

**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 EVIDENCE OF ANNE-MARIE WESTCOTT**

---

---

**BROOKFIELDS  
LAWYERS**

A M B Green / A F Cameron

Telephone No. 09 379 9350

Fax No. 09 379 3224

P O Box 240

DX CP24134

**AUCKLAND, MANUKAU & WELLINGTON**

## INTRODUCTION

1. My full name is Anne-Marie Westcott. I hold the position of Team Leader Environment with Ruapehu District Council.
2. I hold the degree of Bachelor of Science (Zoology) from Massey University. I am currently studying towards a Masters in Business Studies. I was employed by Ruapehu District Council to manage the solid waste service and implement waste minimisation in June 2003 and in June 2006 the portfolio was expanded to include the Council water services assets.
3. 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.
4. 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

5. This evidence is in respect of the Territorial Authorities' ("TAs") submission in respect of:
  - Objective 6-3; and
  - Policy 6-12, Policy 6-13, and Policy 6-14.
6. Water supply infrastructure and reticulation systems have been developed over a significant time period with its engineering structures and management enabling people, industries and agriculture to take and use water to meet their reasonable needs as set out in 6-3 (a) to (c).
7. The question for debate is what "reasonable needs" is and what defines "used efficiently". Policies 6-12, 6-13 and 6-14 give guidance to Horizons objective 6-13. Rules 15-1 to 15-8 give effect to the policy classifying the activity as: permitted, controlled, non-complying, prohibited or discretionary.

8. In their submissions on Policy 3-1 the TAs have already highlighted the need for water and wastewater treatment plants and their associated infrastructure (using the NAMS definition) to be recognised as infrastructure of regional and national importance. This submission addresses and supports Ruapehu District Council and the TAs' submissions at the Horizons Proposed One Plan General Hearing 1 on 2 July 2009.
9. This evidence will support the submission through a discussion of two case studies, with which I have been involved. These concern the water supply systems for Raetihi and Ohakune and their communities, in particular looking at what is sustainable, efficient and reasonable for our communities. What communities can sustainably afford is different for each community and the allocation requirement is different for different communities and will change over time. In my opinion, one size does not fit all.

## EVIDENCE IN SUPPORT OF SUBMISSION

### General Points of Sustainability and reasonable needs of a community

10. The challenge is to provide sustainable water supplies to small rural townships across the Ruapehu District. Council regards the delivery of the water supply activity as enabling communities to be supplied with potable drinking water to run households, maintain public health and provide for businesses and for fire fighting in emergencies, as an essential service for the public good. These formulate the reasonable needs of a community.
11. Sustainability is assessed using the four well beings: social, economic, environmental and cultural. Historical decisions around infrastructure affect the four well beings of our community and any change requires a level of certainty and lead in time to be economically viable for the communities.
12. Part of a community's **social well being** is the amenity value of the town. This starts with the small things: flowers in the garden, maintained lawns and infrastructure able to meet the communities' needs. Vibrant towns stimulate growth by inviting families, visitors and industries to join the community. There needs to be an allowance made for domestic use greater than allowed for in the policy during higher flow periods.
13. **Cultural events** provide exposure for the towns of Ohakune and Raetihi, for example the Mardi Gras, carrot festival and regular marae gatherings drawing both tourist and residents to spend time in the towns' stimulating economies. Mount Ruapehu has the

longest skiable vertical slope in the Southern Hemisphere and is the only ski field in a World Heritage National Park. These events and associated industries create prolonged “peak demands” on water supplies which must be considered in the planning of water supply capacity.

