

IN THE MATTER of the Resource Management Act 1991 and a Notice of Requirement to Selwyn District Council and Applications to Canterbury Regional Council for resource consents.

BY Central Plains Water Trust
AND Central Plains Water Ltd

SUBMISSIONS OF COUNSEL FOR THE CHRISTCHURCH CITY COUNCIL

INTRODUCTION

1. The Christchurch City Council has lodged a submission on the proposed scheme in its capacity as a territorial authority under the Local Government Act 2002¹.
2. The submission is mainly directed at the need to address potential adverse environmental effects on water resources. This reflects the Council's particular interest in maintaining a world class aquifer-fed drinking water supply. In summary, the matters raised in the written submission are:
 - 2.1. The potential for an increased risk of nitrate contamination of groundwater impacting on the City's drinking water supply;
 - 2.2. The potential for a significantly increased risk of groundwater contaminants;
 - 2.3. The potential for raised natural groundwater levels in Christchurch and elsewhere on the plains;
 - 2.4. The effects of the proposal on the Christchurch aquifer recharge;
 - 2.5. The potential for the CCC to become the "environmental underwriters" of the proposal;
 - 2.6. The lack of quantifiable economic benefits and costs to the Scheme;
 - 2.7. The potential biosecurity effects;
 - 2.8. The lack of specified community recreational benefits;
 - 2.9. The effects of encountering contaminated sites during construction;
 - 2.10. The use of hazardous substances and generation of solid waste during the construction process.

¹ Section 10 sets out the purpose of local government including to promote the social, economic, environmental and cultural well-being of communities.

3. Of these, the evidence for the Council focuses on:
 - 3.1. The effects of the proposed scheme on the Waimakariri River flows and the Christchurch aquifer recharge;
 - 3.2. The effects on land drainage and raised groundwater levels (particularly the latter as a potential constraint on mineral extraction activities); and
 - 3.3. The effects on groundwater quality due to increased land drainage beneath the irrigation area.
4. The thrust of the written submission was that if the potential adverse effects cannot be adequately addressed then consent should be declined. Most of the specific relief sought was directed at ensuring further, more detailed assessments were undertaken, and the imposition of detailed and stringent conditions of consent.

City Council's Evidence

5. In summary, the Council's evidence is that:
 - 5.1. Christchurch's drinking water supply from the Christchurch-Westmelton aquifer is of very high quality, and is highly valued by the community;²
 - 5.2. The City Plan recognises that mineral extraction is fundamental to the economic well-being of the City. The provision for mineral extraction in the City Plan is now limited with an estimated supply of about 12 years. Raised groundwater levels may result in a further physical constraint on mineral extraction.³
 - 5.3. In terms of potential adverse effects on water resources, the evidence for Mr Callander is that the following key issues for the City Council arise:
 - (a) The effects of reduced flow in the Waimakariri River caused by the CPW abstraction; and
 - (b) The effects of the increased area of irrigated land on the inland plains and its impact on:
 - (i) Groundwater levels; and
 - (ii) Groundwater quality.
6. Ultimately, his evidence is that the adverse effects of the proposal in respect of these matters are likely to be minor, provided the Scheme is operated within an appropriate framework of monitoring and mitigation conditions. However, the large degree of uncertainty, particularly in respect of predicting groundwater effects, justify a cautious approach whereby, if consent is

² Evidence of Eoghan O'Neil

³ Evidence of Keri Davis-Miller

granted, conditions of consent are as stringent as possible. The Council's case in support of its submission is focussed on this approach.

7. The main relief now sought as a consequence of this evidence is:
 - 7.1. A restriction on the take from the Waimakariri River to the lowest abstraction rate possible to protect the aquifer recharge;
 - 7.2. A new and detailed management plan condition for groundwater matters requiring:
 - 7.2.1. A clearly defined monitoring and mitigation strategy;
 - 7.2.2. A detailed Groundwater Protection Plan; and
 - 7.2.3. The appointment of an expert Environmental Technical Review Panel;
 - 7.3. A reversal of the onus of proof for the proposed mitigation conditions for water supply wells.

