

MEETING OF THE REGULATION HEARING COMMITTEE

TO THE CHAIRPERSON AND MEMBERS OF THE
COMMITTEE

MEMBERSHIP OF THE COMMITTEE

Cr A G Neill (Chairperson)
Cr A S Carroll
Cr R A Budd

A meeting of the Committee will be held on
Friday, 31 March 2006 at 9.00 a.m.

VENUE: Waitaki Room
First Floor
Pegasus Building
Environment Canterbury
58 Kilmore Street
CHRISTCHURCH

BUSINESS: As per Order Paper attached

Dr Bryan Jenkins
CHIEF EXECUTIVE

**RECOMMENDATIONS IN REPORTS ARE NOT TO BE TAKEN
AS COUNCIL POLICY UNTIL ADOPTED BY COUNCIL**

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COMPLIANCE WITH LOCAL GOVERNMENT ACT 2002 DECISION-MAKING REQUIREMENTS

Except as below, a statement of compliance and a completed decision checklist is required for any agenda item on a council committee or the council recommending that a decision be made. This will be the responsibility of the person signing off the agenda item.

The compliance statement and checklist will not be used for:

- Recommendations that information be received or that the Council make a decision.
- Decisions taken under the Resource Management Act 1991 or the Biosecurity Act 1993 in relation to resource consents, decisions required when following the procedures set out in Schedule 1 of the Resource Management Act 1991, other permissions, submissions on plans, or references to the Environment Court.
- Decisions taken to proceed with enforcement procedures under various primary or secondary legislation or regulations, including procedures under the Resource Management Act 1991, the Biosecurity Act 1993, the Local Government Act 2002, and Environment Canterbury Bylaws.
- Administrative and personnel decisions that are entirely internal to Environment Canterbury.
- Other decisions where the procedures to be followed are set out in Legislation.

COMPLIANCE STATEMENT

The council committee (or the council) must formally certify that:

- (a) It is satisfied that it has sufficient information about the options and their benefits and costs, in terms of the region's social, economic, environmental and cultural well-being and the effects on community outcomes, bearing in mind the significance of the decisions.
- (b) It is satisfied that it knows enough about and has given adequate consideration to the views and preferences of affected and interested parties bearing in mind the significance of the decision.

INFORMATION CHECKLIST

(a)	A Statement of the Proposed Decision
(b)	A Statement of the Objective of the Proposed Decision and the Issue or Problem being addressed
(c)	A list of all reasonably practicable options, (including doing nothing).
(d)	For each option in (c): An evaluation of the Benefits and Costs, in terms of the region's social, economic, environmental and cultural well-being.
(e)	For each option in (c): A statement of the extent to which community outcomes would be promoted or achieved in an integrated and efficient manner.
(f)	For each option in (c): A statement of the Impact, if any, on Environment Canterbury's capacity to undertake its statutory responsibilities
(g)	If the Proposed Decision is a significant decision in relation to land or a body of water, a statement of how Maori values have been taken into account
(h)	A Statement of significant inconsistencies, if any, with any Existing Policy, Plan or Legislation arising from the Proposed Decision.
(i)	A statement how the views and preferences of affected or interested persons have been given adequate consideration during the definition of the problem or issue, the objective, the assessment of options and the development of the proposed decision, including the particular contribution of Maori to the decision-making process.

Notes:

The significance of proposals and decisions determines how much time, money and effort is put into exploring and evaluating options and obtaining the views of affected and interested parties. The significance of proposals and decisions is determined through reference to criteria contained in the policy on significance.

The policy on significance together with Section 76 of the Local Government Act 2002 set out the Council's requirements in relation to decisions. Some decisions can only be made through the Long-Term Council Community Plan, or after the Special Consultative Procedures set out in the Act have been used, (refer to the policy on significance and the Act).

All decisions of Environment Canterbury are subject to the decision-making requirements of section 76 of the Act unless inconsistent with specific requirements of other legislation.

ENVIRONMENT CANTERBURY

REGULATION HEARING COMMITTEE

ORDER PAPER

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2. MINUTES OF PREVIOUS MEETING
3. MATTERS ARISING

MATTERS FOR DECISION BY THE COMMITTEE

4. RESOURCE CONSENT APPLICATIONS FOR CONSIDERATION
5. APPOINTMENT OF COMMISSIONERS TO HEAR AND DECIDE RESOURCE CONSENT APPLICATIONS
6. QUESTIONS
7. EXTRAORDINARY AND URGENT BUSINESS
8. NEXT MEETING – to be confirmed
9. CLOSURE

ENVIRONMENT CANTERBURY
REGULATION HEARING COMMITTEE

MINUTES OF THE MEETING HELD IN THE COUNCIL CHAMBER, FIRST FLOOR,
PEGASUS BUILDING, ENVIRONMENT CANTERBURY, 58 KILMORE STREET,
CHRISTCHURCH ON 3 MARCH 2006 AT 9.00 A.M.

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PRESENT

Councillors A G Neill (Chairperson), J M Waters and W E Woods.

IN ATTENDANCE

Nil.

MANAGEMENT AND STAFF PRESENT

Kevin Swete (Investigating Officer) and Sarah Drummond (Consents Administration Officer (Hearings)).

1. APOLOGIES

Cr Woods for lateness.

2. MINUTES OF PREVIOUS MEETING

The minutes of the meetings of 2 December 2005, 27 January 2006 and 17 February 2006 were recorded as true and accurate records.

3. MATTERS ARISING

Nil.

MATTERS FOR DECISION BY THE COMMITTEE

4. RESOURCE CONSENT APPLICATIONS

4.1 TANK MAINTENANCE (1986) LIMITED - CRC042602

The Committee was advised that application was to discharge contaminants to air from abrasive blasting and spray painting at Lyttelton Dry Dock, Godley Quay, Lyttelton. The application was lodged on the 28 May 2004 prior to the expiry of the current consents.

As background, the Committee was advised that the application had been on hold for some time at the applicants request to allow them to consult with submitters who had reserved the right to be heard. Following that consultation, as a result of this consultation, all rights to be heard were withdrawn. Of the 12 submissions received five were in support and seven in opposition

The applicant had initially applied for a 35 year duration but this has since been amended to 10 years.

Mr Swete advised the Committee that while the application had been on hold a set of standard conditions had been developed to address concerns regarding contamination and adverse effects to the sea bed.

Mr Swete referred to the assessment of environmental effects and said that the key adverse effects were effects from dust contamination to surrounding air and land and the potential adverse effects to the sea bed and marine eco systems.

With respect to the potential environmental effects Mr Swete said that provided the proposed conditions and mitigations measures were strictly adhered to that the adverse effects of these activities were likely to be minor.

Following a request by the Committee to provide examples of the global conditions referred to and of other consent conditions for similar activities in the Lyttelton area, Mr Swete provided two examples and also an example of a condition to be included in the conditions already recommended. The Committee determined that the insertion of a further condition would not impose undue cost or affect the applicants ability to carry out their business.

The Committee was satisfied that consent be granted with a duration of 10 years.

The Committee inserted a new condition 11 which read:

“ waste material from any abrasive blasting shall be collected and shall be deposited to an authorised disposal”.

Resolved

That the Committee acting pursuant to a delegation of the Council of 22 October 2004, having had regard to the requirements of Section 104 of the Resource Management Act 1991, grants consent, pursuant to Section 105 of the said Act, to the application subject to the conditions as amended and duration of 10 years, and for the reasons stated.

Cr Waters/Cr Woods

4.2 RAE LINE LIMITED – CRC054286

The Committee was advised that the application was to discharge contaminants to air from a boat building operation at 620 South Eyre Road, Kaiapoi.

The applicant has requested a 20 year duration.

As background, Mr Swete advised the Committee that the application had been made due to enforcement action by Environment Canterbury resulting from changes caused by the implementation of the NRRP. This was an existing business that has been operating on-site since at least 1991.

A total of four submissions were received to the notified application all in opposition with one submitter reserving the right to be heard. Following consultation by the applicant, the right to be heard was withdrawn.

Mr Swete referred to the assessment of environmental effects and said that the key potential adverse effects included health effects from the discharge of from odour, and the sanding and grinding operation. Mr Swete advised the Committee that his calculations differed slightly from the assessment of environmental effects supplied with the application, but would still be within permitted levels. Mr Swete said that while the effects were within permitted minimum levels, each person's sense of smell was different and that some people might be able to detect an odour. Mr Swete advised the Committee that he considered the adverse health effects from discharge of odour will be no more than minor.

With respect to the effects from the sanding and grinding operation, Mr Swete said that the applicant had proposed stringent conditions to minimise any potential effect from this operation including a dust filtration system and filters for emission stacks. Mr Swete also noted that during a site visit the premises were well maintained and dust was not a significant problem.

Mr Swete concluded that given the proposed mitigation and recommended conditions, the effects of the proposed discharges would be less than minor.

The Committee was satisfied that consent be granted with a duration of 20 years. The Committee amended conditions as follows:

Condition 1

Insert (“gelcoat”) after the words polyester resin.

Condition 2(b)

Insert (“gelcoat”) after the words polyester resin.

Condition 2(c)

Replace the words Main Factory Building with “Grinding and Sanding Booth”.

Condition 7(a)

Replace “gelcoat” with (“gelcoat”).

Condition 8(b)

Replace “gelcoat” with (“gelcoat”)

Condition 12(a)

Insert after concurrently “for more than ten minutes in any hour, and”.

