

BEFORE THE MANAWATU-WANGANUI REGIONAL COUNCIL

UNDER Resource Management Act 1991

IN THE MATTER of submissions on the Manawatu-Wanganui Consolidated Regional Policy Statement, Regional Plan, and Regional Coastal Plan for the Horowhenua, Manawatu, Rangitikei, Ruapehu, Tararua, and Wanganui District Councils

AND

IN THE MATTER of hearings by the Manawatu-Wanganui Regional Council regarding the Manawatu-Wanganui Consolidated Regional Policy Statement, Regional Plan, and Regional Coastal Plan – Water

EVIDENCE OF RICHARD KIRBY

**BROOKFIELDS
LAWYERS**

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INTRODUCTION

1. My full name is Richard Kirby. I hold the position of Assets Group Manager with Manawatu and Rangitikei District Councils.
2. I hold a Bachelor of Engineering (Civil) Degree from Canterbury University and I am a Fellow of the Institute of Professional Engineers NZ and am a Chartered Professional Engineer. I have 28 years engineering experience, in contracting (2 years), private engineering consultancy (7 years), and in local government (20 years).
3. I was chair of the Water Information Management Steering ("WIMS") Group from 2007 to 2009 and previously held the position of President of Ingenium from 2005 to 2007 and chair of the National Asset Management Steering Group ("NAMS") from 1999 to 2005.
4. I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court Practice Note and that I agree to comply with it. I confirm that I have considered all of the material facts that I am aware of that might alter or detract from the opinions expressed here.
5. The evidence I am about to give is within my area of expertise and represents my best knowledge about this matter. To my knowledge, I have not omitted any material facts that might alter or detract from the opinion expressed here.

SCOPE OF EVIDENCE

6. This evidence is in support of the Territorial Authorities' ("TAs") submission in respect of:

Water Quality:

- Objective 6-2(a); and
- Policy 6-1.

Water Quantity and Allocation:

- Objective 6.3; and
- Policies 6-12 to 6-14.

7. This evidence will address the submission by reference to a number of recent case studies, namely;
 - (a.) The Kimbolton wastewater scheme, which illustrates issues concerning the application of water management zones; and
 - (b.) The Mangaweka and Feilding water supply schemes, which illustrate issues arising from water quantity and allocation.

EVIDENCE IN SUPPORT OF SUBMISSION

A. Kimbolton Wastewater Scheme

8. Manawatu District Council (Council) owns and operates a Sewage Treatment Plant (STP) in Kimbolton. The sewage system consists of ninety nine (99) individual on-site septic tanks with reticulation to a single oxidation pond. Up to 216m³ of effluent from the oxidation pond discharges into an unnamed tributary of the Oroua River.
9. The previous Resource Consent (6096) expired 26th January 2006 and Council applied for a new consent in May 2005 and sought a consent duration of 20 years.
10. The new Resource Consent was issued 8 September 2008, expiring on 1 September 2019 to align with the relevant Common Catchment expiry date set out in Table 11.2 of the Proposed One Plan. The new consent required upgrading of the plant to enhance the quality of the effluent discharged.
11. The Proposed One Plan establishes a water management zone framework and links values to those zones that safeguard the life supporting capacity of the water bodies and to avoid, remedy or mitigate adverse effects.
12. The TA Collective is concerned with the lack of certainty around the interpretation of what constitutes a water body. The unnamed tributary of the Oroua River into which the Kimbolton treated effluent is discharged is ephemeral; dry during the peak summer months. During these periods the effluent discharge soaks away and there is no direct discharge into the Oroua River.

13. Council presented evidence to the Hearings Committee stating that the effects of the discharge on this tributary were less than minor, however Horizons' reporting officers' approach was that this tributary had the same values to that of the Oroua River as it was in the same water management zone.
14. In its decision, the Hearing Committee made the following statement in clause 81:

“We record however that in our view the reach of the unnamed tributary stream has little if any natural character (Section 6(a)) and there is no evidence of public access to it (Sections 6(d) and 7(c)). We heard no evidence of any special relationship of iwi with the tributary stream (Sections 6(e), 7(a) and 8). The ongoing use of the Kimbolton STP will constitute the efficient use of an existing resource (Section 7(b)) and the proposed upgrades to the STP will enhance the quality of the receiving waters in the tributary stream (sections 7(d) and (f)).”
15. The TA Collective believe that there are tributaries, unnamed or otherwise, within water management zones that should not be considered to have the same values as other streams/ivers within the same management zone. Although Horizons attempted to apply the Oroua River values to this unnamed tributary, it took considerable expense and research on behalf on the Council to prove this philosophy was flawed in this case and the Hearings Committee agreed as stated above.
16. The TA Collective would like some certainty so that the values attributed to specific water management zones are not applied, generally, across all tributaries within that zone.