PARTICULAR ISSUES

Abstraction from the Waimakariri River

8. The key issues for the City Council are that⁴:
 - 8.1. The seepage losses from the Waimakariri River are an important component of recharge for the Christchurch City aquifers;
 - 8.2. The seepage recharge into the City aquifers will decrease when river flows are held lower;
 - 8.3. The effect on the City aquifers is likely to be minor based on an evaluative judgment of the currently available information, but there is a large degree of uncertainty involved in this judgment; and
 - 8.4. The risk that is associated with that uncertainty can be minimised if any allocation of Waimakariri River water granted to CPW is significantly less than the large volume sought, thereby leaving more water in the river.
9. As an aside, there appears to be a presumption within parts of the CPW case that compliance with the minimum flow regime (at least with the WCO for the Rakaia) will ensure that all values sought to be maintained by that regime will, as a matter of fact, be maintained.
10. It is not clear whether CPW are taking a similar approach in respect of the minimum flow regime for the Waimakariri. If it is, then it is submitted that there is no statutory presumption that compliance with a rule in a regional plan will ensure that adverse effects managed by that rule will be minor. This requires an assessment in the circumstances of each case. It is noted that even in the context of land use consents, the Court's have not accepted that compliance with a standard in a rule will necessarily result in a conclusion

⁴ See evidence of Peter Callander paragraph 3.24

that the adverse effects of a proposed activity controlled by that rule must be minor.⁵

11. The Council's case therefore is that there is uncertainty over the quantification of the recharge mechanism and this creates an undefined risk to the Christchurch aquifers. In the circumstances it is prudent to minimise the risk by granting the minimum necessary abstraction so as to protect the recharge value.
12. For the Council, maintaining the aquifer recharge function of the Waimakariri River as close as possible to its current levels is the principal means of addressing the Council's concerns about preserving the high quality drinking water supply. This is on the basis that any compensation for a loss of river recharge that is derived from surplus drainage through irrigated soils (as suggested by CPW) could lead to a general deterioration of groundwater quality.

Relief Sought

13. It is ultimately a matter of judgment for the Panel as to the appropriate balance between the amount of water to be taken from the rivers and the amount of storage that is required.
14. However, the importance of preserving the Christchurch aquifer recharge is such that an abstraction at the lower end of the range that the Applicant has proposed (ie 20m³/s) may be reasonable and appropriate. Whilst this will require greater storage, this is anticipated in the application with storage capacity of up to 280 million m³.

Groundwater Quality

Management Plans

15. Mr Callander's evidence is that potential effects of increased nitrate-nitrogen concentrations on groundwater quality are likely to be of a minor nature. However, a large degree of uncertainty remains about the prediction of groundwater effects.
16. It may be many decades before any adverse effects on groundwater quality manifest and remediation may take a similar period. Given this, and the importance of maintaining groundwater quality, the Council does not fully endorse CPW's reliance on an adaptive management approach. Instead it submits that the potential generation of nitrate and its migration into groundwater should be conservatively managed.
17. It generally supports the intent of the proposed conditions for monitoring, mitigation and farm management. However, it submits that the proposed conditions do not go far enough – particularly in respect of the monitoring and mitigation strategy and the requirement for management plans to address the concerns raised in its submission.

⁵ See *Ngataranga Bay 2000 Inc v Attorney-General* (Decision A16/94), and *LRG Investments Limited v Christchurch City Council* (Decision C64/98)

18. The Council proposes a detailed condition that:
- 18.1. Requires CPW to develop a clearly defined monitoring and mitigation strategy addressing any adverse effects of recharge loss, raised groundwater levels, and deteriorating groundwater quality;
 - 18.2. Requires CPW to prepare a detailed management plan (Groundwater Protection Plan) addressing these matters; and
 - 18.3. Involves the appointment of an expert Environmental Technical Review Panel⁶ to:
 - 18.3.1. Review and approve the management plan;
 - 18.3.2. Receive and review the monitoring and mitigation reports; and
 - 18.3.3. Administer the complaints/mitigation process offered by CPW.
19. The proposed condition is set out in the Schedule that accompanies these submissions. It seeks to expand on the management plan/expert panel approach already proposed by CPW for the drainage conditions. It is based in part on a similar type of condition issued by the Environment Court as a consent order in *Royal Forest and Bird Protection Society v Tasman District Council*⁷.
20. The intent is to prescribe the environmental outcomes sought to be achieved but to maintain flexibility as to how these are to be achieved by defined management plans to be certified by the consent authority. This is consistent with the recognised approach to certifier conditions as articulated in the *Turner v Allison*⁸ and *Foodstuffs* decisions⁹. The use of a delegated expert panel has also been recently approved by the Environment Court in the *Housing New Zealand* decision.¹⁰
21. A condition of this kind would enable the issues of particular concern to the Council to be addressed by the expert panel at the detailed management plan stage prior to any commencement of consent.