14. Consideration needs to be given to the culture of experiencing the winter/spring skiing holidays. It is not unusual to have more than one family per dwelling staying in a dwelling for a skiing holiday. The holiday and visitor numbers in Ohakune have been estimated at 3000 to 5000 people at peak times which well exceeds the resident population of 1500.
15. The **environment we live in** is not solely the domain of natural considerations but also the infrastructure environment in which humans obtain their basic needs to live. Reticulation systems require regular flushing to clean the pipes of “stale water and suspended materials”. This cleaning provides a healthy reticulation environment which is part of the requirements of drinking water legislation. Other legislation which places requirements on the reticulation system is the SNZ PAS 4509:2003 Code of Practice for New Zealand Fire Service Fire Fighting Water Supplies. The minimum flow from a hydrant should be 12.5 l/s for domestic properties and approximately 50 l/s at a school. Fire fighting capacity requires reticulation systems to have both water available for use, and velocity flow across the town.
16. The economic consideration affects the previous three well-beings. There are no large industrial plants in Ohakune or Raetihi to provide employment opportunities. The major employer is WPI Limited at Tangiwai, which employs over 300 personnel in the pulp mill and sawmill. The majority of other employment is from the service industries to the tourism trade and horticultural industry. Raetihi has a low Socioeconomic Deprivation score of 8 and Ohakune scores an 6. This indicates there is only a limited income earned by the communities and spending on infrastructure and growth must align with the communities’ ability to pay. Improvement and changes to the service can only occur at a rate the communities can sustainably afford. Funding available for capital development comes from the ratepayers, industries within the catchment obtaining benefit from the supply, or a government subsidy.
17. Policy 6-12 (c) does not allow for the amenity value of the town, cultural well-being or community environment requirements and economic formulation in its present forms as the formula does not consider the seasonal effects of tourism. Had there been an

adequate section 32 analysis done on the One Plan proposal in its entirety, such community considerations would have been obvious.

### **Population Change and Economic Status**

18. Usual residential population (URP) in Ruapehu District has trended downwards, with numbers from the 1996 to the 2006 census in Ohakune and Raetihi towns declining by 288 and 132 people respectively. However, this is an artificial picture of the communities.
19. Council plans for growth in properties of 2% per year (some 100 properties), but that figure was considerably exceeded in 2008/09. The census figures do not account for the “tourism and holiday” sectors. The projected population growth from 2008 to 2019 has been illustrated in figure 1 below. The district population is forecast to grow at an overall rate of 2.5% per annum. For the year ending December 2006, Ruapehu District attracted 386,458 overnight visitors. Annual growth in the visitor industry since 1996 has been 5% on average. An analysis of the tourism statistics showed that holiday home numbers were increasing at 1.8% per annum in Ohakune.
20. The investment in infrastructure by Ruapehu Alpine Lifts has seen the potential volume of skiers on the Turoa ski field increase significantly since 2005. It is now possible to have visitors on the Turoa slopes on a given day reach 7000 people. While they do not all stay in Ohakune the number of holiday homes is now 41% of the homes in the town. This trend is expected to expand across into Raetihi which is less than 15 minutes from Ohakune township. These trends impact demand but are not obvious in usually resident population figures.