B. Mangaweka Water Supply

17. Policy 6-12 outlines the framework to ascertain reasonable and justifiable need for water. Although the TA Collective is comfortable with the philosophy of minimising wastage and ensuring efficient use of water, it does have concerns with the methodology proposed and the impact on some of the smaller communities. One such community that is impacted by this policy is Mangaweka.
18. The Rangitikei District Council (Council) owns and operates a water supply scheme in Mangaweka. The scheme supplies water to 180 residents plus other commercial properties. The water take is from the Rangitikei River.

19. The Resource Consent (103081) expires on 18th December 2017. The consented take is 170m³/day for both normal and low river flows. The actual abstraction is 109m³/day with the 95 percentile abstraction at 176m³/day.

20. Using policy 6-12 the following calculations are considered reasonable:

i.	180 persons @ 300 litres per person per day	54m ³ /day
ii.	20% for commercial use	10.8m ³ /day
iii.	No industrial use	0m ³ /day
iv.	No livestock use	0m ³ /day
v.	No allocation for growth	0m ³ /day
vi.	15% of (i) to (v) allocation for leakage	<u>9.7m³/day</u>
	TOTAL	74.5m³/day

21. The actual abstraction averages 109m³/day and given the size of the community it will be almost impossible to reduce demand to 75m³/day without significant imposition on levels of service.

22. The last paragraph in Policy 6-12 (c) is proposed as:

Where the existing allocation for a public water supply exceeds the allocation calculated in accordance with subsections (i) to (vi) above, the Regional Council will establish, in consultation with the relevant Territorial Authority, consideration will be given to a timeframe by which the existing allocation shall can ²²be reduced to the calculated amount.*

23. This paragraph outlines a process to achieve the calculated amount, however it does not cater for the situation that the calculated amount cannot be achieved without significant imposition on levels of service. There needs to be an alternative process given to cater for these occurrences.

C. Feilding Water Supply

24. Policy 6-14 states:

“When making decisions on consent applications to take surface water[^], the opportunity to utilise alternative sources such as groundwater or water[^] storage, including harvesting during periods of high flow in a water body[^],²⁴ shall be considered.”

25. The primary source of supply for the Feilding water supply is from a surface water take in the Oroua River. This take expires in August 2021 and allows up to 9,000m³/day during normal flow and 7,000m³/day during periods of low flow.
26. Due to the severe restrictions imposed on the Feilding community during periods of low flow, in 2000 Council invested in groundwater abstraction as an augmentation option to the river source. The bores associated with this groundwater abstraction are located between Feilding and Bunnythorpe. The Resource consent allows for up to 9,600m³/day from Campbell Road bore and 6,000m³/day from the standby Newbury Line bore.
27. The TA Collective is concerned that the policy suggests that where groundwater is utilised it become the primary focus thereby reducing the reliance on the surface water takes.
28. In this case, the Manawatu District Council has chosen to have the groundwater source as augmentation only and does not want that to change. It would strongly object to any move to make the groundwater the primary source because of the following reasons:
 - (a) The quality of the water in the bores is less than that being treated from the surface take and significant further investment would be required to treat the groundwater;
 - (b) The surface water source is largely a gravity supply from the intake through the treatment plant and into town whereas the groundwater needs to be pumped so there is a cost implication if priority to groundwater were to occur;
 - (c) Council has invested \$2.8 to \$3.0 million in the last 5 years to upgrade the water treatment plant to meet 2005 drinking water standards at up to 9,000m³/day.
 - (d) It is good practice for community supplies of this scale (pop 14,500) to have certainty in water source and Council has invested in the groundwater source as augmentation but also to provide security of supply.

Richard Kirby
19 October 2009