Before the Commissioners appointed by Canterbury Regional Council

IN THE MATTER OF The Resource Management Act 1991

AND

IN THE MATTER OF Application CRC040180 by Killermont Station Limited for a Water Permit to take & use surface water, and application CRC040181 for a Water Permit to dam 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. Killermont Station Limited (the applicant) have applied for the following resource consents:

   (a) CRC040180 – To take and use 20 litres per second (l/s) and 170,00 cubic metres per year (m^3/yr) of water, from Frosty Gully for spray irrigation of 28 hectares (ha) of crops and pasture, grazed by stock, excluding dairy cows; and

   (b) CRC040181 - To dam water at Frosty Gully to a height of 2.5 metres, impounding 500 cubic metres (m^3) of water, at Killermont Station, State Highway 8, Omarama.

3. A 35 year duration is sought for both applications. The consents, if granted will replace existing consents for the same activities (WTK836261A – To dam water; and WTD836261B – To take and use surface water). Attachment One shows the location of the take, the dam and the irrigation area.

4. The applicant engaged Mr Grant Richards of Water Resources Otago Limited to prepare the applications and assessment of environmental effects on their behalf. Ms Jenna Donnagio of Aqualinc Research Limited has since been engaged to respond to further information requests relating to the application.

5. Environment Canterbury (ECan) staff undertook a site visit with the applicant in December 2008.

Background

6. Killermont Station Limited occupies 650 hectares of Crown leasehold land, on the true right bank of the Ahuriri River, located approximately six kilometres west of Omarama (Run 674 SO2072).

7. Water is currently abstracted from Frosty Gully (WTK83621B) and Manuka Creek (CRC000002.1), and is used to irrigate a total of 69 hectares (ha) of crops and pasture on the property. In addition to applying for replacement consents associated with the abstraction from Frosty Gully, the applicant has also applied to take water from the Ahuriri River and more water from Manuka Creek. The additional water applied for will allow a further 591 ha of land to be irrigated on the property. Details of these other applications are set out in Report 23A and separate reports outlining the details of each of the applications.

8. This report (23B) specifically relates to the application for replacement consents for the surface water take and damming of water at Frosty Gully (CRC040181 and CRC040180). These applications were lodged on 23 July 2003 and considered to be notifiable on 3 December 2003.

9. Requests for further information have been sent to the applicant in relation to the impacts of the activity on water quality and landscape values, to clarify irrigation volumes, minimum flows and whether derogation approval from Meridian Energy Limited (MEL) has been obtained.

10. In the original application to take water from Frosty Gully (CRC040180), the applicant proposed to take more water (40 l/s) than what was authorised under the existing consent for irrigation of a larger area (54 ha) and for water storage purposes. The application was notified on this basis, however, ECan was subsequently advised by Aqualinc after notification that the applicant wished to amend their application and only apply for what was previously authorised by the existing consent, as described in paragraph 2 above.

Notification

11. Details of the wording used to notify the application are contained in Appendix 4 of the introductory s42a report (Report 1). CRC040181 was notified in August 2007 with 200 other applications for similar activities in the Waitaki catchment. CRC040180 was not notified at the same time and was subsequently notified on the 18th of October 2008.

Submissions

12. Details of the submissions lodged on all applications notified are contained in Report 1, Appendix 5. 8 submissions were received in relation to the application to take water from Frosty Gully (CRC040180), of which 3 submissions were in support and 5 submitters opposed the application. Overall, the key effects of concern relating to these applications include those on water quality, existing and other allocations, and minimum flows.

13. 22 submissions were received in relation to the application to dam water in Frosty Gully (CRC040181), of which 2 were in support, 18 were in opposition and 2 neither supported nor opposed the application.