Insert new Condition 13 to read

- 13 A record of any complaints to the consent holder relating to odour, or particulate matter, from the discharges shall be maintained, and shall include:
- (a) The location where the odour, or particulate matter, was detected by the complainant;
 - (b) the date and time when the odour, or particulate matter, was detected;
 - (c) a description of the wind speed and wind direction when the odour, or particulate matter, was detected by the complainant;
 - (d) the most likely cause of the odour, or particulate matter, detected and
 - (e) any corrective action undertaken by the consent holder to avoid, remedy or mitigate the effect of the odour, or particulate matter, detected by the complainant.
- This record shall be provided to the Canterbury Regional Council upon Request.

Condition 13

Change the number to 14.

The Committee was satisfied that the proposed activity did not conflict with the provisions of the Resource Management Act given the recommended and amended conditions.

Resolved

That the Committee acting pursuant to a delegation of the Council of 22 October 2004, having had regard to the requirements of Section 104 of the Resource Management Act 1991, grants consent, pursuant to Section 105 of the said Act, to resource consent application CRC054286 by Rae Line Limited application subject to the conditions as amended and duration of 20 years, and for the reason stated.

Cr Neil/Cr Waters

5. APPOINTMENT OF COMMISSIONERS TO HEAR AND DECIDE RESOURCE CONSENT APPLICATIONS

RAKAIA SELWYN GROUNDWATER ZONE

D J and V McKay - CRC060383
North Rakaia Farm Partnership - CRC060975
D J Bain - CRC054138
Kildara Holdings Limited - CRC040348

The Committee was advised that a hearing had been scheduled to hear and decide 73 applications to take and use groundwater in the Rakaia Selwyn Groundwater Zone.

The Commissioners recommended had previously been appointed to hear and decide 69 applications and these appointments related to the last four applications to be decided at the combined hearing commencing on 8 May 2006.

Resolved

- (a) *That the Committee appoint Philip Milne, Wayne Russell and Dr Greg Ryder as Commissioners to hear and decide resource consent applications CRC060383 by D J and V McKay, CRC060975 by North Rakaia Farm Partnership, CRC054138 by D J Bain and CRC040348 by Kildara Holdings Limited with the full powers of the Council as a consent authority.*
- (b) *That the Committee appoint Philip Milne, Wayne Russell and Dr Greg Ryder to deal with any preliminary matters associated with (a).*

Cr Woods/ Cr Waters

6. QUESTIONS

Nil.

7. EXTRAORDINARY AND URGENT BUSINESS

Resolved

That the appointment of a Commissioner to consider and decide resource consent application CRC061019.1 by Target Pest Enterprises Limited be considered extraordinary and urgent business.

Cr Neill /Cr Waters

Cr Woods declared that he was a Board Member of Target Pest Enterprises Limited, but did not consider that he had any conflicts of interest in considering the proposed appointment of commissioner.

TARGET PEST ENTERPRISES LIMITED – CRC061019.1

The Committee was advised that an application by Target Pest Enterprises Limited to change condition of consent had been lodged.

Target Pest Enterprises Limited was a subsidiary of Environment Canterbury and a Commissioner was recommended to avoid a potential conflict of interest.

The Commissioner recommended had been previously appointed as the commissioner to consider and decide the original consent application.

Resolved

That the Committee appoint Barry Loe as a Commissioner in respect of resource consent application CRC061019.1 by Target Pest Enterprises Limited with the full power of the Council as a consent authority to:

- (a) decide whether the resource consent application shall be processed with or without notification;*
- (b) determine any preliminary matters associated with the resource consent application; and*
- (c) decide the resource consent application with or without a hearing.*

Cr Woods/Cr Waters

8. NEXT MEETING

Scheduled for 17 March 2006.
Membership Councillors McKay, Oldfield and Johnston.

9. CLOSURE

The Chairperson closed the meeting at 10.10 a.m.

CONFIRMED

DATE _____ CHAIRPERSON _____

4. RESOURCE CONSENT APPLICATIONS FOR CONSIDERATION BY THE COMMITTEE

The following resource consent applications are submitted for consideration and decision by the Committee without formal hearing.

Applications	Permit No.	Page No.
Waimakariri District Council	CRC990927, CRC990932	9 - 40

Report endorsed by:
Leo Fietje, Principal Consents Advisor.

Recommendation

That the Committee acting pursuant to a delegation of the Council of 22 October 2004, having had regard to the requirements of Section 104 of the Resource Management Act 1991, grants consent, pursuant to Section 105 of the said Act, to the applications subject to the conditions and expiry dates, and for the reasons stated.

**INVESTIGATING OFFICER'S REPORT
WIAMAKARIRI DISTRICT COUNCIL
APPLICATIONS
CRC990927 (Poyntz Road Water Supply)
&
CRC990932 (Ohoka Water Supply)
to
TAKE AND USE GROUNDWATER**

INTRODUCTION

This report has been prepared by Andrew Dickson, Consent Investigating Officer (Land/Water North Team).

This report is prepared under the provisions of Section 42A of the Resource Management Act 1991 (RMA). This section allows a Council officer to provide a report to the decision-maker on a resource consent application made to the Council, and allows the decision-maker to consider the report at the hearing. Section 41(4) of the RMA allows the decision-maker to request and receive from any person who makes a report under Section 42A "*any information or advice that is relevant and reasonably necessary to determine the application*". This report will provide the following information and advice:

- A description of the proposed activity;
- The relevant legal and planning provisions;
- A summary of submissions received;
- A description of the affected environment;
- An audit of the assessment of environmental effects provided;
- Conclusion and recommendations.

BACKGROUND

1. Since the applications were submitted (both 28 October 1998), several Investigating Officers employed by Environment Canterbury have undertaken work on the current applications.
2. A site visit has not been undertaken as part of preparation of this report.
3. The applications were prepared by Mr Brian Earnslaw (Essential Services Officer (Contracts)), of the Waimakariri District Council (WDC).
4. Since the preparation of the draft s42A report and associated draft recommended conditions, the applicant raised concerns prior to a hearing being held regarding the draft conditions (refer correspondence on file; 16 June 2005), notably in relation to the annual allocation volume and the associated metering and data recording. Concern was respectively in relation to whether the volumes were sufficient, and the compatibility of the requirements of the metering condition with WDC's existing systems.

5. Given the concerns, Ms Sri Hall (Ex-Team Leader Consents Land/Water North) determined that it would be appropriate for the applicant to provide further information in relation to sufficient annual volumes and compatible water metering.
6. This information has now been submitted by Ms Hilary Lough (Pattle Delamore Partners (PDP)), who undertook the determination of the annual volumes on behalf of the applicant.
7. In summary, the current applications are **replacement increases** from the previous consents. The applicant has previously held the following:

Poyntz Road Water Supply

CRC910126.2 - to take up to 375 cubic metres of water per day at a maximum rate of 4.5 litres per second from bore M35/0181, 200mm diameter and 29.3 metres deep, at or about map reference M35:520-583 for community supply and spray irrigation of lawns and gardens over a 20 lot subdivision.

Ohoka Water supply

NCY880236.1 – to take up to 259 cubic metres of water per day at a maximum rate of 3 litres per second from proposed bore M35/5609, 150mm diameter and 18.3 metres deep, at or about map reference M35:752-607, for community water supply.

8. Both of the above applications are within the **Waimakariri River Catchment** and within the **Eyre River Groundwater Allocation Zone**.

NOTIFICATION AND SUBMISSIONS

Notification

9. The applications were notified on Saturday 26 March 2005 in The Press, the North Canterbury News, and the Northern Outlook as follows:

Applicant: Waimakariri District Council
Address: Private Bag 1005, RANGIORA.
Attn: Mr Brian Earnshaw

*“**CRC990927** - to take and use groundwater at a maximum rate of 11 litres per second, with a volume not exceeding 950 cubic metres per day, from bore M35/0181 (diameter: 200millimetres, depth: 29.3 metres) at or about map reference NZMS 260 M35:52004-58334 Worlingham Road, WEST EYRETON. Water will be used for the purpose of providing public water supply to the Poyntz Road Water Supply Area.*

A consent duration of 35 years is sought. This is an application for a replacement consent for CRC910126.2 with an increase in rate of take and volume.”

*“**CRC990932** - to take and use groundwater at a maximum rate of 18 litres per second, with a volume not exceeding 1,555 cubic metres per day, from bore M35/5609 (diameter: 200millimetres, depth: 18.8 metres) at or about map reference NZMS 260 M35:74950-60536 352A Bradleys Road, OHOKA. Water will be used for the purpose of providing public water supply to the Ohoka Water Supply Area.*

A consent duration of 35 years is sought. This is an application for a replacement consent for NCY880236.1 with an increase in rate of take and volume.”

Summary of submissions

10. In total, for the two applications there were 6 submissions received (one for CRC990927 and five for CRC990932). All were in support of the application; none wish to be heard.

DESCRIPTION OF THE PROPOSED ACTIVITY

11. The applications have been applied for under the following conditions:

CRC990927

1. To take up to 950 cubic metres of water per day at a maximum rate of 11 litres per second from bore M35/0181, 200mm diameter and 29.3 metres deep, at or about map reference NZMS 260 M35:52004-58334 for community supply.
2. An annual allocation volume of 239,258 m³/year
3. The system operates with the customer being connected to the pipe network with an individual lateral fitted with a restrictor.

