

MINUTES

TITLE: Environment & Planning Subcommittee
Commissioner Hearing
DATE: Monday, 1 March 2010 to Friday, 12 March 2010
TIME: 10.30 am
VENUE: Conference Rooms, Motueka Top 10 Holiday Park,
10 Fearon Street, Motueka and Club Waimea, Lower
Queen Street, Richmond, Nelson.

PRESENT: Dr Jeff Jones (Chair), Mr Warwick Heal, Ms Emma
Christmas

IN ATTENDANCE: Sinclair Knight Merz Limited (Gillian Holmes), Principal
Resource Consents Advisor (J Butler), Executive Assistant
(V M Gribble) and Administration Officer (J A Proctor)

APPLICATION NO RM070187: TASMAN DISTRICT COUNCIL (ENGINEERING SERVICES DEPARTMENT)

The application seeks to take and use up to 20,000 cubic metres of groundwater per day at a maximum instantaneous rate of 310 litres per second (average rate of 231 litres per second) for the purpose of community water supply. The groundwater would be abstracted from the Central Plains Zone of the Motueka-Riwaka Plains Aquifer using a well field consisting of up to nine bores, eight of which would be used and one would be a back-up.

The water will be used to supply the townships of Motueka, Riwaka, Tasman Village, Mapua/Ruby Bay, and for rural areas surrounding these townships, including land now zoned Rural 3 under the proposed Tasman Resource Management Plan (TRMP).

The activity is a non-complying activity according to the TRMP.

The application site is located at 22 Parker Street, Motueka, being legally described as Lot 1 DP 374788, CT 301414.

Dr Jones advised that upon hearing that he had been appointed Chair of the hearing, he had alerted Tasman District Council (TDC) staff that there was a potential conflict of interest regarding the Mitchell Research report commissioned by Council as he was related by marriage to John Mitchell. The applicant and major submitters were consulted and no objections were raised.

Dr Jones advised that late on Friday 26 February 2010 Mr Butler had received an e-mail from Paul Majurey (Atkins Holm Joseph Majurey Ltd), lead counsel for one of the main submitters, Whakatu Incorporation. The e-mail requested an adjournment due to illness; however, the panel had decided to proceed and would adjourn the hearing at a later stage to a set date and time.

Mr Butler advised that the Department of Conservation no longer wished to be heard and would table a written submission instead.

The Commissioners proceeded to hear the application, presentation of submissions and staff reports are detailed in the following report and decision.

IN THE MATTER OF

the Resource Management Act 1991

AND

IN THE MATTER OF

Application RM070187 by Tasman District Council (Engineering Department) to Tasman District Council for a resource consent to take groundwater for community supply purposes.

**Decision of the Hearing Commissioners
Dr Jeff Jones, Mr Warwick Heal and Ms Emma Christmas**

Appearances

Applicant

Mr Julian Ironside (Counsel for applicant)
Mr Peter Thomson (Engineering Manager)
Mr Jeffery Cuthbertson (Utilities Asset Manager)
Mr Joseph Thomas (Resource Scientist, Water)
Mr Julian Weir (Aqualink Research Ltd)
Dr Hugh Thorpe (Independent Peer Review Consultant)
Ms Francis Lojkin (Planner – MWH New Zealand Limited)
Mr Richard Lester (MWH New Zealand Limited)

Submitters

Mr Kevin Palmer (Lower Moutere Water Scheme Limited)
Mr Richard Horrell (Horrell Farms (Motueka) Limited)
Mr Andrew Hamilton (Kildrummy Holdings Ltd)
Mr John (Jim) Butler
Mr Philip Peters
Ms Suzanne Park
Mr Matt Molloy (Nelson Marlborough District Health Board)
Mr David Ogilvie
Mr Donald Graves
Mr Peter Canton
Ms Elizabeth Bryant
Ms Betty Fry
Ms Diane Anderson
Mr Graeme Coleman
Mr Paul Majurey (Counsel for Tāngata Whenua submitters)
Mr Ropata Taylor (Wakatu Incorporation, Te Ātiawa, Ngāti Rārua, Ngāti Tama & Ngāti Koata)
Mr Barney Thomas (Wakatu Incorporation, Ngāti Rārua)
Ms Sandra Morrison (Rore Lands Ltd and Ngāti Rārua)
Ms Kura Stafford (Rore Lands Ltd and Ngāti Rārua)

Council Officers

Mr Neil Tyson (Consent Planner, Water)
Ms Gillian Holmes (Modelling Consultant)

In Attendance

Mr Jeremy Butler, Principal Resource Consents Adviser (assisting the Commissioners)
Ms Julie Proctor/ Ms Valerie Gribble, Minutes Secretaries

Summary

1. A Panel of three hearing commissioners ('the Panel') appointed by the Tasman District Council ('the Council') has granted a resource consent (water permit) to the Tasman District Council's Engineering Department ('the applicant').
2. The applicant sought 20,000 cubic metres per day of groundwater from the Te Matu Zone within the Central Plains Zone of the Motueka-Riwaka Plains Aquifer for the Motueka Coastal Community Water Supply Scheme ('the MCCWS'), for a 35 year term.
3. The amount granted is reduced to 16,000 cubic metres per day (at a maximum rate of take of 247 litres per second) and the consent is granted until 31 May 2033 (approximately 23 years).
4. This consent is granted because, after considering the applicant's Assessment of Environmental Effects, all submissions received, the applicant's case and evidence, submissions and evidence from submitters at a hearing, and the reporting officers' Section 42A reports, and in making a broad overall judgement, the commissioners consider that the proposal, subject to the reviewed quantity and term and conditions set, would be consistent with the purpose of the Resource Management Act 1991 ('the Act'), namely the promotion of the sustainable management of natural and physical resources.

