

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

IN THE MATTER OF The Resource Management Act
1991

AND

IN THE MATTER OF Applications CRC041787,
CRC073112 and CRC073113 by
Southdown Holdings Limited for
three land use permits to disturb
the bed of a river to install and
maintain an intake structure and
a discharge structure.

Section 42A Officer's Report of Susannah Vesey

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 overview and technical reports on hydrology and minimum flows (Report 2A and 2B), the 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. Southdown Holdings Limited (the applicant, formerly named Williamson Holdings Limited) has applied for the following resource consents:
 - (a) CRC041787 - To disturb the bed and banks of the Ahuriri River to install a pump station and intake structure, between map references NZMS 260 H39: 596-285 and H39: 599-288, at Killermont Station, State Highway 8, Omarama.
 - (b) CRC073112 - To disturb the bed of Ahuriri River to construct, operate and maintain an erosion control and discharge structure at or about map reference H39:547-283 at Omarama Lindis Pass Road, Omarama.
 - (c) CRC073113 - To disturb the bed and banks of Ahuriri River to construct a low level gravel bar to facilitate the diversion of water, a stopbank to protect the intake trench and filter structure and to undertake remedial work at the bank to restore bank stability if required, between map references H39:544-287 and H39:546-285 at Omarama Lindis Pass Road, Omarama.
3. The applicant engaged Mr Ian McIndoe of Aqualinc Research Limited to prepare the application and assessment of environmental effects on their behalf. Subsequently, Mr Craig McKibbin of Mitchell Partnerships and Mr Christian Whata of Russell McVeagh have been engaged to jointly respond to further information requests and to represent the applicant at this hearing.
4. A duration until 30 April 2025 is sought.

5. The application is for a new activity.

Background

6. The applicant has lodged two separate proposals ("04" and "07" proposals) as an "either/or" situation. In essence the applicant seeks two different means of taking water from the Ahuriri River – the irrigation area for the proposals is the same.
7. The "04" proposal consists of CRC041787 – for works in the bed and banks of the Ahuriri River, and associated water permit CRC041788 to pump directly from the river to the irrigation area.
8. The "07" proposal consists of CRC073112 and CRC073113 as described in the introduction section of this report for works in the bed and banks of the Ahuriri River; associated water permit CRC073115 and discharge permit CRC073114. This proposal is to divert water from a site further upstream from the "04" proposal and to convey to the irrigation area via gravity to the irrigation area.
9. The associated water permits are discussed in Report 35B. There are a number of sections of my report where I will refer you to Report 35B. This is as I have included details of the history and of the applicant's proposal as a whole in that Report.
10. I have prepared Report 35C to address the discharge permit sought under the applicant's proposal (CRC073114).
11. Application CRC041787 was lodged as part of the applicant's original proposal. The application was lodged on 27 February 2004 and considered to be notifiable on that date.
12. The applicant subsequently applied for resource consents to install and maintain a water diversion and intake structure in the bed of the Ahuriri River (CRC073113); and to install and maintain an erosion control and discharge structure in the bed of the Ahuriri River (CRC073112) (see Attachment One for map of location). The applications were lodged on 23 March 2007, and considered to be notifiable on that date. Requests for further information have been sent for both proposals covering, but not limited to, duration and extent of works, location of proposed works and design plans.
13. The applicant has advised that either the "07" proposal is the preferred option, however for reasons of priority, the "04" proposals have been kept in process. If the "07" proposal is granted, the applicant has advised the original applications will be withdrawn.
14. In a response to a request for further information for CRC040787 dated 15 December 2006, the applicant advised detailed plans of the proposed works had not been completed at that stage and they would be provided as soon as they are available. A similar comment was made in a letter from the applicant dated 5 December 2008 (in relation to CRC073112 and CRC073113). At the time this report was prepared, no such details had been provided to the CRC.

Notification and submissions

15. Please refer to Report 35B for details of notification and submissions for each of this proposal. No submissions were made directly in relation to these three applications.

DESCRIPTION OF THE PROPOSED ACTIVITY

CRC041787 – To disturb bed and banks to install a pump station and intake structure

16. The applicant proposes the following activities:
 - (a) To construct an intake structure in the bed of the Ahuriri River to facilitate the abstraction of water described in application CRC041788, between NZMS 260 H39:596-285 and H39:599-288.
 - (b) To construct a pumping station on the south bank of the Ahuriri River at or about map reference NZMS 260 H39:598-287.
 - (c) To install a pipeline from the pumping station to the irrigated area.
 - (d) To open a braid of the river following a flood if necessary to keep water flowing past the intake structure.
17. Attachment 2 shows the proposed location of these structures.
18. Key features of the intake and pumping station are:
 - (a) An intake area to provide water for pump suction pipes
 - (b) A pumping station, located above the highest expected flood level (about 3 metres above normal water level) to house the pumps, and hydraulic and electrical control systems for the pumps and pipelines
 - (c) Screens (5 millimetres) on the pump suction pipe intakes to prevent debris and fish from entering the pumps and pipeline
 - (d) Backflow prevention to stop water flowing back to the sump and Ahuriri River through the pipelines and pumps
 - (e) The river bank at the intake consists of a small, flat terrace approximately 1.0 to 1.5 metres above the river water level, moving into a 5.0 to 6.0 metre terrace.
 - (f) Two concrete or steel pipes of 0.6 to 0.8 metre diameter will be buried in the low terrace about 0.5 metres below the lowest expected water level. This will provide an entry velocity of no more than 1.3 metres per second.
 - (g) The pipe intakes will include a coarse screen (20 millimetres) to prevent debris and large fish from entering the pipes. The river at this point is fast-flowing, which will tend to keep the intake screen clear of any debris.
 - (h) Concrete walls or gabions and rip rap will be used to ensure bank stability above and below the point where the pipes enter the main stream.
 - (i) The two pipes will supply water to a pump sump at the foot of the large terrace. Although the final design of the pumping system has not been completed, it is envisaged that three pumps with 250 millimetre suction pipes will be used. Each suction pipe will be fitted with a self-cleaning screen with a

5 millimetre mesh. The system will be designed so that the screens can easily be lifted for cleaning and maintenance.

