

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

IN THE MATTER OF The Resource Management Act
1991

AND

IN THE MATTER OF Application CRC042020 by
Maree Horo for a Water Permit to
divert, take & use surface water.

Section 42A Officer's Report of Claire Penman

Date of Hearing: 21 September 2009

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

INTRODUCTION

2. Maree Horo (the applicant) has applied for a resource consent to divert, take and use up to 174 litres per second from the East Branch Ahuriri River with an annual volume of 1,800,000 cubic metres, for irrigation of 300 hectares of pasture and winter crop at Ribbonwood Station, Quailburn Road, Omarama.

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

3. The applicant engaged Mr Robin Brooks of Brooks and Associates Ltd to prepare the application and assessment of environmental effects and respond to further information requests on their behalf. Ms Keri Johnston of Irricon Resource Solutions has also been engaged to provide technical advice on behalf of the applicant.
4. A 16 year consent duration is sought to 2025.
5. This is an application for a new activity, however it is seeking to resume activities previously consented on the property.
6. A site visit was undertaken during the audit of this application on 18 June 2009.

Background

7. Application CRC042020 was lodged on 23 March 2004 and considered to be notifiable on 24 March 2005. Requests for further information have been sent covering effects including, but not limited to, water quality, landscape, irrigation volumes, minimum flows, intake design and derogation approvals.
8. Since the application was lodged, there have been a number of formal amendments. The total annual volume now being sought has been reduced from 2,100,000 cubic metres (as notified) to the currently proposed 1,800,000 cubic metres. The total rate

of diversion and take has also been reduced from 570 litres per second diversion and 250 litres per second take (as notified), to only provide for a take of water at a rate of 174 litres per second. The irrigation area was initially 500 hectares, then 350 hectares (as notified), but is now a total of 300 hectares. All changes were made on 15 April 2009. I consider that the amendments made are within the scope of the activity as notified and therefore re-notification is not required.

9. All associated discharge permits have been withdrawn as the applicant no longer proposes to divert and discharge excess water. The entire system will be spray irrigated instead of border-dyke.
10. Applications CRC042011, CRC042015, CRC042017, CRC042018, CRC042022, and CRC042025 have also been lodged by the applicant to take and use water for irrigation of a further two blocks of land in the Quail Burn and Wairepo Creek catchments. These applications are independent of this application and are assessed in Reports 21A and 21C.

Previous consents

11. The consents that this application is replacing – WTK691016A and WTK691016B – expired on 1 October 2001 (A copy can be found in Attachment Two). As this application was lodged 2 and half years after the expiry of the above consents, the applicant is not operating under s124 continuation.
12. It is not clear to what extent the irrigation component of these consents was exercised in the past.
13. These original consents provided for the diversion, take and use of water from the East Branch Ahuriri River at a maximum rate not exceeding 570 litres per second, for stock water and irrigation of 500 hectares.

Notification

14. Details of the notification and wording are contained in Appendix 4 of the introductory s42A report (Report 1). This consent was publicly notified in August 2007 with 200 other applications for similar activities in the Waitaki catchment.

Submissions

15. In the 2007 public notification, 24 submissions in total were made on the water permit application. Of these:
 - (a) 4 were in support;
 - (b) 18 in opposition; and
 - (c) 2 neither supported nor opposed the application.
16. Details of submissions made in response to all applications which were publicly notified at the same time in 2007 are contained in Report 1, Appendix 5. Additionally, Table 1 below summarises submissions made individually on these applications, or submissions which raise particular concerns in relation to this proposal. Please note that all submissions hold equal importance, even if not specifically listed below.

17. Overall, the key effects of concern to submitters include effects on: ecosystems, water quality, allocations, minimum flows, natural character and landscape, efficiency and cultural values.

Submitter	Issues	Support/Neutral/Oppose	To be heard
Fish & Game NZ	Important fish spawning habitat and angling location may be affected by flow reduction	Oppose	Yes
Meridian Energy Ltd	Concerned about water quality, metering and reasonable use	Oppose	Yes
Canterbury Aoraki Conservation Board	Water quality, effects on ecosystems, natural character and landscape	Oppose	Yes
TJ & J Cooke	Assist in efficient use of the land and sustainable management of resource	Support	Yes