Introduction

The Application

5. On 8 March 2007 the applicant applied to the Council for a resource consent (water permit) to take 20,000 cubic metres per day (m³/d) of groundwater from the Central Plains Zone of the Motueka-Riwaka Plains Aquifer for the MCCWS. The maximum instantaneous rate of take applied for was 310 litres per second (l/s) with an average rate of take of 231 l/s.
6. The MCCWS, at full development, would use a well-field consisting of up to nine bores, eight of which would be used routinely and one would be a back-up. The land on which the well-field is intended to be located is zoned Rural 1 under the Tasman Resource Management Plan ('TRMP') and adjoins land zoned Residential at the western end of Parker Street in Motueka.
7. As a unitary authority the Tasman District Council is responsible for both territorial authority functions (such as the provision of water services) as well as regional functions such as the processing and determination of water permit applications. In this sense different arms of the Council act as applicant and regulator.
8. Due to this dual role it is common practice, and one which was largely observed in this case, for the regulatory arm (the consents department) to engage resource

management technical consultants to assess and report on such applications, and independent Commissioners to hear and determine such applications.

9. The application was formally received by the Council's in-house consents staff on 13 March 2007 and its processing was contracted out to Sinclair Knight Merz (SKM) which is a consultancy with expertise in groundwater modelling, geohydrology and planning. The application was publicly notified on 24 March 2007. Submissions were received both in opposition and support as discussed below.
10. Further information was sought under Section 92(1) on 30 March 2007 by SKM. Subsequent to the provision of the information by the applicant, the applicant also commissioned a report by Mitchell Research Ltd. The purpose of the report was to gain a more thorough and in-depth understanding of the matters that had been raised in submissions by local Maori and Iwi groups.
11. As we understand it SKM continued to process the application on behalf of the Council until January 2010 when it found it no longer had the capacity to do so. The processing of the application and the Section 42A reporting was thereafter split between an SKM consultant, Ms Gillian Holmes, who continued to report on the modelling, local groundwater draw-down effects and other technical matters, and the Council consent planner Mr Neil Tyson.

Plan Change 13 and Variation 66

12. Subsequent to it being lodged, the application was placed on hold at the applicant's request (Section 37) from after the closing date for submissions on 2 May 2007. In the intervening time between the application being placed on hold and being heard by the Panel, the Tasman District Council's Policy Section progressed a Plan Change and a Variation to the Tasman Resource Management Plan (Plan Change 13 and Variation 66).
13. We were advised that decisions had been made by Council acting on the recommendations of an independent commissioner confirming these changes, a copy of which we sought and was provided to us.
14. Adopting Ms Lojkine's evidence for the applicant, we note that the two most significant changes as a result of Plan Change 13 and Variation 66 with respect to the proposed MCCWS are that:
 - The Central Plains Zone of the Motueka-Riwaka Plains Aquifer has been split into two zones, the Central Plains Zone and the Te Matu Zone, and the total combined water allocation limit of the two zones has been lifted by 284 litres per second. The new allocation limits for the two zones are now 795 l/s and 344 l/s, respectively;
 - 231 litres per second of water in the Te Matu Zone has been reserved in Schedule 31.1D of the TRMP for Community Supply.
15. We were also advised that this Plan Change and Variation have been appealed to the Environment Court by three parties.

Status of the activity

16. It is common ground between all parties that the application we are considering has a non-complying status. We accept and adopt Ms Lojkine's paragraphs 3.1 to 3.5

which explain the reason for the application being non-complying at the time the application was made. The salient point is that the amount applied for by the Council exceeded the then available allocation resulting in the application being a non-complying activity.

17. The changes brought about by Plan Change 13 and Variation 66 would mean that, had the same application been made under those provisions, the application would have been considered as a Controlled activity. However, Section 88A(1A) of the Act requires that the consent application must continue to be processed as a non-complying activity. This is not disputed by any party.
18. This means that, before we can consider the application under s.104 and Part 2 of the Act, we must determine whether or not the application is able to pass the so called gateway tests in Section 104D(1). See Paragraph 265 onwards for further discussion and our findings on Section 104D.
19. Having said that, Section 88A(2) of the Act states that we must have regard to any proposed plan which exists when we consider the application in accordance with Section 104(1)(b). In other words, while the status stays as non-complying we must have regard to the provisions of the plan as altered by Variation 66.

Submissions

20. A total of 419 submissions were received.
21. Mr Tyson in the Council's staff report summarised the submissions in opposition thus:
 - That water is a taonga and should not be exported or transported away from Motueka where it is required for growth and prosperity. Many of these submitters highlight the yet to be settled claim by Iwi to the Waitangi Tribunal and oppose the application until the claim and the question of ownership is resolved.
 - That abstraction will have an adverse and unacceptable affect on the reliability of household bores resulting in the need for residents to deepen or drill new bores, install submersible pumps and other such works; and
 - Many submitters consider that issues of reticulation to Motueka Township must be addressed now and not deferred until 2016 and that lack of water reticulation is hindering Motueka's development.
 - Many submitters are unconvinced that the applicant's investigations and technical evidence have sufficiently demonstrated that the water is sustainably available and are concerned about increased seawater intrusion, increased water rationing including adverse impacts on horticultural production and other water uses.
 - Many question the logic of transferring Motueka water to water short areas particularly if Motueka is adversely affected.
 - Submitters in support consider that reticulated supply is needed to achieve good quality supply to households and businesses, and also that water reticulation will provide water for firefighting.

22. Ms Lojkin summarised the submissions in opposition by noting the following concerns:
- Adverse effects on neighbouring bores, on Motueka household bores and associated costs;
 - The unsustainable nature of the abstraction, over allocation of the resource, and effects on the groundwater velocity and water pressure;
 - Insufficient provision of water for irrigable land in the area, as new crops may have different water needs;
 - The inappropriateness of transferring water away from Motueka and therefore restricting further development of land;
 - Effect on river levels and aquifer recharge rates and on wetlands and spring-fed streams;
 - Effects on saltwater intrusion;
 - Reduction in water quality as a result of groundwater abstraction;
 - The cumulative effect of the take and climate change;
 - Property subsidence;
 - Dissatisfaction with the process adopted by Council
 - Insufficient consultation;
 - Inconsistency of application with TRMP and Part 2 of the RMA;
 - Issue should be dealt with by way of a plan change.
23. We have read and considered all of the submissions, as well as the Mitchell Research report commissioned by the applicant, and we consider that these summaries adequately identify the matters raised in the written submissions.

