

**IN THE MATTER**

of the Resource Management Act 1991

**AND**

**IN THE MATTER**

of a hearing by the Canterbury Regional Council Hearing Panel on submissions on Variation 6 and relevant submissions on Variation 1 (Christchurch Groundwater Protection Zones and Related Map Volume Amendments) to the Proposed Natural Resources Regional Plan, Chapter 4: Water Quality

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**STATEMENT OF EVIDENCE OF PETER KINGSBURY PRESENTED ON  
BEHALF OF THE CHRISTCHURCH CITY COUNCIL**

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**Introduction**

1. My name is Peter Kingsbury, and I am currently employed as a Principle Advisor - Natural Resources at the Christchurch City Council, a position I have held since 2008. I have a Bachelor of Science Degree in Geography and Geology, and a Masters Degree in Engineering Geology from the University of Canterbury.
2. This evidence is presented on behalf of Christchurch City Council (the Council) and comprises evidence supporting:
  - 2.1. The Council's position on urban development and associated activities in the principal recharge zone for the Christchurch water supply aquifer system, and

- 2.2. The Council's submissions and further submissions on the Proposed Natural Resources Regional Plan (PNRRP), Variation 6.

### **Key conclusions**

3. The Council acknowledges the very high quality of the Christchurch groundwater, and the essential need to protect the groundwater resource.
4. The Council acknowledges Environment Canterbury's (ECan) considerable recognition of the high quality of the Christchurch groundwater resource and need to protect it.
5. The Council continues to support ECan with the intent and overall direction of the PNRRP Variation 6 to protect the high quality of the Christchurch groundwater resource.
6. The Council maintains that some development can occur in some parts of Christchurch above areas of unconfined aquifer, but that rigorous sustainability and risk management assessment processes are required to help ensure the high quality of the groundwater resource is maintained.
7. The Council's position on the provisions of Variation 6 is consistent with its involvement in, and position on, the relevant aspects of the Greater Christchurch Urban Development Strategy (UDS), its input to Proposed Change 1 to the Regional Policy Statement (RPS), the specific goals, objectives and targets of the Council's Water Supply Strategy 2009-2039, and the provisions of the Christchurch City Plan (the City Plan).
8. A substantial effort has been made by ECan in preparing the Officer's Report (OR), and the Council specifically acknowledges the provision of high quality supporting technical evidence. However, the information presented in the OR shows that the conservative management approach is not always well justified on technical grounds.
9. The Council believes that Christchurch can continue to benefit from low cost, and high value and high quality water, with some additional

development in the areas of unconfined aquifer. To this end, the protection of the groundwater resource is paramount.

10. Variation 6 does not always recognise and properly allow for the balance of competing issues required under section 5 of the Resource Management Act 1991 (the RMA).
11. Many activities that the Council is involved in, and are dealt with in Variation 6, are potentially constrained through the activity status recommended in the variation, and further supported in the OR. For example, an activity status of 'non-complying' for installing services, is considered overly onerous and unnecessary. In many cases the Council considers 'discretionary' or 'restricted discretionary' activity status to be fair and reasonable. The Council proposes a 'trigger' rule approach where a 'restricted discretionary' or 'discretionary' activity defaults to 'non-complying' if required.

#### **Specific submission matters**

12. This evidence focuses on the most significant matters of Variation 6 for the Council. Appendix 1 summarises the Council's submissions and further submissions on Variation 6. The submissions listed in Appendix 1 are those that have been either 'rejected' or 'accepted in part' in ECan's OR. These represent about 16% and 25% respectively of the total number of submission points (that being, 173) made by the Council. The remaining 59% of submission points were 'accepted' in the OR, with the Council retaining its position on these. The Council appreciates the positive response provided in the OR to the many and significant submissions made by the Council. Of the submissions 'rejected' or 'accepted in part' in the OR (a total of 72 submission points) the Council has, following careful consideration of the OR explanations and discussion, noted general acceptance to 43 of the OR recommendations.
13. The remaining 29 (about 17% of total submissions) of the Council's submissions that are 'rejected' or 'accepted in part' in the OR, are

discussed further in this evidence and includes the relief sought by the Council. For some submission points, where the Council maintains it is still appropriate, the relief sought is unchanged, or essentially similar to that of the Council's original submission(s).

## **Background**

14. The Council has supported, through the planning process to date, the intent of Variation 6 and the overall direction of the variation provisions to protect the high quality of the Christchurch groundwater resource.
15. The Council has highlighted, through the submission and further submission process, the importance of ensuring Variation 6 recognises the competing interests of urban development and the need to protect Christchurch's water supply, and the need to balance various other factors as well, as required under Part 2 of the Resource Management Act 1991 (the RMA).
16. The Council acknowledges ECan's mostly positive response to the Council's submissions and the generally thorough and useful commentary provided by ECan on the Council's submissions and 'decisions requested'.
17. Whilst the protection of the groundwater resource is of crucial importance, the Council maintains that Variation 6 should not unduly elevate the protection of groundwater quality at the expense of allowing for reasonable use and development of land in a manner that is consistent with sustainable management. The Council also considers Variation 6 provisions must be subject to a robust, realistic and defensible risk management assessment process, a necessary part of any resource consent process.