- (j) A small section of the top terrace will be excavated and a concrete pump shed will be constructed in the terrace so that pump suction lift requirements are met. This is expected to be about 3 metres above the normal river water level and well above flood level.
- (k) The pipeline from the pumping station to the irrigated area will consist of two or three PN6 PVC pipes of approximately 450 – 500 millimetre diameter, buried at least 0.6 metres under ground.
- (l) The pipes will run from the pump station through Killermont land, under South Highway 8 (the Omarama Lindis Pass Road) and branch out to the centre of each pivot.

19. Attachment Five shows a conceptual layout of the intake and pumping station.

CRC073113 – to install and maintain a water diversion and intake structure

20. Attachment 1 shows the location of works for this activity.

21. The applicant has stated that the following activities are proposed:

- (a) Formation of a low gravel bar to facilitate the diversion of 950 litres per second of water from the Ahuriri River (at or about NZMS 260 H39:545-285).
- (b) The gravel bar is anticipated to be up to 100 metres long upstream of the diversion point, spanning into the braid up to 25 metres. The bar will be up to 2 metres high and approximately 3 metres wide.
- (c) Water will be diverted into a pipeline which will be positioned approximately 10 metres away from the waterway. The pipeline will be approximately 750 – 900 millimetres diameter, and would include a valve to adjust water flow. The purpose of this pipe is to regulate water flow past the intake in the event of a fresh or a flood in the river.
- (d) Diverted water will pass into a holding pond, at the downstream end of which an intake structure and fish bypass will be constructed.
- (e) The intake will consist of a paddle wheel which will be used to rotate a rotary fish screen. A pipeline within the rotary fish screen will lead to a surge tank, from which the mainline for the irrigation system on Killermont will start.
- (f) Adjacent to this will be a fish bypass.
- (g) The applicant states that while detailed design plans for the intake have not been finalised, this will probably be similar to the intake currently used by the Cascade Race Company on the South Opuha River at Ashwick Flat. Photographs of this structure are included as Attachment Three. A schematic diagram of the scheme is presented in Attachment Four.
- (h) A stopbank would be constructed over the intake structure located within the holding pond, to protect this structure. The stopbank would be located at least 10 metres away from the water body, and would be approximately 1.4 metres high, 6 metres wide at the base and with a crest width of 1.5 metres. The

stopbank will be created using spoil from the intake trench. Due to the natural slope of the river, the stop bank will only continue for a short distance beyond the intake.

- (i) It is possible that large floods could modify the bed of the river and move the flowing braids away from the divert structure. At these times, standard earthmoving equipment will be used to reinstate temporary low level gravel bunds to ensure continued flow into the intake structure.

CRC073112 – to install and maintain an erosion control and discharge structure

22. Attachment 1 shows the location of works for this activity.
23. If for any reason distribution of water onto irrigated land is not possible, water will be discharged into the Ahuriri River at or about NZMS 260 H39:547-583.
24. The maximum time that high flows would be discharged is the time taken to dewater the race, which the applicant considers would not take a long time given that the distances involved are not long.
25. An open race would convey water from the holding pond to the point of discharge in the Ahuriri River. The approximate size of the race would be 1 – 2 metres wide by 0.5 metres deep. The discharge structure would be designed to carry flows of 950 litres per second, the same as the diversion channel. However the applicant states that it would be unlikely for flows in the channel to be this high.
26. Mitigation measures will be implemented at the discharge point to reduce the risk of erosion, this is likely to include lining the open race near the discharge point and rip rap protection at the discharge point.
27. Where any disturbance occurs to the banks of the river the applicant will undertake remedial work to restore the bank stability required.

LEGAL AND PLANNING MATTERS

Consent Requirements

28. The consent requirements under the Resource Management Act (RMA), Transitional Regional Plan (TRP) and Proposed Natural Resources Regional Plan (PNRRP) for applications for works in bed and banks or lakes or rivers are outlined in the introductory s42A report (Report 1). A summary of the requirements for this application are provided below:

CRC041787

29. As application CRC041787 was lodged prior to the notification of Chapters four and five of the Proposed Natural Resources Regional Plan (PNRRP), it is the TRP which controls the activity status of this application pursuant to s88A of the RMA.

TRP

30. The TRP does not address matters relating to works in the bed and banks of rivers and lakes in the Waitaki Catchment. As there is no operative regional plan which addresses certain uses of beds of lakes and rivers in the Mackenzie Basin, the proposed activity is a **discretionary** activity and requires resource consent under section 77C(1)(a) of the RMA.

CRC073112 and CRC073113

31. These applications were lodged after the notification of Chapters four and five of the PNRRP and so s88A of the RMA does not apply.

TRP

32. The TRP does not address matters relating to works in the bed and banks of rivers and lakes in the Waitaki Catchment. As there is no operative regional plan which addresses certain uses of beds of lakes and rivers in the Mackenzie Basin, the proposed activity is a discretionary activity and requires resource consent under section 77C(1)(a) of the RMA.