The Hearing

24. The Council appointed a panel of commissioners to hear and decide the application. The panel consisted of Dr Jeff Jones (chair), a professional engineer with expertise in resource management, river management and groundwater modelling, Ms Emma Christmas, a consultant planner with extensive experience in regional consents including the taking and using of water, and Mr Warwick Heal, a barrister specialising in resource management and local body law. All panel members are accredited hearing commissioners.
25. On the Sunday before the hearing (28 February 2010) advice was received that the main witness for the Tāngata Whenua submitters, Mr Ropata Taylor, was unwell and would not be able to attend the hearing. After some negotiation a directive was issued from the Chair on 4 March 2010 that, in addition to holding the hearing at the scheduled time, the hearing would be reconvened on the following Friday (12 March 2010) when the Tāngata Whenua submitters would be heard. It was anticipated that Mr Taylor would be well enough by that time.

26. The hearing was held initially at the Motueka Top 10 Motor Camp's conference rooms in Motueka, between 1 and 4 March 2010 and was reconvened at the Waimea Club in Richmond, on 12 March 2010.
27. We undertook a general site visit on 28 February 2010, and we looked at a number of features relevant to issues that had been raised in the hearing on 2 March 2010.
28. During the course of our deliberations, following adjournment of the hearing on 12 March 2010, we identified several matters for which we considered we needed additional information. As the matters arose in a somewhat disparate manner, several separate requests for information were made to the applicant. These are summarised as follows:

Information sought, form of request and date	Information received, form of response and date
Estimated future demand for the MCCWS to 31 May 2033 and 31 May 2045. Verbal request during reconvened hearing 12 March 2010 and in letter dated 22 March 2010.	Report and revised Table 3.1. Provided 26 March 2010.
The applicant's perspective on assessing Maori cultural beliefs and metaphysical arguments under the Act. Verbal request during reconvened hearing 12 March 2010.	Report and attached schedule. Provided 26 March 2010.
Further information and modelling on the effect of the proposed water take on Thorp Drain, along with any volunteered conditions to address any effects or uncertainty. Letter dated 22 March 2010	Report and Aqualinc evidence. Provided 1 April 2010.
Further information about management of existing rural water supplies that are transferred to the proposed MCCWS, and any volunteered conditions. Email dated 8 April 2010.	Provided by e-mail. Provided 14 April 2010.

29. These requests and the information received from the applicant were subsequently made available to all parties who had attended the hearing or who had otherwise shown an interest or involvement in the proceedings¹. A schedule was distributed to allow time for submitters and reporting officers to comment on the further information, and subsequently for the applicant to provide a written reply to those comments.
30. We reviewed all the information before us in early April 2010 and we were satisfied that we had all the information necessary to make our decisions. The Chair closed the hearing on 28 April 2010.

¹ A large number of submissions were received from around the country and many seemed to be copies of a standard form objection. Also, several years had elapsed since the application was notified and many items of correspondence were returned as undeliverable. A relatively small number of people attended the hearing and it was considered appropriate and efficient that the information be disseminated only to those parties who remained actively interested and involved.

Description of the Proposal

Motueka and the Motueka-Riwaka Plains Aquifer

31. The Motueka River is fed by the largest catchment in the Tasman District. Much of the catchment is in the conservation estate; principally Kahurangi National Park.
32. For the purposes of aquifer recharge the Motueka River effectively exits the confined Motueka Valley and onto the Motueka-Riwaka plains at a site called Woodmans Bend. From this point there are considerable flow losses from the river, into what is described in the applicant's evidence as a "leaky three-layered alluvial gravel aquifer".
33. A more thorough description of the groundwater environment is contained within Mr Joseph Thomas's evidence and it is not repeated here.
34. The aquifer is divided into several management zones that are delineated according to the sustainable yield and characteristics of the aquifer. Of note is the Central Plains Zone which underlies Motueka, the Hau Plains Zone which has in the past been affected by saltwater intrusion, and the Te Matu Zone from which the groundwater take is proposed.
35. Motueka is a medium sized service town with a range of industries and a growing tourism market. The town serves the predominantly horticultural land use of the plains.
36. The land in and around Motueka has had a long history of Maori settlement and ownership as detailed by many submitters and the Tāngata Whenua presentations at the hearing.
37. The majority of Motueka is currently served by a large network of shallow private bores used for domestic supply.
38. In addition to these private bores, the applicant currently operates two small reticulation schemes using water taken from production bores on Fearon Street and Old Wharf Road, respectively. These reticulation networks provide water for 950 of the approximately 3085 properties in the town. The reticulation systems have no storage built in, relying on the piped network to operate as a pressure vessel.
39. Where water is supplied by the applicant, water meters are installed to allow monitoring and billing of water use. We were advised that this is common practice in most of urban areas of the Tasman District, particularly in the water short areas such as Richmond.
40. Private production bores for supplying irrigation water for horticultural production surround Motueka. We were advised that these are generally deeper with greater production capacities. Most irrigation supplies are authorised by specific water permits or other historic authorisations.

The Motueka Coastal Community Water Supply (MCCWS)

41. The applicant seeks consent to take water from the Te Matu Zone and supply it to the following areas **as a metered urban supply**:
 - The Motueka Town Water Supply – Plains Scheme; and

- The Mapua Urban Area;

and to supply the following areas **as a restrictor-limited domestic supply**:

- Riwaka;
- Rural Motueka;
- Lower Moutere;
- The Coastal Tasman Area;
- Tasman Village;
- The Rural 3 Zone;
- The Mapua rural area;
- Braeburn; and
- Dovedale.

