

**UNDER** the Resource Management Act 1991.

**IN THE MATTER** of the Proposed Natural Regional Resources Regional Plan.

**AND.**

**IN THE MATTER** of submissions and further submissions by the New Zealand Transport Agency.

**EVIDENCE OF STEPHEN MICHAEL HIGGS.**

1. My name is Stephen Michael Higgs. I hold a Bachelor of Science (Geography) Degree from the University of Canterbury; a Bachelor of Social Science (Honours) Degree and a PostGraduate Diploma in Environmental and Resource Planning from the University of Waikato. I am a full member of the New Zealand Planning Institute.
2. I am currently employed by The New Zealand Transport Agency (NZTA) as the Integrated Planning Manager. I am responsible for providing advice on resource management matters in relation to the State Highway network, principally through involvement in the district plan process, resource consent applications, and providing planning advice on NZTA's capital works projects within the Canterbury and West Coast regions. I have previously been employed as a planner by the Canterbury Regional Council where I have been involved in District Plan liaison, and prior to that, the Christchurch City Council.
3. I am also involved as the representative on the UDS and RPS management groups.

**Outline of Evidence**

4. My evidence will outline:
  - a. Changes to Transit New Zealand, now the New Zealand Transport Agency

- b. An overview of the Agency's submissions on the NRRP and key issues of concern still currently unresolved by the Officer Report.

### **The New Zealand Transport Agency**

5. I have previously provided an outline on the NZTA to a different panel hearing Variation 1. In summary Transit New Zealand merged with Land Transport New Zealand on 1<sup>st</sup> August 2008 to become the New Zealand Land Transport Agency; through the Land Transport Management Amendment Act 2008.
6. The Land Transport Management Act 2003 (LTMA) defines the objective of the New Zealand Transport Agency (NZTA) as being to undertake its functions in a way that contributes to an affordable, integrated, safe, responsive, and sustainable land transport system (s94). The functions of NZTA include funding of the national land transport system, planning and management of the State highway system, management of the regulatory requirements for land transport, assisting, advising and co-operating with approved organisations (such as local authorities), and the investigation and review of accidents and incidents involving transport on land (s95).

### **Background to Submissions by NZTA**

7. NZTA's submissions are supportive of the principles introduced by Variation 6 to protect the quality of Christchurch's drinking water, seeking that both be retained with their current wording. It has submitted in support of both the issue and objective, and has supported the principle of groundwater protection through the Regional Policy Statement. In my view the NRRP is generally consistent with Change 1 to the RPS.
8. NZTA sought clarification of the relationship between the general Policies WQL13 and 14 with the zone policies (WQL15 - 21). This has now been improved through the re-ordering of policies WQL13 to 19.

9. NZTA's submissions are primarily in relation to how the NRRP may be interpreted by officers and has therefore sought greater clarity on the terms and mechanisms for protecting groundwater. In summary the matters of concern are follows:

- a. Avoidance of activities which may result in contaminants entering groundwater
- b. Mechanisms for changing designations and District Plans to give effect beyond 2007.
- c. The definition of 'best practice management measures', and factoring an overall judgement on financial viability.

10. I will discuss these matters under separate headings below.

### **The State Highway Network over the unconfined aquifer**

11. The following State Highways lie over the unconfined aquifer. These are identified on the attached map as Appendix 1.

12. State Highway 1 is currently a two laned road, running from the Waimakariri Bridge to the Selwyn Boundary on Main South Road, via the western side of Christchurch. A large proportion of State Highway 1 (referred to as the 'western corridor' is within Zone 1D and adjoins the Zone 1 unconfined aquifer). NZTA negotiated with Ecan during the early stages of policy formation for recognition of the existing highway network as part of Variation 6 and in my view this has been achieved through the introduction of the Zone 1D. Traffic volume projections on the busiest sections of this State highway going out to 2041 indicate traffic volumes will increase by approximately 60% from the current level of 27,000 vehicles on parts of Russley Road.

13. Other components of the network include State Highway 73 from Racecourse Road to Jowers Road in Selwyn.

14. The principle concern for NZTA is that the NRRP does not provide sufficient recognition to account for highway improvements, particularly for the Western Corridor as explained below:

- The progressive upgrade of the corridor to 4 lanes

- Intersection upgrades at key intersections [Harewood Road roundabout, Sawyers Arms Road roundabout, Johns Road intersection]
- A grade separated interchange at the Russley / Memorial intersection.