Table 1: Summary of submissions on application CRC042020

DESCRIPTION OF THE PROPOSED ACTIVITY

18. The applicant proposes to divert, take and use water at a rate of 174 litres per second from East Branch Ahuriri River to irrigate an area of 300 hectares within Ribbonwood Station (see photos of East Branch and irrigation area in Attachment Three).
19. Water will be diverted from the existing intake which supplies stock water to the property. The current race system will be upgraded to a piped system in order to provide suitable pressure to support a gravity-fed spray system.
20. The applicant has also not yet provided details about the intake design/upgrade and whether or not works in, on or under the bed and banks of the river will be required to upgrade the intake structure. An application for resource consent under section 13 has not been lodged, if required.
21. The proposed annual volume does not include provision for stock water for the property. The applicant considers that the provision of stock water is covered by section 14(3)(b) of the RMA.
22. The applicant proposes the following activities:
- CRC042020
- (a) To divert, take and use water from East Branch River at a rate of 174 litres per second, with a volume not exceeding 1,800,000 cubic metres per year at or about map reference NZMS 260 G39:486-412.
 - (b) Water shall be used for spray irrigation of up to 300 hectares of crops and pasture, excluding dairy cows.
 - (c) A minimum flow equivalent to the 5-year 7-day low flow in the East Branch is proposed, in accordance with Table 3, row (xxii) of the WCWARP.
 - (d) A fish screen will be installed on the intake, however, details of this have not been provided.
 - (e) The take of water will be metered.

LEGAL AND PLANNING MATTERS

Consent Requirements

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

TRP

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

WCWARP

- (a) Rule 2, clause (1) – The applicant proposes the minimum flow of the 5-year 7-day low flow of 400 litres per second in the East Branch Ahuriri River (Table 3, row (xxii)) – refer to Report 2B for discussion on establishing the 5-year 7-day low flow. This minimum flow location is below all abstractions in the catchment, and is reasonably near the bottom end of the catchment. The minimum flows in the Ahuriri River Water Conservation Order (Table 3, row (x)) do not apply to the East Branch Ahuriri River for the purposes of activity classification
- (b) Rule 6 – The applicant proposes an annual volume of 1,800,000 cubic metres which is within the allocation limit of 275 million cubic metres for agricultural activities upstream of Waitaki Dam (see Report 3 for annual allocation and priority tables).
- (c) Rule 15 - Classifying rule – discretionary activity
24. Overall, the proposed water permit is a **discretionary** activity under Rule 15 of the WCWARP (and TRP) and resource consent is required in accordance with section 14 of the RMA.
25. A consent under section 13 of the RMA to undertake works in the bed and banks of East Branch Ahuriri River to upgrade the intake has not yet been lodged, but consent may be required (see paragraph 20 above).
26. No discharge is proposed so consent under section 15 of the RMA is not required.

Priority

27. In terms of instantaneous allocations under Rule 2 for the East Branch Ahuriri River, a detailed list of all consents and applicants can be found in Report 2A.
28. For Rule 6 Table 5 (annual allocations), refer to Report 3 for a full list of all existing consents and applications in priority order.
29. For this application the allocation limits are not exceeded and there are no priority issues

Derogation Approval

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

CONSULTATION

31. The applicant undertook consultation and gained written approval from adjoining land owners Birdwood Station prior to notification of this application.
32. I am unsure if any consultation has occurred since notification with any party.

DESCRIPTION OF THE AFFECTED ENVIRONMENT

33. A description of the values of the Waitaki Basin and Ahuriri catchment in general is provided in the introductory s42A report (Report 1).
34. In addition to the above overall summary, the applicant notes the following:
- (a) The East Branch Ahuriri River is a braided river with a main channel width of between 10 and 15 metres. The depth of the river is around 0.2 to 0.5 metres at normal flows.
 - (b) Flows range from 200 litres per second to 3,700 litres per second but this is based on limited data. Some flow losses are known to occur between the gorge and its confluence with the mainstem.
 - (c) Recreational use of the East Branch is limited because of limited access.
35. The Ribbonwood Station Conservation Resources Report (2002), produced by the Department of Conservation for Tenure Review, provides additional information regarding the landscape and ecological values of the area.
- (a) Ribbonwood Station covers an area of 7,289 hectares of land stretching from the outwash plains of Lake Ohau across the Diadem Range to the river terraces of the Ahuriri River.
 - (b) The outwash flats on the Ahuriri River valley floor consist of two main terrace levels. The higher terrace bounds the Ahuriri River mainstem and extends to a lower terrace associated with the East Branch. The upper terrace, on which irrigation is proposed, has been planted in substantial shelter belts (up to 10 rows deep) and forestry blocks which criss-cross the landscape. Overall the terraces are highly modified with predominantly over sown pasture species.
 - (c) Freshwater fish species include koaro, alpine galaxias, Canterbury galaxias and upland bully. Brown and rainbow trout use the East Branch for spawning with a large number of juvenile trout rearing the East Branch and migrating downstream to the mainstem as fingerlings.
 - (d) Black stilt, banded dotterel and pied oyster catcher breed and feed in the wetlands associated with the East Branch as well as several other species which feed on these wetlands.
36. I also note that the proposed irrigation area is predominantly gently flat land located some distance up the Ahuriri River valley. The irrigation area is not visible to traffic on

the main highway over the Lindis Pass, but will be visible to anglers and other recreational users of the Ahuriri River valley.

37. There are no other existing consent holders on the East Branch and no other applicants seeking to take water from the East Branch. All other applicants in the Ahuriri catchment are seeking to take water from the Omarama Stream and its tributaries, or the Ahuriri River downstream of the confluence with the East Branch.