42. A map of the supply areas is shown in Appendix 4 attached.

43. The volunteered maximum volume for the restrictor-limited properties is 1.5 cubic metres per day per property, with the exception of the Rural 3 zone, the Mapua Rural area and Dovedale.

44. In the case of these latter areas the Council currently provides rural water supplies from other sources and sought to be able to migrate the consumers onto the MCCWS but retain them on their existing volume allowances as it was considered unfair to cut back their entitlements.

45. The proposed water take is from a wellfield (see appendix 3 attached) to be located within the Te Matu water management zone (which itself lies within the Central Plains water management zone) on the applicant's land at Parker Street, Motueka. A maximum daily take of 20,000 cubic metres is sought, at an average rate of take of 231 litres per second, to supply the areas stated above. The maximum instantaneous rate of take would be 310 litres per second as it is proposed that pumping would only take place for up to 18 hours per day.

Summary of Evidence

46. We heard evidence from the applicant, expert witnesses, submitters, and the Council's reporting officers. The following is a summary of the evidence heard at the hearing. This summary focuses on the matters that we consider most in contention and pertinent to our task of making a decision.

47. Some of the initial evidence provided to us, particularly by the applicant, was subsequently updated by the provision of new evidence requested by us in clarification at the hearing, or as a consequence of our preliminary deliberations. This summary of evidence focuses on the latest and most up to date evidence presented which describes the proposal most accurately.

The Applicant

48. The applicant was represented by legal counsel and 7 witnesses.
49. **Mr Julian Ironside**, a solicitor with Fletcher Vautier Moore, presented legal submissions. Mr Ironside emphasised the growth that has occurred, and is projected to occur in the major towns of Richmond and Motueka, as well as in the coastal belt known as the Coastal Tasman Area (CTA). This growth has placed Council's existing supplies under strain and some are at maximum capacity.
50. Mr Ironside suggested that, essentially, Mapua and the CTA are water poor and Motueka is water rich due to the Motueka River and the groundwater aquifers. He said that the groundwater discharges in substantial quantities from those aquifers into the sea via subsurface flow and coastal springs.
51. Mr Ironside said that the extensive network of private bores taking water from a shallow and unconfined aquifer carries health risks through potential contamination of the water. He said that studies demonstrate that there are unacceptable risks both within the existing reticulated supply and in the use of private bores.
52. Mr Ironside outlined the planning issues relating to Variation 66 and the status of the activity. He said that the proposed take does not exceed the amount reserved for Community Supply within the Te Matu zone. However, he agreed that the activity still retained the non-complying status.
53. **Mr Peter Thomson**, the applicant's Engineering Manager, said that potable water supply is a significant core activity of the Council and of strategic importance to the health and wellbeing of Tasman communities and residents. He said that the Council has a responsibility under the Local Government Act 2002 to provide for the health and wellbeing of communities and providing potable water is a principal way of doing this.
54. He said that the water sought will be used exclusively for potable supply. It was made clear to us that the MCCWS will not be a rural water supply scheme and will not be used for irrigation. Instead it is purely for potable use by either a metered (for urban communities) or restricted (for rural supplies) supply.
55. Mr Thomson said that the existing Motueka water supply has no storage reservoir, is pressurised solely by pumps, does not serve the entire community, and does not provide suitable fire-fighting capacity.
56. Mr Thomson went on to identify the pressures and constraints on the current water supplies in the other areas to be covered by the MCCWS.
57. Mr Thomson tabled an overview from an Auditor-General's report which emphasised the importance of drinking water supplies in New Zealand and also stated the importance of sensible use of water. The report called for greater interest in the way local authorities manage water supplies now and how they plan to meet future demand.
58. In response to a question, Mr Thompson said that a 20 year term would be the minimum that the Council could consider to enable implementation of the scheme.
59. Commissioners noted that submitters appeared to be concerned that Motueka would be the last area to be reticulated. Mr Thomson advised that the 2009 Long Term

Council Community Plan (LTCCP) stated that the Motueka urban area would be the first to be reticulated.

60. Clarification was sought as to whether the Council was proposing 1.5 m³ per day or 1.0 m³ per day maximum allocation per property for the restricted supply areas as both figures had appeared in evidence. Mr Thomson stated that ultimately what is provided would be reviewed by the Council but 1.5 m³ per day is sought.
61. **Mr Jeffery Cuthbertson**, the applicant's Utilities Asset Manager, said that the MCCWS's objectives were to provide potable water to the Motueka community, provide potable water to the coastal areas between Motueka and Mapua, and provide potable water to the Mapua community.
62. Mr Cuthbertson confirmed that the Motueka Town Water Supply – Coastal Scheme (see Appendix 1 attached) would operate independently of the proposed MCCWS.
63. The Motueka Town Water Supply – Plains Scheme (see Appendix 2 attached) will include the commercial business district where it will also provide a fire fighting supply as well as servicing the unreticulated parts of Motueka.
64. Mr Cuthbertson said that the demand projection is based on a Population Growth Forecast Study to 2060.
65. He said that the water from the wellfield will be treated in accordance with the New Zealand Drinking Water Standards 2008. The raw water already meets the standards in most respects but would be pH corrected and sterilised by UV irradiation.
66. Mr Cuthbertson disagreed with the expiry date suggested by Council staff of 2015 (which is in-line with the common expiry date for the zone specified in the TRMP) as it would not take into account the purpose and importance of the supply. He said that it also did not reflect the time and capital expenditure necessary to implement the MCWWS.
67. Mr Cuthbertson then addressed the recommended conditions. He disagreed with a leakage limit of 5% being applied and claimed that this is not achievable. He said that it is not practicable to limit losses, but better to require the Council to document the losses actually occurring and then the initiatives that are being implemented to reduce these leakage losses. He presented evidence that showed that in New Zealand most schemes have leakage losses of between 10% and 20%.
68. He said that there needs to be flexibility in the proposed limitations on water supply volumes based on geographical areas (as proposed in the applicant's Condition 6). He said that some areas may develop faster or slower and the volumes supplied would need to vary accordingly. He volunteered a split between the Motueka Urban and Rural and Riwaka areas on one hand, and the CTA and Mapua areas on the other, with a maximum percentage of the water applied to each.
69. Mr Cuthbertson also said that the intention is, where properties currently have access to more than 1.5 cubic metres of water per day through existing schemes (the Redwood Valley Scheme in the southern part of the Rural 3 zone, the Rural Mapua Scheme in the northern Rural 3 zone and the Dovedale Scheme in Dovedale) then the current supply volumes be continued when they get transferred to the MCCWS. He did not consider it appropriate that people have their access to water reduced.