14. Submissions specific to these applications 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
Canterbury Aoraki Conservation Board	Potential for elevated nutrient levels in wetlands.	Oppose	No
Gloag, AJ (Buscot Station)	Essential for ongoing viability of farm.	Support	No
Ruataniwha Farm Ltd	Essential for ongoing viability of farm.	Support	No
Meridian Energy Ltd	Water quality, duration, stockwater supply and metering	Oppose	Yes
J and M Harkerss	Essential for ongoing viability of farm.	Support	Yes
Land Information New Zealand	Impact on Crown Land / Pastoral Lease land	Oppose	No
Department of Conservation	Adverse effects on species / habitats / ecosystems. Natural character of waterways. Fish passage. Duration	Oppose	Yes
Fish and Game New Zealand	Metering. Fish screens. Duration. Adverse effects on water quality and quantity and resulting effects on fish habitat / survival / spawning. Timing of instream works. Intensified landuse and gamebird impacts.	Oppose	Yes

Table 1: Summary of specific submissions on application CRC040180 and CRC040181

DESCRIPTION OF THE PROPOSED ACTIVITY

15. The following description of the proposed activity relates to the take and use of water from Frosty Gully.

CRC040180 – Surface water take and use

(i) Water will be taken from Frosty Gully at a maximum rate of 20 l/s, with a volume not exceeding 170,000 m^3/yr, at or about map reference NZMS 260 H39:5532-2497.

(ii) Water abstracted will be used for spray irrigation of 28 ha of crops and pasture, grazed by stock, excluding dairy cows. The plan attached to this report in Attachment One show the irrigation area and location of the abstraction point. Photographs of these sites are included in Attachment Two.

(iii) Water from Frosty Gully flows naturally into an existing dam (constructed in approximately 1981) within the creek bed. From the dam, water is conveyed to the irrigation area via a pipeline.

(iv) The intake structure consists of a 4 inch PVC pipe that has been fitted with a fish screen.

(v) No minimum flow has been proposed.

(vi) A water meter will be installed to measure the amount of water taken.

16. The proposed annual volume does not include any provision for stock water for the property. Details on the applicant's stockwater needs are provided in Report 23E.

17. The applicant proposes to dam water in Frosty Gully under the following conditions:

CRC040181 – To dam water.

(i) Water in Frosty Gully will be dammed to a height of 2.5 metres, impounding 500 cubic metres of water, at or about map reference NZMS 260 H39:559-248, on Killermont Station, State Highway 8, Omarama.

LEGAL AND PLANNING MATTERS

Consent Requirements

18. The consent requirements under the Resource Management Act (RMA), Transitional Regional Plan (TRP), Proposed Natural Resources Regional Plan (PNRRP) 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:

CRC040180 – Surface Water Take

19. TRP

(a) The TRP permits the abstraction of surface water from any surface waterway provided the volume abstracted is less than 10 m^3/day, and the rate of take is limited to 5 l/s. Given that the proposed take exceeds these limits, consent is required as a discretionary activity.

20. WCWARP

(a) Rule 2, clause (1a) – The applicant is not proposing a minimum flow. The take from Frosty Gully falls within row (xxii) of Table 3, which states that the minimum flow should be based on the 5-year, 7-day low flow as assessed by the Canterbury Regional Council.

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

(c) Rule 16 – Classifying activity, non-complying. All policies in the plan must be regarded when considering the application.

21. In summary, the take and use of water is a non-complying activity under Rule 16 of the WCWARP and requires consent pursuant to section 14 of the RMA.

22. The applicant is proposing to use an existing intake and water race, therefore a land-use consent is not required under s13 of the RMA.

23. No discharges are associated with the system and therefore no consent under section 15 of the RMA is required.

CRC040181 – Dam Water

24. TRP

(a) The damming of intermittently flowing waterways is permitted under the General Authorisation provided certain conditions are met.

25. WCWARP

(a) The application to dam water is subject to the same rules in the WCWARP as the take and use of water, detailed above. As no minimum flow is being proposed, the damming of water is a non-complying activity under Rule 16 of the WCWARP and requires consent pursuant to section 14 of the RMA.

26. The volume of water in the dam is less than 20,000 m^3 therefore the dam does not fall within the definition of a large dam under the Building Act, and is exempt from requiring a building consent.

Ahuriri National Water Conservation Order

27. Section 217 of the RMA states that where an operative conservation order exists, a consenting authority cannot grant a water right if the exercise of this permit would be contrary to any restriction or prohibition or any other provision of the order.

