Before the Commissioners appointed by Canterbury Regional Council

IN THE MATTER OF The Resource Management Act 1991

AND

IN THE MATTER OF Application CRC041031 by Aviemore Limited for a Water Permit to take & use surface water.

Section 42A Officer's Report of Yvette Rodrigo

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 4(A)-(F) and 5).

INTRODUCTION

2. Aviemore Limited (the Applicant) has applied for resource consent to take and use water from Lake Waitaki, at a rate not exceeding 55 litres per second (l/s) and a volume not exceeding 714,000 cubic metres per year (m^3/yr).

3. Water will be used for spray irrigation of 119 hectares (ha) of pasture and winter feed crops at State Highway 83, Awhokomo Road, Waitaki Dam. The applicant has also stated that water may be used for viticulture but has not stated how much of the irrigation area will be used for this purpose.

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

5. The application was initially prepared on behalf of the applicant by Mr Robert Hall (RJ Civil and Environmental Consulting Limited). Further information was later provided by Ms Jenny Geddes (RJ Civil and Environmental Consulting Limited). Ms Cathy Begley (of 'GHD Limited') has been engaged by the applicant since 2008 to provide information to Environment Canterbury (ECan) in relation to this application.

6. The applicant has requested a consent duration to 2025.

7. This is an application for a new activity.

Background

8. The applicant owns Aviemore Station, part of which is located on the true left bank of Lake Waitaki, adjacent to the Waitaki Dam. The station also borders Lake Aviemore and the applicant has applied to take water from this lake to irrigate 35 ha of the property. This application for the abstraction of water from Lake Aviemore (CRC083692) will also be heard at this hearing.

9. The current land use on the property is dry land farming of sheep and cattle with a stocking rate of 2 – 2.5 stock units per hectare. The applicant states that this stocking rate will increase to 5 – 6 stock units per hectare, if this consent for the abstraction of water from Lake Waitaki is granted and water is available for irrigation of a further 119 ha of land within the property.

10. Application CRC041031 was lodged on 14 November 2003 and considered to be notifiable on 15 March 2005. Requests for further information have been sent covering effects including, but not limited to, water quality, landscape and whether derogation approval from Meridian Energy Limited (MEL) has been obtained.

11. The applicant has not applied for any other resource consents from Environment Canterbury (ECan) relating to this activity.

12. The annual volume proposed in the application is based on a seasonal application depth of 600 mm and a volume of 6000 m^3 per hectare per year, which is consistent with the McKenzie Irrigation Company (MIC) share allowance.

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 December 2003 as part of the MfE call-in of all Waitaki consents, and it was publicly notified again in August 2007 with 200 other applications for similar activities in the Waitaki catchment.

Submissions

14. Details of the submissions lodged on all applications notified at the same time as this application are contained in Report 1, Appendix 5. 14 submissions were received on this application when it was notified in 2007, with 2 in support, 10 opposed and 2 that neither supported nor opposed the application.

15. Overall, the key effects of concern relating to applications within the Waitaki catchment including this application include those on ecosystems, water quality, existing and other allocations, minimum flows and natural character.

16. Submissions specific to this application are contained in Table 1 below. Please note that all submissions hold equal importance, even if not specifically listed below.

Submitter	Issues	Support/ Neutral/ Oppose	To be heard
Fish and Game New Zealand	Specific to this application: Assurance that the annual volumes requested are within allocations limits.	Oppose	Yes
Meridian Energy Ltd	Water quality and metering.	Oppose	Yes

Table 1: Summary of specific submissions on application CRC041031

DESCRIPTION OF THE PROPOSED ACTIVITY

17. This description of the proposed activity relates specifically to the take and use of water. The applicant proposes to take water from Lake Waitaki under the following conditions:

Abstraction Limits

(i) Water will be taken at a rate not exceeding 55 l/s, with an annual volume not exceeding 714,000 m^3/yr, from Lake Waitaki, at or about map reference NZMS 260 I40:051-107. This grid reference is currently located within Lake Waitaki and the applicant may wish to confirm the exact location of the intake at the hearing.

(ii) The take of water will cease whenever the level in Lake Waitaki is lower than 227 metres above mean sea level (amsl).

Use of Water

(iii) Water abstracted from the lake will be used for spray irrigation of up to 119 ha to grow pasture, winter feed crops, such as Lucerne and for viticultural purposes at State Highway 83, Awhokomo Road, Waitaki Dam, as shown in Attachment One.

(iv) Pasture will be grazed by sheep and cattle, excluding dairy cows.

(v) Water will be irrigated onto land using either a K-line system or irrigation gun.

(vi) Water will be applied to land over a consecutive 10 days with a 10 day return period.

Intake details

(vii) It is stated in the application that water will be taken via a pump housed within a shed located approximately 5 metres above the lake.

(viii) The intake structure used will be screened to prevent the entry of fish.

18. The proposed annual volume does not include any provision for stock water for the property. The applicant is relying on their rights to abstract water for stock pursuant to section 14(3) of the Resource Management Act (RMA) 1991, as acknowledged on page 14 of the Waitaki Allocation Board (WAB) decision. The annual volume requested therefore is solely for "irrigation purposes" and is additional to the volumes permitted by section 14(3) of the RMA.

LEGAL AND PLANNING MATTERS

Consent Requirements

19. 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 are outlined in the introductory s42A report. A summary of the requirements for these applications are provided below:

20. TRP

(a) The TRP permits the abstraction of surface water from Lake Waitaki provided the volume abstracted is less than 100 m^3/day, and the rate of take is limited to 10 l/s. Given that the proposed take exceeds these limits, consent is required as a discretionary activity.

21. WCWARP

(a) Rule 2, clause (1) – The applicant has proposed to adopt a minimum lake level for Lake Waitaki of 227 metres above sea level, in accordance with the requirements of the WCWARP as set out in Table 3, row (xvi) of the plan.

(b) Rule 6 – The activity is within the allocation limit of 275 million cubic metres for horticultural and agricultural activities upstream of the Waitaki Dam.

(c) Rule 15 – Classifying rule, discretionary activity.

22. In summary, the proposed water permit is a discretionary activity under Rule 15 of the WCWARP and requires consent pursuant to section 14 of the RMA.

23. The applicant was asked to confirm if other consents would be required for the activity to occur. In particular, a land-use consent may also be required depending on the method of abstraction used.

24. The applicant has not applied for a land-use permit for the installation or maintenance of the intake structure. They state that there are a number of options that may be used for abstraction, including options that would not require any works within the bed of the lake and therefore, would not require a land-use consent under section 13 of the RMA.

25. The applicant has not applied for a discharge permit. The proposed activity does not include "discharges" to land or water, therefore resource consent under section 15 of the RMA, is not required.

Priority

26. In terms of instantaneous allocation under Rule 2 for Lake Aviemore, a detailed list of all applicants who fall within Table 3 can be found in Report 2A.

27. For Rule 6, annual allocation, refer to Report 3 for a full list of all existing consent holders and all applicants in priority order. All applications upstream of the Waitaki Dam and downstream of the glacial lake outlets are currently within annual allocation limits set in the WCWARP, therefore priority in relation to the plan, is not an issue for this application.

Derogation Approval

28. At the time of writing this report, MEL has not provided derogation approval to Aviemore Limited for this application. Ms Begley advised ECan in a letter dated 15 June 2009, that the applicant was seeking to purchase MIC shares to support their proposal.

CONSULTATION

29. It is stated in the original AEE lodged in 2003, that consultation was to be undertaken with Central South Island Fish and Game Council, the Department of Conservation, Meridian Energy Limited (MEL), Te Runanga O Moeraki and Waihao Runanga.

30. Te Runanga O Moeraki and Te Runanga O Ngai Tahu were notified of the application by ECan when it was lodged and subsequently when the applications in the Waitaki catchment were notified in 2003 and 2007.

DESCRIPTION OF THE AFFECTED ENVIRONMENT

31. A description of the values of the Mackenzie Basin in general is provided in the introductory s42A report (Report 1).

32. In addition to the above overall summary, the applicant notes the following:

    (a) Lake Waitaki is an artificial lake, located downstream of Lakes Benmore and Aviemore. The lake provides habitat for native fish and trout and is used for a range of recreational pursuits such as fishing, boating and sightseeing.

33. I have use information from ECan's GIS database and reports on the values of the surrounding environment to confirm the applicant's assessment and identify the key features of the environment that could be affected by the proposed activity.

Lake Waitaki

34. Environment Canterbury's GIS system identifies Lake Waitaki as:

    (a) A salmonid habitat, freshwater fish and native bird habitat;

    (b) A Wetland of Representative Importance (WERI)[1];

    (c) A Site of Special Wildlife Importance (SSWI)[2]; and

    (d) An area of National Significance.

35. Several wetland areas are located around the periphery of Lake Waitaki, however none are within the proposed irrigation area or close to the proposed abstraction location.

36. Lake Waitaki is not a Statutory Acknowledgement Area. However, the Waitaki River, which flows out of Lake Waitaki is a Statutory Acknowledgment Area.

Irrigation Area

37. The proposed irrigation area is located on the southern shore of Lake Waitaki, adjacent to the Waitaki Dam.

38. The site is not within a Silent File Area and there are no historically significant sites identified within the vicinity of the water take or irrigation area.

39. The irrigation area is bounded by State Highway 83 to the north and will occur on either side of Awahokomo Road for a distance of approximately 1.4 kilometres.

40. ECan GIS indicates that Transpower Lines (specifically the 220kV, AVI-LIV-A line) cut through the northwestern and south-eastern corners of the irrigation area. The Transpower Waitaki Substation that this line connects to is located approximately 150 metres from the irrigation area, across State Highway 83.

[1] Keller and Pfluger, 2005. A register of ecologically important wetlands.
[2] Keller and Pfluger, 2005. A list of areas identified by the former New Zealand Wildlife Service that provide important habitat for wildlife.

41. Awahokomo Creek flows parallel to the western boundary of the irrigation area into Lake Waitaki. The creek is approximately 120 metres from the edge of the irrigation area at its closest point.

Other Users

42. Meridian Energy hold a suite of consents which are particularly related to the operation of the Waitaki Dam. Users downstream of the Waitaki Dam are part of the Lower Waitaki Catchment, and are therefore covered by the provisions of the WCWARP.

43. There are two other current consented water takes from Lake Waitaki, as follows:

    (a) Matheson Roseneath Limited hold consent to abstract up to 76 l/s from Lake Waitaki at two locations (CRC011952). This consent expires in January 2036.

    (b) Brooks Property Limited (Waitaki Historic Village) hold consent (CRC970664.2) to abstract 10 l/s and 432m^3/day from Lake Waitaki, upstream of the dam. Water is abstracted for a community water supply.

44. Neither of the takes described in (a) and (b) above are subject to minimum lake levels.

45. On 17 August, 2001, Otematata Station Limited applied for consent CRC020355 to take and use up to 220,000 m^3/yr of water from Lake Waitaki. The proposed location for this take is approximately 4 kilometres upstream of the location proposed by the applicant. The Otematata Station Limited consent is a part of this Upper Waitaki hearing.

ASSESSMENT OF THE PROPOSED ACTIVITY

46. The proposed water permit is a discretionary activity and must be considered in context of section 104 of the RMA.

47. Section 104(1) outlines matters that the consent authority must have regard to when considering an application for 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 (Section 104(1)(a))

48. 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 these effects is provided in the following sections.

Adverse Effects	Applicant's assessment	IO assessment	Conclusion
People, communities & amenity values	Local effects minor because intake structure not visible from road and irrigation area already modified.	Irrigation could result in moderate adverse landscape effects. Also potential effects on Transpower infrastructure.	Proposal likely to result in adverse effects, unless appropriate mitigation is provided.

	Cumulative effects not addressed.	Cumulative effects on landscape yet to be addressed, therefore unable to reach a conclusion.	
Other water users	Applicant has applied for MIC shares so effects on MEL will be acceptable. No assessment on other users.	Derogation approval not yet received. Effects on other users minor, however applicant should confirm location of take.	Effects may be acceptable, provided derogation approval is obtained and the location of take does not affect the take of water by .
Inefficient use	Annual volume of 719,950 cubic metres per year. Based on WQNv2 using light soils.	Disagree that this is an efficient volume. Based on WQNv2 using heavy soils, 547,400 m^3 would be more appropriate.	Effects may not be acceptable given difference in annual volumes.
Water quality	Impacts mitigated by efficient irrigation method and non-dairying purposes. MWRL study for cumulative effects.	Cannot confirm that effects acceptable given conclusions in s42a report on cumulative effects and lack of mitigation measures proposed at present.	Effects uncertain.
Ecosystems	Fish screen and minimum flow proposed.	Agree with applicant's assessment & mitigation.	Effects acceptable.
Tangata Whenua values	No assessment provided.	Submissions concerned & have not been addressed by applicant.	Effects may be more than minor.

Table 2: Summary of Assessment of Effects for CRC041031

Adverse effect on people, communities and amenity values

49. The applicant predicts that the impacts of irrigation on landscape and amenity values will be minor for the following reasons:

    (a) The intake structure or pump will be located within a shed that will not be visible from the road; and

    (b) The areas to be irrigated have already been modified for pastoral farming.

50. The applicant has not assessed the cumulative impacts of the activity on the on natural character and amenity values of the catchment resulting from increased irrigation within the Mackenzie Basin. A number of submitters have raised concerns with regard to this effect on natural character and amenity values. This matter is discussed in a separate report by Dr Mike Freeman, which addresses the cumulative landscape effects (Report 4A) of irrigation within the catchment.

51. Mr Chris Glasson (Landscape Architect) has been engaged by ECan to audit the applicant's assessment of effects and to provide comments on the values that may be affected by irrigation. In relation to this application, Mr Glasson states that irrigation of the property, particularly in areas close to the road could result in moderate adverse landscape effects. The extent of these effects however could be reduced by ensuring an appropriate separation distance between the irrigation area and the road is maintained. The applicant may wish to address this at the hearing.

52. As stated previously, the applicant has not applied for a land-use consent for the installation and maintenance of the intake structure and it is stated in the application that one of the options being considered is to install an infiltration gallery within the applicants property to take water. I would agree with the applicant that this method of abstraction would be unlikely to result in an adverse effect on the recreation or amenity values of the area.

53. Any option that would require the disturbance of the bed or banks of the lake, however would need to be authorised by a consent and therefore the effects on amenity and recreational values could be addressed as part of the resource consenting process when the application is submitted to ECan.

Transpower Infrastructure

54. The map attached to this report in Attachment One indicates the presence of Transpower structures and electrical conductor lines that dissect the south western and south eastern corners of the irrigation area. The applicant has not assessed the impacts of irrigation on this infrastructure.

55. It should be noted that Transpower did not submit on the application when it was notified. They did however advise ECan on a number of other similar applications in the Waitaki Catchment, that the proposed activities including the irrigation of water onto land could result in adverse effects on their assets. They have also provided guidelines (NZECP34:2001) on appropriate mitigation measures that should be implemented to ensure the protection of these assets and the National Grid.

56. These mitigation measures include:

    (a) Avoiding the placement of structures, buildings, planting of trees or encroaching vegetation within 12 horizontal metres either side of any structure;

    (b) Maintaining a distance of at least 4 metres from any irrigation equipment to the conductors (power lines), towers and poles; and

    (c) Preventing the spray of water onto conductors by adjusting nozzles, turning jets off when the boom passes by the towers and keeping the boom well away from conductors.

57. The applicant may wish to provide an assessment of the impacts of their proposed activity (irrigation) on these structures at the hearing. Alternatively a condition has been recommended for this application, should the Commissioners decide to grant consent for this activity, that require the above measures, including separation distances to be maintained.

58. It should also be noted that the impacts on these structures should be considered when an intake structure is installed, whether or not land-use consent under section 13 of the RMA is required for the activity. In assessing these applications, ECan currently considers the impacts of works within 50 metres of Transpower structures and power lines.

59. A search of GIS indicated that half of the site is occupied by Transpower. The applicant may wish to address this issue and confirm that the irrigation area does not extend onto land owned by Transpower.

Positive Effects

60. It is noted that the use of water for irrigation could improve the productivity of the land, resulting in economic benefits to the wider community.

Summary

61. The proposal will result in a visible change to the natural character of the area, given the proximity of the irrigation area to the State Highway. In addition, the irrigation of land could result on impacts on Transpower assets that are located in this area. Both these impacts however can be mitigated by ensuring appropriate separation distances are maintained. On this basis, the adverse effects of the proposal could be mitigated provided, conditions requiring appropriate separation distances from these features and the irrigation area are included, should the Commissioners decide to grant consent for this activity.

Adverse effects on other users

62. The applicant has not provided an assessment of effects associated with the proposed abstraction from Lake Waitaki on other users. The applicant however has proposed to adopt the minimum lake level for Lake Waitaki.

63. A search of ECan's GIS database has identified that at present there are two existing consents (CRC011952 and CRC970664.2) for abstractions of water from Lake Waitaki and an application to take up to 220,000 m^3 of water from the lake (CRC020355), which is lower in the priority queue than this application by Aviemore Station Ltd.

64. The applicant has not assessed the impacts of their proposed activity on the rights of these other consent holders or the applicant with priority to abstract water from Lake Waitaki. It is noted however that the consented takes are not subject to any minimum lake levels therefore the proposed activity should not affect the ability of the existing consent holders to take water from the lake.

65. The application by Otematata Station to take water from the lake will be subject to a minimum lake level and has a lower priority than this application. The proposed abstraction is unlikely to result on adverse effects on this abstraction for the following reasons:

    - The abstraction is unlikely to have more than a negligible impact on lake levels;

    - The Otematata Station abstraction is located approximately 4 km from the applicant's proposed take and there are a number of streams and surface water courses contributing flow to Lake Waitaki between the two takes.

    - Lake levels are largely controlled by MEL.

66. It should also be noted that neither the existing consent holders nor Otematata Station have submitted on or raised concerns about this application.

67. My audit of this effect is based on the applicant's current proposal. The applicant should confirm the location of their take and assess the impacts on other users abstracting water from Lake Waitaki, in particular, the community supply take by Brooks Property Limited, which is located approximately 100 metres north east of the irrigation area.

Adverse effects of inefficient use

68. 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.

Annual Volumes

69. The irrigation volume applied for has been based on the volume adopted by the Mackenzie Irrigation Company (MIC), of 6000 m^3 per hectare per year. Ms Begley has also determined the annual volume using WQN9v2, based on an average PAW of 72.5 millimetres (for shallow and stony sandy and silt loams with a WHC of between 55 – 90 mm), an effective rainfall of 210 millimetres per hectare per year and intensive pasture land use.

70. These parameters would provide an annual volume of 719,950 m^3 or 6050 m^3 per hectare per year using the method specified in Policy 16(c)(ii) of the WCWARP (WQN9v2). On this basis, Ms Begley states that the proposed annual volume of 714,000 m^3 is conservative to meet the seasonal demand of the soils within the irrigation area.

71. ECan's soil information database indicates however that the proposed area of irrigation (119 hectares) consists of Otiake Sandy Loam soils (50% of the site), with a PAW mid range value of 300 mm and Kurow deep clay loam soils (50% of the site), with a PAW mid range value of 200. These values would indicate that soils on site are representative of heavy soils (PAW>110mm) rather than light soils, as used by Ms Begley in her assessment. Using the irrigation demand values for heavy soils, the annual volume required as calculated using WQN9v2 would equate to 547,400 m^3.

72. In addition, the applicant is proposing to irrigate some of the land within the irrigation command area for viticultural purposes. It is understood that less water is required for viticulture, however, the applicant has not provided sufficient information to determine how much of this land will be used for this purpose.

73. On this basis, I cannot conclude that the annual volume requested by the applicant represents an efficient and reasonable volume to meet the seasonal demand of the soils on site. The applicant may wish to provide additional information to confirm that the volume requested is reasonable for the expected land-use practices within the site.

Technical Efficiency

74. The applicant states that the maximum gross depth of water applied will be 4 millimetres per day. The applicant's proposed irrigation regime of irrigating for 10 consecutive days, with a 10 day return period, will result in a maximum depth of application of 40 mm. Given the rate of application is well below the AWHC of the soil type in the area, the applicant states that there should be no leaching losses to groundwater and the proposal should be able to achieve the 80% technical efficiency in the WCWARP.

75. In addition, the applicant has proposed to install a water meter and monitor the actual amount of water taken and used from the lake.

Summary of effects from inefficient use

76. While I am satisfied that the method of irrigation (spray irrigation), application rates and return periods proposed combined with the water holding capacity of the soils

within the irrigation area should ensure that irrigation can achieve an 80% technical efficiency consistent with Policy 16(b) of the WCWARP, I am not satisfied that the applicant has provided sufficient information to confirm that the proposed seasonal allocation of 714,000m^3 is reasonable for the proposed irrigation area, as required by Policy 16(c) of the WCWARP. The applicant may wish to address this issue at the hearing.

77. In addition, I recommend that if the Commissioners decide to grant this consent, the applicant's proposal to install a water meter should be included as a condition of consent. This will provide accurate information on the amount of water used in order to efficiently manage the use of this water.

Adverse effect of use on water quality

78. The proposed activity can have an impact on water quality in the immediate vicinity of the site or in combination with other activities in the catchment result in cumulative adverse effects.

Localised Impacts on Water Quality

79. The applicant has stated that the impacts on water quality resulting from irrigation will be mitigated to some extent due to the following reasons:

    (a) The irrigation method proposed uses water efficiently and the amount applied per return period should avoid leaching to groundwater, or overland runoff to surface water;

    (b) The property will be used for crop production and pasture, which will be grazed by sheep and cattle.

80. Ms Begley advises, that the applicant is proposing to develop a farm management plan, which will include measures to mitigate potential impacts on water quality. At the time of writing this report, the applicant has not provided any details of the mitigation measures or an assessment of residual impacts on water quality once these measures are implemented to determine if the impacts on water quality can be adequately mitigated.

Cumulative Impacts on Water Quality

81. A number of submissions on this effect were received by ECan, including a submission from Meridian Energy Ltd. Those submitters and their concerns are outlined in more detail in Appendix 5 of the s42A introductory report.

82. An assessment of cumulative effects on water quality was requested to address the above concerns, in relation to Policy 13 of the WCWARP. The applicant has contributed to the study by Mackenzie Water Research Ltd (MWRL) on cumulative effects within the catchment.

83. The report by MWRL has been audited and a separate s42a report prepared (see Report 4A).

84. Given the lack of information on the impacts of irrigation on water quality and the measures proposed to address these impacts, I cannot confirm that the impacts on water quality will be acceptable.

Adverse effects on ecosystems

85. The applicant predicts that the adverse effects on ecosystems resulting from the abstraction of water from Lake Waitaki will be acceptable for the following reasons:

    (a) The applicant is proposing to cease taking water when lake levels fall below the minimum lake level set in the Plan; and

    (b) The intake structure used to take water from the lake will have a fish screen installed to prevent the entry of fish into the system.

86. The minimum lake level for Lake Waitaki has been set in recognition of the natural values of the lake, which should include the ecosystem and communities that inhabit the lake. The applicant's proposal to cease taking water from the lake when this level is reached should therefore ensure that the ecological values of the lake are protected.

87. Specific details of the intake structure and therefore the type of fish screen that will be used are not currently available. Standard conditions exist however, that can be included in the consent should it be granted, to ensure that an appropriate screen is installed, when the intake structure is determined by the applicant.

88. On this basis, the effects on the ecological values of Lake Waitaki are considered to be no more than minor, provided the measures proposed by the applicant are included as conditions of consent.

Adverse effects on Tangata Whenua values

89. The applicant did not include an assessment of the proposed activity on cultural values. The sites of the proposed activities are within the rohe of Te Runanga O Moeraki. Both runanga and Te Runanga O Ngai Tahu were served notice of the applications in August 2007.

90. Submissions were received in opposition to this application from Te Runanga O Ngai Tahu and Ngai Tahu-Mamoe Fisher People. The concerns of Ngai Tahu-Mamoe Fisher People seem to relate specifically to the resource consent process, rather than this specific application.

91. 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.

92. Given that there are a number of submissions which identify cultural values, I cannot conclude that the actual and potential effects on cultural values of the area will be minor.

Conclusion

93. With regard to s104(1)(a), the actual and potential effects of the activities have been discussed above. For this consent, I cannot confirm that under s104(1)(a), the actual and potential effects of the proposed activity are acceptable when taking account the proposed mitigation. In particular, there is uncertainty regarding the following aspects of the application:

    (a) Whether the annual volume requested represents an efficient use of water;

(b) The localised and cumulative impacts on surface water quality;

94. The impacts on landscape values and Transpower assets can be mitigated, if the recommended conditions requiring appropriate separation distances are included, should the Commissioners decide to grant consent for this activity.

Statutory Assessment (Section 104(1)(b))

Regional Policy Statement (RPS)

95. 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.

96. Of significance to these applications are Chapter 9, which relates to the management of the Region's water resources, and Chapter 10, which relates to works in the bed. 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)

97. 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 Two. A discussion of the key objectives and policies that I consider particularly relevant when deciding this application is provided in the following paragraphs

Objectives

98. Objective 1 of the WCWARP provides direction on the key issues that need to be addressed to sustain the quality of the Waitaki River and surrounding environment in relation to the taking and using of water. The proposed activity could potentially impact on the matters set out in (a), (b) and (c) of this objective.

99. While the proposed minimum lake level should ensure that the life supporting capacity of the environment (Objection 1(b)) is not compromised, I cannot confirm that the proposal will not compromise cultural values (Objective 1(a)). The cumulative impacts of the proposal on the natural character and landscape values of the catchment (Objective 1(c)) may be addressed by requiring appropriate buffer distances between the irrigation area and sensitive areas, such as the State Highway.

100. I am not satisfied that the annual volume of water requested is reasonable to meet the demands of soils within the irrigation area for the intended use of land within the irrigation area therefore the proposal may not be consistent with Objective 4.

101. The proposed activity is within the allocation limits set by the WCWARP and will not result in affecting the reliability of supply to other users taking water from Lake Waitaki, therefore it may be considered to be consistent with Objectives 2, 3 and 5 of the WCWARP.

Environmental Flow and Level regimes

102. The applicant is proposing to adopt the minimum lake level required by the WCWARP for Lake Waitaki, therefore it is considered that the application is consistent with Policies 3 and 4.

Surface Water Quality

103. 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 4A, by Dr Mike Freeman, addresses this policy in more detail, particularly on the cumulative scale. Given his conclusions, I consider that this application may be contrary to this policy, unless adequate mitigation measures are proposed and implemented.

Efficient and effective use

104. Policies 15 – 20 deal with efficient and effective use and all are applicable to this application.

105. 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.

106. 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 these consent applications.

Policy for Lake Waitaki

107. Policy 42 specifically relates to setting minimum lake levels that recognise the natural and recreational values of the lake. The applicant is proposing to adopt the minimum lake levels in the plan, therefore the proposal is considered to be consistent with this policy.

Conclusion

108. With regard to s104(1)(b), the relevant provisions of the RPS and WCWARP have been considered above. In my view, the applicant's proposal may not be consistent with Policy 13 due to there being likely effects on water quality and policies 15-20 due to effects of inefficient use.

Other Matters (Section 104(1)(c)

109. 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 is relevant to this application (see discussion in Report 1).

Part II Purpose and Principals

Purpose of the RMA (s5)

110. 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."

111. 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 by "avoiding, remedying or mitigating" the adverse effects of activities.

112. 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 "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.

Matters of National Importance (s6)

113. Sub-sections (b) and (e) of Section 6 of the RMA are particularly relevant to this application. The proposal will include a change in the visual aesthetics in an area of high amenity. The applicant has not proposed measures to address these effects or assessed the impacts on cultural values.

Other Matters (Section 7)

114. 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) – (d) of Section 7.

115. Sub-sections (b) and (c) 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 Waitaki. 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.

116. 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 areas and areas used by the public, such as the State Highway, may ensure that the amenity values of this area are not compromised.

Principles of the Treaty of Waitangi (s8)

100. 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 Moeraki Runanga. Runanga were informed separately when ECan received the application and later when the application was notified. Concerns regarding the impacts of the taking and use of water were raised by submitters, who have requested to be heard at the hearing. The applicant has not assessed the impacts on cultural values, and therefore I cannot comment on whether the application is consistent with the principles of the treaty.

RECOMMENDATION

Grant or Decline

117. 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.

118. The applicant is proposing to spray irrigate land, thereby meeting some of the technical efficiency objectives of the plan and has proposed to adopt the minimum lake level for Lake Waitaki, which recognises the natural values of the lake.

119. There are however, a number of outstanding issues associated with this proposal as listed below:

(a) *Surface water quality* - No impact assessment or measures to address the water quality impacts that could arise from irrigation at this site. The impacts on water quality may therefore not be acceptable;

(b) *Efficient and reasonable use* - There is a lack of soil water demand information to support the annual volume requested in accordance with the direction provided by Policies 15 – 20 of the WCWARP;

(c) *Landscape and amenity* - The irrigation area is close to sensitive amenity areas and will be visible to the public using the lake, a camping ground and the State Highway.

(d) *Transpower infrastructure* – The applicant has not assessed the impacts of irrigation on Transpower's assets that are located within the proposed irrigation area.

(e) *Location of take and irrigation area* – The applicant may wish to confirm the location of take and provide information on the impacts of taking water from this location on other parties. In addition, the applicant may wish to confirm that the irrigation area shown on the map attached to this report is correct and does not extend onto land owned by Transpower.

120. I have recommended conditions to address (c), and (d) above, however having considered all relevant matters outlined in section 104(1), I am not satisfied that the actual and potential effects of the proposed activity are acceptable due to concerns regarding the effects on water quality and the efficient use of water (listed as (a) and (b) above). On this basis, I cannot recommend that this application be granted.

RECOMMENDED CONDITIONS

121. Comments on the mitigation proposed by the applicant for each application are provided earlier in this report.

122. 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 (Report 1). A list of draft recommended conditions for this application has been provided below.

123. It should be noted that I am not satisfied that these conditions would adequately mitigate that adverse effects that are of key concern, for example, adverse effects on landscape values and water quality as a result of land use intensification.

No.	Condition Code[3]	Details
Take		
1	WP01	*Name of waterbody*: Lake Waitaki *Map reference:* between NZMS 260 I40:051-107 [Currently located in the middle of the lake. Applicant may wish to provide correct grid reference]. *Instantaneous rate:* 55 litres per second *Volume:* xxx cubic metres [Disagreement between IO and applicant regarding reasonable annual volume]
2	WP03	*Instantaneous rate:* 55 litres per second *Volume:* 47,520 cubic metres *Design return period:* 10 days *Seasonal volume:* xxx cubic metres
Use		
3	WP04	*Type of irrigation:* Spray irrigation *Number of hectares:* 72 hectares *Use:* Pasture for grazing sheep and beef cattle. *Plan No:* CRC063564
4	WP05	
5	WP06	
Mitigation		
6	Non standard	When the level in Lake Waitaki, as measured at [x] is at or below 227 metres above mean sea level, the abstraction of water from Lake Waitaki shall cease.
7	WP10 or WP14	Fish screen condition, depending on type of intake structure applicant is proposing.
8	WP13	Transpower condition.
Measuring & Metering		
9	ME01	
10	ME03	

[3] See Report 1, Appendix 6 for condition code and explanation

11	ME04	
12	ME05	
13	ME06	*Waterway:* Manuka Creek
Administrative Conditions		
14	AD01	
15	AD03	
16	AD04	

Signed: Date: 31st August 2009

Yvette Rodrigo
Consents Investigating Officer

REFERENCES

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ATTACHMENT ONE – LOCATION MAP

ATTACHMENT TWO – OBJECTIVES & POLICIES

Objective / Policy	Description	Assessment
Objective 1	To sustain the qualities of the environment of the Waitaki River and associated beds, bans, margins, tributaries, islands, lakes, wetlands and aquifers.	The proposal does not compromise sections b. – g. of this objective, however, no assessment of the proposed activity has been submitted by the applicant to determine if the effects on cultural values (i.e. section a.) will be more than minor.
Objective 2	Provide water for different activities.	The proposed activity is within the WCWARP allocation for agricultural and horticultural activities.
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 proposed abstraction and use will be undertaken to achieve a high level of efficiency.
Objective 5	Provide for practical and fair sharing of allocated water during times of low water availability.	An appropriate minimum lake level, consistent with the requirements of the WCWARP has been proposed by the applicant.
Policy 1	Recognising connectedness between all parts of the catchment	The cumulative effects of the proposal in relation to water quality, landscape and amenity values of the catchment have been assessed.
Policy 3	Setting of environment flow and level regimes for all activities in Objective 2 and consistent with Objective 1.	Minimum lake levels for Lake Waitaki have been proposed to protect the natural values of the waterbody and the rights of existing users within the catchment.
Policy 4	Outlines a number of matters that must be considered when setting an environmental flow and level regime	The minimum lake levels proposed will protect the values set out for Lake Waitaki.
Policy 11	Consider effects on Tangata Whenua values, local and national effects when allocating water to activities	The proposal may have an effect on these values.
Policy 12	Outlines matters that must be considered when establishing allocation limits.	The proposal may not be consistent with f. and g. of this policy.
Policy 13	Addresses water quality objectives in the NRRP	Effects uncertain.
Policy 15	Ensuring take and use of water is reasonable for its intended use	The proposed take and use is not considered to be reasonable for the purposes of irrigation.
Policy 16	Requiring irrigation applications to meet the specified reasonable use test	The proposed annual volume is not consistent with the volumes determined using WQN9v2.
Policy 19	Requiring piping or sealing of water distribution systems to minimise water loss.	Water will be piped to the irrigation area.
Policy 20	Promotes the integration of multiple uses of water	A stock water system is already operational.
Policy 21	Requires the installation of a water meter	One is proposed.
Policy 23	Policies 23 – 27 refer to restrictions during times of	An appropriate minimum lake level has been proposed that will take into account the requirements
Policy 24		

Policy 25	low water availability.	of these policies.
Policy 26		
Policy 27		
Lakes Ruataniwha, Benmore, Aviemore and Waitaki		
Policy 42	Setting minimum lake levels for these lakes	Appropriate minimum lake level has been proposed.