70. In order to address a common concern of submitters drawing from shallow wells in the vicinity of the well field, Mr Cuthbertson volunteered a condition which would specify a “zone of effect” around the wellfield (see Appendix 6 attached) and would allow properties within that zone to connect to a reticulated water supply without payment of a connection charge.
71. Mr Cuthbertson said that the existing water permit for the take from the Old Wharf Road production bore would be retained for supplying the Motueka Town Water Supply, Coastal Scheme reticulation.
72. **Mr Joseph Thomas**, the Council’s Resource Scientist for Water and Special Projects, said that most access to the groundwater below Motueka for individual domestic supplies is via driven pipes, dug wells or drilled bores. The depth of each depends on the method with the former two being shallow and relatively unreliable during dry periods.
73. He outlined the history of water investigation and management on the Motueka Plains, as well as the development of knowledge of the relationship between the river and the aquifer system fed by it. He then outlined the development of a regional dynamic river/aquifer model. The first model was completed in 1999 and was used to determine allocation limits for the various zones on the Plains. Mr Thomas said that the first model used very conservative triggers and the limited hydraulic data available at the time. He noted that the initial model was conservative and that it has always been suspected that there was potential for higher allocation limits to be set in the middle of Motueka Plains because the measured flow of water from the Motueka River to the aquifer system was known to be higher than the initial model predicted.
74. Considerable investigation was then put into the effects of taking water for a long term community water supply and the results were included in the 2007 application.
75. Since then further modelling work has been undertaken by the Council to re-evaluate the whole of the Motueka/Riwaka Plains in terms of water allocation. This work was completed in early 2008 and formed the basis for Variation 66.
76. Mr Thomas commented on the environmental changes expected as a result of climate change. He said that NIWA expect slightly less rainfall in summer but significantly more rainfall in winter, especially by 2090. As these predictions have not been translated into daily predictions they cannot be integrated with the model. He said that there is however, sufficient conservatism in the model to allow for future climate change.
77. Mr Thomas stated that the lower limit of the Water Conservation Order (WCO) for the Motueka River is the Shaggery confluence with the Motueka River, above the possible area of influence resulting from the proposed extraction. This lower limit was agreed to by Fish and Game NZ as it is below this point that the river naturally loses substantial amounts of water to the aquifer.
78. Mr Thomas said that it is important to note that a loss of 13% of the Motueka River flow to the aquifer includes both natural and induced recharge, and that the natural recharge will occur whether there is any induced recharge or not, and that this forms part of the natural system.
79. Mr Thomas said that the proposal has been deliberately designed to maximise the amount of recharge from the river so that less is taken from the groundwater. But

even so, he said that the extra induced recharge of 186 l/s due to this proposed abstraction equates to only 1.9% of the 5 year low flow or 2.4% of the 50 year low flow at Woodmans Bend. Further, this loss of river flow to induced recharge would equate to a river level drop of about 9 millimetres and a reduction in the wetted perimeter reduction of about 80 mm which equates to 0.2% in wetted perimeter in a mean annual low flow situation. His considered view was that such reduction would be barely perceptible.

80. Mr Thomas said that the total existing and proposed recharge induced from pumping the aquifer in a 20 year drought would equate to a loss of 5.7% of the river flow at Woodmans Bend. In this scenario, total induced recharge volume would result in a river level drop of about 27 mm and a wetted perimeter reduction of 240 mm, which is 0.6% of the wetted perimeter at mean annual low flow.
81. Mr Thomas concluded that the impact of induced recharge in the Motueka River due to pumping for the proposed MCCWS is less than minor.
82. **Mr Julian Weir**, a hydrogeologist and modeller for Aqualinc Research Limited, presented evidence about the modelling of the aquifer that has been done, and the calibration and verification of that model. The reader is referred to that evidence.
83. Mr Weir said that the proposed well field site was selected to minimise the effects on the regional aquifer system and to safeguard the site from saltwater intrusion. He said that the optimum design incorporates eight production bores that draw water from the deepest water bearing layer of the aquifer.
84. In addition to domestic bores, there are five irrigation bores that are nearby to the wellfield. Mr Weir said that direct interference on these bores was predicted by the model to be a 0.5 to 0.7 metres reduction in static water level after 150 days of continuous pumping. He considered this to be a small effect on three of the five bores.
85. Mr Weir expected that neighbouring domestic bores within 1 kilometre could experience a reduction in the ability to pump during periods of low groundwater levels.
86. Mr Weir emphasised that the predictions from the model were all very conservative as they included pumping at the maximum rate every day, which is unlikely to occur. The predicted effects are also calculated on top of the observed groundwater levels which are affected by existing domestic takes, some of which could be expected to cease once a high quality, reliable reticulated water supply was readily available.
87. In dealing with the regional groundwater model that had also been developed, Mr Weir said that good fits between simulated and observed groundwater levels have been achieved, meaning that the model is well calibrated.
88. Mr Weir said that the regional model predicted that the proposed abstraction may lower regional groundwater levels by, on average, approximately 0.2 metres over the Plains. He noted that this should be considered against the natural seasonal fluctuation of 2-3 metres.
89. Mr Weir said that the modelling suggested no adverse effects from saltwater intrusion at a regional scale. He said that at a local scale saltwater intrusion cannot be predicted but noted that bores should continue to be positioned away from the saltwater / freshwater interface.

