

To
Canterbury Regional Council
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For
Leo Fietje / Angela Dean

From
Rachel Dunningham

By
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Date
23 November 2007

Dear Mr Fietje & Ms Dean

**Resource Consent Applications for the Central Plains Water Enhancement Scheme -
Section 92 request**

1. We refer to your letter dated 2 November 2007 requesting further information pursuant to section 92 of the RMA.
2. As a preliminary matter, we take issue with the suggestion that some of the information sought *"has previously been requested and either not supplied or supplied only in part"*. The applicant has never been advised previously that the Regional Council considers any section 92 request to be unsatisfied. Furthermore, as we have pointed out in previous correspondence (24 May 2007), information which the applicant voluntarily offered to supply to update the information supplied on ground water modelling, was subsequently subsumed by the Regional Council into a section 92 request, even though it had not previously been sought under this provision.
3. That aside, the following sets out the requests you have made in your letter of 2 November 2007 and Central Plains' response to them, including timeframes in which the further information which Central Plains agrees to supply can be provided. We replicate the headings used in your letter.

Effects on groundwater quality

4. All matters raised in this section will be addressed in a report on nitrate contamination prepared by URS. This will be available no later than 14 December 2007.

Effects on groundwater quantity

5. You have requested *"a copy of the external audit of the Aqualinc groundwater flow model undertaken by Dr Merrick, together with details of his terms of reference and description of material review"*;

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6. The model review will be released along with the full model documentation, as the review needs to be read in context. The specific terms of reference to Dr Merrick from Aqualinc is not available to ECan as it is a private contract between the two parties. However, in the review Dr Merrick does summarise the scope of his review and what he has been asked to consider, and Central Plains considers this should suffice.

Effects on groundwater recharge from reduced river recharge

7. You have sought details of the effects on the Selwyn - Waimakariri and Christchurch – West Melton Groundwater Allocation Zones of reduced river recharge.
8. The Aqualinc model does include the effects of reduced river flow. These are included as changes in the annual average flow, as the steady state models were built with average annual inputs and outputs. We also note the model has been improved from the version supplied to ECan to date. The deeper aquifer flow directions are now more realistic (and match better to the available data in these deeper layers) and the calibration fit for the Selwyn River is better. Aqualinc will use this improved model to run a transient model as is discussed in paragraphs 10-12 below.
9. Aqualinc will not separate the effects of the scheme on the Selwyn - Waimakariri and Christchurch – West Melton zones. The maps provided are independent of zones, as this is how the system physically works. The effects presented include these two zones, and the Rakaia – Selwyn zone, as one complete system.

Effects on groundwater levels from mounding

10. You have asked for a transient simulation of the timing, magnitude and distribution of mounding on groundwater levels within, and down-gradient of, the scheme area as far south-east as Lake Ellesmere.
11. Although Central Plains has already provided steady state modelling, and believes this accurately represents the “*envelope*” of effects on groundwater which is likely to occur in both extremely wet and extremely dry years, it will agree to undertake, and provide the results of, a transient model run as requested. Central Plains notes that a full transient model takes approximately two months to run and it is simply not practical to undertake this before the hearing to enable it to be used by your officers in their assessment. To meet anticipated deadlines for cross-circulation of evidence, the run time will be reduced to slightly over one month and the period covered would reduce from some 30 years to some 15 years. However, this period would cover the wettest and driest periods that have been used in the steady state modelling to date and therefore should meet the requirements of the section 92 request.
12. It is important to note that the transient modelling will not be complete, and a report suitable for use by your officers, until approximately 11 January 2008. It may, therefore, not be available in time for it to be included in the section 42A reports being prepared. However, it will still be available well in advance of the commencement of the hearing and it is our understanding that this will not have any

effect on the proposed commencement date for the hearing. If our understanding is incorrect please advise, as this may have a bearing on the decision to agree to provide it in advance of the hearing.

Effects on drainage networks, septic and stormwater disposal systems

13. Consultants to Central Plains have been working with the local drainage committees and the Selwyn District Council so that a management response to the effects on the drainage networks can be provided. A summary response on this issue will be provided no later than 14 December 2007.

Effects on groundwater levels at Waianiwiwa Dam

14. You have asked for an assessment of the change in groundwater conditions and slope stability in the vicinity of the dam and impoundment. A summary of these effects will be provided no later than 14 December 2007.

Effects of works in the riverbed on terrestrial ecology and wetlands

15. You have asked for an “*assessment of the effects of work in the riverbed on terrestrial ecology and wetlands*” and say that this is to include an assessment of the effects from the proposed works and mitigation, including habit restoration management plans to mitigate these effects, specific consents designs, methodologies and timelines for mitigation measures.
16. To some extent, we consider these matters have already been covered in the AEE but Central Plains will provide further information on these issues by 14 December 2007 at the latest. However, Central Plains declines to supply “*habit restoration plans, specific concept designs, methodologies and timelines etc*”. It is not practicable to expect this to be done to any level of detail without the design concepts being finalised. Instead, the applicant has proposed an Environmental Construction Management Plan that will address all these issues. In our view, it is a matter for the Commissioners to decide whether that plan is sufficiently flexible and responsive to properly address the issues which may arise when all the details of the design of works in the riverbed are settled.