Scheme expansion will be essentially for domestic water only at 2 cubic meters per day with 4,500 litres of onsite storage (for those properties outside of the original boundaries), while any infill subdivision will be at 1 cubic metre / ha (For example, a 4 ha / property would have 4 cubic metres per day restrictor with 4,500 litres of onsite storage).

4. Once fully developed, the scheme will be a fully restricted three-tier scheme (i.e. 2 m³/day and 4 m³/day for new connections, and 8 existing lots at 13 L/min (18.7 m³/day)).
5. Flows are to be metered and measured.
6. The storage for the scheme involves two 22,750-litre tanks and a 11,365-litre tank.
7. A duration of 35 years

(Note: an increase of 6.5 L/s and 375 cubic metres per day from previous consent CRC910126.2)

CRC990932

1. To take up to 1,555 cubic metres of water per day at a maximum rate of 18 litres per second from bore M35/5609, 200mm diameter and 18.8 metres deep, at or about map reference NZMS 260 M35:74950-60536 for community supply.

2. An annual allocation volume of 248,030 m³/year.
3. Each customer is connected to the pipe network with an individual lateral fitted with a restrictor.
4. Once fully developed, the scheme will be a hybrid semi and fully restricted scheme (i.e. 13 L/min and 2 m³/day/connection respectively). Therefore, new connections to the system will be restricted to 2 m³/day/connection. To enable the supply to all connections, it is proposed that some of the 13 L/min connections will be altered to 2 m³/day, particularly when the larger blocks are sub-divided.
5. Flows are to be metered and measured.
6. The storage for the scheme involves three 23,000-litre tanks with a combined capacity of 69,000 litres at the headworks. Customers not required to have any on-site storage.
7. The maintenance contract for reticulation repairs is administered with “maximum response times” for repairs of leaks. This minimises waste especially with any major failures (i.e. a commitment to respond to urgent faults in 1 hour and repair in 5 hours – as per ‘Asset Management Plan’).
8. A commitment to respond and repair minor leakage cases within 3 days, as specified in the system’s ‘Asset Management Plan’.
9. A commitment to achieve water leakage from the system of less than 15%, as specified in the system’s ‘Asset Management Plan’).
10. The WDC would also impose hosing restrictions when low well levels are being experienced within the area.
11. A duration of 35 years.

(Note: an increase of 15 L/s and 1,296 cubic metres per day from previous consent NCY880236.1)

LEGAL AND PLANNING MATTERS

12. The section sets out the consent authority’s jurisdiction over the activities, why consent is required, the status of the applications, the rules that apply, and the matters for consideration in making a decision.

The Resource Management Act 1991 (RMA)

13. Part III of the RMA sets out the duties and functions of regional councils and restrictions applying to applicants in terms of the applications.

Relevant Regional Plans or Relevant Proposed Regional Plans

14. The following regional plans have been referred to:
 - Transitional Regional Plan (TRP)

- Waimakariri River Regional Plan (WRRP)
- Proposed Natural Resources Regional Plan (PNRRP)

PROPOSED ACTIVITIES

Take and use water

Take

RMA

15. Section 14(1)(a) of the RMA states that no person may take or use, dam, or divert any water, unless the taking or use is allowed by subsection (3). Section 14(3) states that a person is not prohibited by subsection (1) if the activity is expressly allowed by a rule in a regional plan and in any relevant proposed regional plan or a resource consent.
16. Therefore, unless expressly allowed by a rule in a relevant regional plan **and** by a rule in a relevant proposed regional plan, a resource consent is required from the regional council to take water.

TRP

17. The TRP contains GA for the abstraction of natural water. Under Rule 3 the taking of groundwater is permitted:

“...the abstraction of natural water from any groundwater resource, provided that the volume abstracted shall not exceed 20 cubic metres per day, per property, from any bore and the abstraction bore shall be further than 50 m from any bore on a neighbouring property, or from any surface water resource.”
18. As the proposed abstraction volume is above that specified in this rule, the proposed abstraction requires a resource consent under s.14 of the Act.
19. As the TRP currently stands, does not classify the proposed abstraction(s) as a controlled, restricted discretionary, discretionary, or non-complying activity.
20. In light of this, s 77C (1) (b) of the RMA Amendment 1991 (RMAA – amended in 2003) provides the following guidance –

“An application for a resource consent for an activity must... be treated as an application for a discretionary activity if... a plan or proposed plan requires a resource consent to be obtained for an activity, but does not classify the activity as controlled, restricted discretionary, discretionary, or non-complying under section 77B;...”
21. Therefore, given s77C (1) (b), any proposed taking of water is to be treated as **discretionary activity**, and to be decided in accordance with section 104(1)(b) of the Act.

WRRP

22. The WRRP provides regulation for the taking of groundwater that is hydraulically connected to a surface waterbody. Where the stream depletion effect is:
- “...greater than 5 litres per second after a 30 day pumping period, a resource consent in accordance with Rule 5.1 is required.”*
23. Rule 5.1 of the WRRP states that within the area of the Waimakariri River Catchment “below Woodstock”, the taking of water from any surface waters of the Waimakariri River is a **Discretionary Activity** for which the ECan has restricted its discretion (page 31 of the WRRP), including:
- The reasonable need for the quantities of water sought
 - The availability and practicality of using alternative supplies of water
 - The effects of abstraction on river flows and consequential effects
 - The effects on other authorised takes
 - The collection, recording, monitoring and provision of information concerning the exercising of the consent.
24. In addition to the above matters of discretion, Rule 5.1 of the WRRP also provides certain standards and terms shall be complied with. These include for example, providing a copy of records of the take upon request; and adherence to minimum flows.
25. However, the cessation and restriction provisions of the ‘Standards and Terms’ shall not apply to the taking of water for:
- A municipal or rural reticulated water supply for the purpose of providing drinking and cooking water and for hygiene purposes, of up to 250 litres per day for every person served by that supply.
 - A reticulated water supply for the purpose of providing drinking water for animals.
26. As the resource in the catchment is limited, the WRRP provides allocation limits creating an ‘A’ and ‘B’ Permit system, based on a first in, first served basis. For the Waimakariri River catchment “below Woodstock”, ‘A’ Permits are granted up to a total allocation and includes stream depletion by hydraulically connected groundwater.
27. The minimum flow for ‘A’ Permits on the Ohoka Stream is 300 L/s, measured at the confluence with the Kaiapoi River. The A permit allocation block is 500 L/s.
28. Any abstractions above the total allocation for ‘A’ Permits, become ‘B’ Permits with a minimum flow of 800 L/s.
29. When flows are between the two minimum flows, abstractions must reduce to no more than the proportion of the maximum allowable rate of take, determined as stated in the WRRP.
30. The ‘A’ allocation was not full at the time of writing this report (allocation is 311.06 L/s).

PNRRP

31. Under Chapter 5 of the PNRRP, the proposed activities would be addressed by **Rule WQN19** (“Taking of water from groundwater within an allocation block for a groundwater allocation zone listed within Schedule WQN3, or determined using Schedule WQN4”¹).
32. Both the applicant’s bores for applications CRC990927 and CRC990932 are located within the Eyre River Groundwater Zone. As of the 14 March 2006, the Eyre River Zone is deemed ‘white’ (i.e. less than 80% allocated).
33. Therefore, this rule classifies the proposed activities as **Restricted Discretionary**, providing the activity complies with the conditions of the rule.

Use

RMA

34. Unless expressly allowed by a rule in a relevant regional plan **and** by a rule in a relevant proposed regional plan, a resource consent is required from the regional council under section 14 of the RMA to use water.

TRP

35. No reference to the use of water is made within the TRP.
36. As the TRP does not expressly allow for the use of water for irrigation, section 77C(1)(a) of the RMA is considered, where it states that:

“An application for a resource consent activity must, with the necessary modifications, be treated as an application for a resource consent for a discretionary activity if Part 3 requires a resource consent to be obtained for an activity and there is ...no relevant rule in a plan or a proposed plan...”
37. Therefore, the use of water for irrigation is classified as a **Discretionary Activity**.

WRRP

38. Under the WRRP, the ‘use’ of water is defined as “...means the utilisation of water in a water body for the purpose of an exclusive value to the user...”
39. No reference is made to use of water for irrigation purposes onto land (i.e. out of a water body).

¹ Schedule WQN3 - “Groundwater management in specified zones in the Canterbury region”. At present, this Schedule is not applicable to this application. Schedule WQN4 – “Interim allocation regimes for groundwater in Canterbury” – Have been set; refer to sections 3.5 and 3.6, and section 6.2 of this report.

40. As discussed for the TRP, under section 77C(1)(a) of the RMA, the use of water for irrigation is classified as a **Discretionary Activity**.

PNRRP

41. The PNRRP provides for the use of water for irrigation. In particular, rule WQN27 refers to the use of water for group drinking water supply or community drinking water supply – **Discretionary Activity**.

Conservation Management Plans and Conservation Orders

42. There are no relevant regulations, Water Conservation Orders, Draft Water Conservation Orders, Heritage Orders or relevant requirements for designations of Heritage Orders relevant to this application.

STATUS OF THE APPLICATIONS

CRC990927

43. The proposed abstraction is not deemed to be hydraulically connected to any waterway due to an absence of natural waterways/springs within the surrounding area. Therefore the proposed activity is not considered under the WRRP.
44. With regard to the PNRRP, the application was lodged with Ecan before the notification of chapter 5 (NRRP - Water Quantity) on 3 July 2004. Therefore, in light of s88A of the RMAA 1991, the application is to be considered as a discretionary activity in terms of the TRP (as provided for by s 77C (1)(b) of the RMAA 1991).
45. The use of water is classified as a discretionary activity.