28. The Ahuriri National Water Conservation Order (AWCO) sets out various restrictions designed to protect the outstanding characteristics and features of the Ahuriri River and its tributaries. Clause 3 of the AWCO requires a catchment management approach and declares that *"the Ahuriri River and its tributaries include and provide for outstanding wildlife habitat, outstanding fisheries, and outstanding angling features."*

29. Frosty Gully is an ephemeral tributary of Manuka Creek, which flows into the Omarama Stream and the Ahuriri River. While it is a tributary within the Ahuriri River drainage basin, flow ceases immediately below the dam, which has been in existence for 28 years and prior to the establishment of the AWCO. On this basis and the direction provided by Section 217(1) of the RMA, the activities covered in this application would be exempt from meeting the requirements of the AWCO.

Priority

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

31. 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

32. At the time of writing this report, MEL has not provided derogation approval to Killermont Station Limited for this application.

CONSULTATION

33. It is stated in a letter from Mr Richards received by ECan in 2006, that the applicant had consulted the Department of Conservation (DoC) and Fish and Game (F&G) prior to the Ministers Call-In of applications in 2003. Te Runanga O Moeraki was notified of the application by ECan when it was lodged and later when all applications in the Waitaki catchment were notified.

DESCRIPTION OF THE AFFECTED ENVIRONMENT

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

35. The applicant provided a limited description of Frosty Gully in the application and supporting AEE. The following description is based on information obtained from ECan's GIS database and observations made during the site visit to the applicant's site in December 2008.

Frosty Gully

36. It is stated in the application that Frosty Gully is an ephemeral tributary of Manuka Creek and that instream values downstream of the dam are limited as surface flow within the waterway ceases a short distance from the dam. This was confirmed during the site visit and it was noted that Frosty Gully ceased to flow downstream of the existing dam.

37. It was also noted that the predominant vegetation at the site was scattered matagouri bushes. A pair of paradise ducks was present on the dam.

38. Environment Canterbury's GIS system does not identify any significant ecological or cultural values for Frosty Gully.

39. Frosty Gully generally runs dry downstream of the existing dam, however, during flood events (which only occur rarely), water overtops the pond and floods onto the surrounding farmland.

40. There are no other existing consent holders on Frosty Gully.

Ahuriri River

41. The proposed irrigation area is on the southern side of SH8 and the Ahuriri River. According to Environment Canterbury's GIS system, the Ahuriri River is a Wetland of Regional Importance, a Site of Special Wildlife Importance, a Recommended Area for Protection, a Land of National Significance and a Land of Regional Importance. The Ahuriri River is also recognised as native bird habitat, a native vegetation area, and trout and salmon spawning habitat.

42. Fish & Game stated in their submission that the Ahuriri River is nationally and internationally renowned for the quality of trout and angling experience it offers and its outstanding natural wildlife habitat. The river and its tributaries also provide spawning and juvenile rearing habitat for resident populations of brown trout.

Proposed Irrigation Area

43. The area proposed for irrigation and abstraction is classified as a Region of Outstanding Regional Significance.

44. The irrigation area is not within a Statutory Acknowledgement Area or a Silent File Area.

ASSESSMENT OF THE PROPOSED ACTIVITY

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

46. 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))

47. The effects that have been considered for these type of activities (surface water abstraction and damming) 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	No assessment provided. Cumulative effects to be addressed later. No assessment provided on the effects on landscape values or amenity as a result of the dam.	Local effects may be acceptable as the irrigation area is small and some distance from SH8. Cumulative effects of this application in combination with new irrigation areas could be significant, unless appropriate mitigation is proposed. Dam has existed within applicant's property for 28 years, and is unlikely to affect amenity or landscape values.	Effects of this application alone may be acceptable and no mitigation is required.
Other water users	No minimum flow proposed as this is an existing activity and flow ceases immediately downstream of the dam.	Agree with applicant that effects are unlikely to be more than minor as there are no other parties using water from Frosty Gully. No minimum flow required.	Effects minor.
Inefficient use	Annual volume of 170,000 cubic metres per year.	Agree that this is an efficient volume.	Effects minor.
Ecosystems	Fish screen already exists.	Fish screen may be appropriate and consistent with fish screen guidelines but effects on fishery values from the presence of the dam are uncertain.	Effects uncertain.
Water quality	MWRL study for cumulative effects.	Cannot confirm that effects will be acceptable given conclusions in s42A report on cumulative effects and lack of mitigation measures proposed by applicant.	Effects may not be acceptable.
Tangata Whenua values	No assessment provided.	Submissions concerned & have not been addressed by applicant.	Effects may be more than minor.
Dam failure	No assessment provided.	Effects unlikely to be more than minor, as dam is below ground and there are no properties located nearby that could be affected in the event of failure.	Effects minor.