Effects of water take on terrestrial ecology and wetlands

17. You have asked for “*an assessment of the potential ecological effects on the quality of feeding habitat for braided river birds consequent on the potential effects of the proposed takes, and mitigation*”, again with “*specific concept designs, methodologies and timelines for mitigation measures*”.
18. The effects on the feeding habitats for braided river birds has been provided in a NIWA report of February 2003 (Habitat use of Waimakariri River by Black fronted terns) and a Kingett Mitchell report of May 2007 (Waimakariri River Flow, habitat availability and angling suitability: two dimensional modelling results). In relation to other ecological effects some further information will be provided on instream ecological aspects, and on potential changes to riparian wetlands, (which it is considered will be minimal). This will be done by 14 December 2007.

19. Again, Central Plains declines to supply specific concept designs, methodologies and timelines, for the reasons discussed above. These mitigations will be governed by the Environmental and Construction Management Plan.

Effects of water use on terrestrial ecology and wetlands

20. You have asked for “*an assessment of effects of water use on terrestrial ecology and wetlands*” and specifying various matters that this should cover. You again request “*specific concept designs, methodologies and timelines for mitigation measures*”.
21. Further information will be provided on these effects. However, as a general comment, Central Plains records that the groundwater regime will return to something similar to that prior to 1990 and therefore the effects will not be significant and will more than likely be beneficial. Central Plains will also be establishing an Environmental Trust, funded by the scheme, to provide a further mechanism to address any environmental effects that cannot be foreseen at this time.
22. Further information on these matters will, as with other requests, be provided on or before 14 December 2007.
23. For the same reasons as discussed above Central Plains declines to provide the specific concept designs, methodologies and timelines for mitigation measures.

Effects on surface water quantity

Mitigation against the effects from freshes

24. Information will be provided in response to this request on or before 14 December 2007.

Effects on other water uses

25. You have asked for an assessment of effects on A permit users from the Waimakariri River.
26. There will be no effect on the existing A permit water users on the Waimakariri River and therefore no work is required to answer this query. Their right to take water is governed by the provisions of the Waimakariri Regional River Plan and is referenced to “*unmodified flow*” levels as defined in the Plan. These levels are not affected by Central Plains’ take.

Effect on river from reduced river flow

27. You have asked for an assessment of the effects from reduced mean and median flows on sediment transport within both the Rakaia and the Waimakariri Rivers. For the avoidance of doubt, the example you refer to of “*fine material*” building-up in the tidal reaches of the Waimakariri and Rakaia Rivers and purportedly affecting ability for early floodwaters to “*blow*” open the mouth is simply not a possible consequence of Central Plains Water Enhancement Scheme. A response to this request for information will be provided on or before 14 December 2007.

Effects from increased flows in lowland stream

28. You have asked for more information regarding the predicted increased flows in lowland streams. The additional transient modelling which will be undertaken, as discussed above, will provide further information on the frequency and duration of increased flows. As already indicated, a report on this further modelling will be available by mid-January 2008.

Effects on water levels in Lake Ellesmere

29. You have asked for a further assessment on the scale of effects on water levels in Lake Ellesmere. This will be provided by Central Plains on or before 14 December 2007.

Effects on surface water quality

30. You have asked for further details and an assessment of the mitigation proposed to address the adverse effects of increased nitrogen loadings to Lake Ellesmere and lowland streams. You have also asked for mitigation measures to reduce the likely reduction of water quality in the stored reservoir water, and an assessment of the impact of all the takes from the Waimakariri on the assimilation capacity of the lower river for authorised waste discharges and non-point discharges. Further information on these issues will be provided on or before 14 December 2007.

Effects on river ecology

31. You have asked for an assessment of the effects of the takes on river ecology in both the Waimakariri and Rakaia Rivers, including "*explicit mitigation measures to reduce these effects*". For clarification we should add that the comments made by Central Plains in terms of the compliance with existing plans/order provisions relate solely to the Rakaia. The Waimakariri take has not made this assumption except insofar as the acceptability of the minimum flow provisions that would apply to these takes.
32. While this is primarily an evidential matter, further commentary and information will be provided on this, particularly in regard to the IFIM assessments already supplied, no later than 14 December 2007.

Effects on mudfish

33. You have asked for details of the mitigation measures proposed to address effects on mudfish. Mitigation plans have been developed to address these effects and these will be supplied on or before 14 December 2007.

Effects on Tidal Reaches

34. You have asked for an assessment of effects from reduced mean and median flows on sediment transport within the Rakaia and Waimakariri Rivers and how this will impact on river ecology and ecology of tidal reaches. This essentially reflects your request discussed at paragraph 27 above, further commentary will be provided on this issue on or before 14 December 2007.

Fish screen design

35. This issue is, in Central Plains view, primarily an evidential issue to be covered at hearing. However, some further information on the methods and level of fish screening proposed will be provided on or before 14 December 2007.

Conclusion

36. Overall, Central Plains is disappointed at the range of the s92 requests provided so late in the piece. Many of the requests relate to matters on which material has already been provided, and where the further detail would normally be left to be provided in evidence at the hearing. However, rather than debate the issues, Central Plains has chosen to simply acquiesce to these requests rather than delay matters to challenge the merits of the requests.
37. Given the breadth of the request made, we consider that the timeframes proposed for provision of information pursuant to these requests. (No later than 14 December for all requests being answered other than the provision of the transient modelling, which is about 11 January 2008) is a reasonable timeframe in which to provide these responses.
38. If the Regional Council takes issue with Central Plains' decision to decline to provide certain information for the reasons given, or if any other issue of concern arises, we ask that that be referred to the Hearing Commissioners, for consideration as a preliminary issue, given that these applications have been delegated to be heard and determined by those persons.

Yours faithfully
BUDDLE FINDLAY



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