PNRRP

33. Rule BLR2 of the PNRRP classifies activities involving the erection or placement of structures as a permitted activity, provided certain conditions are met. These conditions include restrictions on structure dimensions and the activity not having an effect on flooding risk or potential, bank stability, the integrity of existing lawfully established structures, or a discharge above a certain threshold.
34. Should any of the conditions of the permitted activity for BLR2 not be met then Rule BLR8 classifies the activity as discretionary.
35. It is possible that the activity may have an effect on bank stability and the integrity of existing lawfully established structures, therefore it is classified as **discretionary** under the PNRRP and requires resource consent.
36. Rule BLR3 of the PNRRP classifies activities involving the excavation, drilling, tunnelling or disturbance within the bed as a permitted activity as long as certain conditions are met. These conditions include restrictions on excavation volumes, and set back distances from existing structures and flood protection works, as well as the activity not having an effect on flooding risk or potential, bank stability, the integrity of existing lawfully established structures, or a discharge above a certain threshold. Also, no part of the activity should occur within surface water.
37. Part of the activities will occur within surface water, and the activity may not comply with the set back distances specified in condition 5, therefore it is classified as **discretionary** under the PNRRP and requires resource consent.

DESCRIPTION OF THE AFFECTED ENVIRONMENT

38. Refer to Report 35B for a detailed description of the affected environment subject to this proposal.

ASSESSMENT OF PROPOSED ACTIVITY

39. The proposed permits for works in the bed and banks of the Ahuriri River are discretionary activities and must be considered in the context of s104 of the RMA.
40. 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))

41. The effects that have been considered for this type of activity (works in bed and banks of a river) are presented in the introductory s42A report. That report includes the presentation of the relevant planning provisions which direct us to consider these effects. A summary table regarding the assessment of individual effects for this application is provided below and a detailed discussion of those outstanding matters or areas of concern is provided in the following sections.
42. Where that I am satisfied that subject to mitigation, effects will be minor and there are no outstanding matters of contention I have not discussed the particular effect further.
43. Where mitigation is referred to in this table, I am referring to the recommended conditions listed at the end of this report. The recommended conditions take into consideration those proposed by the applicant, however may have been re-worded or replaced by conditions commonly used by Environment Canterbury.

Table 1: Summary of potential adverse effects from CRC041787

Adverse Effects	Applicant's assessment	IO audit	Conclusion
Water quality	<p>Mitigation proposed to ensure sediment into water minimised:</p> <p>(a) Best management practices will be implemented at the time of the works to minimise sediment entering the river.</p> <p>(b) Works will be undertaken during autumn and winter when the flows in the Ahuriri River will be at their lowest and the risk of flood is low. This will help to minimise the risk of sediment entering the river.</p> <p>(c) The majority of the works will be able to be undertaken above the flow level within the river.</p>	<p>I note the proposed activity is for a limited duration and spatial extent of the proposed activity is restricted. The applicant proposed mitigation relating to the duration of works. Additionally, I recommend that a condition limiting the duration of the works within flowing water be added to this consent. Condition (12) and (22)</p>	<p>Minor and acceptable</p>
Bed erosion and flood carrying capacity.	<p>Following mitigation proposed to ensure effects minor:</p> <p>(a) Best management practices will be implemented at the time of the works to minimise erosion of the bank.</p> <p>(b) Concrete walls or gabions and rip rap will be used to ensure bank stability above and below the point where the pipes enter the main stream.</p> <p>(c) The works will be carried out using standard earthmoving equipment.</p> <p>(d) All practical measures will be taken to minimise the disturbance to the river bed</p> <p>(e) Best management practices will be implemented at the time of the works to minimise the disturbance to the bed of the</p>	<p>Environment Canterbury Senior Engineering Officer Mr Scarlett has reviewed the applicant's proposal. He does not have any concerns with the proposal in relation to erosion within the Ahuriri River bed and banks, and effects on the River's flood carrying capacity. He does recommend that conditions(5)-(8) be included to ensure such effects are adequately mitigated.</p>	<p>Minor given comments provided by Mr Scarlett.</p>

	<p>Ahuriri River.</p> <p>The pumping station is proposed to be located on Killermont Station land adjacent to a major braid of the Ahuriri River. At this point the river tends to be stable and running in two braids. The intake area will be at the side of the major braid.</p>		
Artificial structures	No assessment provided.	<p>There is an application by Killermont Station to be heard at this application seeking to maintain an existing intake structure in the bed of the Ahuriri River located approximately 1.5 kilometres downstream of the proposed works.</p> <p>Also resource consent CRC010727.1, located a little further downstream from Killermont Station's application to carry out maintenance works including reconstruction of an intake structure, and reconstruction of diversion and discharge channels, within the bed of the Ahuriri River.</p> <p>Mitigation proposed by applicant and recommended by myself to ensure minimise sedimentation in the water which could affect downstream abstraction pumps.</p>	Effects minor
Tangata Whenua values	No assessment provided.	<p>I note an archaeological site labelled as 'Moa-Hunter Camp' is located 300 metres southeast of the proposed location of the works. While it is unlikely that the proposed works will effect this site, it is possible that other sites, presently unidentified, may exist in the area. I therefore recommend that a condition relating to the accidental discovery of wahi tapu and wahi taonga is attached to this consent.</p> <p>Potential effects on water quality considered to be minor subject to mitigation.</p> <p>The location of the proposed works is not within a Statutory Acknowledgement Area or a Silent File Area. Condition (22)</p>	Effects acceptable
Amenity values and community	The intake and pumping station will bend into the landscape and not look unpleasant to anyone, particularly those on SH8.	<p>I note the Waitaki District Plan is likely to include Rules that the applicant should consider when designing the pump shed to ensure that it is permitted to be built in such a location.</p> <p>I note no details have been provided describing the intake and pump shed design; however I do note that mitigation has been proposed to minimise sedimentation in the Ahuriri</p>	Effects uncertain until hear submission from Transit