18. As part of its support of Variation 6, the Council has provided at ECan's request, detailed information on the 'value' of the Christchurch aquifer system as a source of the Council's water supply. Some of this information is presented as evidence in the Variation 6 OR. The information provided helps support:
  - 18.1. Acknowledgement of the economic value of having a very high quality untreated water supply;
  - 18.2. Christchurch residents very strong desire to retain the water supply in its high quality condition, and
  - 18.3. The high cost of providing an alternative treated water supply.
19. A collaborative approach to providing information to ECan for the preparation of parts of the Variation 6 OR was considered by the Council as appropriate and useful. In his evidence, in the OR, Mr John Talbot clearly summarises existing information on the use and value of groundwater to Christchurch, alternative sources of water, and potential supply and treatment costs.

### **Urban Development and Urban Growth Context**

20. Some areas of Christchurch City currently not zoned for urban development purposes have been identified by the Council and ECan as suitable for urban growth. The need to provide for urban growth is closely linked to the UDS and is also provided for in Proposed Change 1 to the RPS. The UDS and RPS set out the framework for land use and urban growth in Christchurch City. Both documents recognise that provision for the urban growth of Christchurch is reasonable and necessary. The City Plan supports the protection of the water quality of the groundwater resource and looks to ECan to protect it through its policy and plans.
21. However, where it can be shown that adverse effects on groundwater quality can be avoided or mitigated to appropriate levels, the PNRRP should not unnecessarily or unreasonably constrain or frustrate urban

development opportunities which may be expected to be implemented through future plan changes to the City Plan, and to the district plans of other Canterbury region territorial local authorities.

22. Following the recent notification of the decisions on submissions for RPS Proposed Change 1 the Council acknowledges ECan's effort to capture key RPS Proposed Change 1 elements in the Variation 6 OR.
23. RPS Proposed Change 1, as notified, has identified areas that should cater for the next 30 years of urban growth, and therefore the Council's concern about the potential spatial constraint to urban growth has been largely resolved.

#### **Commentary on key technical evidence**

24. The Council supports the key findings of Mr John Talbot and in particular the evidence relating to:
  - 24.1. The residents of Christchurch wishing to maintain the low cost, high quality, untreated water, currently supplied to them;
  - 24.2. The very high economic value of the Christchurch aquifers, and
  - 24.3. The very high cost of developing alternative sources of water, including water treatment, and the re-configuration of the existing reticulation system.
25. However, the Council believes that Christchurch can continue to benefit from low cost, and high value and high quality water with some appropriate development in the areas of unconfined aquifer.
26. As explained in detail in Mr Carl Hanson's evidence, the Christchurch groundwater resource is vulnerable to contamination from some land use activities occurring over the unconfined aquifer in the western part of Christchurch. To date some localised contamination has occurred, however the extent and level of contamination has been low and has not resulted in widespread or significant degradation of the groundwater

system. Mr Laurie McCallum rightly considers this to be fortuitous rather than an outcome achieved by careful management and planning. The current opportunity to minimise the risk to an acceptable level should be acted on to ensure a high quality water supply for Christchurch for the foreseeable future.

27. Mr John Talbot, in his evidence, considers that a risk management approach is not acceptable when making decisions on development above the unconfined aquifer. While acknowledging his statement about the value of the water resource and the potential consequences, we differ in that Council's position is, that the outcome of thorough risk management assessment processes will provide the guidance required for making informed and defensible decisions on development, and associated activities. This reflects the well established principle that the RMA is not a "no risk" regime.
28. The recently published (February 2010) internationally compiled and widely accepted risk management standard, ISO 31000, based largely on the now obsolete AS/NZS 4360:2004 risk management standard, is the benchmark for good practice risk management in New Zealand and elsewhere. With its 'new' definition of risk as "the effect of uncertainty on objectives", ISO 31000 endorses the central, value-creating role that risk management should play in decision making processes.
29. Because of the uncertainty of the likelihood, nature and consequences of the contamination of the groundwater system from various land use activities, the Council considers thorough risk management assessments must be adopted as part of the decision making process for planning and development in areas above the unconfined aquifer. Information from past and current land management practices, and their effect on the Christchurch groundwater system would contribute to such an assessment.
30. Depending on the specific location and the nature of the land use or activity, and as the outcome of a risk assessment process, 'avoidance' may be an entirely appropriate decision. It is therefore a combination of the location (the site factors that determine the susceptibility of the

groundwater system to contamination) and the nature of the activity or development that contributes to, and helps determine the final decision. Many other key matters, for example, the cost of any mitigation, also need to be considered.

31. In general, the Council maintains, that until risk management assessments are carried out for specific locations or areas, 'avoidance' is not an appropriate initial response.
32. Avoidance may be a valid response, but only where it can be clearly demonstrated that contamination could occur, and that the consequences (the magnitude and extent of contamination, and the likely duration, and cost of any remediation) are unacceptable. The OR does not contain robust enough information to demonstrate that avoidance is always the most appropriate option. Christchurch has maintained its very high quality water supply despite some poor management practices in the aquifer recharge zone in the past. This situation, although clearly unacceptable by today's standards and approaches, helps put the contamination risk into perspective, and indicates that careful management of land is required to maintain the high quality of groundwater supply.
33. For 'relief sought' the Council generally considers 'restricted discretionary' and 'discretionary' activity status to be a fairer and more reasonable approach than 'non-complying'. The Council proposes a 'trigger' rule approach where a 'restricted discretionary' or 'discretionary' activity defaults to 'non-complying' if specific aspects of a resource consent application can not be met.