90. He agreed with Mr Thomas that the proposed take will induce immeasurably small extra recharge from the Motueka River of approximately 1% of the MALF and less than 3% of the 1-in-20 year low flow.
91. Mr Weir said that the proposed take is predicted to reduce Central Plains spring flows by approximately 5%, due to a reduction in groundwater levels at the coast.
92. He reported on more recent model enhancements and a sustainable level of regional water allocation. He said that an excellent level of calibration has been achieved, and determined that the optimal location to take water for the stated purpose is from the area that includes the proposed wellfield.
93. Mr Weir also said that the modelling work concluded that an additional abstraction of 24,500 m³/day is sustainable from the Te Matu Zone, given the restrictions on the Hau Plains. Therefore, he considered the proposed 20,000 m³ sought to be conservative and sustainable.
94. **Dr Hugh Thorpe**, who was engaged as an Independent Peer Review Consultant, said that he considered the saltwater intrusion into the coastal part of the Hau Plains zone to be the major issue.
95. Dr Thorpe concluded that Aqualinc have studied the situation, developed and applied a model, and reported the results competently and that the conclusions are sound.
96. However, Dr Thorpe identified some improvements for the model. Notably he said that sea level rise could and, at some stage in the future, should be modelled as it may increase the likelihood of saltwater intrusion at the seaward margins of the zones. He recommended more monitoring bores along the margin.
97. However, he said that the saltwater intrusion that occurred in 1990 demonstrates that the system is capable of self-correcting if the stress is removed. I.e. adverse effects can be reversed by correct management.
98. Dr Thorpe also said, with reference to policy 30.1.11 of the TRMP, that the reduction in spring flows “meets the criterion of not more than 35%”² but that the effects should be expressed as changes to individual spring flows rather than grouped. He acknowledged that this would require refinement of the grid around the spring points.
99. **Ms Frances Lojkine**, a consultant planner, outlined the history of the application for the water permit. She emphasised that 231 litres per second of water from the Te Matu Zone has been reserved in Schedule 31.1D of the TRMP for community supply as a result of Variation 66.
100. Ms Lojkine presented a full policy analysis of the relevant planning documents. She identified Objective 30.1.1 as being the most relevant to the proposed activity. She also referred to Policy 30.1.14 which exempts bores that do not fully penetrate the aquifer from protection from adverse effects. She said that Chapter 30.2 generally prioritises water for the maintenance of public health and for irrigation of Maori perpetual lease lands and community water supply needs.
101. In relation to nearby bores that do not fully penetrate the aquifer, Ms Lojkine agreed that the Policy 30.1.14 exemption from protection does not mean that effects should

² Dr Thorpe referred to a figure of 35% in error. The figure in Policy 30.1.11 is 33%

not be remedied or mitigated. She referred to the volunteered condition expressed by Mr Ironside.

102. She did not consider that Policy 30.1.10 was relevant as in setting allocation limits for groundwater. The Council considered effects on connected water bodies when setting allocation limits, and therefore “applying the standard contained in Policy 30.1.10 as well as the allocation limits would result in a doubling up of considerations, and a second-guessing of allocation limits that have been set for groundwater”.
103. She considered that the taking of water for the stated purpose will not affect the volume of water that has been reserved for irrigation of Maori perpetual lease lands. Ms Lojkine said that all of the potentially irrigable Maori lease land has been provided for in the allocation limits in the TRMP. She said that the proposed MCCWS take will not alter this.
104. Ms Lojkine said that effects on the Motueka River, aquifer recharge rates, wetlands, spring fed streams, water quality and land stability had all been found to not be significant at a level of allocation greater than that sought by the applicant for the MCCWS. She also concluded that the risk of saltwater intrusion would not be increased.
105. Ms Lojkine then dealt with the Tāngata Whenua submissions and noted that the issues raised are both tangible and intangible. Measures had been included to avoid, remedy or mitigate the tangible effects identified. With respect to the intangible values she said that there is an acknowledgement from a number of the submitters that the water from the aquifer can be used.
106. She did not consider the concerns about unresolved Treaty of Waitangi claims to be relevant to the process.
107. Finally, Ms Lojkine disagreed with Mr Tyson’s recommended expiry date. She said that the project will require significant investment and the time to implement. She said that while a replacement consent would be a controlled activity, there will be no guarantee that it will be granted with the same conditions. She emphasised that a 35 year term is sought.
108. In response to a question from Commissioner Heal, Ms Lojkine stated that Maori were largely concerned about the spiritual connection between the land and its water. Ms Lojkine stated that in her experience those spiritual concerns were still classified as effects under the Act, as the definition of environment makes reference to various matters including cultural concerns, and while intangible they still needed to be assessed.
109. Commissioner Heal stated that he felt it was almost impossible to determine the actual impact the drawdown would have on neighbouring bores. He asked whether Ms Lojkine had ever been involved in an issue where a neighbour had asked for compensation for an environmental impact. Ms Lojkine advised that she had not.

Submitters

110. **Mr Kevin Palmer, for the Lower Moutere Water Scheme Limited (LMWS)**, was concerned about the concentration of bores on the proposed wellfield site. He felt that this would create a greater adverse effect than if the bores were more widely spaced.