CRC990932

46. Given the hydraulic connection of the proposed abstraction to surface waterbodies within the Waimakariri Catchment and a stream depletion rate greater than 5 L/s, the activity is classified as a discretionary activity under the WRRP (Rule 5.1).
47. The use of water is classified as a discretionary activity.

DESCRIPTION OF THE AFFECTED ENVIRONMENT

48. There is little to no information provided within the AEE's of the original applications regarding a description of the affected environment.

Regional Scale

49. In the absence of a description, a description of the 'Eyre River Groundwater Zone' is provided (refer Appendix A) as a general background to the groundwater resource of the surrounding area (Aitchison-Earl (2003)).
50. Additionally, there is a resource overview within the WRRP (refer Chapter 3, page 11) regarding the Waimakariri River Catchment.

Local Scale

CRC990927 – Poyntz Road Water Supply

51. A search within the Ecan GIS database has been undertaken for other values within the surrounding area.
52. There are no natural waterways or springs within a one-kilometre radius of the applicant's bore. There are however, water races within this vicinity.
53. The boundary to Eyrewell Forest is located approximately 1.1km distance to the south of the applicant's bore.
54. From the available information within the GIS database, there are no reserves, wetlands, DoC, naturally or regionally significant, or historic sites, or silent files within the immediate surrounding area (i.e. one kilometre) of the applicant's bore.

CRC990932 – Ohoka Water Supply

55. A search within the Ecan GIS database has been undertaken for other values within the surrounding area.
56. Bore M35/5609 is identified as being situated between two branches (southern and northern branch) of the Ohoka Stream. There is limited recorded flow data (sourced from the Environment Canterbury database) for the aforementioned branches of Ohoka Stream – this information has been attached as Appendix B.
57. Springs are located within a one-kilometre radius of the applicant's bore (closest identified to be approximately 750m distance, on the south side of the southern branch of Ohoka Stream).
58. Ohoka Recreation Reserve located approximately 850m distance east of the applicant's bore.
59. From the available information within the GIS database, there are no other reserves, wetlands, DoC, naturally or regionally significant, or historic sites, or silent files within the immediate surrounding area (i.e. one kilometre) of the applicant's bore.

7 ASSESSMENT OF ACTUAL AND POTENTIAL EFFECTS

60. Effects that can arise from the taking of groundwater, including those that arise over time and in combination with other activities are as follows:

- Adverse effect of take on surrounding groundwater users
- Cumulative effect of take on other groundwater users
- Adverse effect of inefficient take on other groundwater users
- Adverse effect of take on other users from seawater intrusion
- Adverse effect of take on aquifer stability
- Adverse effect from cross-connection on groundwater quality
- Adverse effect of take on surface water flows
- Adverse effect of use on water quality
- Adverse effect of take and use on tangata whenua values
- Positive effect of taking and using water

Adverse effect of take on surrounding groundwater users

61. The abstraction of groundwater creates a drawdown cone that extends laterally from the pumping bore, and may result in a lowering of groundwater levels in neighbouring bores.

62. Such lowering may have serious consequences for existing users by:

- preventing them from taking their authorised amount;
- increased costs through having to drill a deeper well; lowering their pump; changing from a surface to submersible pump.

63. Objectives/Policies that are relevant for consideration include:

- RPS, Chapter 9, Policy 5, which states that the granting of a permit should not preclude the reasonable exercise of an existing consent; and
- RPS, Chapter 9, Policy 6 (a), which states that a consent authority should consider the need to specify the maximum permitted usage; and
- RPS, Chapter 9, Policy 6 (c), which states a consent authority should consider the need to provide for existing water permit holders to have priority in terms of their permit.
- PNRRP Water Quantity Objective WQN 7 and Policy WQN20 are concerned with interference effects (drawdown) between bores.

64. For both applications (CRC990927 and CRC990932), an issue raised during the audits was the potential effect on surrounding groundwater users as a result of increased pumping from the wells concerned.
65. On review through the respective files, requests were made to the applicant by Environment Canterbury to supply further information to show that there were no adverse effects on surrounding users, or to provide written approval of the bore owners identified as being potentially adversely affected. In the absence of supplying this information, the applications were publicly notified to enable the community to make submissions. In particular, all neighbouring landowners within a one to two kilometre radius of the bores subject of each application were personally notified of the applications and were offered the opportunity to provide comment (in total, 36 letters were sent for CRC990927, and 94 letters for CRC990932).
66. As summarised within paragraph 10 (pg 3) of this report, there were 6 submissions received in total (one for CRC990927 and five for CRC990932), and all were in support of the application, with none wishing to be heard.
67. In light of the above process undertaken, it is therefore considered by the community that the abstraction for public water supply for both applications is acceptable at the rates proposed. To ensure this, I recommend mitigation restricting the rate, volume and use to that which was proposed.

Cumulative Effect (in combination with other takes) of Take on Other Groundwater Users

68. In addition to localised depression in groundwater level, the taking of groundwater can, over time or in combination with other takes, cause a long-term continuing decline in groundwater level.
 - PNRRP Water Quantity Objective WQN 4, PNRRP Water Quantity Policy WQN 9 and 14 concern allocation of water, preventing long-term decline in groundwater levels and setting allocation regimes for granting water permits.

Zone Allocation Status

69. The Council resolution of 19 February 2004 requires that before the PNRRP is operative decision makers must consider the degree of allocation of groundwater within the zones the application is subject of.
70. Both the applicant's bores for applications CRC990927 and CRC990932 are located within the Eyre River Groundwater Zone.
71. As of the 14 March 2006, the Eyre River Zone is deemed 'white' (i.e. less than 80% allocated) based on the first-order approach to determining groundwater allocation for a zone (Aitchison-Earl *et.al* 2004).

Localised Water Levels

72. Within both of the AEE's provided with the applications (both submitted in October 1998), the applicant has provided a brief comment regarding water levels within the proposed pumping bores. Within bore M35/0181 (CRC990927), the applicant has identified that the lowest level noted is -18.8 m below ground level (b.g.l.), and similarly for bore M35/5609 (CRC990932), the lowest level noted is -2.4 m b.g.l.
73. For both applications, the applicant concludes:
- "No evidence of general lowering of water levels over time apart from seasonal variations."*
74. A search within a 2km radius of each of the applicant's bores has been undertaken within Ecan GIS and wells database, and the following is identified.

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75. The closest current available long-term record is from bore M35/0174 (45.7 m deep, located approximately 1.8km distance southwest of the applicant's bore; recorded from 1977 to the present on a monthly basis by Environment Canterbury).
76. From the limited data available, there appears to be no noticeable long-term decline in water levels recorded.

CRC990932

77. The closest current available long-term record is from bores M35/0596 (9.6 m deep, located approximately 720 m distance southwest of the applicant's bore; recorded from 1999 to the present on a monthly basis by Environment Canterbury) and M35/0601 (12.8 m deep, located approximately 2.2 km distance east of the applicant's bore; recorded from 1973 to the present on a monthly basis by Environment Canterbury).
78. From the limited data available, there appears to be no noticeable long-term decline in water levels recorded.

Annual allocation

79. For the purposes of managing the allocation of water within the zone for both applications, it is recommended that annual volumes be placed on as a condition of the consents, if granted.
80. As noted earlier (paragraph 4, pg 1), the applicant raised concerns regarding the annual allocation initially determined. The initial volumes estimated were determined from Policy WQN14 (6)(c)(ii) of the PNRRP, for community water supply, which multiplied the maximum daily volume by 150 (i.e. days).

81. The respective volumes determined were:
- CRC990927 142,500 m³/year
- CRC990932 233,250 m³/year
82. Ms Lough has since provided further information to establish appropriate annual volumes. As a result, the volumes determined are:
- CRC990927 239,258 m³/year
- CRC990932 248,030 m³/year
83. In summary, Ms Lough has identified that predicting population and land use changes over the duration of a consent is difficult and involves a significant degree of uncertainty. Ms Lough within the further information provided discusses the basis of the method identified within Policy WQN20 of the PNRRP and concludes that annual allocation should be calculated individually for each consent.
84. Therefore Ms Lough has determined annual volumes based on a relationship between the average daily use (i.e. entire flow volume for year divided by days in a year) and the peak daily use (maximum daily volume consented) from data obtained from existing WDC community supply schemes.
85. As part of the assessment, Ms Lough identified the following key factors that affect the relationship between average daily use and peak daily use:
1. Lot size;
 2. Maximum allowable daily water consumption (i.e. the connection type);
 3. Soil type (with respect to water holding capacity);
 4. Land use (e.g. residential, lifestyle, crop/pasture, etc);
 5. Presence on the scheme of large water users (e.g. Commercial, industrial takes).
86. The methodology used to assess an annual volume includes:
- Population and land use predictions made by the WDC have been examined for the Ohoka and Poyntz Road communities;
 - Water use data has been examined from communities that are of similar nature to the expected development for Ohoka and Poyntz Road and have similar water supply connection types;
 - The ratio of average daily use to peak daily use and peak available volume has been assessed for these communities;
 - The ratio has been used to assess an expected maximum annual water usage volume for the Ohoka and Poyntz Road communities based on the proposed maximum daily volumes;

- A safety factor of 15% has been applied to allow for:
 - the effects of climate change (directive from the Ministry of the Environment), i.e. compensate for a drier year than encountered over the period of monitoring data;
 - cumulative uncertainty in the population and land use predictions;
 - monitoring data that has been used to assess usage statistics;
87. In general, Ms Lough notes that analysis of the water usage data for differing consented schemes indicates that the ratio for average to maximum available flow varies significantly between communities, and that section sizes and connection types have a significant influence on these ratios.
88. For example, Ms Lough states that from the analysis that the “...*ratio of average use to peak use is greater for communities with smaller property sizes...*”, i.e. more people overall; water used for landscaping (e.g. gardens), etc.
89. Information relating to the number of lots (now and predicted), subsequent lot sizes, and corresponding flows per connection, is summarised from paragraph 98 onwards (refer below).
90. From the audit undertaken, I consider the methodology used by Ms Lough and the subsequent determination of respective annual volumes as appropriate. However, as noted earlier, Ms Lough acknowledges the uncertainty associated with determining an annual volume, which is based on a number of assumptions, including predictions of future subdivisions and associated increases in population. For this, Ms Lough states that “*continual monitoring of water use data for the areas will reveal actual water usage characteristics for the schemes (and) if the annual allocation volumes do not match the actual water use, it may be appropriate to review these conditions at a later date.*”
91. In light of this, I agree with Ms Lough and have proposed mitigation which expands on this; requiring that water abstraction records be provided detailing the use from the previous two years and details outlining the projected use for the next two years. The intention of this condition is the acknowledgment that development (i.e. subdivision; creation of new lots) will occur over time and it provides a means for showing that. If however, there is a trend over time that water is not being used, then there is the opportunity for the monitoring officer to initiate a review if it is clear that the excess volume is not going to be used.

Conclusion

92. In the absence of any submissions received from the public regarding the cumulative effect of the proposed abstractions; the Eyre River Zone being less than 80 percent allocated; available data regarding localised water levels show no long-term declines; and the proposed and recommended mitigation, it is considered that the cumulative effects of the proposed abstractions (in combination with other takes) on other groundwater users, is *de minimis*.

Adverse Effect of an Inefficient Take on Other Groundwater Users

93. The taking of water in excess of that required for the intended use may contribute to water levels being unnecessarily reduced. Alternatively, inefficient use of water may result in elevated water levels downgradient of the area being irrigated, which may in turn cause a reduction in productivity (i.e. surface flooding), and potential enhanced leaching of nutrients and contaminants to groundwater.
94. Inefficient use can be defined as both:
- Technical (using efficient irrigation management practices and appropriate irrigation scheduling so that the soil infiltration rate is not exceeded; no surface runoff; minimising the potential for deep percolation of water and nutrients to beneath the root zone; and there is no leakages in the delivery system and no irrigation of waste areas); and
 - Allocative (inefficient use where the applicant is authorised to take more water than what is actually or reasonably required, therefore depriving water that can be used by others)
95. Objectives/Policies that are relevant for consideration include:
- RPS, Chapter 9, Policy 3, which states to promote efficiency in the use of water, and
 - RPS, Chapter 9, Policy 6 (b), which states that a consent authority should consider the need to be based on actual and reasonable water needs.
 - PNRRP, Objective WQN 5 and Policy WQN 17(1) both promote the reasonable and efficient use of water.
 - PNNRP, Policy WQN 17(2) states that water permits should be granted as a seasonal volume of water that meets a “reasonable use” test.
 - PNRRP, Policy WQN16 “Measurement and recording of water abstraction” requires continuous monitoring with flow meters of water volumes abstracted.
96. Each application shall be addressed in turn.
97. (Note: Given the time that has passed since the audit undertaken by the previous Investigating Officers, I sought an update from the applicant regarding the water supply schemes when this report was initially prepared. Within the further information provided, Ms Lough has provided an additional update. The information obtained has been included within this report.)

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98. Flow and volume details, as well as a summary of future expansion of the water supply scheme, have been outlined within paragraph 11 (pgs 3-4) of this report.

99. Information provided by the applicant indicates that at present, there are:
- 28 connections with flow rates of 13 L/min (or 18.72 m³/day maximum peak equivalent; if taken 24 hours);
 - 6 connections at flow rate of 2.8 L/min (or 4 m³/day), and another 8 more connections at this flow rate to be installed in the near future;
 - A further 16-18 enquiries for possible connections, at either 2.8 L/min (or 4 m³/day) or alternatively a lesser rate of 2 m³/day (or an equivalent flow rate of ~1.4 L/min).
100. Details provided by the applicant regarding the properties included:
- most of the properties are 20 ha, with some 4 ha properties;
 - all new connections generally are for 4 ha properties;
 - scheme provides water for domestic household use, and that land use is predominantly for irrigating pasture for running some stock, and lawns/gardens.
101. Ms Lough has since provided further information that earlier predictions for future development have underestimated potential population and subdivision increases, and it is now considered that a total of 267 lots may be serviced by the Poyntz Road water scheme by 2041. Ms Lough states that this is the maximum number that will be able to be serviced based on the maximum daily volume applied for under the consent. From this estimate, it is assumed that 8 of the existing lots are un-subdividable and that some growth will occur outside the development boundaries than initially predicted, with most property sizes being ~4 ha each.
102. It is identified by Ms Lough that:
- any 4 ha lots (a result of subdivision) within the boundaries of the scheme will be supplied at 4 m³/connection/day;
 - any lots outside the boundaries will be supplied with 2 m³/connection/day;
 - there are 8 existing lots (unsubdividable) which will remain at a maximum of 18.7 m³/day (or 13 L/min);
 - it is expected that the 4 ha lots will install storage tanks so that they will be able to use more water (than the connections deliver) on certain days (i.e. for landscaping use).

Conclusion

103. From the information provided, the scheme is predicted to expand and in time additional water will be required. With regard to whether water is used efficiently, a factor is the size of the property per connection. Therefore:
- Larger property sizes (i.e. 20 ha), with flow rates per connection of 13 L/min, or 18.72 m³/day, can be considered efficient when acknowledging that the individual property allocation planned for is less than that permitted as of right to an individual property owner currently under the TRP;

- Smaller sized blocks (i.e. 4 ha), there is a corresponding reduction in water supplied to the property and it is expected that storage will be installed for these lots.
104. Additionally, the proposed size of the abstraction (i.e. maximum rate of 11 L/s) is comparatively small to other groundwater abstractions within the Canterbury Region.
105. To ensure that proactive measures are being taken to promote efficiency over the life of the consent, if granted, mitigation is recommended including:
- requiring all practicable measures be taken to avoid leakages from pipes and structures; and
 - a flow meter be installed, and associated accurate recording of the taking of water is recommended. This water meter condition will require the provision of records of use.
106. Of note, the applicant has raised issue with the wording of the water metering conditions and in particular the location of where the meters are located on the plumbing system. Ms Lough notes that the WDC water meters are located on the outlet of the reservoirs, rather than on the pump outlet of the well, and that the condition states that the water meter must be on the mainline distribution system. The concern held by the WDC is that the rate drawn from the reservoir may exceed the maximum consented rate at which water is taken from the well and therefore imply that the conditions of consent have been breached, although it is noted that the pump in the well would be sized such that it would not be possible to abstract at a greater rate.
107. In response to this, my recommendation is that the metering is to be measured from the well, not from the reservoir, as it is for the purpose of controlling the effects on the environment, not the effect on, or usage from the reservoir.
108. I am satisfied that the proposed and recommended mitigation will promote the reasonable and efficient use of water and is consistent with the Regional Policy Statement.

CRC990932

109. Information initially provided by the applicant indicated that there were 82 (now 85) connections and additional applications to connect to the scheme had been declined.
110. The applicant identified that properties on this supply vary from residential size with a number around the 1-1.5 ha range, another smaller group around the 4 ha size, with the largest about 60 ha. The use ranges considerably (i.e. many identified involved in intensive horticultural activities) but there is a general trend towards life style blocks within this supply. It was noted that each property on the scheme is restricted to a rate of 13 litres per minute (18.72 m³/day maximum peak equivalent).
111. Ms Lough has provided further information, stating that population predictions for the area indicate that an additional 406 people, or 98 new connections, will require connection to a reticulated water supply by 2039. However, it is noted that these new connections will be restricted to 2 m³/day, and therefore the scheme will be a mix of restrictions between 18.7 m³/day and 2 m³/day. Ms Lough considers that to enable the water taken under this consent to supply all households, then some of the 18.7 m³/day connections will be altered to 2 m³/day, particularly when the larger blocks are subdivided.

Conclusion

112. As identified by the applicant within the AEE (and for the Poyntz Rd scheme discussed above), the maximum individual property allocation (18.72 m³/day) is less than that permitted as of right to an individual property owner under the TRP.
113. Additionally, with a move towards smaller sized blocks (resulting from subdivision), there is a corresponding reduction in water supplied to each property.
114. To ensure that proactive measures are being taken to promote efficiency over the life of the consent, if granted, mitigation is recommended including:
- requiring all practicable measures be taken to avoid leakages from pipes and structures; and
 - a flow meter be installed, and associated accurate recording of the taking of water is recommended. This water meter condition will require the provision of records of use.
115. The issue of water metering has also been raised in relation to this application.
116. I am satisfied that the proposed mitigation will promote the reasonable and efficient use of water and is consistent with the Regional Policy Statement.

Adverse Effect of Take on Other Users from Seawater Intrusion

117. Contamination of saltwater can occur if potentiometric levels in coastal aquifers fall below that of sea level, reversing the hydraulic gradient and causing a shift in the saltwater-freshwater interface, resulting in movement of saltwater into the aquifer. This contamination may arise due to excessive pumping of groundwater, but it can also occur because of seasonal decline in water levels relative to sea level. Migration of this interface may cause wells near the coastline and near Lake Ellesmere to pump salt contaminated water.
118. This effect is not discussed within the original applications, nor is there any information on file to suggest that the applicant or the previous Investigating Officers' addressed it subsequently.
119. Identifying the locations of the bores for both applications within the GIS database indicates that they are at a distance greater than 12 kilometres from the coast.
120. I am satisfied that given the distances identified, the potential effect of saltwater intrusion on other users will be *de minimis*.

Adverse Effect of Take on Aquifer Stability

121. There are documented cases (overseas examples) of land subsidence occurring in thick unconsolidated sequences of aquifers and aquitards. Land subsidence occurs when there is an over-pumping of aquifers, resulting in a lowering of water pressures and drainage of water from the overlying aquitards. Aquitards with a high proportion of silt or clay are particularly susceptible to compression, which leads to subsidence. Aquifer drainage can also result in subsidence but to a much lesser amount than the aquitard because of the nature of the aquifer materials.
122. This effect is not discussed within the original applications, nor is there any information on file to suggest that the applicant or the previous Investigating Officers' addressed it subsequently.

123. From reviewing the available bore logs within the area surrounding the applicant's bores, the aquifers in the vicinity of the applicant's well are gravel based, hence it is considered that there is little likelihood of aquifer subsidence.

Adverse Effect from Cross-Connection on Groundwater Quality

124. This occurs when fertiliser is injected into irrigation systems and water flows into the bore when pumping stops. It can also occur when water is taken from more than one source and water from a contaminated source is able to flow into a less contaminated source. It can result in groundwater becoming unsuitable as a source of potable supply.
125. This effect is not discussed within the original applications, nor is there any information on file to suggest that the applicant or the previous Investigating Officers' addressed it subsequently.
126. Given the depths of the applicant's bores, it is considered that the bores are screened in only one aquifer; and it is considered that cross-contamination of aquifers is unlikely.
127. It is considered that the potential effect on groundwater quality shall be no more than minor.

Adverse Effect of Take on Surface Water Flows

128. Taking hydraulically linked groundwater can deplete surface flow as effectively as a direct take, depending on distance and degree of connection. As the Policy below indicates, this can affect both instream values and values to other users out of stream, by reducing their reliability of supply. Effects on springs, existing authorised users of surface water, aquatic ecosystems, amenity and recreational values, and spiritual and cultural values also should be considered.
129. Objectives/Policies that are relevant for consideration include:
- RPS, Chapter 9, Policy 1, requires that water flow; level or allocation regimes should be set and managed in accordance with specified values within Objective 1.
 - RPS, Chapter 9, Policy 2, states that subject to Policy 1, flow and allocation regimes should be managed with the aim to maximise the wellbeing obtained by people and communities, through taking account of its value both instream and out of stream.
 - RPS, Chapter 9, Policy 6 (d), specify the priority to be given to the permit in the event of restrictions being imposed.
 - RPS, Chapter 9, Policy 6 (e), which states that a consent authority should consider the need to provide mechanisms to reduce or suspend abstractions during periods of low water flows.
 - WRRP, Policy 5.1, to set and maintain water flow, water level and water allocation regimes and the control of the taking of water, while meeting Objective 5.1.
130. Each application shall be addressed in turn.

CRC990927

131. Given the absence of any natural waterways/springs in the surrounding area (refer paragraphs 56 and 57 of this report), the potential effect of abstracting from bore M35/0181 (CRC990927) is considered to be no more than minor (i.e. no stream depletion effect).

CRC990932

132. The applicant has addressed this effect within the AEE and noted that there is no known effect on either branches of the Ohoka Stream, although any effect would be minor. The applicant concludes that the streams are considered to be part of the recharge source for the well aquifer.
133. The audit undertaken by previous Investigating Officer's however conclude that from the information available, the hydraulic connection and the subsequent effect of the applicant pumping from well M35/5609 on the branches of Ohoka Stream is likely to be greater than the five litres per second permitted under the WRRP. This has also been confirmed by Ms Lough, where the assessment undertaken calculates a stream depletion rate of 8.3 L/s at 30 days continuous pumping at a rate of 18 L/s (1,555 m³/day).
134. Ms Lough refers to the WRRP and highlights that clause (g) of rule 5.1 which states
"... the cessation and restriction shall only apply over the specified rate of take that would have a calculated effect on the surface water depletion rate, resulting from a 30 day pumping period, that is greater than 5 L/s."
135. Given the above, Ms Lough calculates that a restricted rate of 10.9 L/s (942 m³/day) is required to reduce stream depletion effects to 5 L/s at 30 days. It is concluded that
"...the assessment is conservative as the effects of layers between the stream and the pumped aquifer that have lower permeabilities than the pumped aquifer, has not been accounted for. These layers would restrict stream depletion rates, however to enable a more detailed stream depletion assessment, site specific values for aquifer parameters would need to be determined through a pumping test."
136. I consider the assessment undertaken and the associated conclusions appropriate.
137. In light of the conclusions, the provisions of the WRRP apply and notably a minimum flow condition for the Ohoka Stream is recommended to be included as a condition of the consent, if granted.
138. The minimum flow for Ohoka Stream (as per Table 2, page 33 of the WRRP) for 'A' permits is 300 L/s.
139. Provided any water taken for community water supply purposes is restricted via the provisions in accordance with the WRRP, I am satisfied that the values of, and the existing users of, the Waimakariri River Catchment resource will not be adversely affected by the proposed abstraction.

Adverse Effect of Take on Groundwater Quality

140. The use of groundwater when applied to soil for irrigation purposes can, depending on the type of landuse, the intensity of the landuse, and the inputs of contaminants to the soil from the landuse, degrade water quality.
141. There is a direct relationship between the fertility of land and the 'fertility' or nutrient content of water that passes through it and water quality can be degraded due to leaching of nitrates and other contaminants. For example, nitrate leaching occurs when there is an accumulation of nitrate-nitrogen in the soil that coincides with or is followed by a period of drainage through the soil to below the root zone where uptake occurs. Elevated nitrate-nitrogen concentrations in groundwater are a concern due to its harmful effects if ingested by humans (i.e. pregnant women and babies). The New Zealand Drinking Water Standard (Ministry of Health, 2000) for nitrate is 50 mg/L (which is equivalent to 11.3 g/m³ of nitrate-nitrogen).
142. This degradation of water quality may have adverse effects on other groundwater users and as a consequence of groundwater contamination, on surface water resources.
143. Objectives/Policies that are relevant for consideration include:
- RPS, Chapter 9, Objective 3, aims to enable people to gain benefits from the water quality in Canterbury water bodies while safe-guarding: drinking water sources, life supporting capacity of water, Maori cultural values, preserving natural character, protecting habitat of trout and salmon.
 - RPS, Chapter 9, Policy 9, establishes water quality standards in plans to ensure that Objective 3 is met – this sets the lowest acceptable standards, although protection could be set at a higher level.
 - RPS, Chapter 9, Policy 11, promotes land use practices that maintain and enhance water quality (groundwater and surface water).
 - PNRRP, Chapter 4, Objective WQL2, states that where water quality is affected by human activities, for nitrate-nitrogen the maximum concentration shall not increase by more than 2 mg N/L, and the maximum concentration not exceed 11.3 mg N/L
144. Both applications proposed are for community water supply. Although some of the water has been identified to be used for irrigation purposes, it is considered that the size and scale of the use for irrigation (i.e. for lawns, gardens, for running a few stock, horses, etc) will be minor.
145. It is considered that the potential effect on groundwater quality shall be no more than minor.

Adverse effect of take and use on tangata whenua values

146. Chapter 6, Policy 3 of the Council's Regional Policy Statement dealing with the provision for relationship of tangata whenua with resources states:

“Specific aspects of the relationship of Tangata Whenua, their culture and their traditions with their ancestral lands, water, sites, wahi tapu and other taonga should be recognised and provided for through resource management and

planning including provisions in plans, decisions on resource consents and monitoring the state of the environment”.

147. Tuahuriri Runanga did submit on both applications and were in support of them.

Positive effect of taking and using water

148. The applicant has identified a number of positive benefits of the proposed abstraction for consent CRC990932, including stating that the water supply is the “lifeline” of the town – supplying a source of water to households to carry out a variety of household uses; as well as that the abstraction provides for the continued well being of current and future users by providing for their social, economic and cultural well being, and for their health and safety.

149. While the applicant has not specifically stated any of these positive effects for application CRC990927, it is considered that they would also be applicable.

150. I consider the taking of water for community water supply, where the environment is protected through conditions, will have positive effects on the local community.

CONSIDERATION OF ALTERNATIVES

151. No consideration of alternatives was assessed within these applications.

POLICY STATEMENTS

Regional Policy Statement

152. Under Section 104(1)(c) of the Act, the consent authority shall have regard to any relevant regional policy statement. The Canterbury Regional Policy Statement (RPS) has been operative since 26 June 1998. Of significance to these applications are Chapter 9 under Part II which relates to the management of the region’s water resources.

153. Policies relevant to this application have been considered within this report.

Waimakariri River Regional Plan

154. Chapter 5 describes issues, objectives and policies relating to water quantity for the Waimakariri River and are not inconsistent with the RPS.

155. Policy 5.2 - to promote efficiency in the use of water, was addressed from paragraph 98 (onwards) of this report.

Proposed Canterbury Natural Resources Regional Plan

156. The relevance of Chapter 1 to this application relates to duration of resource consents. Duration is discussed further from paragraph 166 ('Other relevant matters') of this report.
157. With respect to Chapter 2, the Waimakariri River and tributaries are not within a statutory acknowledgement area.
158. All the remaining chapters of the NRRP have been recently publicly notified. Due consideration has been given within this report to the objectives and policies of the notified plan.

PART II

Under s104, the consent authority must consider applications “**subject to Part 2**” of the Act.

Purpose of the Act

159. The purpose of the Act (s5) is to “**promote the sustainable management of natural and physical resources**” and is achieved by the guidance provided by the Principles of the Act (s.6, 7 and 8).
160. The assessment of effects provided by the applicant has been audited and from the information provided, shows the proposed activity will not significantly adversely affect the present water resource and surrounding environment.
161. I consider that the granting of the applications with proposed conditions will be consistent with the sustainable management of the Waimakariri River and its tributaries.

Matters of National Importance

162. Section 6 of the Act requires the consent authority to recognise and provide for matters of national importance. It is considered that the granting of the application with the recommended conditions will not compromise any of the matters within section 6.

Other Matters

163. Section 7 requires that the consent authority shall have particular regard to a number of matters. It is considered that the granting of the application with the recommended conditions will not compromise any of the matters within section 7.

Treaty of Waitangi

164. Section 8 of the Act requires the consent authority to take into account the principles of the Treaty of Waitangi. The Court of Appeal has identified four principles, which form the basis of developing a relationship of partnership and communication. These are: the Essential Bargain, Tribal Self-Regulation, the Treaty Relationship and Active

Protection. The third principle, the Treaty Relationship, accords Maori with special status as a Treaty Partner, distinct and separate from status as 'affected party'.

165. Tuahuriri Runanga did submit on both applications and were in support of them.

OTHER RELEVANT MATTERS

Duration

166. For both applications, a duration of 35 years has been applied for.

167. I note that in the recent Environment Court decision for Lynton Dairies Limited v Canterbury Regional Council (C108/05), Judge Smith provided comment on duration of water permits issued by Environment Canterbury. Judge Smith stated that:

"...with the current imperfect knowledge base and consequent need for conservatism it seems ill-judged to grant 35 year consents."

168. Further, Judge Smith states that future groundwater consents, including renewals, should be granted for a similar ten-year duration. Although the hearing focused on groundwater resources within the Rakaia-Selwyn groundwater zone, the judgment provides clear guidance that where the environmental impacts of the activity are not fully understood, that granting 35 year consents is not wise as it:

"...commits the resource for a much longer period than is desirable and limits the responses that can be made to increases in understanding of the resource of the next 35 years".

169. The issue of duration of water permits is also highlighted within a memorandum addressed to groundwater consultants, 7 November 2005 (refer Appendix 6), from Mr Leo Fietje (Principal Consents Advisor). Within this memorandum, Mr Fietje concludes that for applications which have not been publicly notified, a 10 year duration will be considered appropriate, given the uncertainties and long timeframes for some effects to express themselves.

170. Mr Fietje identifies that the above advice (for applications not publicly notified) will be implemented for all applications received from 7 November 2005, and 20 December 2005 for all other applications in the consent system with unresolved issues. It is also identified that the advice will also be considered on applications proceeding to Council Committee or a Hearing.

171. In identifying the above however, I refer to a recent hearing decision for RD Hughes Developments Limited (CRC052839), which was granted on 9 January 2006 for the taking of 11 L/s, 600 m³/d and 146,000 m³/year, for community water supply. This consent is located within the Selwyn Waimakariri Groundwater Allocation Zone and was considered to be, at the time of processing, an application in a queue greater than 100% allocation limit.

172. Within the decision, the Hearing Commissioners stated with respect to duration that:

"We believe that Mr Pascoe (Investigating Officer) has erred in applying the Lynton decision to this application by failing to distinguish between community water supply

and irrigation. We do not consider that the Lynton decision can be applied. As pointed out by Ms Steven, the RMA, Regional Policy Statement and PNRRP all recognise the importance of water for domestic use and accord it some priority. Those living in the development will still need water after ten or fifteen years.

The rate and volume of take is relatively small and the effects of the take are minor. Should unanticipated effects occur, or in the event that more water than required has been granted, the consent conditions can be reviewed. We therefore consider that 35 years, as requested by the applicant, is appropriate.”

173. Given the above, I recommend a duration of 35 years and reiterate the comment made within the decision for RD Hughes Developments Ltd that the RMA, the RPS, and the PNRRP recognises the importance of water for domestic use and accords it some priority over other uses associated with water takes. Similarly, the proposed rates and volumes for both takes being considered are relatively small, and in the event of unforeseen circumstances, the review condition has recommended.

CONCLUSION OF ADVICE & RECOMMENDATIONS

174. Section 104B states that a consent authority may grant or refuse a resource consent for a discretionary activity and may impose conditions under s108.
175. Based on the audit of the applicant’s information, and having considered all relevant matters under s104, I consider that the applications can be granted for 35 years, as proposed by the applicant, subject to the mitigation measures proposed by the applicant and additional conditions considered necessary (as explained within this report) and are as follows:

Poyntz Road Water Supply – CRC990927

- 1) Water may be taken only from bore M35/0181, 200 millimetres diameter and 29.3 metres deep, at map reference NZMS 260 M35:52004-58334.
- 2) Water may be taken at a rate not exceeding 11 litres per second, with an annual volume not exceeding 239,258 cubic metres between 1st July and the following 30th June.
- 3) Water shall only be used for community drinking water supply.
- 4) The consent holder shall, within six months of the commencement of this consent, install an easily accessible straight pipe(s), with no fittings or obstructions that may create turbulent flow conditions, of a length at least 15 times the diameter of the pipe, as part of the pump outlet plumbing or within the mainline distribution system.
- 5) The consent holder shall within six months of the commencement of this consent:
 - (a)
 - (ii) install a water meter(s) that has an international accreditation or equivalent New Zealand calibration endorsement, and has pulse output, suitable for use with an electronic recording device, which will measure the rate and the volume of water taken to within an accuracy of plus or minus five percent as part of the pump outlet plumbing, or within the mainline distribution system, at a location(s) that will ensure the total take of water is measured; and
 - (iii) install a tamper-proof electronic recording device such as a data logger(s) that shall time stamp a pulse from the flow meter at least once every 60 minutes and have the capacity to hold at least one season's data of water taken as specified in clauses (b) (i) and (b) (ii), or which is telemetered, as specified in clause (b).
 - (b) The recording device(s) shall:
 - (i) be set to wrap the data from the measuring device(s) such that the oldest data will be automatically overwritten by the newest data (i.e. cyclic recording); or
 - (ii) store the entire season's data in each 12 month period from 1 July to 30 June in the following year, which the consent holder shall then download and store in a commonly used format and provide to the Canterbury Regional Council upon request in a form and to a standard specified in writing by the Canterbury Regional Council; or
 - (iii) shall be connected to either the Waimakariri District Council telemetry system or a telemetry system which collects and stores all of the data continuously with an independent network provider who will make that data available in a commonly used format to the Canterbury Regional Council when requested. No data in the recording device(s) shall be deliberately changed or deleted.
 - (c) The water meter and recording device(s) shall be accessible to the Canterbury Regional Council, upon request, at all times for inspection and/or data retrieval.
 - (d) The water meter and recording device(s) shall be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
 - (e) All practicable measures shall be taken to ensure that the water meter and recording device(s) are fully functional at all times.

- 6) Within one month of the installation of the measuring or recording device(s), or any subsequent replacement measuring or recording device(s), and at five-yearly intervals thereafter, and at any time when requested by the Canterbury Regional Council, the consent holder shall provide a certificate to the Canterbury Regional Council, attention: RMA Compliance and Enforcement Manager, signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
 - (a) The measuring and recording device(s) has been installed in accordance with the manufacturers specifications; and
 - (b) Data from the recording device(s) can be readily accessed and/or retrieved in accordance with clauses (b) and (c) of condition (5).
- 7) The consent holder shall take all practicable steps to avoid leakage from pipes and structures.
- 8) The consent holder shall prepare and submit to the Canterbury Regional Council, Attention: Manager Compliance Monitoring, by 30 June every two years from the granting of the consent, water abstraction records detailing use from the previous two years with respect to condition (2) and details outlining the projected use for the next two years with respect to condition (2).
- 9) The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; and in particular, reviewing the volume of abstraction as set out within condition (2) based on reports provided in accordance with condition (8).
- 10) The lapsing date for the purposes of section 125 shall be 30 June 2011.