15. These projects are progressing now, with two sections now consented (Russley to Memorial intersection 4 laning and Memorial to Wairakei) and further sections to follow over the next 18 months. These upgrades are consistent with the urban growth planning for Greater Christchurch (as defined through the RPS Change 1).

16. The other significant portion of the road building programme (as it affects Zone 1) includes an extension to the existing designated Southern Motorway (from Springs Road) and continuing through to Waterholes. This section crosses a minor part of Zone 1 near Springs Road. However NZTA is still in the process of investigating and designating this alignment. The officer report incorrectly identifies (see submission 22.42, page 191) that this part of the State Highway lies within the Zone 1A. This is not entirely correct as a portion of the designation will extend into the Zone 1 as it is currently rural. NZTA's submission sought to provide flexibility to include this designation once it is finally confirmed. In my view the NRRP does not recognise this and I shall discuss this later in more detail.

17. While NZTA currently has an ambitious road building programme over the next 10 years it does recognise the need to protect the groundwater as an asset of regional significance, and indeed its submissions are generally of a supportive nature. Variation 6 is consistent with a number of internal NZTA policies and procedures that require it to meet best practice with its stormwater management. NZTA has provided evidence on its practices at a previous hearing on Variation 1 to the NRRP and its evidence concluded that the effects from road runoff were not significant. This evidence is attached for your information (See Lynn Torgerson Evidence - Appendix 2).

## Comments on the Officer Report

### **a) Avoidance of activities which may result in contaminants entering groundwater**

**(See submissions F113.1, p13; F113.2, p88, F113.11, p89; F113.13, p90; 22.12, p96; 22.18, p112; 22.19, p118; 22.29, p178; 22.36, p188; 22.39, p189; 22.40, p192)**

18. This submission raised the issue that it will not be possible to 'avoid' contaminants on an individual basis and that the policy should be concerned with the management of contaminants on an 'overall' basis. NZTA's submission suggest two options which include either identifying activities of concern to the Regional Council or amending that part of the policy so that it is concerned with cumulative adverse effects. In addition, NZTA sought the deletion of (what is now) Policies 17(6) and 14(6). This was rejected by the OR because of concern that such an approach would weaken the 'avoidance' policy.

19. The avoidance of activities that may result in contaminants entering and persisting in groundwater may be difficult, if not impossible to achieve. While I agree that the NRRP must establish a high threshold, and therefore avoidance is a preferred option, this is at odds with a policy framework that recognises a certain level of existing development and associated discharges. My understanding is that complete avoidance will, by definition, not be achievable. In my view this is also inconsistent with the RMA, which does enable some level of effect (to something less than minor) and avoidance by itself is stricter than this requirement.

20. Roads, by their very nature will generate contaminants and it is probable that some contaminants will enter groundwater. Further, the transportation of hazardous substances mean that NZTA will be at particular risk through spill management. NZTA does have a spills response protocol, which is a contractor requirement to adhere to. However NZTA does not have control over spill management, which can include emergency services. Avoidance of contaminants arising from spills sets a threshold difficult to achieve. The requirement to 'avoid' then leads to the issue of 'over designing' of stormwater treatments for incremental benefits, which I discuss in (b) below.

21. NZTA's view is that when it undertakes improvements to its State Highway network it will also be undertaking improvements to the stormwater network where, in some cases, none currently exists.
22. As I discuss later, NZTA adopts the Best Practicable Option approach to its designs, in accordance with its stormwater guidelines. In my view, the policy is not consistent with the Act as it does not recognise the ability to mitigate or minimise effects and I suggest an alternative wording to reflect some tolerance for effects that are less than minor. As an alternative to the OR response on NZTA's submission, I suggest the policies be reworded (as opposed to deleted) to introduce the word 'minimise' as follows:

*All hard surfaces and vehicle standing areas associated with activities on designated land must be designed, constructed and maintained so as to avoid or minimise hazardous substances .....*