Table 2: Summary of Assessment of Effects for CRC040180 & CRC040181

Adverse effect on people, communities and amenity values

48. The applicant has not provided an assessment of the effects on landscape or amenity values at a local or catchment scale.

Landscape Values

49. The irrigation area is, on its own is relatively small (28 hectares) and is some distance from SH8. This area of land has also been irrigated for at least 20 years therefore the visual impacts of irrigation are already occurring and will not change or increase as a result of this replacement application.

50. This irrigation area alone would not be highly visible from the road, however the area represents a portion of a much larger irrigation area applied for under the Killermont applications, and this larger area extends to SH8 and would therefore be visible from the road.

51. Mr Chris Glasson (Landscape Architect) was engaged by ECan to audit the applicant's assessment of landscape effects. He concluded that no measures would be required to mitigate the impacts of irrigation associated with the replacement application.

52. 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 4F) of irrigation within the catchment.

53. While it is considered that the irrigation of this land solely is unlikely to result in adverse landscape effects, the site in combination with the new irrigation areas proposed under CRC041798 (75 ha) and CRC041777 (300 ha) may result in significant adverse effects, unless appropriate mitigation is provided. This mitigation however, would be required in relation to irrigation areas covered under other applications within this Landscape Unit and not for the area irrigated under this application, should it be granted.

Recreation & Amenity Values

54. The applicant has not assessed the impacts of the proposed take and use of water from Frosty Gully on recreation and amenity values. It has been confirmed by GIS and site visits by ECan Investigating Officers however, that the flow in Frosty Gully ceases a short distance from the dam, within the applicant's property. In addition, no recreational or amenity values have been recorded for Frosty Gully.

55. Given that it is unlikely that Frosty Gully in the vicinity of the abstraction location and dam would be accessible to the public or used for recreational or amenity purposes, the adverse effects on amenity are unlikely to be no more than minor.

Effects of the dam on amenity and landscape values

56. The dam has existed on the property for 28 years, since it was constructed in 1981. It is inaccessible to the public and the closest property to the dam belongs to the applicant and is over 2 km away. On this basis, I am satisfied that the dam will not result in adverse effects on landscape values or the amenity of the surrounding area.

Positive Effects

57. It is noted that the use of water for irrigation could maintain the productivity of the land, provide for the economic well-being of the wider community.

Summary

58. Given the conclusions reached by Dr Freeman and Mr Glasson and the nature of the proposed activities, I am satisfied that the adverse effects on landscape and amenity values will be minor.

Adverse effects on other users

59. The applicant is not proposing a minimum flow as they state that flow ceases downstream of the dam and within the applicant's property. Given that there are no existing or proposed takes from Frosty Gully, a minimum flow to protect other users is not considered necessary.

60. This application if it is granted will authorise activities that have occurred on this property for almost 30 years. Given the size of the take and the lack of other abstractions from Frosty Gully, I am satisfied that the proposal to continue taking water from this waterway is unlikely to have impacts on any other users including MEL, notwithstanding the requirements for derogation approval.

Adverse effects of inefficient use

61. 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

62. The irrigation volume of 170,000 m^3 has been based on the volume currently authorised under the existing consent for this activity. Aqualinc also stated that this volume is consistent with an average annual application depth of 600 mm.