		River during works. The proposal includes the installation of irrigation pipelines beneath State Highway 8. Transit New Zealand have concerns regarding potential traffic effects created by the construction phase of the proposed works. These could potentially include road closure, which would in turn have significant effects on people. Transit New Zealand have made a submission in opposition on this application regarding these and other effects. Conditions (23) and (24)	
Ecosystems	The landscape and vegetation in the area of construction is typical braided riverbed. The area is covered in scrub, gorse and broom. As far as is known there are no endangered plants in the area of construction that could be adversely affected.	Given the significant ecological values identified in the Ahuriri River, I consider that more detail regarding the effect of the proposed landuse activity on ecosystems is required. Conditions (19)-(21)	Effects uncertain

Table 2: Summary of potential adverse effects from CRC073112 and CRC073113			
Adverse Effects	Applicant's assessment	IO audit	Conclusion
Water quality	<p>Best management practice will be implemented at the time of the works to minimise sediment entering the river.</p> <p>Works to create the diversion will be undertaken when flows in the Ahuriri permit and the risk of flooding is low. This will help minimise the risk of sediment entering the river.</p> <p>As a result of the works some sediment may be released into the Ahuriri River. The effects will be temporary (complete within one week) and minor in nature, and it is considered that the Ahuriri River in general is adapted to high sediment transport conditions.</p> <p>Reinstatement of the gravel bar would only be required after high river flows, when the river is naturally discoloured with sediment. Thus the effects of discolouration of the river due to sediment release from the works are likely to be minor.</p> <p>It is considered that with the implementation of the proposed mitigation measures the effects on water quality will be minor.</p>	<p>Disturbance of material within the riverbed, associated with the proposed works, could potentially affect water quality. In order to mitigate potential adverse effects, I recommend that a condition limiting the duration of the works within flowing water be added to this consent.</p> <p>Submissions relating to water quality were received for this application, however, these concerns related more specifically to the effects of irrigation.</p> <p>Given the limited duration and spatial extent of the proposed activity, and assuming that the proposed mitigation relating to the duration of works occurring within flowing water is adhered to, I consider that the potential impacts of the proposed activity on water quality will be minor, and acceptable.</p>	Effects minor
Bed erosion and flood	The proposed river bed works are localised and on a small scale with	Mr Bruce Scarlett (Senior Engineer, Environment Canterbury) reviewed	Effects minor

carrying capacity	<p>respect to the size of the Ahuriri River, and hence will have a negligible effect on the natural and physical environment.</p> <p>Works to create the diversion will be undertaken when flows in the Ahuriri permit and the risk of flooding is low. This will help minimise disturbance of the bank.</p> <p>Mitigation measures will be implemented at the diversion point to reduce the risk of erosion. Where any disturbance occurs to the banks of the river the applicant will undertake remedial work to restore the bank stability required.</p> <p>Best management practices will be implemented at the time of the works to minimise disturbance to the bed of the Ahuriri River and to minimise erosion of the river bank.</p> <p>The gravel weirs are temporary, so that they will wash out at times of flood to minimise the risk of flood carrying capacity being effected.</p> <p>The erosion control at the discharge is relatively minor in the scheme of the river and the effects on the flood carrying capacity will be minor.</p> <p>There are no known flood protection structures within the vicinity of the site.</p>	<p>the application and stated that, based on the information supplied by the applicant, there were no concerns regarding bank stability or flood carrying capacity provided conditions (5)-(8) included on consent.</p> <p>There were no submissions regarding bank stability or flood carrying capacity.</p> <p>Based on the information provided by the applicant and the advice from Mr Scarlett; as long as the mitigation proposed is adhered to, I consider that the effects of the activity on bank stability should be minor.</p>	
Artificial structures	Note Killermont Station Limited has consent applications CRC041776 and CRC041777 (water permit and works in bed of river) located downstream of this proposal.	CRC041776 is proposed to be located approximately 200 metres downstream of the proposed works. Mitigation measures in regards to flood carrying capacity, erosion and water quality are adhered should ensure effects on downstream structures are minor	Effects minor
Tangata Whenua values	<p>The applicant has stated that a condition relating to the accidental discovery of wahi tapu and wahi taonga be added to this consent. I agree with the applicant that this condition should be attached.</p> <p>The applicant advised potential effects on the local Tangata Whenua will be assessed through consultation with Te Runanga o Waihao and Te Runanga o Arowhenua.</p>	<p>Agree accidental discovery condition suitable for both applications.</p> <p>I note no detail of the proposed consultation has been provided at time of writing this report.</p> <p>The location of the proposed works is not within a Statutory Acknowledgement Area or a Silent File Area, and mitigation proposed to ensure water quality effects minor. Condition (22)</p>	Effects minor and acceptable
Amenity values and community	<p>Works are expected to be complete within one week.</p> <p>The effects of the proposed works on other users are considered negligible due to the small scale of the proposed works. The proposed works will be carried out over a short period of time,</p>	<p>I agree with the applicant that the works are of short duration and are therefore unlikely to impact amenity values.</p> <p>The proposal includes the installation of irrigation pipelines beneath State Highway 8. Transit New Zealand</p>	Effects uncertain until hear submission from Transit.