**b) The incorporation of a date in District Plans, particularly in respect to designations.**

**(See submissions 22.17, p110; 22.27, p176; 22.34, p188)**

23. NZTA raised a practical issue on how alterations to designations should be undertaken through the NRRP. As I have mentioned earlier, NZTA is undertaking a significant road building programme over the next 10 years, which includes State Highway 1. The majority of the upgrades will occur within the existing designation, but some widening is required to accommodate a 4 laned median divided road and intersection improvements. The reason for the Zone 1D was to recognise the special value of designations. The Act provides for alterations to designations in order for the Requiring Authority to undertake works that may extend outside the designated boundaries.
24. The NRRP is currently inflexible because of the way it is drafted and tied to a date within the District Plan. NZTA sought the exclusion of the date as a blunt mechanism to overcome this issue. This has been rejected by the OR. However another way would be to reference the Regional Plan to allow for alterations to the designation outline where

it is subject to the alteration process as set out under section 181 of the Act. As an alternative, and lesser relief than sought through its submission, I consider this could be achieved through the inclusion of the following words to the policy and explanation as follows:

- a. Policy 19(3) (a) .... *And subsequent alterations to that designation pursuant to Section 181 of the Act.*

25. And words within the explanation (or to similar effect) as follows:

- a. *Policy 19(3) anticipates the reasonable extensions to existing designations and therefore Zone 1D anticipates minor amendments to the zone through alterations to designations where they have been applied to the Territorial Local authority under Section 181 of the Resource Management Act. In these circumstances, the Zone 1D boundary will have deemed to have changed where the alteration is confirmed by the decision of the requiring authority.*

**c) The definition of ‘best practice management measures’, and factoring an overall judgement on financial viability.**

**(See submissions 22.21, p127; 22.22, p135; 22.35, p188)**

26. NZTA raised a concern on how the definition of ‘Best Management Practice Measures’ was worded and whether it raised issues with ‘gold plating design’. This is because of the reference to excluding financial viability in the definition of what constitutes ‘overall judgement’. If the paragraph in Variation 6 is interpreted to mean that the Council will not allow a lower standard of management practices to protect groundwater than it would normally allow just because allowing the usual standard of management practices would threaten the financial viability of the particular project, then this is not seen as a problem.

27. However, it is possible that the paragraph might be interpreted to mean that the financial cost of a method for managing effects must always be totally disregarded when deciding which method should be

used to avoid, remedy or mitigate adverse effects. This could lead to unnecessary "gold plating" of mitigation works, requiring an option to be used which requires significantly more resources when a method which used less resources would result in only a very slightly lower level of mitigation. Such plan provisions would not be consistent with the RMA for the following reasons:

- a. When determining whether or not to include a policy in a plan the Council must consider whether having regard to its "efficiency and effectiveness" the policy is the most appropriate for achieving the objectives of the plan taking into account, among other things, the "benefits and costs" of the proposed policy (s32(3)(b) and s32(4)(a) RMA). It is unclear how, having regard to its efficiency, a policy which would result in unnecessary "gold plating" could be the most appropriate for achieving the objectives of the plan in terms of efficiency. While "benefits and costs" in section 32(4) (a) RMA are not limited to economic costs and benefits they do include economic costs and benefits.
- b. In making its decision as to what provisions to include in the NRRP the Council is required to "have particular regard to" "the efficient use and development of natural and physical resources" (section 7(b) RMA). The Environment Court has said that to do that the costs and benefits of a proposal should be examined and, if possible, quantified<sup>1</sup>.
- c. The RMA specifically recognises that the cost of a mitigation option is a relevant thing for decision makers under the RMA to take into account. The definition of "best practicable option" in section 2(1) RMA provides  
  
"Best practicable option, in relation to a discharge of a contaminant ... means the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to - ...

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<sup>1</sup> See Maniototo Environmental Society Inc. v Central Otago District Council C103/09 at para [229]

(b) The financial implications, and the effects on the environment, of that option when compared with other options; ..."

28. NZTA undertakes its stormwater designs based on its stormwater guidelines which adopts a Best Practicable Option, which is more in line with the RMA. NZTA's submission seeks the deletion of the last part of the final sentence of the definition so that it does not refer to the implications for the financial viability of the project. This approach does not consider the value of other public assets such as the State Highway system which is also of considerable value to the economy. NZTA's concern is that it designs to current best practice and that any incremental design improvements above this should be assessed against the associated costs and benefits.

29. While NZTA's first preference is for the deletion of reference to financial viability, similar wording to recognise public benefit or value of public infrastructure assets would also assist with its concerns. I therefore suggest the following alternative wording to address these concerns:

*'Where the work is undertaken as a public work by a requiring authority within Zone 1D and consistent with that designation, then the current best practice shall be adopted when reaching an overall judgement on best management measures.'*