111. Mr Palmer described the LWMS as supplying more than 500 people from two interconnected fully-penetrating bores, one of which is within one kilometre of the MCCWS wellfield.
112. Mr Palmer said that he was worried about the drop in flow through the aquifer and the possibility of greater saltwater intrusion at the margins of the Hau Plains zone. He said that a reduction in the level of the river will reduce the flushing of the aquifer.
113. Commissioners sought comment from Mr Weir for the applicant about the LMWS wells. Mr Weir said that they were outside the zone of effect and he was confident that there would be no significant effect on them. He said the model predicted a 0.2 metre interference which he said would not be noticed for a fully penetrating bore.
114. **Mr Richard Horrell (Horrell Farms (Motueka) Limited)**, advised that he has extensive knowledge of the aquifer system having drilled many wells. He said that it is essential to take a conservative approach to the water supply and that over extraction would impact on everyone. Mr Horrell requested that the diameter of the pipe approaching the Mapua rural areas be restricted to ensure that it could not supply commercial users.
115. Mr Horrell expressed his concern that water could be transferred to other areas in the wider Tasman Region in the future.
116. **Mr Andrew Hamilton (Kildrummy Holdings Ltd)**, spoke to the matter of saltwater intrusion into the Hau Plains aquifer. He said that the 8% reduction in groundwater flows through the system as stated in applicant's Executive Summary may result in localised salt water intrusion. He recognised that 35% restrictions (Step 2 of the Council's three step rationing regulations in Figure 31.1C of the TRMP) may need to be implemented.
117. Mr Hamilton considered it important that, coupled with the export of water from the LMWS, there could be significant effects on existing abstractors. He considered that there should be a piping linkage between the MCCWS and the LMWS which would allow pumping from the LMWS to cease when restrictions were likely in the Hau Plains Zone. This system would be rarely used but would provide benefits.
118. **Mr John (Jim) Butler**, outlined his considerable involvement in the Motueka area. Mr Butler did not consider the reticulation scheme to be appropriate due to its cost. Mr Butler sought that the reticulation of Motueka should come before any of the CTA and other areas.
119. However, Mr Butler recognised that the people of the CTA and surrounding areas should not be deprived of water and shortages in such areas would be bad for the entire district.
120. **Mr Philip Peters** stated that no map had been produced showing the flow of the aquifer, where it came from and where it went. This information was required to enable an assessment of the application to be made. He was concerned that some members of the community had been pushing for development in the rural coastal strip without sufficient water. Mr Peters strongly objected to Motueka water being supplied to other areas and requested that reticulation be stopped at Tasman.
121. Mr Peters acknowledged that his mother in law's bore (just outside the applicant's identified zone of effect) was shallow but that it had not run dry in the past 15 years.

122. **Ms Suzanne Park** was represented at the hearing by Mr Michael Park. Mr Park spoke in opposition to the application on Ms Park's behalf.
123. Ms Park was concerned about the spiritual needs of the people of the land for their future economic and social wellbeing. Ms Park felt that the water resource under the land was designated to the land and should be reserved for the future growth of Motueka. Ms Park was concerned about adverse effects on their mana whenua and also expressed her inherent distrust of the Council. Ms Park suggested that the water should be secured for the future growth of the local iwi.
124. We queried whether Ms Park could be satisfied that the water was being provided for the future needs of the people of Motueka and that if there was some left over, that other people could use it. Mr Park reiterated that Ms Park was primarily concerned about the security of the water for the people of Motueka.
125. **Mr Matt Molloy**, Health Protection Officer and Drinking Water Assessor for of the Nelson Marlborough District Health Board, identified the legislation which puts duties on local authorities to provide potable drinking water.
126. Mr Molloy said that the provision of safe and adequate water supply is an essential aspect of public health. Unsafe supplies can be a means of spreading enteric diseases. He acknowledged that Motueka groundwater is generally of good quality but that the risks identified in a Public Health Risk Management Plan are real.
127. Mr Molloy drew our attention to a Blenheim aquifer in which faecal bacteria were found. He noted that the contamination was ongoing for a number of days and the source was never fully identified.
128. Mr Molloy supported the application as he noted it will also provide a better supply to the CTA and other townships.
129. **Mr David Ogilvie** emphasised the importance of water and the pressure that may come upon water resources. He expressed concern about the modelling and specifically referred to the reduction in predicted available water from 33,500 m³ to 24,000 m³ between the 2007 model and the 2008 model.
130. Mr Ogilvie said that the effects on the residents near the wellfield could be significant, but noted his satisfaction that the Council will now waive the connection fee.
131. Mr Ogilvie considered the projected population numbers to 2045 to be underestimated for Motueka at least, and he queried the accuracy of the projection figures for other areas.
132. Mr Ogilvie said that it is ultimately inevitable that the town will be fully reticulated; he said that for some time subdivisions have been connecting to the existing water supply.
133. With regard to fire-fighting, Mr Ogilvie said that the existing hydrants are regularly tested and the reticulation will not provide a great advantage.
134. Mr Ogilvie finished by restating his very strong connection to Motueka. He claimed that his long-term and spiritual connection to be the pakeha equivalent to the Tāngata Whenua's role of manawhenua or kaitiakitanga.

135. **Mr Donald Graves** objected to the water take primarily on the basis of his belief that whatever location people decide to reside or make a business in, that they should live within the environmental and resource constraints of that location.
136. Mr Graves felt that there was more that could be done by people to collect and use rainwater, and also that irrigation water could be used more efficiently.
137. **Mr Peter Canton** discussed sea level rise as a threat to the coastal aquifers via saltwater intrusion. Mr Canton said that if conditions were on the consent requiring monitoring of any saltwater intrusion then his concerns would be somewhat alleviated.
138. He said that his passion lies in the potential future growth and prosperity of Motueka and expressed concern that water moving out of the area could negatively impact on future growth.
139. Mr Canton considered that if people cannot obtain water in the more remote areas then they should not be building there.
140. **Ms Elizabeth Bryant** refuted the claim that the water flowing under Motueka towards the sea is “wasted” or “underutilised”. She said that it is very important for ecological purposes, particularly in the coastal foreshore where the emergence of groundwater is an important part of the ecosystem.
141. Ms Bryant stated that she does not support water going beyond Tasman. She did not know what types of industries may eventuate in Motueka but said that there may be water intensive ones which should be provided for.
142. Mr Bryant identified the rise of water pollution from farmed land and from other sources. She said the Motueka River plays an important role in diluting other contaminants. Ms Bryant said that the coastal springs are very important and that they are ecologically different and have more unique biodiversity, and it is important that they don't dry out.
143. **Ms Betty Fry** said that she has lived near the Motueka River for over 70 years. She said that there used to be a lot more water around and floods used to be more regular. There were lots more streams and full ditches then. Overall, she considered that the water table has dropped.
144. She expressed scepticism of the model and its accuracy.
145. Ms Fry recommended a higher price be charged to those areas that are further away from Motueka. She did not think that Motueka residents should pay the same for the water as the people further away.
146. **Ms Diane Anderson** stated that she objected to water being piped away from Motueka. She did not consider that the Council is obliged to supply water to every house in the district and that there are excellent ways for people to provide for their own water.
147. She did not consider that Motueka residents should have to drill new bores because of the removal of water. She felt that not enough thought had been given to the future of the town, nor the effects of the future climate.