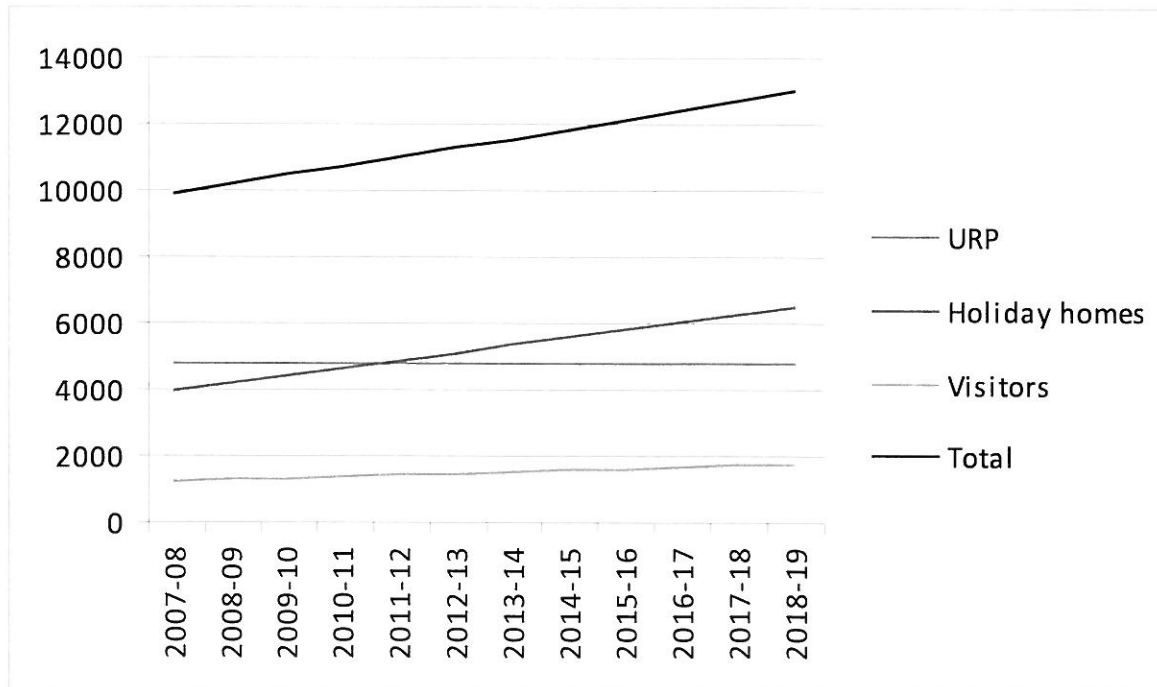


Figure 1 Projected Growth

### Cost to community

- Community infrastructure is intergenerational, requiring both certainty of the resource and an affordable payback period. Policy 6-15 should trigger a community asset review at the time of the common expiry dates to provide certainty for the infrastructure. These reviews should not be the actual expiry of the consent.. The review should ensure that the water resource has been not been locked up but is actively being managed to the benefit of the greater community and the environment.

### Raetihi Water Supply

- Raetihi Water Supply Reticulation system is about 45 years old and was installed using sewer grade asbestos cement pipes. The accepted life of these pipes is about 30 years. The general perception is that at least some of these pipes are porous enough to “lose” the amount of water that cannot be accounted for. Also the “take-off connections” that had been exposed during normal operation have proved to be leaking in most cases. This accounts for the fact that the average usage is more than double the national average. Raetihi water supply has an aged infrastructure, with larger property sections, low social economic population and older housing. A range of measures has been tried over the years to identify and solve the problem of water use/loss with a general trend down in average daily

consumption (figure 2), reflecting general improvements in efficiency, removal of gravity overflows at the take, and/or greater understanding of the need to act more sustainably.

23. Whilst Council endeavours to replace pipe work at a rate that is economically sustainable, there is no short term fix to Raetihi's water consumption issue.

