2004

- 5.30 The existing consent conditions indicate a minimum flow of 80 m³/s, with a 4 m³/s take allowable at flows below 80 m³/s, most likely to allow for essential use of water for community and stock drinking-water. It is not clear that a consistent minimum flow applies when the flow at Kurow is between 80 m³/s and 110 m³/s. When flows at the Kurow recorder are between 110 m³/s and 120 m³/s, up to 32.7 m³/s can be taken, resulting in a flow in the river of 77.3 m³/s to 87.3 m³/s if the full 32.7 m³/s is taken. This is consistent with a current minimum flow of around 80 m³/s. Once the flow at the Kurow recorder goes above 132 m³/s, a 1:1 flow sharing regime similar to the one proposed in the draft plan has been applied. Every additional 1 m³/s consented requires a 2 m³/s increase in the flow at the Kurow recorder. With some small discrepancies, it appears the existing minimum flow regime in the lower Waitaki River is an 80 m³/s minimum, and a flow sharing threshold of 120 m³/s (1:1 sharing).
- 5.31 Conditions on the consent to dam the Waitaki River at Waitaki Dam require a flow of 120 m³/s to be continuously released year round from the Waitaki Dam, a flow rate that is 40 m³/s above the minimum flow. The existing arrangement inherent in the consent conditions is that the flow release from the Waitaki Dam provides 40 m³/s at all times to downstream abstractive users.
- 5.32 Some submitters have asked for the status quo for river flows in the lower Waitaki River. There is a substantial difference between the existing minimum flow specified through resource consent conditions, and actual flows that have occurred in the lower Waitaki River. Report 14 received by the Board, *Waitaki Catchment Hydrological Information* by Tonkin & Taylor Limited, contains information on the flows from 1964 to 2004 at the Waitaki Dam, and at the Kurow recorder. The report is accompanied by a spreadsheet of mean daily flows measured at the Kurow recorder from 1 July 1979 to 16 September 2004. Over that time the lowest mean daily flow at the recorder at Kurow was 110 m³/s and occurred in July 2001. The mean daily flow at the recorder has been above 210 m³/s, 95 percent of the days over the 25 years and above 250 m³/s on 90 percent of days.
- 5.33 Canterbury Regional Council's inventory of existing resource consents in the Waitaki Catchment calculated the total consented take from the lower Waitaki River as 46.89 m³/s (Information Provided to the Board). Allowing for this amount of abstraction, and discounting the effects of tributary inflows and flows to and from groundwater, the mean daily flow in the river from the Kurow recorder to the mouth has been at or above 200 m³/s on 90 percent of days between 1 July 1979 to 16 September 2004. The mean daily flow in the river has therefore been considerably above the minimum flow of 80m³/s, and has provided very close to 100 percent reliability to all currently consented takes.

5.34 The values in the paragraphs above do not illustrate when the lower flows occur over the year. Using the spreadsheet of flows at the Kurow recorder (refer paragraph 5.30 above), we have provided a monthly breakdown of mean daily flows at the Kurow recorder from 1 July 1979 to 30 August 2004. Figure 1 shows the lowest recorded mean daily flow, the flow that is exceeded on 90 percent of days, the flow that is exceeded on 75 percent of days, and the median flow. For example, for 90 percent of all the June days from 1980 to 2004, the mean daily flow in the river at Kurow was above 200 m³/s.

Figure 1: Mean daily flows in the Lower Waitaki River at Kurow, 1979–2004



Source: Spreadsheet accompanying Report 14 received by the Board, *Waitaki Catchment Hydrological Information*, Tonkin & Taylor Limited

Appendix 3 Schedule of instantaneous rates (adjusted for stream depletion) relating to Rule 2, Table 3, Line xvii of the Waitaki Regional Plan for existing water permits and applications to divert and/or take water from the Lower Waitaki River as at 9 October 2007.

Consent number	File number	Activity	Consent holder / applicant name	Rate (in allocation) (l/s)	Rate (not in allocation) (l/s)	Running total (l/s)	Above/below Black Point	Comment
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Issued consents