ASSESSMENT OF PROPOSED ACTIVITY

38. The proposed water permit application is a discretionary activity and must be considered in the context of s104 of the RMA.
39. Section 104(1) outlines matters that the consent authority must have regard to when considering an application for a resource consent, including any actual and potential effects on the environment, any relevant statutory provisions, and any other matter the consent authority considers relevant.

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

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

Adverse Effects	Applicant's assessment	My assessment	My Conclusion
Ecosystems	Consider with fish screen & min flow that effects minor.	Minimum flow as set out in Table 3 at bottom end of catchment will protect instream values and fish spawning. Current fish screen not adequate as fingerlings could still pass through and no bypass provided prior to rock weir / fish screen (see photos in Attachment Three). But upgraded fish screen proposed which needs to be consistent with recommended condition. No flow sharing requires as below mean flow of 2,060 litres per second.	Effects minor.
Other water users	Only applicant on East Branch Ahuriri River. Other existing and proposed users in Ahuriri catchment but downstream of proposed abstraction point on mainstem of Ahuriri River. The diversion operated in the past without known effects on other users or the environment. Water meter proposed.	Water meter proposed. The proposed abstraction may reduce flow availability and trigger minimum flows sooner for users on the Ahuriri mainstem. However, the East Branch is specifically excluded from the Ahuriri WCO and as such the abstraction under this application, with the proposed min flow, is not considered to adversely affect users who are limited by the Ahuriri min flow at South Diadem. The proposed min flow will protect other permitted users of the catchment for stockwater and recreational purposes.	Effects minor.
People,	Part of substantially modified	The irrigation area is not visible from	Effects

communities & recreational values	environment with human influences from striking shelter belts. Cannot be seen from main highway. No change to contour of land, but greening effects of irrigation part of agricultural landscape. Cumulative effects too remote, unnecessary to determine application & beyond scope of Regional Council. Recreational & amenity effects have not been assessed.	the State Highway. Conclusions of Chris Glasson on landscape effects (Report 5) note that the site is located on a high river terrace between the Ahuriri River and a tributary, this is a very discrete site. A shelterbelt screens much of the site and from the road the landcover of the site is not visible. Therefore, there will be no effects on landscape from the proposed activity. Appropriate min flow proposed to protect recreational use and aesthetic amenity of waterway. I also note that use of water for irrigation may result in improved productivity of the land & positive economic benefits for the wider community.	minor.
Inefficient take and use	Applicant proposes 1,800,000m ³ /yr for irrigation.	Disagree that this is an efficient volume. Consider 1,455,000m ³ /yr more appropriate for irrigation using the methodology outlined in Report U05/15.	Effects may be more than minor.
Water quality	MWRL report for cumulative effects.	Not satisfied given conclusions in s42A reports on cumulative effects (Report 4A-F). There are a number of submitters to be heard on this matter.	Effects may be more than minor.
Tangata Whenua values	No assessment provided.	Submissions concerned & have not been addressed by applicant.	Effects uncertain.

Adverse effects of inefficient take and use on other users

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

Irrigation volumes

42. The applicant proposes to take water at a rate not exceeding 174 litres per second, and use up to 1,800,000 cubic metres of water per year for irrigation of 300 hectares. The irrigation volume has been calculated based on the volume adopted by Mackenzie Irrigation Company of 600 millimetres per hectare per year.
43. I note that the gross application depth with the rate of water applied for would be 5 millimetres per day, and at 80% efficiency, the maximum application depth would be 4 millimetres per day. The applicant therefore considers that as the expected evapotranspiration rates are likely to be around 5 millimetres per day, that the proposed volume and rate is efficient.
44. As a comparison to the applicant's annual volume calculation, I have used CRC's GIS system and the method outlined in Report U05/15 to determine an appropriate annual volume for irrigation of the proposed area in accordance with Policy 16(c). I based this calculation on intensive land use with 100% light soil (PAW <75mm) and Effective Summer Rainfall of 330mm.

45. Using the above figures, a recommended annual volume 1,455,000 cubic metres would be a more appropriate and efficient volume of water for spray irrigation of this area using one of the methods outlined in Policy 16(c).
46. I note that this methodology (Report U05/15) assumes an irrigation efficiency of 80% which is largely achievable for modern spray systems (consistent with Policy 16(b)) and takes into consideration on-site physical and climatic factors (Policy 16(a)).
47. Given the above discussion, I am not satisfied that either of the annual volumes being sought by the applicant of 1,800,000 cubic metres per year would be reasonable and appropriate for the area and method of irrigation proposed.
48. I also consider that an efficiency condition (WP05) is appropriate to ensure that water is not applied to the soils above their average water holding capacity, nor onto unproductive areas of land.