	<p>with further work relating only to maintenance issues, thereby reducing any effect on other users.</p> <p>The landscape and vegetation in the area of construction is typical braided riverbed, covered in scrub, gorse, broom etc.</p> <p>The applicant intends to consult with a Landscape Architect to reduce the visual impact of the proposed activity.</p>	<p>have concerns regarding potential traffic effects created by the construction phase of the proposed works. These could potentially include road closure, which would in turn have significant effects on people. Transit New Zealand have made a submission in opposition on this application regarding these and other effects. Conditions (23) and (24)</p>	
Ecosystems	<p>The landscape and vegetation in the area of construction is typical braided riverbed. The area is covered in scrub, gorse and broom. As far as is known there are no endangered plants in the area of construction that could be adversely affected.</p>	<p>Given the significant ecological values identified in the Ahuriri River, I consider that more detail regarding the effect of the proposed landuse activity on ecosystems is required. Conditions (19)-(21)</p>	Effects uncertain

Adverse effects on ecosystems

44. The applicant's Assessment of Environmental Effects focuses mainly on the effect of the surface water take on ecosystems; with less information is available regarding the effect of the landuse activity on ecosystems. However, the applicant has stated that the proposed riverbed works are localised, and on a small scale, with respect to the size of the Ahuriri River, and hence will have a negligible effect on the natural ecosystems. Additionally they provide the following information:
- (a) The landscape and vegetation in the area of construction is typical braided riverbed.
 - (b) The area is covered in scrub, gorse and broom.
 - (c) As far as is known there are no endangered plants in the area of construction that could be adversely affected.
45. Submissions relating to effects on ecosystems have been received from Fish and Game New Zealand, Central South Island, the Department of Conservation and the Royal Forest and Bird Protection Society New Zealand. Submissions received from L Shand and A Braun-Elwert also commented on adverse effects on ecosystems.
46. In terms of landuse activities, Fish and Game New Zealand have raised concerns regarding the timing of instream works. The submission states that, works carried out during the spawning season have the potential to destroy redds (fish spawning nests made in the gravel beds of rivers) by physical disturbance, dewatering or suffocation through siltation. Concern is also raised regarding the protection of sportfish fry during the incubation and emergence period. These concerns relate to all landuse applications within the Upper Waitaki catchment.
47. Given that insufficient information on effects on ecosystems is available, and that submissions in opposition to the proposal have been received I will not provide further comment on the actual and potential effects on ecosystems.

Adverse effects on people and amenity values

48. The applicant has commented that the Ahuriri catchment is considered to have high natural character and high landscape and visual amenity values under the Waitaki Plan. Therefore, the applicant intends to consult with a Landscape Architect to reduce the visual impact of the proposed activity. At the time this report was written, no assessment had been submitted to the CRC.
49. The proposal includes the installation of irrigation pipelines beneath State Highway 8. Transit New Zealand have concerns regarding potential traffic effects created by the construction phase of the proposed works. These could potentially include road closure, which would in turn have significant effects on people. Transit New Zealand have made a submission on this application regarding these and other effects.
50. While most submissions regarding amenity values focus more specifically on the effects of irrigation, the submission by Transit New Zealand is specifically related to the effects of the land use activity. I consider that the issues raised by Transit New Zealand are significant and need to be addressed by the applicant.
51. Given that there are outstanding issues highlighted by the Transit New Zealand submission, as well as other submitters, I will not make further comment on the actual and potential effects on people and amenity values.

Conclusion

52. With regard to s104(1)(a), the actual and potential effects of the activities have been discussed above. For this consent, I cannot confirm that under s104(1)(a), the actual and potential effects of the proposed activity are acceptable when taking account the proposed mitigation. In particular, there is uncertainty regarding the following effects of the application:
 - (a) The effects on amenity and community;
 - (b) The effects on ecosystems.
53. I also note more details need to be provided by the applicant in relation to the design plans of the proposed structures so the scope of the proposed works may be defined as conditions of consent should the Commissioners decide to grant this application.

Statutory Assessment (s104(1)(b))

Regional Policy Statement (RPS)

54. 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.
55. Of significance to these applications is Chapter 9 and 10, which relates to the management of the region's water resources and the beds of lakes and rivers and their margins. The WCWARP and PNRRP take into account 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.

National Water Conservation (Ahuriri River) Order 1990 (WCO)

56. This order declares that the Ahuriri River and its tributaries include and provide for outstanding wildlife habitat, outstanding fisheries, and outstanding angling features. The order includes provisions to preserve and protect those characteristics and features.
57. The proposed works are located within the area identified as “protected waters” in the Ahuriri River.
58. Clause 3 of the Order addresses the outstanding characteristics and features of the Ahuriri River and its tributaries.

“It is hereby declared that the Ahuriri River and its tributaries include and provide for outstanding wildlife habitat, outstanding fisheries, and outstanding angling features.”

59. Clause 8(2) of the Order addresses the discharge of water.

“A water right shall not be so granted and a general authorisation shall not be so made for any discharge into the protected waters if the effect of the discharge on the protected waters would be to breach the following provisions and standards:

- (a) Any discharge is to be substantially free from suspended solids, grease, and oil;*
- (b) After allowing for reasonable mixing of the discharge with the receiving water -
 - i. The waters shall not be tainted so as to make them unpalatable, nor shall they contain toxic substances to the extent that they are unsafe for consumption by humans of farm animals, nor shall they emit objectionable odours:*
 - ii. There shall not be any destruction of natural aquatic life by reason of the concentration of toxic substances:*
 - iii. The natural colour and clarity of the water shall not be changed to a conspicuous extent”**

60. I recommend the proposed and recommended mitigation be reworded where appropriate to include the restrictions for discharges above. This will ensure that any release of sediment into the River during the works does not contravene the WCO.