CRC000042.1	CO6C/16071	SWTAKE	Mr & Ms A P & H E Turner-Heaton & Scott	25		25	Above	
CRC000897	CO6C/12080	SWTAKE	Morven Glenavy & Ikawai Irrigation Limited	6,000		6,025	Below	
CRC000945	CO6C/07005	GWTAKE	Geoff Wallace Holdings Limited	126		6,151	Below	
CRC011913	CO6C/16439	SWTAKE	Invernia Holdings Limited	220		6,371	Below	
CRC012445	CO6C/18076	SWTAKE	Mr & Mrs P G & W E A Reid	56		6,427	Above	
CRC012641	CO6C/18196	SWTAKE	Mr & Mrs R J & R M Irving	60		6,487	Above	
CRC012648	CO6C/18200	GWTAKE	Mr K M Pavletich	73		6,560	Above	
CRC012812	CO6C/18295	SWTAKE	Mr & Mrs E M & S A Ross	230		6,790	Above	
CRC020642.4	CO6C/20708	GWTAKE	K & D Farms Ltd	10		6,800	Above	
CRC020869	CO6C/18838	GWTAKE	Mr E R Rutherford	3		6,804	Above	
CRC021028.1	CO6C/18703	GWTAKE	Mr & Mrs S R G & J S Fielding	20		6,824	Above	
CRC021158	CO6C/18985	SWTAKE	Normanvale Limited	50		6,874	Above	
CRC021235.1	CO6C/24791	GWTAKE	D D Chalmers & Kokoamo Farms Limited	82		6,955	Above	
CRC021450	CO6C/14913	SWTAKE	Sanford Limited (Timaru)	500		7,455	Below	
CRC021286.2	CO6C/20708	GWTAKE	K & D Farms Ltd	30		7,485	Above	
CRC022002	CO6C/19388	SWTAKE	Mr & Mrs B W & T F Hore	9		7,494	Above	
CRC030182.1	CO6C/19642	SWTAKE	Meridian Energy Limited	230		7,724	Above	
CRC030183.1	CO6C/19642	GWTAKE	Meridian Energy Limited	34		7,758	Above	
CRC030342	CO6C/15986	SWDIVERT	Mr A J Bell	1,200		8,958	Below	
CRC030342	CO6C/15986	SWTAKE	Mr A J Bell		43	8,958	Below	
CRC031246	CO6C/20188	GWTAKE	Mr & Mrs A W & S J Gibson	92		9,050	Above	
CRC040805	CO6C/06676	SWDIVERT	Mr N O Dogterom	450		9,500	Above	
CRC981733	CO6C/06676	SWTAKE	Mr N O Dogterom		450	9,500	Above	

CRC897372A	CO6C/12080	SWDIVERT	Morven Glenavy & Ikawai Irrigation Limited			9,500	Below	No consented rate. Associated with CRC000897
CRC897381B	CO6C/12080	SWDIVERT	Morven Glenavy & Ikawai Irrigation Limited			9,500	Below	No consented rate. Associated with CRC897381C.1
CRC897381C.1	CO6C/12080	SWTAKE	Morven Glenavy & Ikawai Irrigation Limited	14,300		23,800	Below	
CRC916614	CO6T/01450	SWTAKE	Transpower NZ Ltd	30		23,830	Above	
CRC921659	CO6C/02410	GWTAKE	Mr A J Nicol	5		23,835	Above	
CRC921660B	CO6C/02410	SWDIVERT	Mr A J Nicol	1,000		24,835	Above	
CRC921660C	CO6C/02410	SWTAKE	Mr A J Nicol		1,000	24,835	Above	
CRC940477	CO6C/09593	GWTAKE	Waitaki District Council	28		24,863	Above	
CRC940497B.3	CO6C/20293	SWTAKE	Meridian Energy Limited	65		24,928	Above	
CRC940846	CO6C/09558	GWTAKE	Waimate District Council	18		24,946	Below	
CRC950119	CO6C/07915	SWTAKE	Mr C R Cairns	115		25,061	Above	
CRC950648.1	CO6C/05275	SWDIVERT	Lower Waitaki Irrigation Company Limited	27,000		52,061	Below	
CRC950649.1	CO6C/05275	SWTAKE	Lower Waitaki Irrigation Company Limited		27,000	52,061	Below	
CRC952210	CO6C/08682	SWDIVERT	Maerewhenua District Water Resource Company Limited	1,500		53,561	Above	
CRC952215	CO6C/08687	SWTAKE	Maerewhenua District Water Resource Company Limited		900	53,561	Above	
CRC960030.1	CO6C/09200	SWTAKE	Station Peak Partnership & Wainui Farm Limited	570		54,131	Above	
CRC961298	CO6C/10698	SWTAKE	Mr A W & Mrs S J Gibson	280		54,411	Above	
CRC962093.1	CO6C/11456	GWTAKE	Tynninghame Trust	22		54,433	Above	
CRC962259	CO6C/11602	GWTAKE	Clarkefield Holdings (1996) Limited	59		54,492	Above	
CRC980921.1	CO6C/20302	SWDIVERT	Aviemore Irrigation Co Limited & Meridian Energy Limited	770		55,262	Above	
CRC980921.1	CO6C/20302	SWTAKE	Aviemore Irrigation Co Limited & Meridian Energy Limited		542	55,262	Above	
CRC982133	CO6C/09591	GWTAKE	Waitaki District Council	5		55,267	Above	
CRC992244	CO6C/09885	SWTAKE	Mr G C van't Klooster	17		55,284	Below	
CRC992778.1	CO6C/16036	SWTAKE	Mr & Mrs T W & J K Allan	120		55,404	Above	
Subtotal issued						55,404		