63. I have used the method outlined in Policy 16(c)(ii) of the WCWARP (WQN9v2) to provide guidance on reasonable annual volumes that would be required to meet the seasonal irrigation demand for soils within the proposed irrigation area. Environment Canterbury's soil information database indicates that the proposed irrigation area consists of primarily light soils (PAW of 70 millimetres) and the effective seasonal irrigation rainfall for the site is 185 mm. If this was taken into account, then the annual volume required to irrigate the 28 ha block, as calculated using WQN9v2 would equate to 176,400 m^3, which is higher than the volume applied for by the applicant. On this basis, the annual volume requested by the applicant would represent a reasonable volume to meet the irrigation demand of the soils at the site.

Technical Efficiency

64. Applying this volume over the proposed irrigation area would result in an average application depth of 6 millimetres per day. Information provided by the applicant indicates that water will be taken for 12 consecutive days for irrigation, with a design return period of 12 days. This will result in a total application depth of 72 mm. As this approximates the average water holding capacity (AWHC) of soils at the site, irrigation should not result in losses to groundwater.

65. Given the method of irrigation (spray irrigation) and application rates proposed, I am satisfied that irrigation can proposal should be able to achieve the 80% technical efficiency in the WCWARP.

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

Summary of effects from inefficient use

67. 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(c)(ii) of the WCWARP, and that the proposed seasonal allocation of 170,000m^3 is reasonable for the irrigation area, as required by Policy 16(c)(ii) of the WCWARP.

68. 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

69. 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.

70. 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.

71. 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.

72. The report by MWRL has been audited and a separate s42a report prepared (see Report 4a). The conclusion of Dr Mike Freeman and other experts (as outlined in Reports 4(a) – (f)) is that given the significant level of uncertainties involved in, and technical concerns with, critical aspects of the MWRL/GHD assessment relating to the extent of adverse effects, together with the lack of mitigation measures proposed by resource consent applicants means that it would be premature to make robust conclusions about the potential adverse cumulative effects.

73. At the time of writing this report, the applicant has not provided details of mitigation measures that will be implemented to ensure that the impacts on water quality will be adequately mitigated.

Adverse effects on ecosystems

74. The abstraction of surface water can result in adverse effects on ecosystems by reducing the amount of water available to sustain the life-supporting capacity of the surface waterway or affect fishery values, if intake structures impede the passage of fish or are not appropriately screened to prevent the entry of fish.

Minimum Flows

75. The applicant has not provided a clear assessment of effects of the abstraction and damming of water from Frosty Gully on ecosystem values within the waterway. All the flow in Frosty Gully is currently collected in the dam within the creek bed and piped to the irrigation area. This situation has occurred since 1981 and it is likely that any ecological values within the waterway reflect the current situation and are unlikely to change as a result of granting these applications.

76. On this basis, the applicant is not proposing a minimum flow for the abstraction and both applications are non-complying activities according to the WCWARP. Given that these activities have occurred for a relatively long time and the ecosystem of the creek has already been modified, it is considered that continuation of both the damming and abstraction of water from Frosty Gully are unlikely to result in further adverse effects on the environment.

Fish screen & Intake Structure

77. The applicant states that water is taken via a pipeline installed within the dam wall. A fish screen with a 1 mm mesh, is installed at the intake. The intake pipe within the wall of the dam is unlikely to impede fish passage and the mesh size is consistent with the NIWA fish screen guidelines, which recommend a mesh size of no greater than 2 mm.

78. The existence of the dam however may impede the passage of fish within Frosty Gully. While the intake structure has a fish screen, the applicant has not provided information on the fishery values of this watercourse, confirmed whether fish passage within the flowing reaches of the gully (both upstream and downstream of the dam) has been provided for, or assessed the impacts of damming water within this watercourse to determine the significance and extent of the impacts associated with this activity.

79. It is stated that flow in Frosty Gully ceases immediately downstream of the dam. It is unclear whether fish can move freely between the upper and lower reaches of Frosty Gully via the pond. The applicant may wish to provide further details at the hearing to confirm the impacts on fishery values as a result of the dam.

Adverse effects of dam failure

80. The applicant has not provided an assessment of this effect. The nearest property to the existing dam belongs to the applicant, and is located approximately three kilometres north of the dam. During the site visit, ECan officers noted that this property is separated from the existing dam by a low hill, and therefore it would be impossible for flows to reach the property if dam failure occurred.

81. Two properties, not owned by the applicant are located at a distance of 5 kilometres from the dam (one property to the east – Twin Peaks, one to the southeast – Clifton Downs). Twin Peaks is separated from the dam by Manuka Creek and several kilometres of naturally undulating land. Clifton Downs is separated from the dam by Clifton Swamp and several kilometres of undulating land.

82. There are no other structures or public roads within the vicinity of the dam. Therefore, if dam failure was to occur it is unlikely that any existing structures would be affected.

83. The dam is below ground in a natural basin on the property (see Attachment Two). In times of very heavy rain, there is the potential for water to overtop the banks of the

dam and flow onto the surrounding farmland. Given the size of the dam and the amount of water impounded, it is unlikely that flooding will be extensive or result in adverse effects on other properties.

84. For the reasons detailed above, I consider that the effects of dam failure are likely to be minor.

Adverse effects on Tangata Whenua values

85. 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.

86. 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.

87. 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.

88. 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

89. 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 localised and cumulative impacts on surface water quality, cultural values and ecological values as a result of the damming of water.

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

Regional Policy Statement (RPS)

90. 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.

91. 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)

92. 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

93. 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) and (b) of this objective.

94. I cannot confirm that the proposal will not compromise cultural values (Objective 1(a)) fishery values (Objective 1(b)).

95. Objective 3 requires the recognition of both the benefits of the use of water and the adverse effects that could occur. The use of water for irrigation within this catchment may result in unacceptable effects on water quality, which may therefore outweigh the positive economic and social benefits of irrigation.

96. The proposed activity is within the allocation limits set by the WCWARP and the applicant has demonstrated that the amount of water applied for is reasonable and can be applied for in an efficient manner. Therefore it may be considered that the take, use and damming of water from Frosty Gully is consistent with Objectives 2, 4 and 5 of the WCWARP.

Environmental Flow and Level regimes

97. The applicant is not proposing a minimum flow, as required by Rule 2 of the WCWARP. The application may compromise subsection h. of Policy 4.

Surface Water Quality

98. 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 consider that this application may be contrary to this policy, unless adequate mitigation measures are proposed and implemented.

Replacement consents

99. Policy 28 provides guidance as to matters which must be considered when deciding whether to grant or refuse an application for replacement of existing consents.

100. These include consideration of attempts to meet the efficiency expectations of the plan, recognition of the value of the investment by the consent holder and maintenance of the consent in any allocation limits and priority bands if granted.

101. I consider that the proposal is consistent with this policy. The applicant has applied for a direct replacement of a consent that has authorised irrigation at the site for approximately 28 years.

Ahuriri Catchment

102. The WCWARP does not have any specific policies for the Ahuriri Catchment. Minimum flows are as set in the conservation order and apply. The proposal will not compromise the requirements of the conservation order.

Conclusion

103. 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.

Other Matters

104. 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)

105. 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."

106. 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.

107. 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 Section 5(2)(c). It is also uncertain whether the proposal adequately protects any ecological or fishery values that exist within the watercourse, as required under Section 5(2)(b).

Matters of National Importance (s6)

108. Sub-section (e) of Section 6 of the RMA is relevant to this application. The applicant has not assessed the impacts on cultural values.

Other Matters (Section 7)

109. 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. The proposal may compromise subsection f., which requires the maintenance and enhancement of the quality of the environment. The proposal may contribute to impacts on water quality within the catchment.

Principles of the Treaty of Waitangi (s8)

110. 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 Refuse

111. 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.

112. These applications relate to replacement consents that if granted will authorise existing activities, in relation to the location of abstraction and damming of water, the amount of water taken and the proposed size and location of the irrigation area. The applicant is not proposing a minimum flow therefore both the damming of water in Frosty Gully and the abstraction must be considered as non-complying activities.

113. In order to grant consent, the Commissioners must therefore be satisfied that the impacts of the activities will not result in more than minor impacts on the environment; or that the applications are not contrary to the objectives and policies of the relevant plans (section 104D).

CRC040180 – To take and use water

114. The applicant is proposing to spray irrigate land and has proposed an annual volume that is consistent with the annual volumes calculated using the method recommended by the WCWARP. The proposal therefore should meet the technical efficiency objectives of the plan.

115. The applicant has not however proposed any measures to mitigate impacts on water quality or demonstrated that the impacts on water quality are likely to be no more than minor or that the proposal is consistent with the policies of the WCWARP, in particular Policy 13. On this basis, I cannot recommend that this application be granted.

CRC040181 – To dam water

116. As discussed above, the applicant has not provided sufficient information to confirm that the impacts of the damming of water in Frosty Gully on the ecological and fishery values within the watercourse are unlikely to be more than minor therefore, I cannot recommend that this consent be granted.

RECOMMENDED CONDITIONS

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

118. 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 these applications is provided below.

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

CRC040180 – To take and use water

No.	Condition Code[1]	Details
Take		
1	WP01	*Name of waterbody*: Frosty Gully *Map reference:* between NZMS 260 H39:5532-2497. *Instantaneous rate:* 20 litres per second *Volume:* 170,000 cubic metres
2	WP03	*Instantaneous rate:* 20 litres per second *Volume:* 1,728 cubic metres per day *Volume over design return period – [applicant may wish to confirm this volume and the design return period]* *Seasonal volume:* 170,000 cubic metres
Use		
3	WP04	*Type of irrigation:* Spray irrigation *Number of hectares:* 28 hectares *Use:* Pasture for grazing sheep and beef cattle. *Plan No:* CRC040180
4	WP05	
5	WP06	
Mitigation		
6	WP09	Fish screening condition
Measuring & Metering		
7	ME01	
8	ME03	
9	ME04	
10	ME05	

[1] See Report 1, Appendix 6 for condition code and condition wording.

11	ME06	*Waterway:* Frosty Gully
Administrative Conditions		
12	AD01	
13	AD03	
14	AD04	

CRC040181 – To dam water

No.	Condition Code[2]	Details
Scope *[These conditions set out the design specifications and limits of the dam]*		
1	DW04	*Map reference:* between NZMS 260 H39:5532-2497.
2	DW05	*Volume of water dammed:* 500 m^3
3	DW05	*Depth of water in dam: [x]*
4	DW07	*Freeboard: [x] in metres*
5	DW08	*Height of crest: [x] in metres*
Operation and Maintenance		
6	DW13	
7	DW17	
Administrative Conditions		
8	AD03	

Signed: Date: 31st August 2009

Yvette Rodrigo
Consents Investigating Officer

[2] See Report 1, Appendix 6 for condition code and condition wording.

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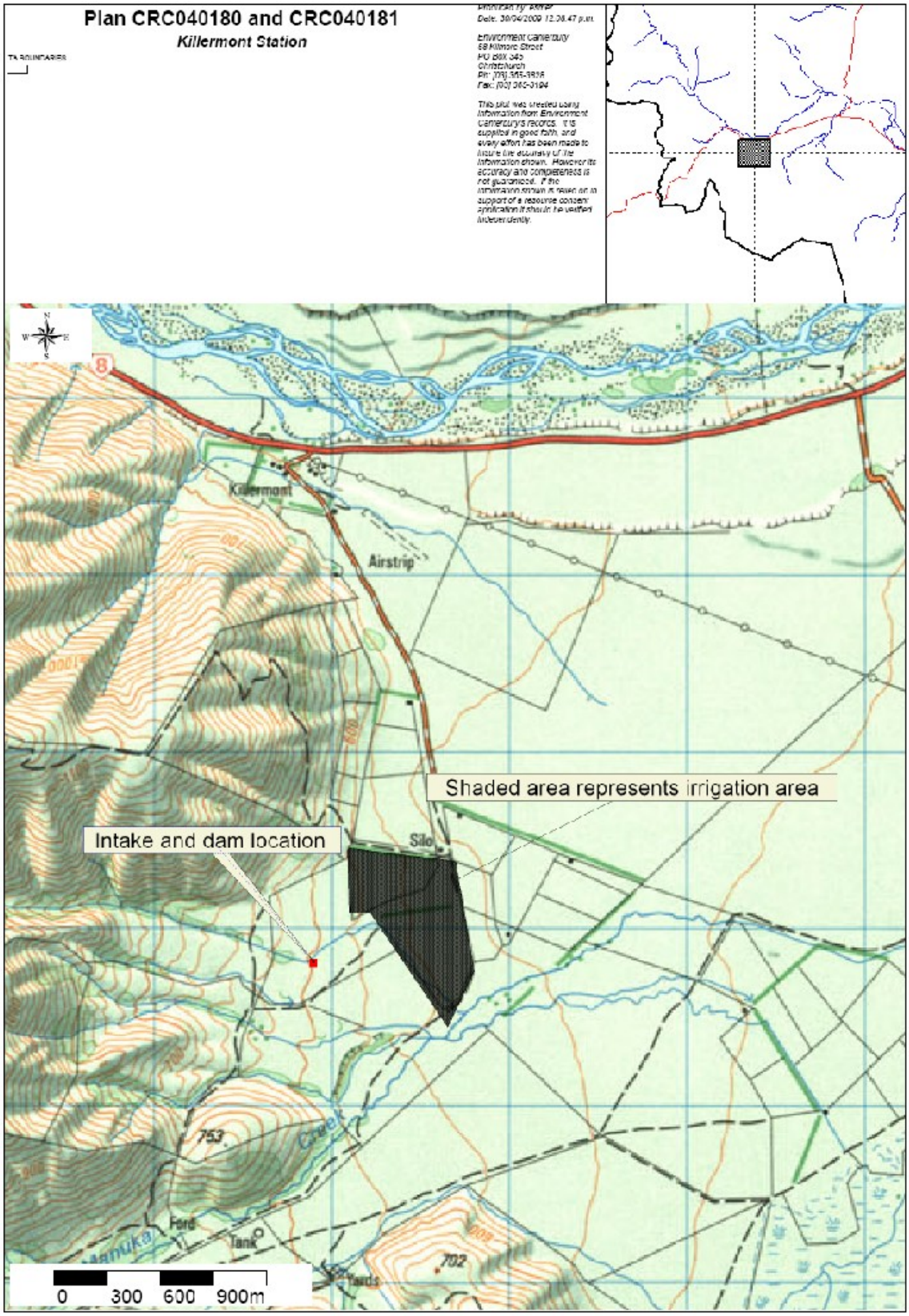
Waitaki Catchment Water Allocation Board 2006. Waitaki Catchment Water Allocation Regional Plan, Section 32 Report. ISBN: 0-9582620-5-5.

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 may compromise section b. of this objective and 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.	No minimum flow has been proposed however there are no other users of Frosty Gully.
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.	No minimum flows for Frosty Gully have been proposed.
Policy 4	Outlines a number of matters that must be considered when setting an environmental flow and level regime	The applicant is not proposing a minimum flow, however the matters set out in this policy should not be affected by the proposal.
Policy 8	Promoting water harvesting when flows are low	The applicant currently dams water within the gully for irrigation purposes therefore it may be considered that the proposal is consistent with this policy.
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.	Apart from the uncertainty regarding the impacts of the proposal on tangata whenua values, the proposed abstraction is consistent with this policy.
Policy 13	Addresses water quality objectives in the NRRP	Proposal may compromise water quality objectives.
Policy 15	Ensuring take and use of water is reasonable for its intended use	The proposed take and use is 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 consistent with the volumes determined using WQN9v2 and irrigation will be undertaken in an efficient manner.
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 has been applied for under a separate resource consent.
Policy 21	Requires the installation of a water meter	One is proposed.

Policy 23	Policies 23 – 27 refer to restrictions during times of low water availability.	The proposal will not affect other users.
Policy 24		
Policy 25		
Policy 26		
Policy 27		
Policy 40	Setting an environmental flow and level regime for these rivers and streams	The effects of not adopting a minimum flow for Frosty Gully are unlikely to be more than minor.