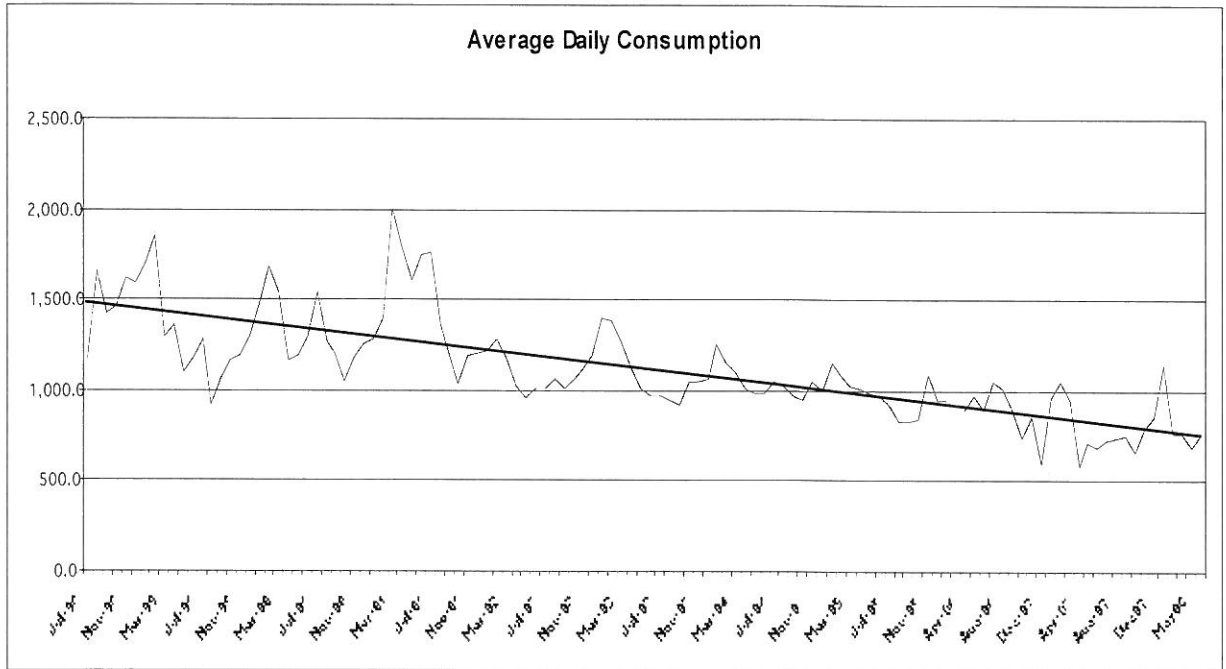


Figure 2 Raetihi Average Daily Consumption

24. The “one size fits all” per-capita allocation in the One Plan clearly makes Raetihi non-complying as it would not meet Policy 6-13's technical efficiency test. This is a limited definition of efficiency as it does not encompass the concepts of economic efficiency, social equity or intergenerational equity.
25. A mechanism to affording improved infrastructure in an accelerated fashion is to allow the sponsoring of change through transferable water permits. Such a transfer would require Policy 6-13 to support a permitted or a controlled activity status. This would enable current allocation to be set aside for future community growth and asset managers could transfer their future allocation to other users in the short term, with certainty that this water would be available for community use at a later date.

### Ohakune Water Supply

26. Policy 6-13 does not account for seasonal consumption demands. The washing of vegetables by market gardeners is largely undertaken before the summer low flow periods.

Applying the policy for 365 days of the year will restrict the opportunities to attract industry to the towns, such as primary winter tourism, secondary ancillary businesses and vegetable processing.

27. Ohakune average monthly water demand is graphically described in figure 3. The trend is for high demand in the winter period and lower demand during the drier months when streams are more likely to be operating at minimum flows and the ecosystem is under greater stress.
28. Again, applying the formula in Policy 6-13 does not allow for Ohakune's unique need to cater for the tourism industry and high day visitor numbers enjoying the township infrastructure.