Applications in process

CRC071029	CO6C/25821	SWTAKE	The South Canterbury Irrigation Trust & Meridian Energy Limited	17,500		17,500	Below	Rate 20,500 if CRC040428 does not proceed
CRC061919	CO6C/06323	SWTAKE	Clarkesfield Holdings (1996) Limited	54		17,554	Above	
CRC061931	CO6C/06323-02	GWTAKE	Clarkesfield Holdings (1996) Limited	6		17,560	Above	
CRC063815	CO6C/18838	GWTAKE	Mr E R Rutherford	81		17,641	Above	
CRC040428	CO6C/20823	SWTAKE	Waihao Downs Irrigation Limited	3,060		20,701	Below	
CRC032177	CO6C/20563	SWTAKE	Hakataramea Valley Irrigation Inc	1,000		21,701	Above	
CRC042124	CO6C/14790	GWTAKE	Mr & Mrs D D & V J Chalmers	34		21,735	Below	
CRC050566	CO6C/06323	SWDIVERT	Clarkesfield Holdings (1996) Limited	4,200		25,935	Above	
CRC061399	CO6C/24272	SWTAKE	Waitaki Orchards Limited	98		26,033	Above	
CRC041002	CO6C/18615	SWTAKE	Mr W N Cameron	53		26,086	Above	partial replacement. 38l/s from WTK875192; 15l/s new.
CRC041003	CO6C/18615	SWTAKE	Mr W N Cameron	30		26,116	Above	replacement. 38l/s from WTK875191.
CRC041004	CO6C/08692	GWTAKE	Maerewhenua District Water Resource Company Limited	468		26,584	Above	
CRC051795	CO6C/09200	SWDIVERT	Station Peak Partnership & Wainui Farm Limited	720		27,304	Above	
CRC073237	CO6C/25028	SWTAKE	Torach Farm Limited	100		27,404	Above	
CRC071033	CO6C/25821	SWDIVERT	The South Canterbury Irrigation Trust & Meridian Energy Limited		30,000	27,404	Below	On hold s.91
CRC031136	CO6C/20108	SWTAKE	Irrigation North Otago Limited		27,500	27,404	Above	Not notifiable
CRC031137	CO6C/20108	SWDIVERT	Irrigation North Otago Limited		0	27,404	Above	Not notifiable

Subtotal in process	27,404
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TOTAL	82,808
(issued & in process)	

Appendix 4 Schedule of annual volume estimates grouped by activity as per Table 5 of the Waitaki Regional Plan for existing water permits and applications to take water downstream of the Waitaki Dam as at 9 October 2007.

Consent number	File number	Activity	Consent holder / applicant name	Annual volume (in allocation) (m3/yr)	Annual volume (not in allocation) (m3/yr)	Section running total	Comments
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Downstream of Waitaki Dam but upstream of Black Point

Town & Community

Issued

CRC940477	CO6C/09593	GWTAKE	Waitaki District Council	883,039		883,039	
CRC960857	CO6C/10138	GWTAKE	Waitaki District Council	630,720		1,513,759	
CRC962154.1	CO6C/11512	SWTAKE	Waimate District Council	536,112		2,049,871	
CRC981956	CO6C/14561	SWTAKE	Kenilworth Rural Water Supply Scheme	31,536		2,081,407	
CRC982133	CO6C/09591	GWTAKE	Waitaki District Council	111,690		2,193,097	
Subtotal issued				2,193,097			
Subtotal in process				0			
TOTAL				2,193,097			

Industrial & Commercial

Issued

CRC916614	CO6T/01450	SWTAKE	Transpower New Zealand Limited	946,080		946,080	
CRC921659	CO6C/02410	GWTAKE	Mr A J Nicol	157,680		1,103,760	
CRC921660B	CO6C/02410	SWDIVERT	Mr A J Nicol	31,536,000		32,639,760	
CRC921660C	CO6C/02410	SWTAKE	Mr A J Nicol		31,536,000	32,639,760	
Subtotal issued				32,639,760			

In process

CRC062308	CO6C/05382	GWTAKE	Warnbro Enterprises Limited	142,898		32,782,658	
				Subtotal in process	142,898		
				TOTAL	32,782,658		

Agriculture & Horticulture

Issued

CRC000042.1	CO6C/16071	SWTAKE	Mr & Ms A P & H E Turner-Heaton & Scott	170,640		170,640	
CRC000347	CO6C/16211	GWTAKE	D J & L M Parker	682,560		853,200	
CRC000668	CO6C/05661	SWTAKE	Awakino Station Limited	477,582		1,330,782	
CRC000935.1	CO6C/16452	GWTAKE	Mr J G Watherston	341,280		1,672,062	
CRC000971	CO6C/16058	SWTAKE	Mr A R Bayley	126,274		1,798,336	
CRC001010.2	CO6C/19085	SWDIVERT	Otago Station Estates Limited	341,280		2,139,616	
CRC001010.2	CO6C/19085	SWTAKE	Otago Station Estates Limited		194,261	2,139,616	
CRC001203	CO6C/16562	SWTAKE	Maerewhenua District Water Resource Company Limited	5,227,200		7,366,816	
CRC001655	CO6C/16754	SWTAKE	Metherell Farm Limited	125,586		7,492,402	
CRC001706	CO6C/05661	SWDIVERT	Awakino Station Limited	682,560		8,174,962	
CRC001706	CO6C/05661	SWTAKE	Awakino Station Limited		370,533	8,174,962	
CRC010048.2	CO6C/22758	SWDIVERT	Star Holdings Limited	177,466		8,352,428	
CRC010048.2	CO6C/22758	SWTAKE	Star Holdings Limited		84,643	8,352,428	
CRC011285	CO6C/16452	SWDIVERT	Mr J G Watherston	682,560		9,034,988	
CRC011285	CO6C/16452	SWTAKE	Mr J G Watherston		517,503	9,034,988	
CRC011714	CO6C/17733	SWTAKE	Mr M F Moynihan	777,992		9,812,980	
CRC012337	CO6C/18043	GWTAKE	Haricot Investments Limited	324,899		10,137,879	
CRC012445	CO6C/18076	SWTAKE	Mr & Mrs P G & W E A Reid	764,467		10,902,346	
CRC012641	CO6C/18196	SWTAKE	Mr & Mrs R J & R M Irving	807,369		11,709,715	
CRC012648	CO6C/18200	GWTAKE	Mr K M Pavletich	1,228,608		12,938,323	
CRC012812	CO6C/18295	SWTAKE	Mr & Mrs E M & S A Ross	2,313,792		15,252,115	
CRC020415.1	CO6C/18770	SWTAKE	S R & M E Fenwick	701,046		15,953,161	