Conveyance / distribution efficiency

49. The applicant has initially estimated that existing race losses may be in the order of approximately 10 percent for the open race conveyance system. I note that they have proposed to upgrade this to a pipe system if consent is granted in order to achieve adequate pressure for a gravity-fed spray system. The applicant also notes that no additional water has been applied for to “counter” losses in the race network so it will be up to them to manage and improve the system to ensure the water applied for is able to be used and not “lost” from the system.
50. I consider that the applicant’s analysis of the conveyance efficiency is appropriate and that the race network appeared to be reasonable well maintained during my site visit. With the proposed upgrade to a piped system and given no “additional” water has been applied for, I consider that the proposal has adequately considered Policy 19 of the WCWARP.

Efficiency conclusions

51. I would recommended an annual volume for the diversion and take of 1,455,000 cubic metres per year for irrigation, compared with the applicant’s proposed 1,800,000 cubic metres per year. Once an appropriate stockwater volume has been determined this should be added on to the recommended irrigation volume.
52. Given the above discussion, I am not satisfied that that the proposed seasonal allocation is reasonable for the proposed irrigation area.

Adverse effect of use on water quality

Local effects

53. In terms of effects at the local scale, the applicant has considered that effects on water quality will be minor. They noted in their s92 response dated 15th December 2006, that spray irrigation is an efficient use of water which minimises runoff and leaching.
54. No nitrates assessment for the property has been provided and depth to groundwater is unknown. Conditions to mitigate water quality effects have not yet been provided by the applicant (for example farm management plans).
55. No submissions were received on the local effects on water quality of this proposal.

56. Given the lack of assessment and mitigation measures, I cannot be satisfied that the adverse effects on water quality from the proposed activity will be minor.

Cumulative effects

57. An assessment of cumulative effects on water quality was requested to address the above concerns and in reference to Policy 13 of the WCWARP. The applicant has been involved with the study by Mackenzie Water Research Ltd (MWRL) on cumulative effects within the catchment.
58. There are a number of submissions which identify water quality as a result of land use intensification as a concern, including a submission from Meridian Energy Ltd. Those submitters and their concerns are outlined in more detail in Appendix 5 of Report 1.
59. The report by MWRL has been audited and a separate s42a overview report prepared by Dr Mike Freeman as well as numerous technical s42A reports (see Reports 4A-F).
60. The conclusion of Dr Mike Freeman and other experts (as outlined in Reports 4A-F) is that given the significant level of uncertainties involved in, and technical concerns with, critical aspects of the MWRL/GHD assessment of the adverse effects, together with the lack of mitigation measures yet proposed by resource consent applicants means that it is premature to make adequate conclusions about the potential adverse cumulative effects.

Adverse effect on Tangata Whenua values

61. The applicant has not provided an assessment of the effects of the proposed activity on cultural values. The sites of the proposed activities are within the rohe of Te Runaka O Waihao, Te Runaka O Arowhenua and Te Runaka O Moeraki. All three runanga and Te Runanga O Ngai Tahu were served notice of the applications in August 2007.
62. Submissions were received in opposition to this application from Te Runanga o Ngai Tahu and Ngai-Tahu Mamoe Fisher People. The concerns of the Ngai-Tahu Mamoe Fisher People seem to relate specifically to the resource consent process, rather than this specific application.
63. 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.
64. Given that there are a number of submissions which identify cultural values, I cannot determine the scale of the actual and potential effects on the cultural values of the area.

Overall Conclusion

65. With regard to s104(1)(a), the actual and potential effects of the proposed activity have been discussed above.
66. In particular, there is uncertainty regarding the following effects:
- (a) Localised and cumulative impacts on water quality;
 - (b) Whether the proposed annual is a reasonable and efficient volume of water for the intended purpose;

(c) Whether there are any adverse effects on Tangata Whenua values.

67. I consider that the effects of inefficient take and use can be mitigated, if the recommended conditions are included as part of the consent, if granted. For the other effects, I am unsure if these can be mitigated. The applicant may wish to address these matters at the hearing.

Statutory Assessment (s104(1)(b))

Regional Policy Statement (RPS)

68. 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.
69. Of significance to this application is Chapter 9, which relates to the management of the Region's water resources. The WCWARP takes into account policies in the RPS and addresses 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)

70. 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 Four. A discussion of the objectives and policies which are particularly relevant to this application is provided in the following paragraphs. Where I am satisfied there is no conflict with the objectives and policies, I have not discussed them.

Objectives

71. Objective 1 is a key objective in relation to the proposed taking of water. I have considered whether Objective 1 can be met in terms of sustaining the quality of the river and surrounding environment. While the proposal may not entirely be consistent with Objective 1 and the associated policies (particularly policy 13 relating to water quality and policies 15 & 16 relating to efficient use), it is difficult to determine if the inconsistencies are significant enough to make the proposal contrary to Objective 1.
72. The proposed activity will impact on the matters outlined in Objective 1. In particular, (a) relating to spiritual and cultural values, given that effects on Tangata Whenua have been raised as a concern by submitters and have not yet been addressed by the applicant, and (b) life-supporting capacity of river and ecosystems, given that the potential adverse effects on water quality remain an outstanding concern. There have been a wide range of people who have submitted against the proposed activity due to concerns about impacts on these values. Given this, and that no mitigation has been proposed by the applicant, I cannot determine whether the proposed activity is contrary to these values at the time of preparing this report.
73. The proposed activity is within the allocation limits set by the WCWARP, therefore, it may be considered to be consistent with Objective 2.
74. Objective 4 aims to achieve a high level of technical efficiency in the use of water. The applicant has not provided sufficient information to confirm that the annual

volume of water requested is reasonable to meet the demands of the soils within the irrigation area, therefore, the proposal may not be consistent with Objective 4.