Proposed Natural Resources Regional Plan (PNRRP)

61. Section 88A(2) RMA states that notwithstanding subsection (1) which relates to the type of activity, any proposed plan which exists when the application is considered must be had regard to in accordance with section 104(1)(b).
62. The objectives and policies of the PNRRP that are relevant to each potential adverse effect have been identified in the introductory s42A report. A discussion of the relevant objectives and policies is provided below.

Objective BLR1 – Activities within the beds and margins

63. This objective aims to ensure that works in the beds and banks of lake, rivers and streams can be undertaken while minimising effects, including flood-carrying capacity, natural character, ecosystems, other structures, erosion, Ngai Tahu values. While the works are of a small scale, the design details of the pump station, intake structure and

pipeline have not yet been provided and there is no recommended mitigation with ecosystems. In addition, a submission has been received from Transit New Zealand concerned with potential effects on their infrastructure from this proposal. Therefore I cannot conclude that the works will be consistent with the outcomes required by this objective.

Policies BLR 1 and 2

64. These policies aim to control activities associated with the erection, placement, use and maintenance of structures within the bed of rivers to ensure that objective BLR1 is achieved. This may include restricting activities so that they do not affect flood-carrying capacity, erosion or create plant infestations. With the proposed and recommended conditions, I consider this application is consistent with these policies.

Conclusion

65. With regard to s104(1)(b), the relevant provisions of the RPS and PNRRP have been considered above. I do not consider the permits for works in the bed or banks of the Ahuriri River are consistent with Objective BLR1 of the PNRRP given the potential effects on ecosystems and Transit New Zealand.

PART II PURPOSE AND PRINCIPALS

Purpose of the RMA (s5)

66. 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.”

67. 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.
68. 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 has not proposed sufficient measures to “avoid, remedy or mitigate” any potential adverse effects that may arise.

Matters of National Importance (s6)

69. Section 6 Matters of National Importance, I have considered the preservation of natural character, the protection of outstanding natural features and landscapes, the protection of areas of significant indigenous fauna, and the relationship of Maori to their ancestral lands. There are a number of submissions concerned with potential adverse effects on ecosystems. Given the nature of the Ahuriri River, I cannot determine if the proposal is consistent with this section until I have heard the submissions.

Other Matters (Section 7)

70. 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. Section (f) refers to the maintenance and enhancement of the quality of the environment. I have considered kaitiakitanga, the maintenance of amenity values, intrinsic values of

ecosystems, maintenance of the quality of the environment, and the protection of the habitat of trout and salmon. As mentioned above, a number of submissions have raised concerns with potential adverse effects on ecosystems.

Principles of the Treaty of Waitangi (s8)

71. 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. Submissions have been received from Ngai Tahu on this proposal, however I consider their submission was more directly related to the applicant's water permit application.

RECOMMENDATION

Grant or Refuse

72. Section 104B applies to any application which is a discretionary activity and states that the consent authority may grant or refuse the application and may impose conditions under s108.
73. Having considered all relevant matters outlined in section 104(1), I am not satisfied that the actual and potential effects on ecosystems and amenity and communities are minor. Therefore I cannot recommend that the applications be granted.
74. A discussion of duration sought for applications to be heard is included in Report 1. However given the outstanding areas of concern I cannot provide comment in relation to duration until I am able to determine the scale of potential adverse effects.

RECOMMENDED CONDITIONS

75. 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.
76. I have included a set of conditions specifically for these proposals below in Table 3. These have been proposed by the applicant or recommended by myself and are explained in relevant sections of this report. It should be noted that I have included conditions for all three permits being sought. Those that are not relevant to those granted may be deleted.
77. I emphasize that these conditions should provide sufficient mitigation for those potential adverse effects which I consider will be minor. These conditions do not however adequately mitigate adverse effects on:
- (a) Scope – more details need to be provided by the applicant in relation to the design plans of the proposed structures
 - (b) ecosystems
 - (c) Amenity and communities – specifically Transit New Zealand
78. A number of the conditions below have 'codes' located next to them. Please refer to Appendix 6 of the introductory report (Report 1) to view the conditions in full. Any proposal specific details or conditions are included below.

Table 2: Recommended draft conditions for CRC041787, CRC073112 and CRC073113

No.	Consent Code	Details
Scope		
1	LU01	<p>CRC041787</p> <p>(a) Construct an intake structure in the bed of the Ahuriri River</p> <p>(b) To construct a pumping station on the south bank of the Ahuriri River</p> <p>(c) To install a pipeline from the pumping station to the irrigated area.</p> <p>(d) To open a braid of the river following a flood if necessary to keep water flowing past the intake structure.</p>
1	LU01	<p>CRC073112</p> <p>(a) To construct, operate and maintain an erosion control and discharge structure</p> <p><i>NB: details of discharge structure design limited – this needs to be addressed by the applicant as discussed earlier</i></p>
1	LU01	<p>CRC073113</p> <p>To construct, maintain and operate a diversion structure on the bed of the Ahuriri River to facilitate the diversion of water to the intake structure</p> <p>Construction of a stopbank over the intake structure located within the holding pond, to protect this structure. The stopbank would be located at least 10 metres away from the water body, and would be approximately 1.4 metres high, 6 metres wide at the base and with a crest width of 1.5 metres. The stopbank will be created using spoil from the intake trench. Due to the natural slope of the river, the stop bank will only continue for a short distance beyond the intake.</p> <p><i>NB: These are not suitable condition wordings however details of diversion structure design are limited – this needs to be addressed by the applicant as discussed earlier</i></p>
Location		
2	LU02	<p><i>Cross reference to Condition: 1</i></p> <p><i>Name of watercourse: Ahuriri River</i></p> <p><i>Map reference:</i></p>