CRC020642.4	CO6C/20708	GWTAKE	K & D Farms Limited	682,560		16,635,721	
CRC020744	CO6C/18615	GWTAKE	Mr W N Cameron	3,071,520		19,707,241	
CRC020842.1	CO6C/18826	SWTAKE	R H & J Robertson Family Trust	955,584		20,662,825	
CRC020869	CO6C/18838	GWTAKE	Mr E R Rutherford	45,049		20,707,874	
CRC020875.2	CO6C/19292	SWTAKE	Woodrow Limited	21,612		20,729,486	
CRC021028.1	CO6C/18703	GWTAKE	Mr & Mrs S R G & J S Fielding	546,048		21,275,534	
CRC021158	CO6C/18985	SWTAKE	Normanvale Limited	682,560		21,958,094	
CRC021235.2	CO6C/24791	GWTAKE	D D Chalmers & Kokoamo Farms Limited	2,230,971		24,189,065	
CRC021286.2	CO6C/20708	GWTAKE	K & D Farms Limited	606,478		24,795,543	
CRC021460.1	CO6C/27420	SWTAKE	Star Holdings Limited	176		24,795,719	
CRC021504.1	CO6C/21570	SWTAKE	Des Conlan Trust	1,501,632		26,297,351	
CRC022002	CO6C/19388	SWTAKE	Mr & Mrs B W & T F Hore	10,270		26,307,621	
CRC022184.3	CO6C/20837	SWTAKE	Willander Family Trust	1,744,202		28,051,823	
CRC022209	CO6C/16754	SWTAKE	Metherell Farm Limited	163,814		28,215,637	
CRC030182.1	CO6C/19642	SWTAKE	Meridian Energy Limited	3,139,776		31,355,413	
CRC030183.1	CO6C/19642	GWTAKE	Meridian Energy Limited	464,141		31,819,554	
CRC030278	CO6C/19691	SWTAKE	Mr & Mrs C R A & G N Hay	34,128		31,853,682	
CRC030733	CO6C/19912	SWDIVERT	Hakataramea Water Scheme Inc Society	397,354		32,251,036	
CRC030733	CO6C/19912	SWTAKE	Hakataramea Water Scheme Inc Society		192,370	32,251,036	
CRC030840.3	CO6C/18770	SWTAKE	S R & M E Fenwick	1,037,428		33,288,464	
CRC031246	CO6C/20188	GWTAKE	Mr A W & Mrs S J Gibson	1,255,910		34,544,374	
CRC040309	CO6C/20920	SWTAKE	Davenport Holdings Limited	58,857		34,603,231	
CRC040805	CO6C/06676	SWDIVERT	Mr N O Dogterom	1,500,000		36,103,231	
CRC060832	CO6C/24044	SWTAKE	Mr & Mrs Bruce W & Christine A Nowell	498,314		36,601,545	
CRC062314.1	CO6C/18619	SWTAKE	Awakino Station Limited		1,967,328	36,601,545	
CRC062314.1	CO6C/18619	SWDIVERT	Awakino Station Limited	1,967,328		38,568,873	
CRC062320	CO6C/22139	SWDIVERT	Goldwyn Farming Company Limited	3,122,064		41,690,937	
CRC062320	CO6C/22139	SWTAKE	Goldwyn Farming Company Limited		3,122,064	41,690,937	