75. I am satisfied that the proposal will not affect the reliability of supply to other users downstream on the East Branch Ahuriri given the proposed minimum flow of the flow sharing threshold, and can conclude that it is consistent with Objective 5 of the WCWARP.

Environmental flow and level regimes

76. Policies 2 – 8 deal with minimum flows for the East Branch Ahuriri.
77. Policies 3 and 4 outline the values that must be maintained in the water bodies, and a number of matters that must be considered when setting an environmental flow and level regime, and are particularly relevant to this application. As the applicant is proposing to adopt the minimum flow required by the WCWARP and falls within the instantaneous allocation limits, I am satisfied that the proposal is consistent with these policies.

Policies on water quality

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

Policies on efficient and effective use

79. Policies 15 – 20 deal with efficient and effective use and all are applicable to this application.
80. 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.
81. 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.

Policies for other rivers and streams in the upper catchment

82. Policy 40 deal with the environmental flow regime in the rivers and streams in the upper catchment (see Map 2 in the WCWARP). Policy 40 enables access to water for the activities identified in Objective 2, to the extent consistent with Objective 1.
83. As the environmental flow and level regime in the plan is proposed by the applicant, and as it is within the allocation for agricultural and horticultural activities identified in Rule 6, Table 5, the proposal would be considered to be consistent with this policy.

Ahuriri catchment

84. The plan does not provide any locality specific policies for the Ahuriri catchment as this catchment is provided for under the Ahuriri Water Conservation Order. However, this application, while in the Ahuriri catchment, falls outside those water bodies

covered by the Order. Therefore, policy 40 has been considered as the relevant policy for “all other rivers and streams in the upper catchment”.

Conclusion

85. With regard to section 104(1)(b), the relevant provisions of the RPS and WCWARP have been considered above. I do not consider that these applications are consistent with Policy 13 due to likely effects on water quality, and Policies 15 – 20 due to effects of inefficient taking and use. In addition, I cannot make a conclusion about whether the applications are consistent with Objective 1.

Other Matters (s104(1)(c))

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

Part II Purpose and Principals

87. Part 2 of the RMA contains sections 5 to 8 which define the purpose and principals of the RMA.

Purpose of the RMA (s5)

88. 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.”

89. Section 5(2) defines the meaning of “sustainable management”, which is to manage resources in a manner that provides for the social, economic and cultural wellbeing of communities while protecting the life-supporting capacity of the environment for the needs of future generations. This section also states that this should be achieved while “safeguarding the life-supporting capacity of water” and “avoiding, remedying or mitigating” the adverse effects of activities.

90. The proposal will allow the development of land to occur, which may provide for the economic and social well-being of the community. The applicant however has not proposed measures to “safeguard the life-supporting capacity of water” and “avoid, remedy or mitigate” the potential impacts on water quality 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)

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

¹ [2004] NZMRA 251

Other Matters (s7)

92. 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.
93. Sub-sections (b) and (f) are specifically relevant to this application and should be considered when deciding the acceptability of effects resulting from the proposed take and use of water from the Quail Burn and its tributaries. 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.
94. Section (f) refers to the maintenance and enhancement of the quality of the environment. The applicant has not proposed mitigation measures to ensure that this objective is achieved, particularly with regards to water quality.

Principles of the Treaty of Waitangi (s8)

95. 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 Te Runaka O Waihao, Te Runaka O Arowhenua and Te Runaka O Moeraki. Runanga were informed separately when ECan received the application and later when the application was notified. Submissions have been received from Ngai Tahu and runanga on this application.

RECOMMENDATION

Grant or Refuse

96. 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.
97. For CRC042020, I am not satisfied that the actual and potential effects of the proposed activity are acceptable. In particular, there are a number of outstanding matters as follows:
 - (a) *Water quality* - No impact assessment or measures to address the water quality impacts that could arise from irrigation at this site. Given the conclusion regarding the potential cumulative adverse effects on water quality, it is premature to make any recommendation to grant or refuse this application as it relates to cumulative water quality;
 - (b) *Efficient and reasonable use* – There is a lack of conclusive information to support the annual volume requested in accordance with the direction provided by Policies 15-20 of the WCWARP;
 - (c) *Ecosystems* – The applicant has proposed a fish screen but has not included any details of what this will entail;
 - (d) *Cultural values* – The applicant has not provided any assessment on cultural values and there are outstanding submissions from runanga in opposition to this proposal.
98. I have recommended conditions to address (c), above, however having considered all relevant matters outlined in section 104D, I am not satisfied that the actual and potential effects of the proposed activity are minor due to concerns those matters

outlined as (a), (b) and (d) above. I also cannot be satisfied that the proposal is consistent with objectives and policies of the relevant planning documents given that no assessment or mitigation has been provided for the above. Under s104B, I cannot recommend that consent application CRC042020 be granted.