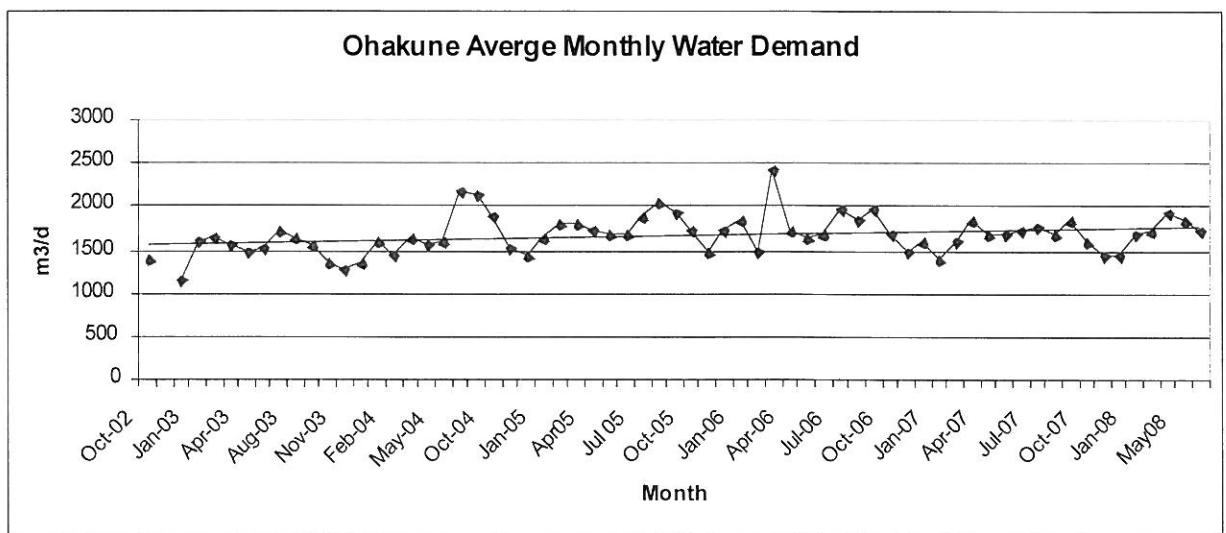


Figure 3 Ohakune Average Monthly Water Demand.

## CONCLUSION

29. Growing healthy communities require a level of certainty around infrastructure and water allocation which is vital for their survival. District Councils are legislatively required to produce water to drinking water standards and volumes for fire fighting. The question is around the "reasonable needs" of the communities, other users and the environment to give effect to the life supporting capacity of the aquatic ecosystem.
30. The allocation system proposed under policy 6-13 does not account for community by community variations. The Ohakune example demonstrates that an allocation based on 300 litres per person per day does not cater for the extra demand of the tourism industry. Negotiating allocation by consultation does not provide certainty. The Raetihi example demonstrates that effective, efficient and sustainable resource use must be considered



over time at a rate which communities can afford. One of the possible mechanisms to overcome lack of certainty and potentially increase affordability is to consider permitted transferable consents.

31. The development of community infrastructure has an intergenerational payback period which requires certainty to allow new infrastructural development. Policy 6-15 should trigger a community asset review at the time of the common expiry dates. These reviews should not be the actual expiry of the consent, to provide certainty for the infrastructure. The review should ensure that the water resource has been not been locked up but is actively being managed to the benefit of the greater community and the environment.

**Anne-Marie Westcott**  
October 2009

One Plan Background - Water allocation for Urban Towns

	Raetihi	90 percentile	Ohakune	90 percentile	peak
	Average	Up to 50	Average	Up to 50	Up to 50
System Age (years)	24		39		39
Retiulation Length (km)	345		700		
Rural Area served (ha)	180		245		
Urban Connections	?				872
Rural Connections	19*		872		
Farm connections	5		62		
Commercial / Industrial recreation / Community					
<b>TOTAL CONNECTIONS</b>	<b>185</b>		<b>1179</b>		
Urban Pop.	1035		1445		3624
Total holiday homes			2331		2331
Rural Pop					
<b>Total</b>	<b>1035</b>		<b>3776</b>		<b>5624</b>
Abstracted (m <sup>3</sup> /day)	698	820	2000	2500	2500
unused abstracted (m <sup>3</sup> /day)	0	0	0	0	
water to reticulation (m <sup>3</sup> /day)	711.7	711.7	1700	2061	2695.4
Rural use (m <sup>3</sup> /day)	8	16	313	400	400
Commercial (m <sup>3</sup> /day)	150		150	150	
Community Uses (m <sup>3</sup> /day)	30%	30%	15%	15%	15%
Network losses (%)	214	214	255	309	404
Network losses (m <sup>3</sup> /day)					
Unaccounted / night losses					
Domesic (m <sup>3</sup> /day)	340	482	982	1,202	1,891
<b>Domestic (L/person/day)</b>	<b>329</b>	<b>466</b>	<b>260</b>	<b>318</b>	<b>522</b>
<b>Water take per capita (L/person/day)</b>	<b>674</b>	<b>792</b>	<b>530</b>	<b>662</b>	<b>690</b>
% of abstracted that domestic represents	49%	0%	49%	0%	76%
% of abstracted that commercial & community represent	23%	2%	23%	22%	16%
% of abstracted that Rural/farming represents	0%	0%	0%	0%	0%
% of abstracted that unaccounted/losses represent	31%	26%	13%	12%	16%

2072\* \* model 2004