		<p>CRC041787 = between NZMS 260 H39:596-285 and NZMS 260 H39:599-288;</p> <p>CRC073112 = NZMS 260 H39:547-283</p> <p>CRC073113 = between NZMS 260 H39:544-287 and NZMS 260 H39:546-285</p> <p><i>Plan:</i> "Plan CRC073112/CRC073113" and "Plan CRC041787 (Attachment 1)"</p>
Limits of Excavation		
3	Non-standard	Works described in conditions (1) shall take no longer than two weeks. Maintenance works in accordance with condition (1) shall take no longer than two days
Erosion Protection		
4	Non-standard	Concrete walls or gabions and rip rap will be used to ensure bank stability above and below the point where the pipes enter the main stream.
5	LU10	
6	LU11	<i>Watercourse:</i> Ahuriri River
7	LU12	
8	LU13	<i>Waterbody:</i> Ahuriri River
Prior to Construction		
9	LU08	
10	Non standard	The Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager shall be notified by the consent holder of the intention to carry out works and their intended type and scope at least 48 hours prior to the commencement of work.
11	LU31	
During Construction		
12	LU15 modified	Works shall only occur during Autumn and Winter months
13		<p>After allowing for reasonable mixing downstream of the proposed works:</p> <p>(a) The waters shall not be tainted so as to make them unpalatable, nor shall they contain toxic substances to the extent that they are unsafe for consumption by humans or farm animals, nor shall they emit objectionable odours;</p> <p>(b) There shall not be any destruction of natural aquatic life by reason of the concentration of toxic substances;</p> <p>(c) The natural colour and clarity of the water shall not be</p>

		changed to a conspicuous extent.
14	LU14	
15	LU18	
16	LU21	
17	LU23 modified	All practicable measures shall be undertaken to minimise vehicles and machinery entering the Ahuriri River, including, but not limited to: (a) The consent holder shall take all practicable steps to avoid cementitious material entering Sutton and Gibson Streams including waste wash water from tools and machinery. (b) Cement shall be stored securely or removed from site overnight.
18	LU22	
19	LU26	
20	LU24	
21	LU25	
Accidental Discovery Protocol		
22	LU09	
Upon Completion		
23	LU28	
24	Non standard	On completion of works, the area shall be restored to its original condition as far as practicable.
Administrative Conditions		
25	AD03	
26	AD04	

Signed: _____



Susannah Vesey
Consents Investigating Officer

Date: 31 August 2009

REFERENCES

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

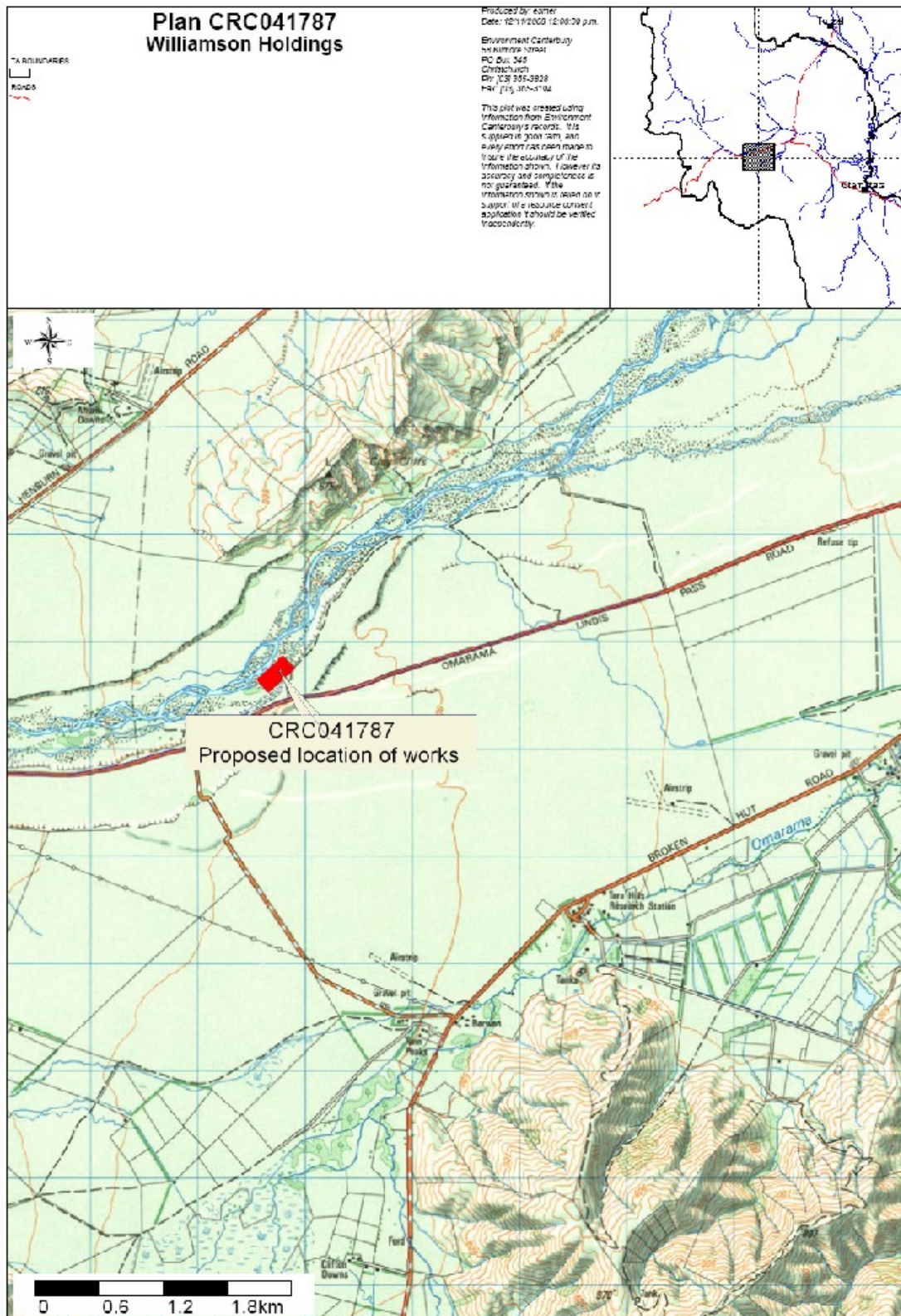
Canterbury Regional Council 1998. Regional Policy Statement. Report No R98/4. ISBN 1-86937-337-5.