RECOMMENDED CONDITIONS


99. Comments on the mitigation proposed by the applicant are provided earlier in this report.
100. If the Commissioners decide to grant this application, a list of conditions that are usually included in a water permit are provided in Appendix 6 of the introductory s42A report. A list of draft recommended conditions specific to this application is provided below.
101. It should be noted that the investigating officer is not satisfied that these conditions would adequately mitigate the adverse effects that are identified in paragraph 97 above.

Table 3: Recommended draft conditions for water permit CRC042020		
No.	Condition Code²	Details
Divert & Take		
1	WP01	<p><i>Name of waterbody:</i> East Branch Ahuriri River</p> <p><i>Map reference:</i> NZMS 260 G39:486-412</p> <p><i>Instantaneous rate:</i> 174 litres per second</p> <p><i>Volume:</i> 15,033 cubic metres per day and 1,455,000 cubic metres between 1st July and the following 30th June</p>
Use		
2	WP04	<p><i>Type of irrigation:</i> Spray irrigation</p> <p><i>Number of hectares:</i> 300 hectares</p> <p><i>Use:</i> crops and pasture for grazing stock excluding milking dairy cows</p> <p><i>Plan No:</i> "CRC042020" (Attachment 1)</p>
3	WP05	Efficiency of use
4	WP06	Backflow preventer
Mitigation		
5	WP07	<p><i>Name of waterbody:</i> East Branch Ahuriri River</p> <p><i>Map reference:</i> NZMS 260 G39:483-355</p> <p><i>Minimum flow:</i> 400 litres per second</p>

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

		<i>Flow graph: See Report 2A</i>
6	WP09	Fish screen
7		The consent holder shall ensure water races used to convey water diverted in terms of this permit are well maintained to minimise losses.
Measuring & Metering		
8	ME03	
9	ME04	
10	ME05	
11	ME06	
12	ME07	<i>Waterway: East Branch Ahuriri River</i>
13	WP08	<i>Waterway: East Branch Ahuriri River</i> <i>Map reference: NZMS 260 G39:483-355</i> To be used with ME03-05
Administrative Conditions		
14	AD01	
15	AD02	<i>Number of working days: 5</i> <i>Month 1: March</i> <i>Month 2: July</i> <i>Waterbody: East Branch Ahuriri River</i> <i>Cross reference to Condition: 5</i>
16	AD04	Lapse date

Signed:



Date: 31st August 2009

Claire Penman
Consents Investigating Officer

REFERENCES

Canterbury Regional Council 2004. Proposed Natural Resources Regional Plan – Chapter 4: Water Quality.

Canterbury Regional Council 2004. Proposed Natural Resources Regional Plan – Chapter 5: Water Quantity.

Canterbury Regional Council 2004. Proposed Natural Resources Regional Plan – Chapter 6: Beds and margins of Lakes and Rivers

Canterbury Regional Council 1998. Regional Policy Statement. Report No R98/4. ISBN 1-86937-337-5.

Canterbury Regional Council 1991. Transitional Regional Plan. October 1991.

Department of Conservation 2003. Ribbonwood Station Tenure Review - Conservation Resources Report.

Gabites, S, & Horrell, G. 2005. Seven day mean annual low flow mapping of the tributaries of the Waitaki River. Canterbury Regional Council Report R05/16. ISBN: 1-86937-570-X.

Keller, J & Pfluger, Y. 2005. Working papers about the Natural and Physical Resources of the Waitaki catchment by locality. Report provided to the Waitaki Catchment Water Allocation Board.

Ministry for the Environment, 2006. Waitaki Catchment Water Allocation Regional Plan.

Te Maire Tau, Anake Goodall et al., 1990. Te Whakatau Kaupapa: Ngai Tahu Resource Management Strategy for the Canterbury Region. ISBN: 0-908925-06-9.