### **Specific evidence to support the Council's submissions**

#### Background comment

34. Appendix 1 provides a tabulated summary of the Council's submissions and further submissions, the OR recommendation, and the Council's response to the OR recommendation. Only those submissions where the

Council does not agree, either in full or in part, with the OR recommendation, are discussed in this evidence. These submissions are highlighted in Appendix 1 with reference in the fourth column of the table to the relevant section of this evidence that discusses them further. The Council has 'noted' the submissions accepted in full by ECan, refer also to the fourth column.

Evidence on specific parts of the PNRRP

4-21-34 Policy WQL13 Level of protection of ground water quality (Council submission no. 25.19)

35. As stated in the Council's original submission, the policy aims to manage activities so that there is no significant increase in risk. However, it remains unclear what level of increase would be considered significant. The policy can be interpreted as saying "avoid all adverse effects on Christchurch groundwater quality", amounting essentially to a 'no risk approach' and 'no tolerance' for any adverse effects, irrespective of how minor they may be, or how appropriate the proposed activity might be, when proposed mitigation measures are considered. Furthermore, there are very few activities that won't result in some level of contaminants entering groundwater. The mitigation measures may include risk reduction (for example, bunding around a fuel storage facility), readiness (for example, a written plan that outlines actions required in the event of an accidental spillage), and response initiatives (for example, emergency service involvement). A combination of these various approaches will often provide the most appropriate outcome.
36. The Council acknowledges that some consideration has been given, in Variation 6, to existing activities and situations where a higher level of risk may be acceptable, or at least tolerable.
37. The Council agrees that remedial action is generally not a valid mitigation approach, but does not agree that the intensification of land use, as stated in the OR, 'will' necessarily result in the degradation of groundwater. Although it would be inappropriate to rely on it, developments in technology may present more valid remedial techniques

in the future, particularly as uncontaminated water supplies become more scarce.

38. Although a risk management approach is partly discounted in the OR, significant discussion, although not deliberately obvious and directed, is given in the OR on the 'risk management approach' required. The Council considers the risk management approach to be a pragmatic and reasonable approach to help ensure that appropriate planning and development decisions are made. At this time, policy and other plan provisions are being developed without there having been a thorough risk management assessment. The established groundwater zones can, to some degree, be considered part of an initial risk management assessment.
39. Risk can be defined on the basis of probability and consequence. Low likelihood (probability) and low consequence (impact) activities may be 'acceptable' in the most vulnerable areas of unconfined aquifer. Equally so, an activity that has a very low probability of contaminating groundwater, and has moderate potential consequences, may also be acceptable. Each activity needs to be considered on the likelihood of contamination occurring, and the consequences should contamination occur.

As discussed earlier in this evidence the Council proposes a 'trigger' rule approach for restricted discretionary and discretionary, defaulting to non-complying. A risk management approach provides a logical assessment basis and allows a consent application to default to a non-complying activity status if appropriate.

**Relief sought:** Accept Council submission no. 25.19.

Amend Policy WQL13(i) to read: "(i) ensure that any adverse effects on Christchurch groundwater quality from contaminants which persist in groundwater are avoided, remedied or mitigated so as to maintain a high level of groundwater quality.", or similar wording.

4-22-27 Policy WQL14 General control of activities (Council submission no. F112.13)

40. The following discussion has some relevance across many aspects of Variation 6.
41. Omitted from the OR discussion on risk, is the matter of 'risk acceptability', although this concept is indirectly referred to in comments in the OR on Christchurch resident's water quality expectations. The Council agrees that generally low probability high consequence events should be allowed for. Although a low probability event has a lower likelihood of occurring in any given time period than a high probability event, the low probability event could occur 'tomorrow', and for this reason, and the high consequences, it may be appropriate to consider the activity as unacceptable. Events that could lead to contamination are essentially random events, and are not 'conditional' (that is, they occur on a regular basis), and they could happen at any time.
42. 'Unacceptable risk' is defined as where risk can not be justified except in extraordinary circumstances. 'Acceptable risk' exists when it is necessary to maintain assurance that risk remains at some level, and 'tolerable risk' exists and can be justified only if reducing the risk is not practical or affordable, or if the cost of reducing the risk is more than the improvements gained.
43. The term 'unnecessary risk' used repeatedly in the OR is ambiguous and not a useful way to explain or define the policy approach. Clearly defining the level of 'acceptable' risk, through a risk management assessment process is required.

**Relief sought:** Accept Council submission no. F112.13.

Ensure that the groundwater protection zones, and all related provisions of Variation 6, are clearly and fairly defined on the basis of their exposure or vulnerability to contamination, and through a thorough risk management assessment process, and that decisions on specific activities are also based on risk management assessments.

4-22-27 Policy WQL14 General control of activities (Council submission no. 25.23)

44. The Council acknowledges that this policy provides a more appropriate balance by allowing for avoidance or mitigation. However, to the extent that the policy requires “avoiding all other activities which may result in ... an adverse effect on groundwater quality”, this section does not recognise and properly allow for the balance of competing issues required under section 5 of the RMA.
45. The Council agrees that the most vulnerable groundwater zone should have the greatest level of protection. However, for the reasons already given earlier in this evidence, this does not mean that no development should occur in the most vulnerable groundwater zone. The PNRRP should enable site specific risk assessment through the resource consent process.