CRC062327	CO6C/18619	SWDIVERT	Awakino Station Limited	3,122,064		44,813,001	
CRC062327	CO6C/18619	SWTAKE	Awakino Station Limited		3,122,064	44,813,001	
CRC062331.1	CO6C/18619	SWDIVERT	Awakino Station Limited	1,101,946		45,914,947	
CRC062331.1	CO6C/18619	SWTAKE	Awakino Station Limited		1,101,946	45,914,947	
CRC062337	CO6C/17850	SWDIVERT	Otematata Station Limited	1,766,016		47,680,963	
CRC062337	CO6C/17850	SWTAKE	Otematata Station Limited		1,766,016	47,680,963	
CRC062339	CO6C/17885	SWDIVERT	Westmere Estate Limited	1,766,016		49,446,979	
CRC062339	CO6C/17885	SWTAKE	Westmere Estate Limited		1,766,016	49,446,979	
CRC062341	CO6C/17885	SWDIVERT	Westmere Estate Limited	883,008		50,329,987	
CRC062341	CO6C/17885	SWTAKE	Westmere Estate Limited		883,008	50,329,987	
CRC062343	CO6C/17885	SWDIVERT	Westmere Estate Limited	504,576		50,834,563	
CRC062343	CO6C/17885	SWTAKE	Westmere Estate Limited		504,576	50,834,563	
CRC062346	CO6C/18124	SWDIVERT	Goldwyn Farming Company Limited	189,216		51,023,779	
CRC062346	CO6C/18124	SWTAKE	Goldwyn Farming Company Limited		189,216	51,023,779	
CRC062349	CO6C/24663	SWTAKE	W F H Cochrane Estate		189,216	51,023,779	
CRC062349	CO6C/24663	SWDIVERT	W F H Cochrane Estate	189,216		51,212,995	
CRC062352	CO6C/17885	SWDIVERT	Westmere Estate Limited	1,608,336		52,821,331	
CRC062352	CO6C/17885	SWTAKE	Westmere Estate Limited		1,608,336	52,821,331	
CRC062354	CO6C/18124	SWDIVERT	Goldwyn Farming Company Limited	536,112		53,357,443	
CRC062354	CO6C/18124	SWTAKE	Goldwyn Farming Company Limited		536,112	53,357,443	
CRC062356	CO6C/24663	SWDIVERT	W F H Cochrane Estate	536,112		53,893,555	
CRC062356	CO6C/24663	SWTAKE	W F H Cochrane Estate		536,112	53,893,555	
CRC062358	CO6C/18196	SWDIVERT	Mr R J Irving	1,766,016		55,659,571	
CRC062358	CO6C/18196	SWTAKE	Mr R J Irving		1,766,016	55,659,571	
CRC062361	CO6C/17733	SWDIVERT	Mr M F Moynihan	1,766,016		57,425,587	
CRC062361	CO6C/17733	SWTAKE	Mr M F Moynihan		1,766,016	57,425,587	
CRC062363	CO6C/10016	SWDIVERT	Waitaki District Council	8,924,688		66,350,275	
CRC062363	CO6C/10016	SWTAKE	Waitaki District Council		8,924,688	66,350,275	
CRC062365	CO6C/18143	SWDIVERT	Otago Station Estates Limited	1,608,336		67,958,611	
CRC062365	CO6C/18143	SWTAKE	Otago Station Estates Limited		1,608,336	67,958,611	

CRC062366	CO6C/24664	SWDIVERT	Grants Road Lot Owners Association	1,955,232		69,913,843	
CRC062370	CO6C/24665	SWDIVERT	D J & L M Parker	1,324,512		71,238,355	
CRC062370	CO6C/24665	SWTAKE	D J & L M Parker		1,324,512	71,238,355	
CRC062371	CO6C/24666	SWDIVERT	Mr & Mrs A R & B A Watherston	1,324,512		72,562,867	
CRC062371	CO6C/24666	SWTAKE	Mr & Mrs A R & B A Watherston		1,324,512	72,562,867	
CRC062375	CO6C/24665	SWDIVERT	D J & L M Parker	662,256		73,225,123	
CRC062375	CO6C/24665	SWTAKE	D J & L M Parker		662,256	73,225,123	
CRC062376	CO6C/24666	SWDIVERT	Mr & Mrs A R & B A Watherston	1,324,512		74,549,635	
CRC062376	CO6C/24666	SWTAKE	Mr & Mrs A R & B A Watherston		1,324,512	74,549,635	
CRC062377	CO6C/24667	SWDIVERT	Mr & Mrs N S & J F Harraway	1,324,512		75,874,147	
CRC062377	CO6C/24667	SWTAKE	Mr & Mrs N S & J F Harraway		1,324,512	75,874,147	
CRC931002.2	CO6C/21357	SWDIVERT	Davenport Holdings Limited	2,047,680		77,921,827	
CRC931003.4	CO6C/21503	SWTAKE	Mr & Mrs J R D & M M Clarke	1,957,824		79,879,651	
CRC931004	CO6T/00861	SWDIVERT	Maungatiro Partnership		614,304	79,879,651	
CRC931005	CO6T/00861	SWTAKE	Maungatiro Partnership	614,304		80,493,955	
CRC931008	CO6T/01403	SWDIVERT	G K & J L Taylor Partnership		819,072	80,493,955	
CRC931009	CO6T/01403	SWTAKE	G K & J L Taylor Partnership	819,072		81,313,027	
CRC940497B.3	CO6C/20293	SWTAKE	Meridian Energy Limited	388,206		81,701,233	
CRC950119	CO6C/07915	SWTAKE	Mr C R Cairns	584,805		82,286,038	
CRC950305	CO6T/00878	SWTAKE	W J C & G F McCone	425,494		82,711,532	
CRC950409.4	CO6C/22758	SWTAKE	Star Holdings Limited	1,365,120		84,076,652	
CRC950458.1	CO6C/05306	SWTAKE	New Zealand Deer Farms Limited	2,190		84,078,842	
CRC950458.1	CO6C/05306	SWTAKE	New Zealand Deer Farms Limited	614,304		84,693,146	
CRC950460.1	CO6C/05310	SWTAKE	New Zealand Deer Farms Limited	546,048		85,239,194	
CRC950462.3	CO6C/05306	SWTAKE	New Zealand Deer Farms Limited	204,768		85,443,962	
CRC950464.1	CO6C/14209	SWTAKE	Hakataramea Station 1990 Limited	204,768		85,648,730	
CRC950493.3	CO6C/22758	SWTAKE	Star Holdings Limited	177,466		85,826,196	
CRC950551	CO6C/05381	SWDIVERT	Warnbro Enterprises Limited			85,826,196	No consented rate or volume
CRC950552	CO6C/05382	SWTAKE	Warnbro Enterprises Limited	464,204		86,290,400	

CRC950601.2	CO6C/20370	SWTAKE	Mr & Mrs R H & J Robertson	355,026		86,645,426	
CRC950602.2	CO6C/20370	SWTAKE	Mr & Mrs R H & J Robertson	614,304		87,259,730	
CRC950995.1	CO6C/06141	SWTAKE	Mr G S Hay	819,072		88,078,802	
CRC951082.2	CO6C/06383	SWTAKE	Star Holdings Limited	341,280		88,420,082	
CRC951084.3	CO6C/27128	SWTAKE	Sunny Downs Limited	614,304		89,034,386	
CRC951698.1	CO6C/22260	SWTAKE	Star Holdings Limited	409,536		89,443,922	
CRC951776.4	CO6C/22260	SWTAKE	Star Holdings Limited	587,128		90,031,050	
CRC951804.2	CO6C/22260	SWTAKE	Star Holdings Limited	409,536		90,440,586	
CRC952146	CO6C/08599	SWDIVERT	Mr P F McIlraith	1,242,196		91,682,782	
CRC952149	CO6C/08598	SWTAKE	Mr P F McIlraith		1,242,196	91,682,782	
CRC952200.2	CO6C/08698	SWTAKE	Hopefield Farm 1995 Limited	99,224		91,782,006	
CRC952210	CO6C/08682	SWDIVERT	Maerewhenua District Water Resource Company Limited	26,697,600		118,479,606	
CRC952215	CO6C/08687	SWTAKE	Maerewhenua District Water Resource Company Limited		16,018,560	118,479,606	
CRC960030.1	CO6C/09200	SWTAKE	Station Peak Partnership & Wainui Farm Limited	5,263,500		123,743,106	
CRC961298	CO6C/10698	SWTAKE	Mr A W & Mrs S J Gibson	2,135,926		125,879,032	
CRC961543.2	CO6C/22758	SWDIVERT	Star Holdings Limited	546,048		126,425,080	
CRC961543.2	CO6C/22758	SWTAKE	Star Holdings Limited		546,048	126,425,080	
CRC962093.1	CO6C/11456	GWTAKE	Tynninghame Trust	100,172		126,525,252	
CRC962259	CO6C/11602	GWTAKE	Clarksfield Holdings (1996) Limited	1,774,656		128,299,908	
CRC980512.1	CO6C/13526	SWDIVERT	Mr & Mrs R W & M E Sutton	68,256		128,368,164	
CRC980513.1	CO6C/13526	SWTAKE	Mr & Mrs R W & M E Sutton		429,038	128,368,164	
CRC980514	CO6C/13526	GWTAKE	Mr & Mrs R W & M E Sutton	341,280		128,709,444	
CRC980911	CO6C/13734	SWDIVERT	Montara Properties Limited		146,263	128,709,444	
CRC980915	CO6C/13734	SWTAKE	Montara Properties Limited	341,280		129,050,724	
CRC980916	CO6C/13734	SWTAKE	Montara Properties Limited	100,376		129,151,100	
CRC980921.1	CO6C/20302	SWDIVERT	Aviimore Irrigation Co Limited & Meridian Energy Limited	13,704,768		142,855,868	
CRC980921.1	CO6C/20302	SWTAKE	Aviimore Irrigation Co Limited & Meridian Energy Limited		9,646,733	142,855,868	

CRC981495	CO6C/12908	GWTAKE	Mr R W McKenzie	102,384		142,958,252	
CRC981733	CO6C/06676	SWTAKE	Mr N O Dogterom		2,402,704	142,958,252	
CRC982130	CO6C/14630	GWTAKE	Tokarahi Golf Club Incorporated	54,605		143,012,857	
CRC991000.1	CO6C/15153	SWTAKE	Pukeraro Trust	165,716		143,178,573	
CRC991183.1	CO6C/18770	SWTAKE	S R & M E Fenwick	1,092,096		144,270,669	
CRC991295.3	CO6C/20762	SWDIVERT	Maerewhenua Community Irrigation	5,695,488		149,966,157	
CRC991295.3	CO6C/20762	SWTAKE	Maerewhenua Community Irrigation		3,163,662	149,966,157	
CRC992096.2	CO6C/21570	SWTAKE	Des Conlan Trust		511,704	149,966,157	Allocation included in CRC021504.1
CRC992778.1	CO6C/16036	SWTAKE	Mr & Mrs T W & J K Allan	1,638,144		151,604,301	
WTK750911	CO6C/05688	SWTAKE	Aviemoire Limited	176,400		151,780,701	
WTK894451	CO6C/10020	SWTAKE	Waitaki District Council	63,072		151,843,773	
Subtotal issued				151,843,773			

In process

CRC011989	CO6C/17887	SWDIVERT	Padkins Creek Community Race	756,000		152,599,773	
CRC031136	CO6C/20108	SWTAKE	Irrigation North Otago Limited			152,599,773	
CRC031137	CO6C/20108	SWDIVERT	Irrigation North Otago Limited			152,599,773	
CRC020744.1	CO6C/18615	GWTAKE	Mr W N Cameron	1,948,500		154,548,273	
CRC063815	CO6C/18838	GWTAKE	Mr E R Rutherford	706,250		155,254,523	
CRC070328	CO6C/25588	SWTAKE	Waitaki Valley Vineyards Ltd	490,500		155,745,023	
CRC070329	CO6C/25588	GWTAKE	Waitaki Valley Vineyards Ltd	19,158		155,764,181	
CRC073124	CO6C/06323-02	GWTAKE	Clarkefield Holdings (1996) Limited	287,500		156,051,681	Combined annual volume with CRC061919 and CRC962259
CRC061919	CO6C/06323	SWTAKE	Clarkefield Holdings (1996) Limited	1,053,920		157,105,601	
CRC061919	CO6C/06323	GWTAKE	Clarkefield Holdings (1996) Limited		1,053,920	157,105,601	
CRC061931	CO6C/06323	GWTAKE	Clarkefield Holdings (1996) Limited	66,080		157,171,681	
CRC051279	CO6C/22604-02	SWTAKE	Mr M W Hutton	42,000		157,213,681	
CRC040989	CO6C/21144	SWDIVERT	Mr N J Small	946,080		158,159,761	

CRC040989	CO6C/21144	SWDIVERT	Mr N J Small	4,140,000		162,299,761	
CRC051766	CO6C/21144-02	SWTAKE	Mr N J Small		1,540,000	162,299,761	
CRC021585	CO6C/22260	SWTAKE	Star Holdings Limited	15,000		162,314,761	
CRC032177	CO6C/20563	SWTAKE	Hakataramea Valley Irrigation Inc	11,142,000		173,456,761	
CRC032220	CO6C/11022	SWTAKE	Foveran Station Limited	3,657,000		177,113,761	
CRC040446	CO6C/20423	GWTAKE	Mr & Mrs R J & J M Meikle	144,300		177,258,061	
CRC050940	CO6C/06556	SWTAKE	Mr & Mrs R G & Z L Pringle		612,000	177,258,061	
CRC050957	CO6C/06556	SWDIVERT	Mr & Mrs R G & Z L Pringle	612,000		177,870,061	
CRC061399	CO6C/24272	SWTAKE	Waitaki Orchards Limited	111,810		177,981,871	
CRC073249	CO6C/16249	SWTAKE	Sunny Downs Limited	626,750		178,608,621	
CRC981376	CO6C/14209	SWTAKE	Hakataramea Station 1990 Limited	357,000		178,965,621	
CRC062067	CO6C/05382	SWDIVERT	Warnbro Enterprises Limited	266,212		179,231,833	
CRC041002	CO6C/18615	SWTAKE	Mr W N Cameron	647,700		179,879,533	
CRC041003	CO6C/18615	SWTAKE	Mr W N Cameron	381,000		180,260,533	
CRC071327	CO6C/24430	SWTAKE	Mr A L & Mrs G K Trainor	51,840		180,312,373	
CRC031592	CO6C/20354	SWTAKE	R H & J Robertson Family Trust	354,250		180,666,623	
CRC041004	CO6C/08692	GWTAKE	Maerewhenua District Water Resource Company Limited	5,868,270		186,534,893	
CRC051767	CO6C/19089	SWTAKE	RPNZ Properties Limited	252,000		186,786,893	
CRC051768	CO6C/19089	GWTAKE	RPNZ Properties Limited	212,000		186,998,893	
CRC051769	CO6C/19089	GWTAKE	RPNZ Properties Limited	216,000		187,214,893	
CRC051795	CO6C/09200	SWDIVERT	Station Peak Partnership & Wainui Farm Limited	2,669,760		189,884,653	
CRC072756	CO6C/22260	SWTAKE	Star Holdings Limited	1,356,048		191,240,701	
CRC070826	CO6C/23822	SWTAKE	Mr M S Gillingham		175,000	191,240,701	Allocation included in CRC070820
CRC070820	CO6C/23822	GWTAKE	Mr M S Gillingham	175,000		191,415,701	
CRC951776.5	CO6C/22260	SWTAKE	Star Holdings Limited	1,356,048		192,771,749	
CRC950464.2	CO6C/14209-03	SWTAKE	Hakataramea Station 1990 Limited	89,250		192,860,999	
CRC012051	CO6C/17885	SWTAKE	Westmere Estate Limited	2,660,515		195,521,514	
CRC071114	CO6C/13526	SWDIVERT	Mr & Mrs R W & M E Sutton	500,000		196,021,514	

CRC073237	CO6C/25028	SWTAKE	Torach Farm Limited	1,225,000		197,246,514	
				Subtotal in process	45,402,741		
				TOTAL	197,246,514		

Other Activities

Issued

CRC981015	CO6C/06698	SWDIVERT	Waimate District Council				No consented rate or volume
				Subtotal issued	0		
				Subtotal in process	0		
				TOTAL	0		

Hydro-electricity generation

Issued

Consents not listed as there is no numerical limit specified in the Waitaki Regional Plan for hydro-electricity generation.