Replacement Supply Wells

22. Mr Callander's evidence notes the potential for contamination of existing water supply wells¹¹. CPW have recognised this potential and have offered to provide replacement water supplies to affected parties (condition 6, CRC 061973). The proposed condition requires replacement only if the failure of a well to meet drinking standards is a direct result of the CPW consent.

⁶ To be funded by CPW

⁷ RMA 862/03, 21 November 2003

⁸ [1971] NZLR 833

⁹ *Foodstuffs (South Island) Limited v CCC* [1999] NZRMA 481 (HC)

¹⁰ *Housing New Zealand Corporation v Manakau City Council* (Decision A143/2001)

¹¹ See Peter Callander evidence at paragraph 5.20

23. This places the burden of proof on an affected landowner to establish causation. Given the potential for such effects and the variability involved in groundwater assessments, the Council's position is that the onus should be reversed and the condition should require the mitigation to be provided unless CPW can demonstrate that the adverse effect is not related to CPW activities.

Relief

24. Redraft proposed condition 6 of CRC061973 (and all corresponding conditions) along the lines of the amended condition set out in the Schedule.

Groundwater Levels

25. Two particular issues arise:
- 25.1. Land drainage and groundwater quality impacts; and
 - 25.2. The effects of raised groundwater levels as a potential constraint on land use, localised groundwater contamination and mineral extraction activities.

Land Drainage and Groundwater Quality Impacts

26. Raised groundwater levels can adversely affect the ability to use the land and can reduce groundwater quality if they inundate sewage disposal systems, landfills, contaminated sites, cemeteries and the like. This is an issue that should be able to be mitigated by stringent monitoring and mitigation conditions which the City submits is a minimum requirement before consent can be granted.

Quarrying

27. The impact of raised groundwater levels as a potential constraint on mineral extraction is discussed in Ms Davis-Miller's evidence. The significance of the shortage of supply of zoned quarry land was recently made clear by the Environment Court in the *Road Metals* decision.¹² The Court essentially invited the Council to make further provision for mineral extraction activities in the City Plan.
28. That process is underway. However, it should be recognised that the options available for zoning land for quarrying are limited and elevated groundwater levels would present a further constraint. This is a matter to be dealt with in detail in the submissions by the quarry operators. However, the Council's concerns reflect the "fundamental" importance of gravel supply as identified in the City Plan.
29. In response the Council has introduced the adverse effects of groundwater levels to be addressed in the new management plan condition. If it cannot be adequately mitigated then this would be a matter that would count against granting consent to the proposal.

¹² *Road Metals Company Limited v Christchurch City Council* (Decision C163/2006)

Relief

30. Both issues are matters that fall within the proposed condition for the Groundwater Protection Plan.

OTHER MATTERS

31. Other matters raised in the written submission are still of interest to the City Council but have not been pursued through supporting evidence.
32. Concerns about becoming an environmental underwriter remain but are reflected in the Council's primary submission that the Panel should take a conservative approach to assessing adverse effects (particularly on groundwater quality) and its request for more stringent conditions than those proposed if consent is granted.
33. Concerns about quantifiable economic benefits and specified recreational benefits reflect the level of detail in the notified application and AEE. Again concerns remain. It is noted that CPW's case is that any adverse effects on the environment will be outweighed by benefits. However, as with all cases, the evidential burden lies with CPW as the applicant to satisfy the Panel of these matters.¹³
34. Concerns about potential biosecurity effects, contaminated sites during construction, and the management of hazardous substances can all be addressed in conditions and the Council has set out some proposed amendments to conditions in its written submission.

Witnesses:

1. Eoghan O'Neill;
2. Keri Davis-Miller;
3. Peter Callander

Aidan Prebble
30 April 2008

¹³ See Baker Boys Limited v Christchurch City Council [1998] NZRMA 433