148. **Mr Graeme Coleman** spoke briefly to reemphasise his opposition to the proposal and to restate the points raised in his original written submission.

Tangata Whenua Submissions

149. Several submissions were lodged opposing the application by people who can be described as representing Tāngata Whenua. These submitters included the Wakatu Incorporation, which is a substantial landowner and resource consumer in the district, Te Ātiawa, Ngāti Rārua, Rore Lands Ltd and Tiakina Te Taiao, as well as many individuals. The Council, after receiving the numerous submissions from Tāngata Whenua, engaged Mitchell Research, a consultancy with expertise in tangata whenua issues including local and regional maori history and Treaty of Waitangi matters, to review the submissions and to advise the Council generally on their content and context.

150. The Mitchell Research report headed “Motueka – Coastal Community Water Supply Consultation with Maori Submitters on Tasman District Council’s Application” was made available to the Hearing panel. This report, along with evidence produced at the hearing of the application, revealed that the primary issues from the Maori perspective to the application were:

- Water as a Taonga
- Kaitiakitanga
- Identity
- Utu
- Treaty Considerations
- Condition of the Motueka River
- Mana
- Mauri

151. **Mr Paul Majurey (Counsel for Tāngata Whenua submitters)** said that Tāngata Whenua have mana whenua over the lands, waters and sites that are within the rohe encompassed by the application. He confirmed that water is a taonga and that the Motueka River is of significant spiritual and cultural importance.

152. Mr Majurey said that the application could pass through neither of the Section 104D gateway tests in the Act and therefore could not be granted. Mr Majurey also considered that the provisions of Variation 66 could not be considered and therefore the proposal is inconsistent with the TRMP.

153. **Mr Ropata Taylor (Wakatu Incorporation, Te Ātiawa, Ngāti Rārua, Ngāti Tama and Ngāti Koata)** presented as a witness for the Tāngata Whenua submitters. **Mr Barney Thomas (Wakatu Incorporation, Ngāti Rārua)** answered questions on Mr Taylor’s behalf.

154. Mr Taylor started by saying that the Motueka River is his Awa Tupuna or river ancestor. He described the Tāngata Whenua’s long and strong connection with the region and Motueka in particular.

155. He said that the land and water is viewed as an indivisible whole, and the land and water are in turn connected to his people as the mana whenua in the rohe. He said that water is imbued with a mauri which can be translated as a life force, vital essence or personality of the water. The Tāngata Whenua have kaitiaki responsibilities to protect this mauri. Because of this it is held that it is of fundamental importance for the health, safety, and security of a community that the mauri of those elements within its environs are respected. It was put to us that transporting water away from the lands would have the effect of severing the relationship of Tāngata Whenua with these waters and also interfering with their kaitiakitanga.
156. There was fear that a degradation of the river would result in a loss of mana and mauri. He said the health of the Motueka River is integral to the health and cultural identity of Tāngata Whenua. He said that the impacts of the water taken on the mauri of the River will have significant adverse effects on the cultural and spiritual values of Tāngata Whenua.
157. The concept of mana has been described as “authority, control, influence, prestige, power or honour”³ and can be hereditary or attributed and can also be determined by the abundance (strength of mauri) of taonga, the state of the mahinga kai of the river amongst other things.
158. The submissions also raised the issue of utu, meaning in this context, what the ratepayers outside the catchment would give back to local Maori in return for the water that the Council were proposing to provide for them under the scheme proposed.
159. The issue of rights under the Treaty of Waitangi was also raised, mainly in the context of unresolved claims before the Waitangi Tribunal that might affect land in the area, particularly Maori reserve leasehold land. The argument was also advanced that the water “belonged” to Maori who had a property right in it. Mr Taylor and Mr Thomas said that there were lands, currently used mainly for forestry, within the Motueka catchment which may need water in the future and that this water had not been reserved.
160. Mr Taylor said that the Council has not justified the need to take the volume of water that it has sought. The proposed volume of water would be an overuse and would show disrespect for the mauri of the water.
161. Mr Taylor said that his people are rebuilding and are now in a position to again utilise and cultivate their lands for sustenance and prosperity. The proposed water take would undermine this and further exacerbate the breaches of the Treaty.
162. Mr Taylor said that they particularly object to the volumes sought. They support the supply of water to Motueka Township for efficient domestic purposes.
163. In response to a question about the effect on the community, Mr Barney Thomas said that the mauri is the life force of water and is linked to the capacity of community. He said that if you take 10% of the water then 10% of mauri of that water is diminished. This, in turn, diminishes the health of the land and therefore the community which depends upon it. In this sense, the environment and community must be considered as a whole. From a Maori perspective, he said that if you decrease any amount of water it will affect the mauri of the community. Mr Thomas said that they are not

³ Motueka-Coastal Community Water Supply “Consultation with Maori Submitters” Hillary and John Mitchell para 5.2.2.

advocating for preservation over sustainable use, but he said that the balance is not right; too much take and not enough give.

164. