

**Before the Commissioners appointed by Canterbury  
Regional Council**

**IN THE MATTER OF** The Resource Management Act  
1991

**AND**

**IN THE MATTER OF** Application CRC061154 by Five  
Rivers Limited for a Water Permit  
to take & use surface water.

## **Section 42A Officer's Report of Claire Penman**

**Date of Hearing: 21 September 2009**

1. This report should be read together with the introductory s42A report which gives an overview of all applications presented at this hearing (Report 1), the planning and technical reports on hydrology and minimum flows (Report 2A and 2B), the planning report outlining annual allocations (Report 3) and the reports on cumulative landscape and water quality effects in the catchment (Reports 4A – F and 5).

### **INTRODUCTION**

2. Five Rivers Ltd (the applicant) have applied for a resource consent to:
  - (a) Take and use 950 litres per second, with a volume not exceeding 8,958,000 cubic metres per year, from Lake Ohau at Ohau Downs Station, adjacent to Lake Ohau Road and State Highway 8, for spray irrigation of 1,493 hectares of crops and pasture, excluding dairy cows;

See Attachment One for a map of the location of take and irrigation areas.

3. The applicant engaged Ms Jenny Geddes of Irricon Resource Solutions (formerly R J Hall) to prepare the application and assessment of environmental effects on their behalf. Subsequently, Mr Craig McKibbin of Mitchell Partnerships has been engaged to respond to further information requests.
4. A 16 year duration to 2025 is sought.
5. This is an application for a new activity.
6. A site visit was undertaken by myself in January 2009

### **Background**

7. Application CRC061154 was lodged on 6 October 2005 and considered to be notifiable on that date. Requests for further information have been sent covering effects including, but not limited to, water quality, landscape, irrigation volumes, intake design and derogation approvals.

8. The only minor change to the application since lodgement is a reduction in volume being sought from 9,000,000 cubic metres per year associated with a reduction in area from 1,500 hectares to 1,493 hectares.
9. An area of 1260 hectares of the property is under QEII Trust covenant, adjacent to the proposed irrigation area (see map in Attachment One).
10. A consent to take and groundwater (CRC061155) on the same area of land has also been lodged by the applicant but is currently on hold pending the outcome of this application. Should this consent be granted then it will be withdrawn.
11. Additional consents to discharge effluent from the proposed dairy farms has been lodged and is in the process of being audited. An application has also been lodged to install the intake structure. This was not submitted to CRC in time for the information to be incorporated into this report. The remainder of this report is written on that basis.
12. Another application is also being sought by Southdown Holdings Ltd, in conjunction with this applicant, to irrigate a 400 hectare area also subject to this consent. (CRC040835). That application is addressed in Report 35A.

## Notification

13. Details of the notification and wording are contained in Appendix 4 of the introductory s42a report (Report 1). This consent was notified in August 2007 with 200 other applications for similar activities in the Waitaki catchment.

## Submissions

14. In the 2007 public notification, 25 submissions in total were made on the water permit application. Of these:
  - (a) 4 were in support;
  - (b) 19 in opposition; and
  - (c) 2 neither supported nor opposed this application.
15. Details of submissions made in response to all applications which were publicly notified at the same time in 2007 are contained in Report 1, Appendix 5. Additionally, Table 1 below summarises submissions made individually on this application, or submissions which raise particular concerns in relation to this proposal. Please note that all submissions hold equal importance, even if not specifically listed below.
16. Overall, the key effects of concern to submitters include effects on: ecosystems, water quality, allocations, minimum flows, natural character and landscape, efficiency and cultural values.

Submitter	Issues	Support/ Neutral/ Oppose	To be heard
Ohau Snow Holdings	Consider they have priority to water in the Lake Ohau catchment	Oppose	Yes
Fish & Game NZ	Takes in the catchment may exceed those in the Plan	Oppose	Yes
Meridian Energy Ltd	Concerned about water quality, metering and	Oppose	Yes

	health & safety due to location of the take		
TJ & J Cooke	Assist in management of land but need to grant Williamson Holdings Ltd consents first	Support	Yes
Southdown Holdings Ltd (previously Williamson Holdings Ltd)	Assist in management of land but need to grant Williamson Holdings Ltd consents first	Support	Yes
Blue Family Trust	Loss of amenity value on shores of Lake Ohau as neighbour to proposed operation	Oppose	Yes

**Table 1: Summary of specific submissions on application CRC061154**

## DESCRIPTION OF THE PROPOSED ACTIVITY

17. The applicant proposes to take water from Lake Ohau to irrigate an area of 1500 hectares within a command area of approximately 4000 hectares of Ohau Downs Station (see photos of irrigation area and take points in Attachment Two). The intake structure will be located within a 2 kilometre stretch of lakefront but the exact location has not yet been confirmed.
18. The applicant has also not yet provided details about the pump station/intake design and whether or not works in, on or under the bed and banks of the lake will be required to install the intake structure. An application for resource consent under section 13 has been lodged.
19. The applicant states that water will be conveyed from the intake to the proposed centre pivots, however, the method of conveyance has not yet been specified.
20. The proposed annual volume does not include any provision for stock water for the property.
21. I note that the application as lodged and notified specifically excluded milking dairy cows from the property. However, the applicant appears to be seeking to use this land for dairying. I consider this is beyond the scope of the application as notified based on the increase in effects on water quality.
22. The applicant proposes the following activities:
 

CRC061154

  - (a) To take and use water from Lake Ohau at a maximum rate of 950 litres per second, with a volume not exceeding 8,958,000 cubic metres per year, between map references NZMS 260 H38:6566-5350 and H38:6298-5280.
  - (b) Water shall be used for spray irrigation of up to 1,493 hectares of crops and pasture excluding dairy cows, within a command area of 4,000 hectares.
  - (c) A minimum lake level of 519.45 metres above sea level is proposed, in accordance with the WCWARP.
  - (d) A fish screen will be installed on the intake, however, details of this have not been provided.
  - (e) The take of water will be metered.

## LEGAL AND PLANNING MATTERS

### Consent Requirements

23. An overview of the consent requirements under the Resource Management Act (RMA), Transitional Regional Plan (TRP) and Waitaki Catchment Water Allocation Regional Plan (WCWARP) for water permit applications is provided in the introductory s42A report (Report 1). A summary of the requirements for this application is provided below:

#### TRP

The TRP permits the abstraction of surface water from any surface waterway provided the annual volume abstracted is less than 10 cubic metres per day, and the rate of take is limited to 5 litres per second. Given that the proposed take exceeds these limits, consent is required as a discretionary activity

#### WCWARP

- (a) Rule 3, clause (1) – The applicant proposes to adopt the minimum lake level for Lake Ohau of 519.45 metres above sea level (Table 4, row (iii)).
  - (b) Rule 6 – The activity is within the annual allocation limit of 275 million cubic metres for agricultural activities upstream of Waitaki Dam (see details of annual allocation in Report 3).
  - (c) Rule 6 – The activity exceeds the annual allocation limit of 12 million cubic metres for agricultural activities upstream of the Lake Ohau outlet. Details of allocation and priority are contained in Report 3.
  - (d) Rule 18 – Classifying rule – non-complying activity
24. Overall, the proposed water permit is a **non-complying** activity under Rule 18 of the WCWARP (and TRP) and resource consent is required in accordance with section 14 of the RMA.
25. Consent is required under section 13 of the RMA to undertake works in the bed and banks of Lake Ohau (see paragraph 18).
26. No discharges are associated with the system and therefore no consent under section 15 of the RMA is required.

### Priority

27. There is no instantaneous allocation limit for takes from Lake Ohau under Rule 3.
28. For Rule 6, annual allocation, refer to Report 3 for a full list of all existing consent holders and all applicants in priority order.
29. For application CRC061154, the allocation limits are exceeded for the annual allocation above Lake Ohau and there may therefore be priority issues.

### Derogation Approval

30. At the time of preparing this report, Meridian Energy Limited (MEL) had not provided approval for Five Rivers Limited to derogate from its consents.

## CONSULTATION

31. The applicant did not undertake any consultation prior to notification, as they considered that the application was likely to be publicly notified as part of the Waitaki Catchment call-in process. I am unsure if any consultation has occurred since notification.

## DESCRIPTION OF THE AFFECTED ENVIRONMENT

32. A description of the values of the Mackenzie Basin and Lake Ohau in general are provided in the introductory s42A report (Report 1).
33. In addition to the above overall summary, the applicant notes the following:
- (a) Much of the property is suffering from soil loss through the combined effects of low and irregular rainfall, and invasion by hieracium and wilding pines from the north-west.
  - (b) The property has on it several lagoons, and Six Mile Creek runs through the property.
  - (c) Approximately 1200 hectares is protected under QEII Trust covenant to maintain the ecological values of the area including several lagoon ecosystems.
34. I also note the following:
- (a) Page 22 of the WCWARP identifies some of the issues relating to water allocation around Lake Ohau, including: iconic nature of lakes and surrounds; high natural character; high landscape and visual amenity values; recreation; hydro-electricity generation; and irrigation within area and out-of-catchment.
  - (b) Lake Ohau Road leading to the tourist destination of Lake Ohau Village dissects the proposed irrigation area.
  - (c) Parts of the applicant's property on either side of Lake Ohau Road (not within the irrigation area) are designated as "*Outstanding Natural Landscape*" in Proposed Variation 2 to the Waitaki District Plan.
  - (d) There are no sites of historical or cultural significance within the vicinity of the proposed irrigation area.
  - (e) Photos in Attachment Two show the rolling nature of the area which has been formed from glacial moraine. The majority of the irrigation area on the north side of Lake Ohau Road will be location on a terrace that is not visible from the road. However, the area to the south of Lake Ohau Road will be visible to traffic travelling up the Lake Ohau valley.
35. There is one existing consented user of water within the Lake Ohau catchment and four other applications for new or replacement consents, one of which has higher priority for agricultural and horticultural purposes (refer to Report 3 for further details of priority). These are:
- (a) Waitaki District Council (CRC001915) – 2.2l/s from an unnamed tributary of Lake Ohau for town and community supply.

- (b) Ohau Snow Holdings (CRC061101 – replacement in process) – 1 l/s from an unnamed tributary of Lake Ohau for town and community supply.
- (c) Ohau Snow Holdings (CRC061735 – in process) – 20 l/s from an unnamed tributary of Lake Ohau for tourism and recreational purposes.
- (d) Southdown Holdings Ltd (CRC040835 – in process) – 1,200l/s from Lake Ohau for agricultural and horticultural purposes.
- (e) FE & AE Dennis (CRC082361 – in process) – 1.5l/s from an unnamed tributary of Lake Ohau for agricultural and horticultural purposes.

## ASSESSMENT OF PROPOSED ACTIVITY

- 36. The proposed water permit is a non-complying activity and must be considered in the context of s104D of the RMA.
- 37. Section 104(1) outlines matters that the consent authority must have regard to when considering an application for a resource consent, including any actual and potential effects on the environment, any relevant statutory provisions, and any other matter the consent authority considers relevant.

### Assessment of actual and potential effects (s104(1)(a))

- 38. The effects that have been considered for this type of activity (surface water abstraction) are presented in the introductory s42A report (Report 1). That report includes the presentation of the relevant planning provisions which direct us to consider these effects. A summary table regarding the assessment of individual effects for this application is provided below and a detailed discussion of those outstanding matters or areas of concern is provided in the following sections.

Adverse Effects	Applicant's assessment	IO assessment	Conclusion
Ecosystems	Consider with fish screen & min lake level that effects minor.	Minimum lake level as set out in Table 3 which takes into consideration protection of ecosystems. If a fish screen is installed which is in accordance with recommended conditions, then effects minor.  I note that there are outstanding submissions regarding effects on ecological values that have not been addressed by the applicant, therefore I cannot conclude effects are minor.	Effects on aquatic ecosystems minor provided fish screen is suitable. Effects on terrestrial ecosystems may be more than minor. An assessment and mitigation is required by the applicant
Other water users	Only parties potentially affected are MEL as abstraction will reduce their generating capacity, and Southdown Holdings who have higher priority. Water	Water meter proposed. This applicant has lowest priority for new applications but existing consented users of lake have no min lake level on their consents. MEL controls the lake level through the operation of	Effects may be more than minor. Assessment needed from applicant on

	meter proposed..	the hydro scheme, and has provided derogation approval, therefore no effects on other users. Min lake level will ensure recreational users are not affected by take. However, total allocation exceeds that available for agricultural and horticultural activities upstream of Lake Ohau outlet and applicant has not assessed any reduction in water availability for other activities.	allocation to other activities.
People, communities & amenity values	<p>No individual assessment on landscape provided. Applicant considers that cumulative effects beyond scope of Regional Council.</p> <p>Recreational &amp; amenity effects considered to be minor as intake will not be visible and pump station will be discrete and not visibly intrusive on the environment.</p> <p>Applicant considers that there will be improved productivity of the land &amp; positive economic benefits for the wider community.</p>	<p>The irrigation is in a high amenity area on the lake edge, adjacent to a QEII covenant area and is visible to general traffic travelling to Ohau Village and users of the lake. Cumulative landscape effects have not been dealt with by the applicant, but I note they are not irrigating within the "Outstanding Natural Landscape" area, however land on the boundary. Conclusions of Chris Glasson on landscape effects (Report 5) consider that effect on landscape from this proposal are likely to be significant. He considers that proposal requires modifying the irrigated area so that there is a significant buffer from the irrigated area to moraine hills, lake edge and road edge. And to exclude these areas from proposed irrigation area.</p> <p>Appropriate min lake level proposed to protect recreational use and aesthetic amenity of waterway. Noise from pumping may affect peaceful surroundings of lake and pump station may be visible to users of the lake. I note that a submission has been lodged by the adjacent property owner in opposition to this proposal.</p> <p>I agree with the positive effects of the proposal identified by the applicant.</p>	Effects may be more than minor. Applicant needs to provide appropriate mitigation to protect landscape and amenity values and mitigation to ensure effects on amenity values are minor.
Inefficient use	Annual volume of 8,958,000m <sup>3</sup> .	Using the methodology outlined in Report U05/15, a volume of 7,743,750m <sup>3</sup> /yr would be more appropriate.	Effects may be more than minor.
Water quality	MWRL study for cumulative effects. Local effects minor as not dairying and efficient irrigation proposed.	Not satisfied given conclusions in s42A report on cumulative effects (Report 4A). QEII covenant area adjacent to the property and dairying is proposed. There are a number of submitters to be heard	Effects may be more than minor.

		on this matter.	
Tangata Whenua values	No assessment provided.	Submissions are concerned about effects on Tangata Whenua values & have not been addressed by applicant.	Effects uncertain.

**Table 2: Summary of Assessment of Effects for CRC061154**

### **Adverse effect on other water users**

39. There are no existing consented users from Lake Ohau that are restricted by minimum lake levels. However, there is one applicant seeking a replacement consent with higher priority (see Report 3 for a list of consents and existing priority).
40. MEL controls the lake level through the operation of the hydro scheme, and has provided derogation approval for this application to derogate from their existing consents for hydro-electricity generation.
41. There is not instantaneous allocation limit for Lake Ohau, however, the total annual allocation under the proposed applications exceeds that available for agricultural and horticultural activities upstream of Lake Ohau outlet of 12 million cubic metres per year. The applicant has not assessed the effects of any reduction in water available for other activities as required under Policy 12 of the WCWARP.
42. I also note that Annex 1 of the WCWARP at paragraph 76 states that *“The environmental level and flow regimes, and the allocations to activities, are two key components of the allocation framework established by this Plan. They should be binding except in specific cases where it can be established that the adverse environmental effects of the proposal are minor, and where the activity is not contrary to the objectives and policies of this Plan.”*
43. The applicant has not provided any assessment of the effects of granting an application over the allocation limits on entitlements to other activities, therefore, I cannot conclude that effects on other water users are minor.

### **Adverse effect on people, communities and amenity values**

#### ***Landscape effects***

44. The applicant has not addressed the potential effects on landscape. They stated in their response to a further information request received 15 December 2006 that *“a technical assessment of effects on natural character and landscape values both individually and cumulatively in the catchment is proposed to be undertaken”*. To date this has not been received from the applicant.
45. During my site visit, the applicant commented to me that the proposed irrigation areas will not be within 500 metres of Lake Ohau Road. In addition, they pointed out that the area to the north of Lake Ohau Road is not visible from the road as it is set down below a terrace. However, the area to the south of the road will be visible to traffic travelling up the Lake Ohau valley.
46. I have reviewed the Waitaki District Plan and note that none of the land area subject to this application is designated as Outstanding Natural Landscape through Proposed Variation 2 to the Waitaki District Plan.
47. A number of submitters have raised concerns with regard to effects on natural character and amenity values through the change in landscape within the Mackenzie

basin. This matter is discussed in separate reports prepared by Dr Mike Freeman and Chris Glasson on landscape effects (Report 4F and 5). Mr Chris Glasson has concluded that that effect on landscape from this proposal are likely to be significant. He considers that the proposal requires modifying the irrigated area so that there is a significant buffer from the irrigated area to moraine hills, lake edge and road edge. These areas should be excluded from the proposed irrigation area. He also considers they should modify the area so that it is compatible with landform patterns on both sides of the road so as to retain a consistent landscape. The shape of the irrigated area must be made compatible with the landforms. This means avoiding the moraine hills, mountain tarn, and that there needs to be a significant buffer from the road. The boundary edge of site needs to be compatible with landform pattern.

48. As the conclusions reached by Mr Glasson consider the effects may be more than minor, I am not satisfied that the adverse effects on people, community and amenity values, in terms of effects on landscape as a result of irrigation, will be minor.

#### ***Recreational and amenity values***

49. An appropriate minimum lake level has been proposed by the applicant and I consider that in setting minimum flows for the WCWARP, protection of recreational and amenity values on each water body would have been taken into account (see Policy 41).
50. A submission from the adjacent property owner in opposition to this proposal has been received. They are concerned about noise from pumping station that may affect the peaceful surroundings of lake, and the visibility of pump station and associated infrastructure and access track may be visible to users of the lake.
51. No mitigation measures regarding these concerns have been provided, therefore, I am not satisfied that the adverse effects on people, community and amenity values, in terms of visual effects from the pump station will be minor.

#### **Adverse effects of inefficient use on other users**

52. The taking of water in excess of that required for the intended use may contribute to water levels being unnecessarily reduced and less water available for other users. A number of submitters have identified this issue.

#### ***Irrigation volumes***

53. The applicant proposes to take water at a rate not exceeding 950 litres per second, and use up to 8,958,000 cubic metres of water per year for irrigation of 1,493 hectares. The irrigation volume has been based on the volume adopted by Mackenzie Irrigation Company of 600 millimetres per hectare per year.
54. The applicant states that the maximum gross depth of water applied will be 5 millimetres per day. They expect the evapotranspiration rates to be over 6 millimetres per day in the peak summer months. They therefore consider that the proposed volume is efficient.
55. In response to a request for further information regarding efficiency, the applicant provided details on the soils and application rates. They note that the soils have an average water holding capacity of 70 millimetres and the amount of water applied for equates to 4.9mm/ha/day over the 1,493 hectares.
56. However, I note that at the proposed rate of 950 litres per second, irrigation equates to a gross daily application depth of 5.4mm/ha/day and an application depth of

4.3mm/ha/day at 80% efficiency. They have not proposed any return period for irrigation.

57. As a comparison to the applicant's annual volume calculation, I have used CRC's GIS system and the method outlined in Report U05/15 to determine an appropriate annual volume for irrigation of the proposed area in accordance with Policy 16(c). I based this calculation on intensive land use with 25% light soil (PAW <75mm), 50% medium soil (PAW 75-110mm) and 25% heavy soils (PAW >110mm) and Effective Summer Rainfall of 230mm. The PAW of the soils in the proposed irrigation area range from 30mm to 130mm, but are predominantly between 75-110mm.
58. Using the above figures, the recommended annual volume for each soil class is 2,193,750 cubic metres for light soils, 3,900,000 cubic metres for medium soils and 1,650,000 cubic metres for heavy soils. I therefore consider a volume of 7,743,750 cubic metres would be an efficient volume of water for irrigation of this area using one of the methods outlined in Policy 16(c).
59. I note that this methodology (Report U05/15) assumes an irrigation efficiency of 80% which is largely achievable for modern spray systems (consistent with Policy 16(b)) and takes into consideration on-site physical and climatic factors (Policy 16(a)).
60. Given the above discussion, I am not satisfied that the annual volume being sought by the applicant of 8,958,000 cubic metres per year would be reasonable and appropriate for the area and method of irrigation proposed.
61. I also consider that an efficiency condition (WP05) is appropriate to ensure that water is not applied to the soils above their average water holding capacity, nor onto unproductive areas of land.
62. Given the above discussion, I am not satisfied that that the proposed seasonal allocation is reasonable for the proposed irrigation area.

## **Adverse effect of use on water quality**

### ***Local effects***

63. In terms of effects at the local scale, the applicant has considered, given the depth to groundwater, that with efficient irrigation management practices (i.e. not exceeding soil infiltration rate and appropriate irrigation scheduling), there should be no surface runoff or potential for deep percolation of water and nutrients beneath the root zone. In addition, the applicant notes that the property will be used for intensive beef and sheep and will not be used for intensive cropping or dairying purposes. They therefore conclude that effects on groundwater quality would be minor.
64. Several submitters raised specific concerns with the local effects on water quality of this proposal.
65. As a full mitigation suite and assessment of residual effects on water quality has not yet been provided, I cannot be satisfied that the adverse effects on water quality from the proposed activity will be minor.

### ***Cumulative effects***

66. An assessment of cumulative effects on water quality was requested to address the above concerns and in reference to Policy 13 of the WCWARP. The applicant has

been involved with the study by Mackenzie Water Research Ltd (MWRL) on cumulative effects within the catchment.

67. There are a number of submissions which identify water quality as a result of land use intensification as a concern. Those submitters and their concerns are outlined in more detail in Appendix 5 of Report 1.
68. The report by MWRL has been audited and a separate s42a overview report prepared by Dr Mike Freeman as well as numerous technical s42A reports (see Reports 4A-F).
69. The conclusion of Dr Mike Freeman and other experts (as outlined in Reports 4A-F) is that given the significant level of uncertainties involved in, and technical concerns with, critical aspects of the MWRL/GHD assessment of the adverse effects, together with the lack of mitigation measures yet proposed by resource consent applicants means that it is premature to make adequate conclusions about the potential adverse cumulative effects.

### **Adverse effect on Tangata Whenua values**

70. The applicant has not provided an assessment of the effects of the proposed activity on cultural values. The sites of the proposed activities are within the rohe of Te Runaka O Waihao, Te Runaka O Arowhenua and Te Runaka O Moeraki. All three runanga and Te Runanga O Ngai Tahu were served notice of the applications in August 2007.
71. Submissions were received in opposition to this application from Te Runanga o Ngai Tahu and Ngai-Tahu Mamoe Fisher People. The concerns of the Ngai-Tahu Mamoe Fisher People seem to relate specifically to the resource consent process, rather than this specific application.
72. Te Runanga o Ngai Tahu have raised concerns relating to mixing of waters between catchments, deterioration of water quality, dewatering and residual flows, changes to sediment flow and deposition and impacts on sites of cultural significance.
73. Lake Ohau has a statutory acknowledgement in the Ngai Tahu Claims Settlement Act 1998.
74. Given that there are a number of submissions which identify cultural values, I cannot determine the scale of actual and potential effects on the cultural values of the area.

### **Overall Conclusion**

75. With regard to s104D(1)(a), the actual and potential effects of the activities have been discussed above. For this consent, I cannot confirm that under s104D(1)(a), the actual and potential effects of the proposed activity are minor when taking account the proposed mitigation. In particular, there is uncertainty regarding the following aspects of the application:
  - (a) The localised and cumulative impacts on water quality;
  - (b) Effects on amenity and landscape values from irrigation of the proposed area;
  - (c) The effects on terrestrial ecological values from the proposed irrigation;

- (d) Whether granting this application over the allocation limit would affect the entitlement to other activities;
  - (e) Whether the annual volume requested represents an efficient use of water;
  - (f) The effects on cultural values in the area.
76. The impacts on aquatic ecosystems can be mitigated, if the recommended conditions requiring installation of a suitable fish screen are included, should the Commissioners decide to grant consent for this activity.

## **Statutory Assessment (s104(1)(b))**

### **Regional Policy Statement (RPS)**

77. Under Section 104(1)(b)(iii) of the RMA, the consent authority shall have regard to any relevant regional policy statement. The Canterbury Regional Policy Statement has been operative since 26 June 1998.
78. Of significance to this application is Chapter 9, which relates to the management of the Region's water resources and Chapter 10 which relates to beds of lakes and rivers. The WCWARP and PNRRP take into account policies in the RPS and address the issues outlined in more detail. Any assessment of effects has been made using these documents and therefore I have had regard to the RPS throughout this assessment.

### **Waitaki Catchment Water Allocation Regional Plan (WCWARP)**

79. The objectives and policies of the WCWARP that are relevant to each potential adverse effect have been identified in the introductory s42A report. A table of all those objectives and policies considered to be relevant to this application is appended in Attachment Three. A discussion of the objectives and policies that I consider are particularly relevant when deciding this application is provided in the following paragraphs.

#### **Objectives**

80. Objective 1 is a key objective in relation to the proposed taking of water. I have considered whether Objective 1 can be met in terms of sustaining the quality of the river and surrounding environment. While the proposal may not entirely be consistent with Objective 1 and the associated policies (particularly policy 13 relating to water quality and policies 15 & 16 relating to efficient use), it is difficult to determine if the inconsistencies are significant enough to make the proposal contrary to Objective 1.
81. The proposed activity will impact on the matters outlined in Objective 1. In particular, (a) relating to spiritual and cultural values, given that effects on Tangata Whenua have been raised as a concern by submitters and have not yet been addressed by the applicant, and (b) life-supporting capacity of river and ecosystems, given that the potential adverse effects on water quality remain an outstanding concern. The cumulative impacts of the proposal on natural character and landscape values of the catchment (c) may be addressed by requiring appropriate buffer distances between the irrigation area and sensitive areas, such as the conservation area and Lake Ohau Road. There have been a wide range of people who have submitted against the proposed activity due to concerns about impacts on these values. Given this, and that no mitigation has been proposed by the applicant, I cannot determine whether the proposed activity is contrary to these values at the time of preparing this report.

82. The proposed activity exceeds the annual allocation limits set out in the WCWARP for agricultural and horticultural activities upstream of Lake Ohau. The applicant has not provided an assessment of the effects on entitlements to other activities in Objective 2 and therefore, is not be consistent with this objective.
83. Objective 4 aims to achieve a high level of technical efficiency in the use of water. The applicant has not provided sufficient information to confirm that the annual volume of water requested is reasonable to meet he demands of the soils within the irrigation area, therefore, the proposal may not be consistent with Objective 4.
84. The proposed activity will not affect the reliability of supply to other users taking water from Lake Ohau, therefore, it may be considered to be consistent with Objective 5 of the WCWARP.

#### ***Environmental flow and level regimes***

85. Policies 2 – 8 deal with minimum lake levels for Lake Ohau.
86. Policies 3 and 4 outline the values that must be maintained in the water bodies, and a number of matters that must be considered when setting an environmental flow and level regime, and are particularly relevant to this application. As the applicant is proposing to adopt the minimum lake level required by the WCWARP, I am satisfied that the proposal is consistent with these policies.

#### ***Policies on water quality***

87. Policy 13 deals with water quality issues resulting from land use intensification and enables the consent authority to have regard to the water quality objectives in the PNRRP. The WCWARP incorporates by reference Objectives WQL1, 2 and 3 of the PNRRP which contain particular outcomes to be achieved in the regions waterbodies. Report 4F, by Dr Mike Freeman, addresses this policy in more detail, particularly on the cumulative scale. Given his conclusions, I cannot determine if this application is contrary to this policy.

#### ***Policies on the allocation to activities***

88. Policies 10 to 14 deal with the allocation to activities. Policies 10 and 14 are not applicable to this application.
89. Policy 12 outlines a number of matters that must be considered and links directly to Rule 6 and the annual allocations to activities outlined in Table 5 of the WCWARP. The proposed activity exceeds the annual allocation limit set for this type of use upstream of Lake Ohau outlet. Therefore the proposed activity may be contrary to this policy.

#### ***Policies on efficient and effective use***

90. Policies 15 – 20 deal with efficient and effective use and all are applicable to this application.
91. Policy 15 ensures that the rate of abstraction and the annual volume is reasonable for the intended use. As discussed in the assessment of effects section of this report, I am not satisfied that the annual volume is reasonable for the intended use.
92. Policy 16 provides guidance for determining reasonable and efficient use for agriculture activities. As discussed in the assessment of effects, I am not satisfied that the requested volume of water is required under this consent application.

### **Policy for Lake Ohau**

93. Policies 35-37 deal with setting minimum lake levels that recognise the iconic nature and the mana of Lakes Tekapo, Pukaki and Ohau, and enable appropriate access to water for the activities identified in Objective 2, to the extent consistent with Objective 1.
94. With regard to policy 35, the applicant has stated that they will comply with the minimum lake level for Lake Ohau as outlined in Table 4 row iii of the WCWARP therefore I am satisfied that the activity is not in contrary to this policy.

### **Overall Conclusion**

95. With regard to s104D(1)(b), the relevant provisions of the RPS and WCWARP have been considered above. I do not consider the water permit application is consistent with policy 13 due to there being likely effects on water quality and there is a lack of mitigation proposed by the applicant, policy 12 as it is over the allocation limit in this catchment and policies 15 and 16 due to effects of inefficient use. In addition, I cannot make a conclusion about whether the application is consistent with Objective 1 given the number of submissions to be heard.

### **Other Matters (s104(1)(c))**

96. With regard to s104(1)(c), the consent authority can consider any other matter relevant and reasonably necessary to determine the applications. I consider that the high court decision *Aoraki Water Trust and Others v Meridian Energy Limited*<sup>1</sup> is relevant to this application (see discussion in Report 1).

## **PART II PURPOSE AND PRINCIPALS**

### **Purpose of the RMA (s5)**

97. Under Section 104, the consent authority must consider applications “subject to part II” of the RMA. The purpose of the RMA (Section 5(1)) is to:  
  
*“promote the sustainable management of natural and physical resources.”*
98. Section 5(2) defines the meaning of “sustainable management”, which is to manage resources in a manner that provides for the social, economic and cultural wellbeing of communities while protecting the life-supporting capacity of the environment for the needs of future generations. This section also states that this should be achieved while “safeguarding the life-supporting capacity of water” and “avoiding, remedying or mitigating” the adverse effects of activities.
99. The proposal will allow the development of land to occur, which may provide for the economic and social well-being of the community. The applicant however has not proposed measures to “safeguard the life-supporting capacity of water” and “avoid, remedy or mitigate” the potential impacts on surface water quality and landscape values as required in Section 5(2)(c), or provided information to confirm that the proposed annual volumes requested are reasonable and consistent with the objectives of Section 5(2)(a), which aims to provide for the needs of future generations.

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<sup>1</sup> [2004] NZMRA 251

## **Matters of National Importance (s6)**

100. Sub-sections (a), (b) and (e) of Section 6 of the RMA are particularly relevant to this application. The proposal will include a change in visual aesthetics in an area of high amenity and may result in effects on water quality and ecosystems that have not been adequately mitigated. The applicant has not yet proposed measures to address these effects. The applicant has not assessed the impacts on cultural values, and runanga have submitted in opposition on this application.

## **Other Matters (Section 7)**

101. In achieving the purpose of the RMA, the consent authority is directed to have particular regard to a number of matters as set out in (a) – (j) of Section 7.
102. Sub-sections (b), (c) and (f) are specifically relevant to this application and should be considered when deciding the acceptability of effects resulting from the proposed take and use of water from Lake Ohau. Section (b) relates to the efficient use of water and as discussed above there is currently insufficient conclusive evidence to confirm that the applicant's requested annual volume is reasonable.
103. Section (c) refers to the maintenance and enhancement of amenity values. The applicant has not proposed mitigation measures to ensure that this objective is achieved. However, maintaining buffer distances between the irrigation area and areas used by the public, such as roads and conservation areas, may ensure that the amenity values of the area are not compromised.
104. Section (f) refers to the maintenance and enhancement of the quality of the environment. The applicant has not proposed mitigation measures to ensure that this objective is achieved, particularly with regards to water quality.

## **Principles of the Treaty of Waitangi (s8)**

105. Section 8 of the RMA requires the consent authority to take into account the principles of the Treaty of Waitangi. The site lies within the rohe of Waihao, Moeraki and Arowhenua Runanga. Runanga were informed separately when ECan received the application and later when the application was notified. Submissions have been received from Ngai Tahu and runanga on these applications.