**Relief sought:** Accept Council submission no. 25.23.

Amend Policy WQL14 1(c) to read: “Ensuring all other activities avoid, remedy or mitigate adverse effects on groundwater quality and prohibiting the establishment of a new municipal solid or hazardous waste landfill.”, or similar wording.

4-27-5 Policy WQL16 Control of rural production (Council submission no. 25.28)

46. Policy WQL16(2) effectively prevents any new rural productive use or the intensification of any existing rural productive land use. It applies to a large area of rural land within Zone 1, and does not balance the relevant factors under Part 2 of the Act, and therefore it is not the most appropriate way to achieve the purpose of the RMA.
47. As previously stated, the Council does not agree with the statement in the OR that the intensification of land use over an unconfined aquifer will eventually degrade water quality and that mitigation is not a viable option. The potential for degradation increases, but it is not a certainty, and mitigation certainly remains a practicable choice.

**Relief sought:** Accept Council submission no. 25.28.

Amend Policy WQL16(2) to read: “Ensure that any intensified or new rural productive land use that may increase the potential for nutrient, chemical and micro-biological contaminants entering groundwater avoids, remedies or mitigates adverse effects on Christchurch groundwater quality.”, or similar wording.

4-28-9 Policy WQL17 Control of the intensity of activities within Christchurch Groundwater Protection Zones 1 and 2 (Council submission no. 25.31)

48. Policy WQL17 limits development in Zone 1 to intensities provided for as permitted or controlled activities in the City Plan on 1 August 2007. The wording of the policy does not allow for changes that may be required to district plans as a result of Proposed Change 1 to the RPS.
49. Policy WQL17(1)(b) does not recognise the balancing of competing issues required by section 5 of the RMA. As previously stated in this evidence the intensification of land use will not necessarily result in degradation of the unconfined groundwater resource.
50. Although the policy goes some way to recognising some situations where mitigation could be acceptable, the Council considers it remains too restrictive.

**Relief sought:** Accept Council submission no. 25.31.

Amend Policy WQL(1)(b) so that any other residential, commercial or industrial development is allowed if it avoids, remedies or mitigates any adverse effects on groundwater quality to acceptable levels.

4-29-14 Policy WQL18 Control of mineral extraction activities (Council submission no. 25.36 and 25.37)

51. As for other activities, good management practices (for development and operation) may make mineral extraction activities acceptable. The Council also recognises the importance of having an adequate and reliable supply of appropriate quality gravel close to the urban area. Therefore, and as discussed in a similar context in previous sections of

this evidence, the wording of this policy needs to be amended to improve meaning and to better recognise Part 2 of the RMA.

**Relief sought:** Accept Council submission no. 25.36 and 25.37.

Amend Policy WQL18(2)(a), Policy WQL18(2)(b), and WQL18(2)(c) by replacing the word “avoid” with the phrase “avoid or minimise”.

Amend the wording to allow for changes that may be required to district plans as a result of Proposed Change 1 to the RPS.

4-30-28 policy WQL19 Control of existing and future urban development within Christchurch Groundwater Protection sub-zone 1A or zone 2 (Council submission no. 25.42 and F112.32)

52. Although the reformatting of policies (refer amendment WQLV6.1) does assist with clarification, the Council maintains its original position. That is, this policy captures all hard surfaces, regardless of size, and requires them to be designed, constructed and maintained so as to avoid hazardous substances and contaminants entering groundwater. The policy therefore applies to every hard surface from a small backyard patio to a sealed carpark covering a hectare or more. Furthermore, as the effects are adequately dealt with in other sections of the PNRRP, for example in provisions dealing with stormwater, this policy is considered redundant.

**Relief sought:** Accept Council submission no. 25.42 and F112.32.

Delete Policy WQL19(15) and the relevant explanation and principal reason.

4-30-28 policy WQL19 Control of existing and future urban development within Christchurch Groundwater Protection sub-zone 1A or zone 2 (Council submission no. F112.33)

53. The Council does not agree that all existing hard surfaces should have measures to avoid contaminants entering the ground water system. Retrofitting of many hard surfaces to achieve this would not be practicable.

**Relief sought:** Accept Council submission no. F112.33.

Amend Policy WQL19(5) as follows: “(5) All new hard surfaces and ...”

4-36-20 Methods to Policy WQL21 (Council submission no. 25.55)

54. The OR recommendation does not address the Council’s concern about the need to provide information on the manner in which the level of contribution will be determined. Although the OR indicates the need for an amendment, this reference does not appear to relate to providing information on how levels of contribution will be determined.

**Relief sought:** Accept Council submission no. 25.55.

Delete any reference to financial contributions in Method WQ13(f), or alternatively provide information on the manner in which the level of contribution will be determined.

4-40-2 Rule WQL5 Discharge of stormwater containing contaminants onto or into land - permitted activity (Council submission no. 25.57)

55. This rule makes stormwater discharges to land within Zone 1 and Sub-Zones 1B and ID, as a ‘minimum’, a discretionary activity.

**Relief sought:** Accept Council submission no. 25.57.

Retain amendments to Rule WQL5.

4-60-1 Rule WQL40 Excavation of land in the Coastal Confined Gravel Aquifer System, or over an unconfined or semi-confined aquifer - restricted discretionary activity (Council submission no. 25.70)

56. This rule applies where the depth of excavation exceeds five metres, is deeper than groundwater level, and the volume exceeds 100 cubic metres. Any activities that exceed these limits become non-complying. This rule would mean, for example, that stormwater retention basins, infiltration galleries, and artificial lakes, which are excavated to the level of highest groundwater, would be non-complying activities. In addition,

earthworks required for the installation of services, for example, sewer pipes, may also be non-complying for many areas in the City.

57. The Council acknowledges the OR reference to ‘small scale’ excavations, however, the comment that consents would not be required for ‘a lot’ of excavation activities is difficult to accept. A key criteria for the application of the rule is if groundwater is ‘likely’ to be intercepted. This situation is highly likely in the various groundwater protection zones for even very small scale excavations. Given the nature and purpose of many of the Council’s excavations, non-complying status is considered unnecessary and inappropriate, and is considered by the Council as onerous and potentially costly.

**Relief sought:** Accept Council submission no. 25.70, replacing ‘restricted discretionary’ with ‘discretionary’.

Amend Rule WQL40 so that when excavation is for the purpose of installing services or for stormwater management or artificial lakes, then the activity is a discretionary activity, rather than a non-complying activity.

4-70-1 Rule WQL48 Use of land for a new cemetery or an extension to an existing cemetery - permitted activity (Council submission no. 25.75)

58. This rule makes cemeteries a non-complying activity for a large part of the flat area of Christchurch, that is, the Christchurch Groundwater Protection Zones 1 (including Sub-zones) and Zone 2. The use of other areas is restricted by the high water table. The Burial and Cremation Act 1964 states that: “It shall be the duty of every local authority, where sufficient provision is not otherwise made for the burial of the bodies of persons dying within its district, to establish and maintain a suitable cemetery”. In addition, section 5 of the RMA requires consideration of social and cultural well-being, and the health and safety of communities.
59. The Council believes that the risk to groundwater quality needs to be assessed on a site-by-site basis, and all the relevant factors balanced appropriately. Some sites may have ‘localised’ confining layers or other attributes that would naturally mitigate adverse effects. Making the use

of land for cemeteries a discretionary activity still allows, through the consenting process, the refusal of a resource consent for specifically identified parts of the consent.

**Relief sought:** Accept Council submission no. 25.75, replacing 'restricted discretionary' with 'discretionary'.

Amend Rule WQL48 to make the use of land for cemeteries a discretionary activity.

4-71-1 Rule WQL51 Discharge of municipal solid waste refuse or treated hazardous waste to land in certain areas - discretionary activity (Council submission no. 25.76)

60. This rule makes the discharge of municipal solid waste or treated hazardous waste within Christchurch Groundwater Protection Zones 1 (including Sub-zones) and 2, a prohibited activity. The Council supports this activity status. It should however not apply to inert clean-fill. The Council does not consider that the rule, as stated in the OR, applies only to refuse and hazardous waste, and thereby excludes inert clean-fill. The rule refers to 'solid waste' and 'treated hazardous waste', and by definition of 'waste' in the OR, inert clean-fill would be included. 'Inert clean-fill' is not defined in the PNRRP glossary.
61. Given the potential for confusion between the rule and PNRRP definitions, the Council believes it would be appropriate to explicitly state that it does not apply to inert clean-fill.

**Relief sought:** Accept Council submission no. 25.76 or make suggested amendments.

Amend Rule WQL51 to specifically state it does not apply to inert clean-fill, and/or, more clearly define the various 'waste' types in the definitions section of the PNRRP, and ensure consistency of terminology use in the various PNRRP provisions.

4-71-3 Rule WQL52 Discharge of municipal solid waste refuse or treated hazardous waste to land - prohibited activity (Council submission no. 25.77)

62. The Council repeats the matters raised under paragraphs 60 and 61 above in respect of rule WQL51. The same issues apply to rule WQL5 in respect of inert clean-fill.

**Relief sought:** Accept Council submission no. 25.77 or make suggested amendments.

Amend Rule WQL52 to specifically state it does not apply to inert clean-fill, and/or, more clearly define the various 'waste' types in the definitions section of the PNRRP, and ensure consistency of terminology use in the various PNRRP provisions.

4-73-1 Rule WQL55 Use of land for mineral extraction, use of a specified hazardous substance, or the discharge of stormwater in Sub-zones 1A, 1B, 1C or 1D - discretionary activity (Council submission no. 25.78)

63. This rule makes; (1) stormwater discharges in Sub-zone 1A; (2) the use of land associated with hazardous substances; and (3) excavation of land for mineral extraction, a discretionary activity, or non-complying if a stormwater management plan has not been prepared. It is unclear in the rule that discretionary activity status is reliant on a stormwater management plan for the site or the property, not for the area. The Council considers it is appropriate to refer to a 'site' or 'property', in the context of the requirement for a stormwater management plan, and not 'area'. The word 'area' is ambiguous, whereas 'sites' and 'properties' can be accurately defined.

**Relief sought:** Accept Council submission no. 25.78.

Amend Rule WQL55 so that it is clear that discretionary status is reliant on a stormwater management plan for the site or property (not for the area).

4-85-1 Rule WQL64 Use of land within the Christchurch Groundwater Protection Zone 1 - non complying activity (Council submission no. 25.82 and 25.83)

64. For Zone 1 land, use of land not established by 1 August 2007, or a site that did not exist as at 1 August 2007, or not located on a site that complies with minimum net site area for a controlled activity in the Selwyn District or Christchurch City Plan, is non-complying and requires land use consent . The Council opposes this as it does not target activities that impact on groundwater quality. This rule would make land use changes in Zone 1, which reduce the risk to groundwater quality, a non-complying activity. A targeted rule, as a discretionary activity, is favoured by the Council. In addition, the rule should not refer to the Selwyn District or the City Plans as they exist at 1 August 2007, but as changed to reflect requirements of the RPS.
65. As discussed in the OR, the confusion over the relationship of this rule to other rules, and reformatting of some rules, the Council considers that further consideration by ECan to delete this rule in its entirety, may be appropriate.

**Relief sought:** Accept Council submission no. 25.82 and 25.83, replacing 'restricted discretionary' with 'discretionary'.

Amend, including with additions, the Activity section to Rule WQL64 as follows: "Rule WQL64 - Use of land within Christchurch Groundwater Protection – ~~non-complying activity~~ discretionary activity. The use of land within Christchurch Groundwater Protection Zone 1 ~~after 1 August 2007~~ that is:

1. Not legally established or authorised on or before ~~1 August 2007~~ the operative date of any changes to the Selwyn District Plan or the City of Christchurch District Plan to meet Proposed Change 1 to the Regional Policy Statement as publicly notified on 28 July 2007; or
2. Not located on a site that exists as of ~~1 August 2007~~ the operative date of any changes to the Selwyn District Plan or the

City of Christchurch District Plan to meet Change 1 to the Regional Policy Statement as publicly notified on 28 July 2007;  
or

3. Not located on a separate site that complies with the minimum net site area requirements for subdivision for a controlled activity in the relevant zone within the Selwyn District Plan or City of Christchurch Plan at the operative date of any changes to the Selwyn District Plan or the City of Christchurch District Plan to meet Change 1 to the Regional Policy Statement publicly notified on 28 July 2007 is a ~~non-complying~~ restricted discretionary activity and requires land use consent.

Environment Canterbury has restricted its discretion to:

1. Measures to avoid, remedy or mitigate any adverse effects of the activity on:
  - (a) groundwater quality
  - (b) other users of the water resource. ", or similar wording, or delete the rule in its entirety.

4-106-0 Changes to map volume (Council submission no. 25.86)

66. It is important that areas mapped as Sub-zone 1A match those areas signalled for urban development in Proposed Change 1 to the RPS. The Council acknowledges a recent change to the RPS that provides some boundaries for urban limits, and that these boundaries are slightly different to the groundwater zone boundaries in Variation 6. It is appropriate for ECan not to make any alterations to the Christchurch groundwater zones at this stage, but to remain aware of the need to do this in the future.

**Relief sought:** Ensure that areas mapped as Sub-zone 1A match those areas signalled (defined) for urban development in Proposed Change 1 to the RPS.

Submissions from Variation 1 now considered submissions on Variation 6

4-149-1 Rule WQL40 Excavation of land in the Coastal Confined Gravel Aquifer System, or over an unconfined or semi-confined aquifer - restricted discretionary activity (Council submission no. F1040.131, 378.154, 476.196, 476.200, and 378.155)

67. Although the Council has addressed Rule WQL40 previously in this evidence, it is appropriate to reiterate the Council's concerns again. The Council strongly believes that essential network utility services should be excluded from this rule, and to this end proposed a new rule, in its submissions, that the Council believes adequately addresses the concerns raised in the OR. A significant increase in the permitted quantities of material able to be excavated, as proposed by Selwyn District Council, would go some way to satisfy the Council. Despite the OR reassurance that the thresholds are unlikely to be triggered in most cable or pipe laying situations, the Council remains concerned at the likely constraints and the potential costs that are likely to result from the non-complying activity status requirements.

**Relief sought:** Accept Council submission F1040.131, 378.154, 476.196, 476.200, and 378.155.

Add a new rule to permit trenching subject to; (1) depth excavation to be less than five metres; (2) within Coastal Confined Gravel Aquifer System there shall be no less than one metre of undisturbed sediment between the base of the excavation and the aquifer; (3) trenches shall be backfilled with inert clean-fill only, or similar wording.

Submissions from Variation 1 now considered submissions on Variation 6

WQLV6.129 Amendment (Council submission no. F1040.134)

68. Providing an exemption in Rule WQL40 for maintenance work being undertaken by a network utility operator, and providing annual works consents for capital works, is considered by Council to be a fair and reasonable approach. Whilst the Council acknowledges that controls

may be implemented through a consent process, the process of applying for a consent and justifying that no adverse effects are likely, and the likely requirement for mitigation measures, will be unnecessarily onerous and costly to the Council.

**Relief sought:** Accept Council submission no. F1040.134.

Provide an exemption in Rule WQL40 for maintenance work being undertaken by a network utility operator, and provide for annual works consents for capital work.

Submissions from Variation 1 now considered submissions on Variation 6

4-149-3B2 Condition 1 Rule WQL40 (Council submission no. 476.197, 476.198, and 476.199)

69. The Council's submission was that condition 1(a) of Rule WQL40 should be amended so that meeting this condition does not require a consent if it meets the conditions in an Asset Management Plan (AMP) or in an Integrated Catchment Management Plan (ICMP). The Council accepts that an AMP may not be the most appropriate instrument, however, an ICMP is considered appropriate. The OR is silent on ICMP's as an instrument.

**Relief sought:** Accept Council submission no. 476.197, 476.198 and 476.199.

Amend condition 1(a), (c) and (d) of Rule WQL40 so that not meeting this condition does not require a consent if it meets the conditions in an ICMP.

P Kingsbury

Appendix 1: Summary list of Council's 'rejected' and 'accepted in part' submissions

Submission number	Page in Officer's Report	Officer Report recommendation	Christchurch City Council response to Officer Report recommendations ('noted' and 'not agreed to', with reference to relevant section in evidence)
General submissions on Variation 6			
F112.3	12	Reject	Noted
F112.4	13	Reject	Noted
25.1	15	Accept in part	Noted
25.26	16	Accept in part	Noted
4-10-1 2.5 Amend policy WQL10 Avoid contamination of groundwater via bores or excavations			
25.5	50	Accept in part	Noted
4-19-7 Objective WQL4 The quality of Christchurch groundwater			
25.16	73	Reject	Noted
4-21-34 Policy WQL13 Level of protection of ground water quality			
25.19	89	Reject	Refer sections 35-39 of evidence
25.21	96	Accept in part	Noted
4-22-27 Policy WQL14 General control of activities			
F112.13	105	Reject	Refer sections 40-43 of evidence
25.22	111	Reject	Noted
25.23	118	Reject	Refer sections 44 and 45 of evidence
4-26-1 Policy WQL15 Control of hazardous facilities			
F112.25	137	Accept in part	Noted
25.27	137	Accept in part	Noted
4-27-5 Policy WQL16 Control of rural production			
25.28	141	Reject	Refer sections 46 and 47 of evidence
25.29	142	Accept in part	Noted
4-28-9 Policy WQL17 Control of the intensity of activities within Christchurch Groundwater Protection Zones 1 and 2			
F112.26	145	Accept in part	Noted
F112.28	149	Accept in part	Noted
25.31	152	Reject	Refer section 48-50 of evidence
4-28-30 Explanation and principal reasons to Policy WQL17			
F112.29	157	Accept in part	Noted
4-29-14 policy WQL18 Control of mineral extraction activities			
25.32	163	Accept in part	Noted
25.33	165	Accept in part	Noted
25.36	170	Reject	Refer section 51 of evidence
25.37	170	Reject	Refer section 51 of evidence
4-30-28 policy WQL19 Control of existing and future urban development within Christchurch Groundwater Protection sub-zone 1A or zone 2			
F112.32	178	Reject	Refer section 52 of evidence
25.42	178	Reject	Refer section 52 of evidence
F112.33	179	Reject	Refer section 53 of evidence
4-36-20 Methods to Policy WQL21			
25.55	196	Accept in part	Refer section 54 of evidence
4-40-2 Rule WQL5 Discharge of stormwater containing contaminants onto or into land - permitted activity			
25.57	202	Accept in part	Refer section 55 of evidence
4-40-3A6 Rule WQL5 - Activity			
F112.36	202	Accept in part	Noted
4-42-1 Rule WQL7 Discharge of stormwater containing contaminants onto or into a river, lake or artificial watercourse from a stormwater management area - controlled activity			
25.58	207	Accept in part	Noted
4-56-1 Rule WQL29 Use of land for storing human sewage effluent or animal effluent, organic waste, or stockpiling fermenting or decaying organic matter - permitted activity			
25.66	228	Accept in part	Noted
4-57-1 Rule WQL30 Use of land for storing human sewage effluent or animal effluent, organic waste, or stockpiling fermenting or decaying organic matter that does not comply with certain conditions of regional Rule WQL29 - restricted discretionary activity			
25.67	229	Accept in part	Noted
4-60-1 Rule WQL40 Excavation of land in the Coastal Confined Gravel Aquifer System, or over an unconfined			

Submission number	Page in Officer's Report	Officer Report recommendation	Christchurch City Council response to Officer Report recommendations ('noted' and 'not agreed to', with reference to relevant section in evidence)
or semi-confined aquifer - restricted discretionary activity			
25.70	232	Reject	Refer sections 56 and 57 of evidence
4-61-1 Rule WQL42 Use, including storage or removal of an underground container used for a specified hazardous substance - permitted activity			
25.71	240	Accept in part	Noted
4-66-2B27 Rule WQL44 - Conditions			
25.74	250	Accept in part	Noted
4-70-1 Rule WQL48 Use of land for a new cemetery or an extension to an existing cemetery - permitted activity			
25.75	253	Reject	Refer sections 58 and 59 of evidence
4-71-1 Rule WQL51 Discharge of municipal solid waste refuse or treated hazardous waste to land in certain areas - discretionary activity			
25.76	253	Accept in part	Refer sections 60 and 61 of evidence
4-71-3 Rule WQL52 Discharge of municipal solid waste refuse or treated hazardous waste to land - prohibited activity			
25.77	254	Accept in part	Refer section 62 of evidence
25.78	255	Reject	Refer section 63 of evidence
4-80-1 Rule WQL62 Use of land for certain activities - non-complying activity			
25.80	263	Accept in part	Noted
4-28-1 Rule WQL63 The use including storage of a specified hazardous substance in Christchurch Groundwater Protection Zones 1 and Sub-Zones 1C and 1D - prohibited activity			
F112.59	265	Accept in part	Noted
F112.60	265	Accept in part	Noted
F112.61	266	Accept in part	Noted
25.81	266	Accept in part	Noted
F112.62	267	Accept in part	Noted
4-85-1 Rule WQL64 Use of land within the Christchurch Groundwater Protection Zone 1- non complying activity			
25.82	269	Accept in part	Refer sections 64 and 65 of evidence
4-85-2A1 Rule WQL 64 - Activity			
25.83	275	Accept in part	Refer sections 64 and 65 of evidence
4-85-3 Rule WQL65 Use of land (hazardous substances) within the Christchurch Groundwater Protection Zone 1 - prohibited activity			
25.84	277	Accept in part	Noted
4-86-1 Rule WQL66 Use of land (hazardous substances) within the Christchurch Groundwater Protection Sub-Zones 1A and 1B - prohibited activity			
25.85	281	Accept in part	Noted
4-106-0 Changes to map volume			
25.86	297	Reject	Refer section 66 of evidence
<i>Submissions from Variation 1 now considered submissions on Variation 6</i>			
4-78-1[6] Issue WQL3 Community drinking water sources			
476.840	303	Accept in part	Noted
<i>Submissions from Variation 1 now considered submissions on Variation 6</i>			
4-80-26[6] policy WQL12 Avoid the potential for contamination of community drinking water sources			
476.841	315	Accept in part	Noted
<i>Submissions from Variation 1 now considered submissions on Variation 6</i>			
4-80-31[6] Policy WQL12(1) (a)			
476.842	323	Accept in part	Noted
<i>Submissions from Variation 1 now considered submissions on Variation 6</i>			
4-81-12[6] Policy WQL 12(2)(b)			
476.114	333	Accept in part	Noted
<i>Submissions from Variation 1 now considered submissions on Variation 6</i>			
4-81-14[6] Policy WQL 12(2)(b)(i)			
476.112	337	Accept in part	Noted
<i>Submissions from Variation 1 now considered submissions on Variation 6</i>			
4-149-1 Rule WQL40 Excavation of land in the Coastal Confined Gravel Aquifer System, or over an unconfined or semi-confined aquifer - restricted discretionary activity			
F1040.131	380	Reject	Refer section 67 of evidence
378.154	380	Reject	Refer section 67 of evidence
476.196	384	Reject	Refer section 67 of evidence
476.200	384	Reject	Refer section 67 of evidence
<i>Submissions from Variation 1 now considered submissions on Variation 6</i>			
WQLV6.129 Amendment			

<b>Submission number</b>	<b>Page in Officer's Report</b>	<b>Officer Report recommendation</b>	<b>Christchurch City Council response to Officer Report recommendations ('noted' and 'not agreed to', with reference to relevant section in evidence)</b>
378.155	394	Reject	Refer section 67 of evidence
F1040.134	397	Reject	Refer section 68 of evidence
<i>Submissions from Variation 1 now considered submissions on Variation 6</i> 4-149-3B2 Condition 1 Rule WQL40			
476.197	400	Reject	Refer section 69 of evidence
476.198	401	Reject	Refer section 69 of evidence
476.199	402	Reject	Refer section 69 of evidence
<i>Submissions from Variation 1 now considered submissions on Variation 6</i> 4-155-2A33[6] Activity 4 Rule WQL43			
476.207	405	Accept in part	Noted
<i>Submissions from Variation 1 now considered submissions on Variation 6</i> 4-157-1[6] Rule WQL 44 Use, including storage, of a specified hazardous substance – controlled activity			
476.209	408	Accept in part	Noted
<i>Submissions from Variation 1 now considered submissions on Variation 6</i> 4-169-1 Rule WQL55 Use of land for mineral extraction, use or a specified hazardous substance, or the discharge of stormwater in Zone 1A, Zone 1B, or Zone 1C of the Christchurch Groundwater Recharge Zone - discretionary activity			
378.44	419	Accept in part	Noted
<i>Submissions from Variation 1 now considered submissions on Variation 6</i> 4-169-3A1 Activity Rule WQL55			
476.227	424	Accept in part	Noted
F1040.161	425	Reject	Noted
<i>Submissions from Variation 1 now considered submissions on Variation 6</i> 4-169-3B9 Condition 2 Rule WQL55			
F1040.160	427	Accept in part	Noted
<i>Submissions from Variation 1 now considered submissions on Variation 6</i> 4-180-4A1 Activity Rule WQL63			
476.336	433	Accept in part	Noted
<i>Submissions from Variation 1 now considered submissions on Variation 6</i> 0-9-0#4[6] General – Maps - V6 matters			
F1040.21	437	Accept in part	Noted