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

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.

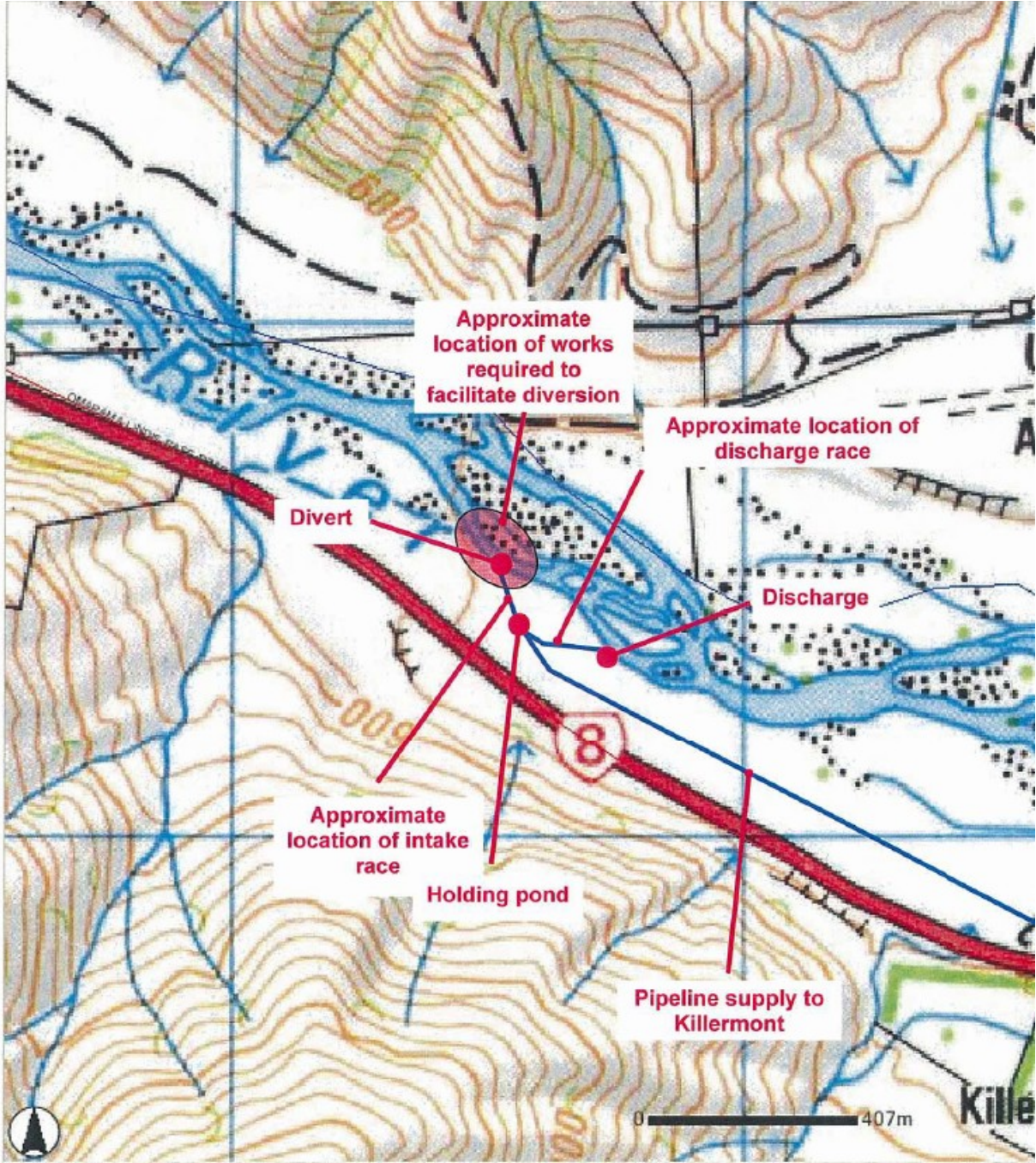
ATTACHMENT TWO – MAP SHOWING PROPOSED LOCATION OF WORKS – “04” PROPOSAL



ATTACHMENT THREE: THE INTAKE STRUCTURE USED BY THE CASCADE RACE COMPANY ON THE SOUTH OPUHA RIVER, AT ASHWICK FLAT (SOURCED FROM AEE)



**ATTACHMENT FOUR: SCHEMATIC DIAGRAM OF PROPOSED WORKS
CRC073112 AND CRC073113**



ATTACHMENT FIVE: CONCEPTUAL DIAGRAM OF INTAKE STRUCTURE CRC041787