## **RECOMMENDATION**

### **Grant or Refuse**

106. Section 104B applies to any application which is a discretionary or non-complying activity and states that the consent authority may grant or refuse the application and may impose conditions under s108.
107. The proposal may result in economic and social benefits to the wider community through improved pasture production, and the applicant has recognised the natural values of the lake by proposing to adopt the minimum lake level.
108. There are however, a number of outstanding issues associated with this proposal as listed below:

CRC061154

- (a) *Water quality* - No impact assessment or measures to address the water quality impacts that could arise from irrigation at this site. Given the conclusion regarding the potential cumulative adverse effects on water quality, it is premature to make any recommendation to grant or refuse this application as it relates to cumulative water quality;
- (b) *Efficient and reasonable use* – There is a lack of conclusive information to support the annual volume requested in accordance with the direction provided by Policies 15-20 of the WCWARP;
- (c) *Allocation to activities* – No assessment of the effects of entitlements to other activities has been provided;
- (d) *Ecosystems* – The applicant has proposed a fish screen but has not included any details of what this will entail;
- (e) *Landscape and amenity* – The irrigation area is close to sensitive amenity areas and will be visible to the public using the lake and Lake Ohau Road;
- (f) *Cultural values* – The applicant has not provided any assessment on cultural values and there are outstanding submissions from runanga in opposition to this proposal.

109. I have recommended conditions to address (d), above, however having considered all relevant matters outlined in section 104D, I am not satisfied that the actual and potential effects of the proposed activity are minor due to concerns those matters outlined above. I also cannot be satisfied that the proposal is consistent with objectives and policies of the relevant planning documents given that no assessment or mitigation has been provided for the above. On this basis, I cannot recommend that application CRC061154 be granted.

## RECOMMENDED CONDITIONS

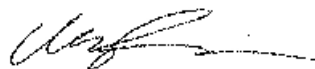
- 110. Comments on the mitigation proposed by the applicant are provided earlier in this report.
- 111. If the Commissioners decide to grant this application, a list of conditions that are usually included in a water permit are provided in Appendix 6 of the introductory s42A report. A list of draft recommended conditions specific to this application is provided below.
- 112. It should be noted that the investigating officer is not satisfied that these conditions would adequately mitigate that adverse effects that are of key concern, as identified in paragraph 108 above.

Table 3: Recommended draft conditions for water permit CRC061154		
No.	Condition Code <sup>2</sup>	Details
<b>Take</b>		
1	WP01	<i>Name of waterbody:</i> Lake Ohau

<sup>2</sup> See Report 1, Appendix 6 for condition code and wording.

		<p><i>Map reference:</i> NZMS 260 H38:6566-5350 and H38:6298-5280</p> <p><i>Instantaneous rate:</i> 950 litres per second</p> <p><i>Volume:</i> 82,080 cubic metres per day and 7,743,750 cubic metres between 1<sup>st</sup> July and the following 30<sup>th</sup> June</p>
<b>Use</b>		
2	WP04	<p><i>Type of irrigation:</i> Spray irrigation</p> <p><i>Number of hectares:</i> 1,493 hectares</p> <p><i>Use:</i> crops and pasture for grazing stock excluding milking dairy cows</p> <p><i>Plan No:</i> "CRC061154" (Attachment 1)</p>
3		In conjunction with CRC040835, if granted, irrigation of 400ha identified under consent CRC040835 not to exceed total of 2,235,000 m3/year.
4	WP05	Efficiency of use
5	WP06	Backflow preventer
<b>Mitigation</b>		
6		Abstraction shall cease whenever the lake level in Lake Ohau is at or below 519 metres above mean sea level.
7	WP10	Fish screen
<b>Measuring &amp; Metering</b>		
8	ME02/ME03	Open channel or pipe
9	ME04	
10	ME05	
11	ME06	
12	ME07	<i>Waterway:</i> Lake Ohau
<b>Administrative Conditions</b>		
13	AD01	
14	AD03	
15	AD04	Lapse date

Signed:



Date: 31<sup>st</sup> August 2009

Claire Penman  
Consents Investigating Officer

## REFERENCES

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The Resource Management Act 1991. Consolidated version including the Resource Management Amendment Act 1995. August 2005.

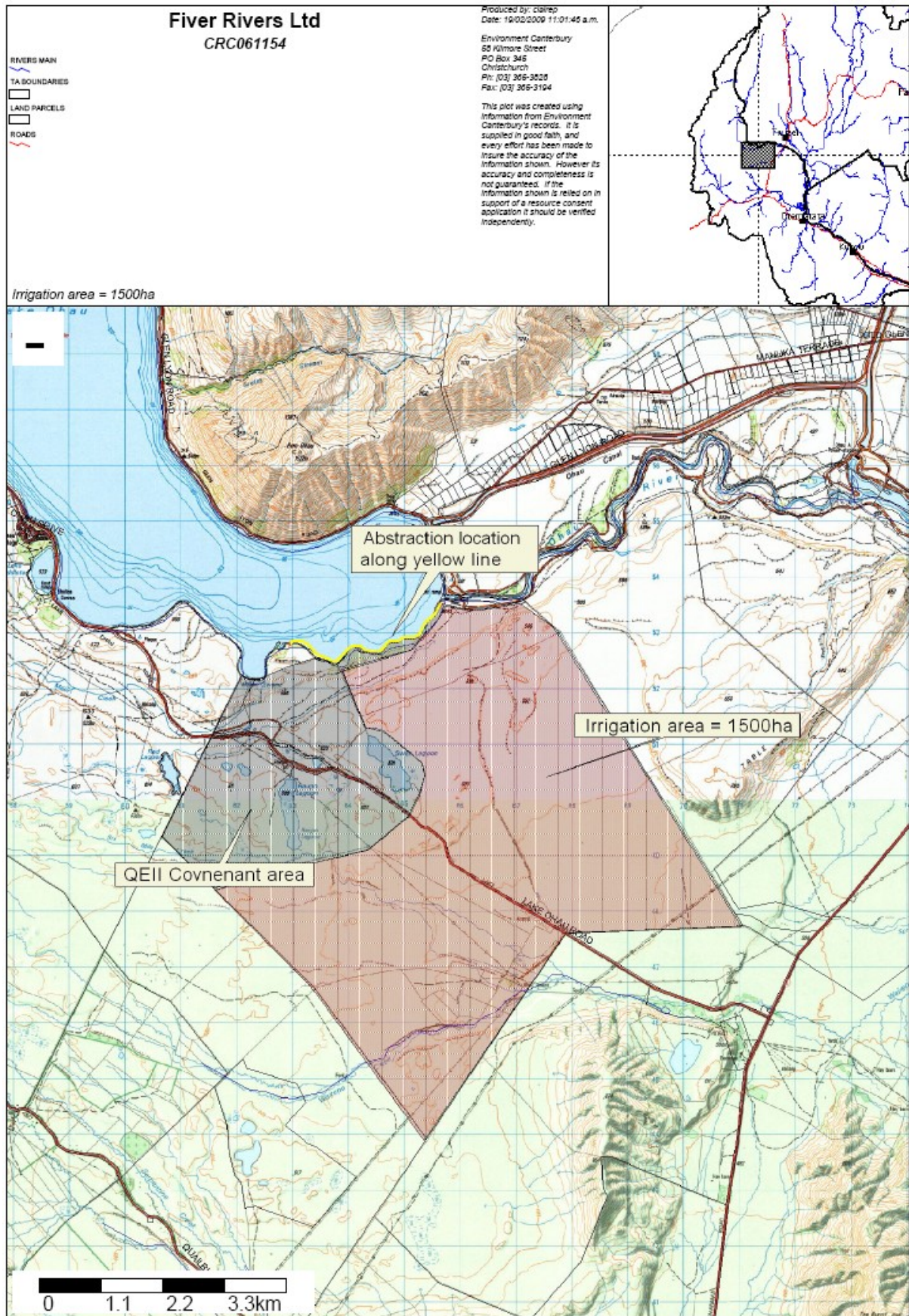
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# ATTACHMENT ONE – LOCATION MAP



**ATTACHMENT TWO – PHOTOS OF IRRIGATION AREA & INTAKE SITE**



Irrigation area to north of Lake Ohau Road



Irrigation area to north of Lake Ohau Road



Irrigation area to north of Lake Ohau Road



Irrigation intake site on left of photo in gully

## ATTACHMENT THREE – OBJECTIVES & POLICIES

Objective / Policy	Description	Assessment
Objective 1	To sustain the qualities of the environment of the Waitaki River and associated beds, bars, margins, tributaries, islands, lakes, wetlands and aquifers.	The proposed activity will impact on the matters outlined in Objective 1, particularly (a), (b) and (c). There have been a wide range of people who have submitted against the proposed activity due to concerns about impacts on these values. I therefore cannot determine whether the proposed activity is contrary to these values at the time of preparing this report.
Objective 2	Provide water for different activities.	The proposed activity exceeds the annual allocation limit for agricultural and horticultural activities outlined in Rule 6 upstream of Lake Ohau outlet. Therefore, this application may affect availability of water to other users.
Objective 3	Recognise that there are beneficial and adverse effects on the environment at a national and local scale.	These factors have been considered in the assessment of effects.
Objective 4	Achieve a high level of technical efficiency in the use of water.	The applicant has not demonstrated that the use of water for irrigation is technically efficient.
Objective 5	Provide for practical and fair sharing of allocated water during times of low water availability.	Appropriate minimum lake level proposed and the proposal would not affect the reliability of supply to other users to a less than acceptable level.
Policy 1	Recognising connectedness between all parts of the catchment	By providing a suitable minimum lake level, the connectedness with the catchment is recognised.
Policy 3	Setting of environment flow and level regimes for all activities in Objective 2 and consistent with Objective 1.	Applicant proposes minimum lake level as established in Table 3 of the plan which will enable access for the activities in Objective 2.
Policy 4	Outlines a number of matters that must be considered when setting an environmental flow and level regime	Applicant proposes minimum lake level as established in Table 3 of the plan which will ensure those matters have been considered
Policy 8	Promoting water harvesting when flows are low	Water harvesting is not proposed
Policy 9	Discouraging further mixing of water between catchments	Water will be taken and used within the same catchment and sub-catchment
Policy 10	Enabling small amounts of water to be taken or diverted where effects are minor.	The proposed volume exceeds what is considered to be a small amount
Policy 11	Consider effects on Tangata Whenua values, local and national effects when allocating water to activities	Submissions received on Tangata Whenua values, and application falls outside allocation limits for agricultural and horticultural activities. No assessment from the applicant has been provided.
Policy 12	Outlines matters that must be considered when establishing allocation limits.	Application falls outside allocation limit for activities in Objective 2.
Policy 13	Addresses water quality objectives in the NRRP	Addressed in more detail in Report 4A
Policy 15	Ensuring take and use of water is reasonable for its intended use	Applicant is seeking what I consider to be an unreasonable volume of water
Policy 16	Requiring irrigation applications to meet the specified reasonable use	As above – applicant has not provided an adequate assessment

	test	
Policy 19	Encouraging piping or sealing of water distribution systems to minimise water losses and maintain water quality.	The proposed conveyance via pipe is consistent with this policy
Policy 20	Promoting the integration of multiple uses of water.	Multiple uses of water are not proposed
Policy 21	Requiring the installation and use of water-measuring and recording devices.	A suitable water metering device is proposed to be installed
Policy 23	Restricting taking or diverting of water (surface and shallow and connected groundwater) upstream of Lake Benmore during times of low flow except for essential uses	A suitable minimum lake level is proposed for restricting the abstraction of water in times of low flow.
Policy 27	Giving priority during low flows or levels to integrated schemes where water used for more than one purpose.	There are no integrated schemes with this sub-catchment
Policy 35	Setting minimum lake level for Lake Ohau	An appropriate minimum flow has been proposed to ensure consistency with this policy