Ohoka Water Supply – CRC990932

- 1) Water may be taken only from bore M35/5609, 200 millimetres diameter and 18.8 metres deep, at map reference NZMS 260 M35:74950-60536.
- 2) Water may be taken at a rate not exceeding 18 litres per second, with an annual volume not exceeding 248,030 cubic metres between 1st July and the following 30th June.
- 3) Whenever the flow in the Ohoka Stream, as estimated by the Canterbury Regional Council from measurements at the confluence with the Kaiapoi River, at or about map reference NZMS 260 M35:803-591, for any period ending at noon is:
 - (a) either;
 - (i) 800 litres per second or greater; or
 - (ii) equal to or greater than the sum of 300 litres per second plus the total abstractions authorised by permits which come within the category of "A" permits as defined by the Waimakariri River Regional Plan; or
 - (iii) greater than 300 litres per second and less than 800 litres per second and all water permit holders who are subject to same minimum flow restriction as is set out in (c), are adhering to a water sharing regime that restricts the total rate of abstraction from Ohoka Stream whenever the flow is at or above 300 litres per second;

then the maximum rate at which water is taken from bore M35/5609 during the next 24 hours shall not exceed 18 litres per second.

- (b) greater than 300 litres per second and less than 800 litres per second, except where (a) (ii) or (iii) applies, the maximum rate of take during the next 24 hours shall be equal to the rate shown on the vertical axis on the attached graph that corresponds to that flow on the horizontal axis, by reference to the diagonal line.
 - (c) at or less than 300 litres per second, then the maximum rate at which water is taken from bore M35/5609, 200 millimetres diameter and 18.8 metres deep, during the next 24 hours, shall not exceed 942 cubic metres per day.
- 4) Water shall only be used for community drinking water supply.
- 5) The consent holder shall, within six months of the commencement of this consent, install an easily accessible straight pipe(s), with no fittings or obstructions that may create turbulent flow conditions, of a length at least 15 times the diameter of the pipe, as part of the pump outlet plumbing or within the mainline distribution system.
- 6) The consent holder shall within six months of the commencement of this consent:
- (a)
 - (i) install a water meter(s) that has an international accreditation or equivalent New Zealand calibration endorsement, and has pulse output, suitable for use with an electronic recording device, which will measure the rate and the volume of water taken to within an accuracy of plus or minus five percent as part of the pump outlet plumbing, or within the mainline distribution system, at a location(s) that will ensure the total take of water is measured; and
 - (iv) install a tamper-proof electronic recording device such as a data logger(s) that shall time stamp a pulse from the flow meter at least once every 60 minutes and have the capacity to hold at least one season's data of water taken as specified in clauses (b) (i) and (b) (ii), or which is telemetered, as specified in clause (b).
 - (b) The recording device(s) shall:
 - (i) be set to wrap the data from the measuring device(s) such that the oldest data will be automatically overwritten by the newest data (i.e. cyclic recording); or
 - (ii) store the entire season's data in each 12 month period from 1 July to 30 June in the following year, which the consent holder shall then download and store in a commonly used format and provide to the Canterbury Regional Council upon request in a form and to a standard specified in writing by the Canterbury Regional Council; or
 - (iii) shall be connected to either the Waimakariri District Council telemetry system or a telemetry system which collects and stores all of the data continuously with an independent network provider who will make that data available in a commonly used format to the Canterbury Regional Council when requested. No data in the recording device(s) shall be deliberately changed or deleted.
 - (c) The water meter and recording device(s) shall be accessible to the Canterbury Regional Council, upon request, at all times for inspection and/or data retrieval.
 - (d) The water meter and recording device(s) shall be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.

- (e) All practicable measures shall be taken to ensure that the water meter and recording device(s) are fully functional at all times.

- 7) Within one month of the installation of the measuring or recording device(s), or any subsequent replacement measuring or recording device(s), and at five-yearly intervals thereafter, and at any time when requested by the Canterbury Regional Council, the consent holder shall provide a certificate to the Canterbury Regional Council, attention: RMA Compliance and Enforcement Manager, signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
 - (a) The measuring and recording device(s) has been installed in accordance with the manufacturers specifications; and
 - (b) Data from the recording device(s) can be readily accessed and/or retrieved in accordance with clauses (b) and (c) of condition (6).

- 8) The consent holder shall take all practicable steps to avoid leakage from pipes and structures.

- 9) The consent holder shall prepare and submit to the Canterbury Regional Council, Attention: Manager Compliance Monitoring, by 30 June every two years from the granting of the consent, water abstraction records detailing use from the previous two years with respect to condition (2) and details outlining the projected use for the next two years with respect to condition (2).

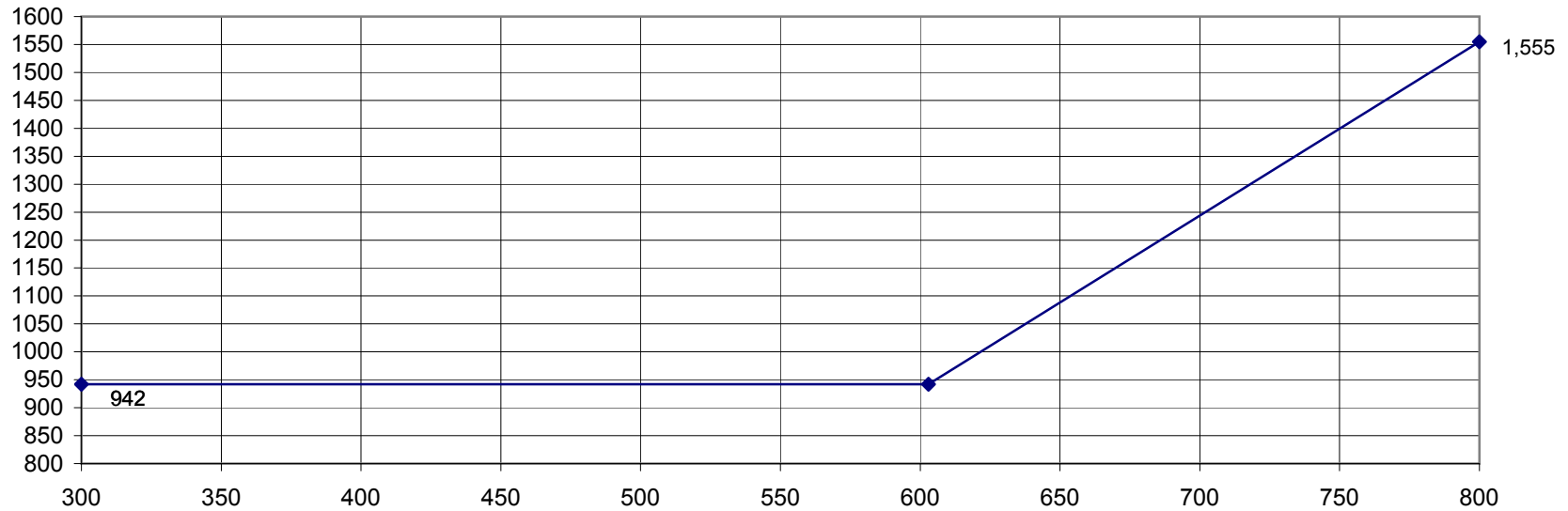
- 10) The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; and in particular, reviewing the volume of abstraction as set out within condition (2) based on reports provided in accordance with condition (9).

- 11) The lapsing date for the purposes of section 125 shall be 30 June 2011.

Maximum Allowable Abstraction Rates when the Ohoka Stream Flow is between 300l/s and 800l/s.

Resource Consent CRC990932, Condition (3b).

Flow available for abstraction (cubic metres per day)



Flow in Ohoka Stream above the minimum flow calculated as if there was no take occurring as measured by the Canterbury Regional Council (litres per second).

5. APPOINTMENT OF A COMMISSIONERS TO HEAR AND DECIDE RESOURCE CONSENT APPLICATION

BROOKFIELD FARM HOLDINGS LIMITED – CRC050428, CRC050429 AND CRC052296

Applications

CRC050428 & CRC050429 - to discharge treated domestic sewage onto land, and to discharge odour from the treatment and disposal of the domestic sewage into air. The discharges will occur from the proposed 16 lot subdivision of PT RS 1294, on the corner of Auckland Street and Wellington Street, Ashley. The land is situated at or about map reference NZMS 260 M34:7769-7004. The maximum volume to be discharged to land will be one cubic metre per day per proposed lot. The contaminant in treated domestic sewage are known to include organic material, nitrogen, phosphorus, heavy metals and micro-organisms.

The requested duration of consent is 35 years.

CRC052296 - to discharge stormwater to land. The stormwater will be that flowing from roading, hardstand areas, and roofs of a proposed 16 lot residential subdivision on the corner of Auckland Street and Wellington Street, Ashley, at or about map reference NZMS 260 M34:777-701. The discharge may include contaminants such as suspended sediment, nutrients, heavy metals, hydrocarbons and micro-organisms, typical of stormwater discharges from residential areas.

The applicant has requested a consent duration of 35 years.

A joint hearing with Waimakariri District Council will be scheduled to hear and decide resource consent applications to discharge treated domestic sewage onto land, and to discharge odour from the treatment and disposal of the domestic sewage into air and to discharge stormwater to land and a land use consent relating to the establishment of the proposed subdivision at Ashley.

The Commissioners recommended have satisfied Council staff they have the necessary criteria including technical ability and availability to carry out the duties required.

Report prepared by Donald Fraser, Consents Hearings Officer.
Endorsed, Don Rule, Consents Operations Manager.

Recommendation

- (a) *That the Committee appoint Robert Nixon and Dr Brent Cowie as Commissioners to hear and decide resource consent applications CRC050428, CRC050429 and CRC052296 by Brookfield Farm Holdings Limited with the full powers of the Council as a consent authority.*
- (b) *That the Committee appoint Robert Nixon and Dr Brent Cowie to deal with any preliminary matters associated with (a).*