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

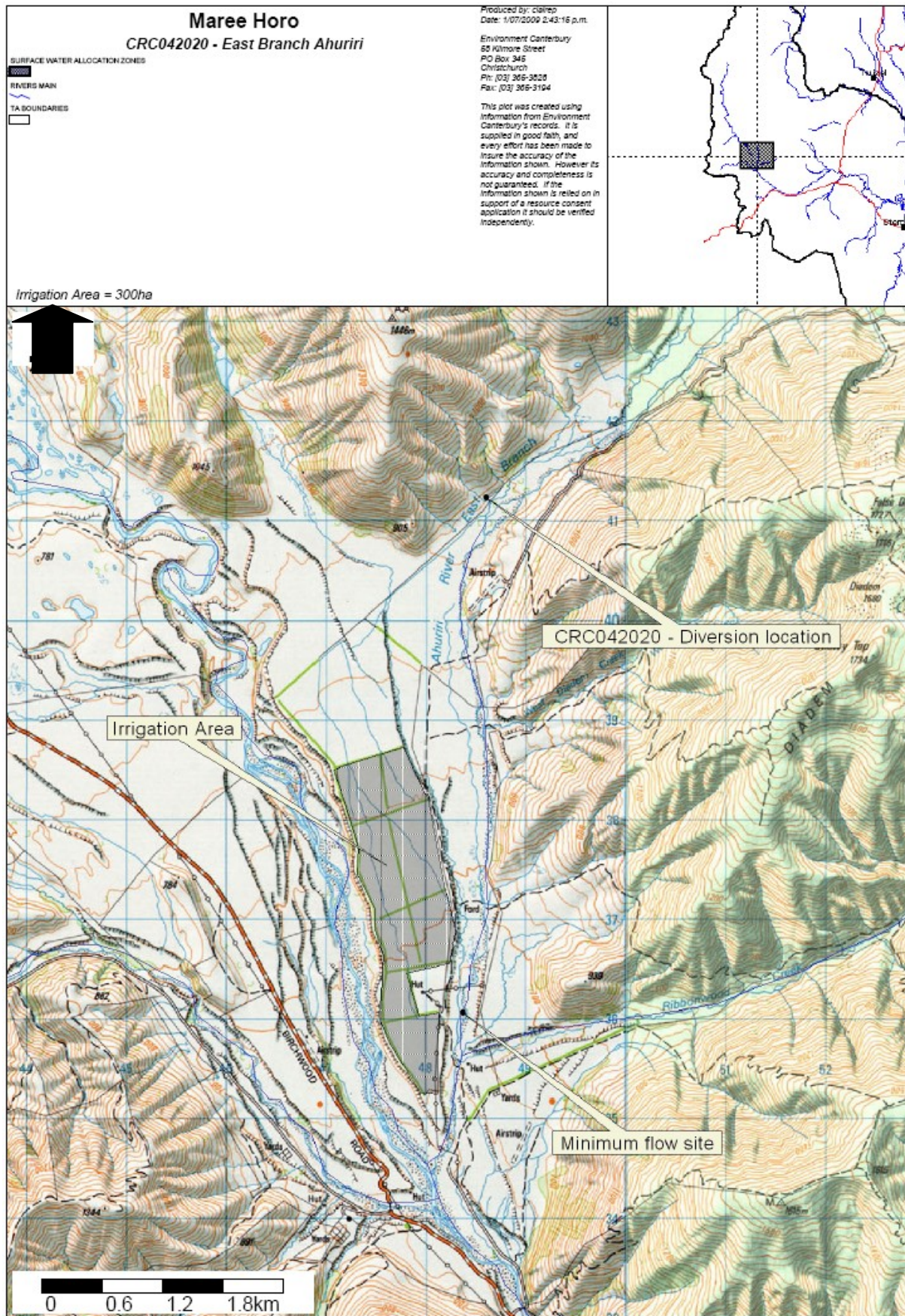
Waitaki Catchment Water Allocation Board 2006. Waitaki Catchment Water Allocation Regional Plan. ISBN: 0-9582620-7-1.

Waitaki Catchment Water Allocation Board 2006. Waitaki Catchment Water Allocation Regional Plan, Material Incorporated by Reference. ISBN: 0-9582620-6-3.

Waitaki Catchment Water Allocation Board 2006. Waitaki Catchment Water Allocation Regional Plan, Annex 1 – Decision and principal reasons for adopting the Plan provisions. ISBN: 0-9582620-4-7.

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 – PREVIOUS CONSENTS

RecordNo WTK691016A

Type Consent

Source Existing Use Wtr

PermitType Water Permit

FileNo CO6T/00828

ClientID 1540

ClientName Mr C C MacKay

To [Notified Use No.101/6 Divert]: to divert up to 139 megalitres of water per week from the East Head of the Ahuriri River, at a maximum rate of 570 litres per second, at map reference S108:448-507 (G39:486-412) for stock water and irrigation of up to 500 hectares.

Location

Status Expired

Events 28/Mar/1969 Consent Issued
23/Mar/2001 1st Expiry Reminder
01/Oct/2001 Consent Expires

Subject to the following conditions:

- 1) No Conditions

Consent Summary



RecordNo WTK691016B

Type Consent

Source Existing Use Wtr

PermitType Water Permit

FileNo CO6T/00828

ClientID 1540

ClientName Mr C C MacKay

To [notified Use No.101/6 Take] to take up to 139 megalitres of water per week from the East Head of the Ahuriri River, at a maximum rate of 570 litres per second, at map reference S108:448-507 (G39:486-412) for stock water and irrigation of up to 500 hectares.