Downstream of Waitaki Dam but downstream of Black Point

Town & Community

Issued

CRC061444	CO6C/24285	SWDIVERT	Waitaki District Council, C/- Opus	0			temporary divert for works. No rate of volume.
				Subtotal issued	0		
				Subtotal in process	0		
				TOTAL	0		

Industrial & Commercial

Issued

CRC021450	CO6C/14913	SWTAKE	Sanford Limited (Timaru)	15,768,000		15,768,000	
CRC990438	CO6C/14913	GWTAKE	Sanford Limited (Timaru)	1,135,150		16,903,150	
				Subtotal issued	16,903,150		
				Subtotal in process	0		
				TOTAL	16,903,150		

Agriculture & Horticulture

Issued

CRC000334.1	CO6C/18439	SWTAKE	Waitaki North Limited	341,280		341,280	
CRC000613	CO6C/06811	SWTAKE	T H Edzes	910,080		1,251,360	
CRC000897	CO6C/12080	SWTAKE	Morven Glenavy & Ikawai Irrigation Limited	106,790,400		108,041,760	
CRC000943	CO6C/11170	SWTAKE	Retell Holdings Limited	281,556		108,323,316	
CRC000945	CO6C/07005	GWTAKE	Geoff Wallace Holdings Limited	1,842,912		110,166,228	
CRC000946.1	CO6C/25080	GWTAKE	Baylyn Farm Limited	464,141		110,630,369	
CRC011913	CO6C/16439	SWTAKE	Invernia Holdings Limited	1,398,446		112,028,815	
CRC012747	CO6C/18255	GWTAKE	Morven Glenavy Properties Limited	95,558		112,124,373	
CRC021983	CO6C/06751	GWTAKE	Mr G W Dovey	273,024		112,397,397	
CRC030342	CO6C/15986	SWDIVERT	Mr A J Bell	16,381,440		128,778,837	
CRC030342	CO6C/15986	SWTAKE	Mr A J Bell		662,143	128,778,837	
CRC031265	CO6C/17989	GWTAKE	Amuriwai Partnership	450,490		129,229,327	
CRC064081	CO6C/25325	SWTAKE	Mr & Mrs A R & L G Gibson	193,300		129,422,627	
CRC897372A	CO6C/12080	SWDIVERT	Morven Glenavy & Ikawai Irrigation Limited			129,422,627	No consented rate or volume. Associated with CRC000897.
CRC897381B	CO6C/12080	SWDIVERT	Morven Glenavy & Ikawai Irrigation Limited			129,422,627	No consented rate or volume. Associated with CRC897381C.1.
CRC897381C.1	CO6C/12080	SWTAKE	Morven Glenavy & Ikawai Irrigation Limited	254,517,120		383,939,747	
CRC940846	CO6C/09558	GWTAKE	Waimate District Council	596,045		384,535,792	
CRC950648.1	CO6C/05275	SWDIVERT	Lower Waitaki Irrigation Company Limited	302,572,800		687,108,592	
CRC950649.1	CO6C/05275	SWTAKE	Lower Waitaki Irrigation Company Limited		302,572,800	687,108,592	
CRC961914.1	CO6C/12071	SWTAKE	Maldah Farming Company Limited	268,600		687,377,192	
CRC971706.1	CO6C/18605	SWTAKE	Mr & Mrs P C & R M Derwin	475,580		687,852,772	
CRC980851	CO6C/06751	GWTAKE	Mr G W Dovey	237,790		688,090,562	
CRC981689.1	CO6C/18780	SWTAKE	Rua Farming Company Limited	45,728		688,136,290	
CRC992244	CO6C/09885	SWTAKE	Mr G C van't Klooster	135,371		688,271,661	
Subtotal issued				688,271,661			

In process

CRC063461	CO6C/25080	GWTAKE	Baylyn Farm Limited	2,135,760		690,407,421	
CRC060827	CO6C/24033	GWTAKE	Thanet Farm Limited	342,000		690,749,421	
CRC040428	CO6C/20823	SWTAKE	Waihao Downs Irrigation Limited	38,000,000		728,749,421	
CRC040823	CO6C/21016	SWTAKE	Elephant Hill Limited	571,500		729,320,921	
CRC042124	CO6C/14790	GWTAKE	Mr & Mrs D D & V J Chalmers	522,000		729,842,921	
CRC063375	CO6C/24629	SWTAKE	Redcliff Dairy Farm Limited	120,000		729,962,921	
CRC071029	CO6C/25821	SWTAKE	The South Canterbury Irrigation Trust & Meridian Energy Limited	251,000,000		980,962,921	
CRC071033	CO6C/25821	SWDIVERT	The South Canterbury Irrigation Trust & Meridian Energy Limited			980,962,921	On hold under s.91
CRC074131	CO6C/26813	GWTAKE	Mr L R H White	495,590		981,458,511	
Subtotal in process				293,186,850			
TOTAL				981,458,511			

Other Activities

Subtotal issued	0
Subtotal in process	0
TOTAL	0

Hydro-electricity generation

Consents not listed as there is no numerical limit specified in the Waitaki Regional Plan for hydro-electricity generation.