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Committee Rural Services and Wairarapa
Author Stephen Thawley Resource Advisor

Extended Moratorium on Groundwater Takes from the Martinborough Eastern Terraces

1. Purpose

To seek the Committee's endorsement and approval to extend the existing moratorium on new and increased takes to all aquifers in the Martinborough Eastern Terraces groundwater zone.

2. Background

In December 2001, the Rural Services and Wairarapa Committee approved a moratorium on any new and increased takes from aquifers 1 and 2 of the Martinborough Eastern Terraces groundwater zone. This was completed due to concern over declining groundwater levels and allocation from these aquifers. Aquifers 1 and 2 were determined to extend to a depth of approximately 40 metres.

3. Recent Developments

Since the moratorium has been in place, there has been further interest in investigation and utilising the groundwater resource in the Martinborough Eastern Terraces groundwater zone.

Last year, Te Kairanga Wines drilled a bore to a depth of close to 70 metres. Te Kairanga completed extensive investigations, including water quality analysis and pump testing. A non-notified resource consent was issued as staff were satisfied that the applicant was taking groundwater from aquifer 3 and that the groundwater take was sustainable. Aquifer 3 was not subject to the moratorium issued in December 2001.

This year, The Terrace vineyard drilled a bore to a depth of 80 metres. The Terrace also completed extensive investigations, including water quality analysis and pump testing. Staff have recently advised the applicant, that they do not consider the groundwater take to be sustainable and hence the application would be recommended to be declined. The key reasons for this are that:

1. Pump testing of this deep bore affected a bore located within aquifer 2 as defined by the original moratorium in December 2001.
2. Water quality analysis has shown that water in the aquifer where the applicant's bore is located is from rainfall recharge, which is the same recharge source as aquifers 1 and 2.
3. Groundwater levels in monitoring bores in aquifers 1 and 2 have continued to decline since 2001. Furthermore, groundwater levels in the Te Kairanga bore (aquifer 3) have also declined, in that the groundwater level in August 2003 was nearly 1.5 metres lower than the same time in August 2002.

4. Discussion

Recent drilling of deep irrigation bores below 45 metres, have highlighted more complexities than answers in relation to hydrogeological structure in the Martinborough Eastern Terraces groundwater zone. As all aquifers identified to date have shown that they are recharged through rainfall, a precautionary approach to water allocation should be taken.

Figure 1 shows that the decline in groundwater levels has only occurred since 1997. A number of new resource consents for groundwater takes were approved in the two years after this date. The decline in groundwater levels have also coincided with below average rainfall. This climatic pattern is predicted to continue into the immediate future. Hence the extension of the moratorium is considered critical to ensure the sustainable management of the groundwater resource in the Martinborough Eastern Terraces groundwater zone.

The extended moratorium does not impact the current application lodged by The Terrace vineyard, as the extension will apply from the date it is approved.

It should be noted that the moratorium only applies to aquifers in the Martinborough Eastern Terraces groundwater zone. This doesn't preclude the drilling of investigation bores to greater depths and the taking of water if it can be demonstrated that groundwater recharge is from a different zone and doesn't form part of the Martinborough Eastern Terraces Groundwater Zone.

5. Further Work Required

- Water metres are now in place on all consented takes in the Martinborough Eastern Terraces groundwater zone. Staff are assessing water taken from the aquifer on an annual basis.
- Monitoring of groundwater levels in a number of bores will continue.

- A conceptual model for the Wairarapa aquifer system including the Martinborough Eastern Terraces groundwater zone is currently being developed. This will reassess appropriate safe yield and allocation limits for this zone.

6. Communications

- Copies of this report will be distributed to key stakeholders including local well drillers, and local iwi.
- Public awareness of the moratoriums on stressed groundwater zones/aquifers will be increased through interaction with the appropriate media.

7. Recommendation

1. *That the report be received.*
2. *That the Committee approves the extension of the existing moratorium on the consenting of any new or increased groundwater takes to all aquifers within the Martinborough Eastern Terraces groundwater zone.*

Report prepared by:

Stephen Thawley
Resource Advisor

Graham Sevicke-Jones
Section Leader - Resource Investigations

Steve Blakemore
Manager, Planning & Resources