Location

Status Expired

Events 28/Mar/1969 Consent Issued
23/Mar/2001 1st Expiry Reminder
01/Oct/2001 Consent Expires

Subject to the following conditions:

- 1) No Conditions

Consent Summary



**ATTACHMENT THREE – PHOTOS OF RIVER & IRRIGATION AREA
TAKEN ON 18 JUNE 2009 BY CLAIRE PENMAN**



Minimum flow site adjacent to willow tree on East Branch Ahuriri River



East Branch Ahuriri upstream of confluence with mainstem Ahuriri River, looking upstream



East Branch Ahuriri River upstream of confluence with mainstem Ahuriri River, looking downstream



Irrigation area with shelter belts in background



Irrigation area with shelter belts in background



Irrigation area looking back down East Branch valley towards Ahuriri River



Stock water race on property



Stock water race running through irrigation area



East Branch race downstream of intake



East Branch at intake site – rock gallery to control flow on left of photo



Rock gallery at intake with settling pond and stone fish screen / weir



Stone fish screen / weir comprised of fabric with graded gravel between

ATTACHMENT FOUR – OBJECTIVES & POLICIES

Objective / Policy	Description	Assessment
Objective 1	To sustain the qualities of the environment of the Waitaki River and associated beds, bars, margins, tributaries, islands, lakes, wetlands and aquifers.	The proposed activity will impact on the matters outlined in Objective 1, particularly (a), (b) and (c). There have been a wide range of people who have submitted against the proposed activity due to concerns about impacts on these values. I therefore cannot determine whether the proposed activity is contrary to these values at the time of preparing this report.
Objective 2	Provide water for different activities.	The proposed activity is within the annual allocation limit for agricultural and horticultural activities outlined in Rule 6. Therefore, this application would not affect availability of water to other users.
Objective 3	Recognise that there are beneficial and adverse effects on the environment at a national and local scale.	These factors have been considered in the assessment of effects.
Objective 4	Achieve a high level of technical efficiency in the use of water.	The applicant has not demonstrated that the use of water for irrigation is technically efficient.
Objective 5	Provide for practical and fair sharing of allocated water during times of low water availability.	Appropriate minimum flow proposed and the proposal would not affect the reliability of supply to other users to a less than acceptable level.
Policy 1	Recognising connectedness between all parts of the catchment	By providing a suitable minimum flow, the connectedness with the catchment is recognised.
Policy 3	Setting of environment flow and level regimes for all activities in Objective 2 and consistent with Objective 1.	Applicant proposes minimum flow as established in Table 3 of the plan which will enable access for the activities in Objective 2.
Policy 4	Outlines a number of matters that must be considered when setting an environmental flow and level regime	Applicant proposes minimum flow as established in Table 3 of the plan which will ensure those matters have been considered
Policy 8	Promoting water harvesting when flows are low	Water harvesting is not proposed
Policy 9	Discouraging further mixing of water between catchments	Water will be taken and used within the same catchment and sub-catchment
Policy 10	Enabling small amounts of water to be taken or diverted where effects are minor.	The proposed volume exceeds what is considered to be a small amount
Policy 11	Consider effects on Tangata Whenua values, local and national effects when allocating water to activities	Submissions received on Tangata Whenua values, but application falls within allocation limits for agricultural and horticultural activities
Policy 12	Outlines matters that must be considered when establishing allocation limits.	Application falls within allocation limit for activities in Objective 2
Policy 13	Addresses water quality objectives in the NRRP	Addressed in more detail in Report 4A
Policy 15	Ensuring take and use of water is reasonable for its intended use	Applicant is seeking what I consider to be an unreasonable volume of water
Policy 16	Requiring irrigation applications to meet the specified reasonable use test	As above – applicant has not provided an adequate assessment

Policy 19	Encouraging piping or sealing of water distribution systems to minimise water losses and maintain water quality.	The proposed upgraded conveyance to a piped system is consistent with this policy
Policy 20	Promoting the integration of multiple uses of water.	Multiple uses of water are not proposed
Policy 21	Requiring the installation and use of water-measuring and recording devices.	A suitable water metering device is proposed to be installed
Policy 23	Restricting taking or diverting of water (surface and shallow and connected groundwater) upstream of Lake Benmore during times of low flow except for essential uses	A suitable minimum flow is proposed for restricting the abstraction of water in times of low flow
Policy 25	Allowing for sharing of available water within a water-users group	No other users on this water body so no flow sharing required
Policy 26	Setting priority bands for upper or mid-catchment tributaries and the Ahuriri catchment.	Priority bands have not been established for this catchment
Policy 27	Giving priority during low flows or levels to integrated schemes where water used for more than one purpose.	There are no integrated schemes with this sub-catchment
Policy 40	Setting an environmental flow and level regime for these tributaries	An appropriate minimum flow has been proposed to ensure consistency with this policy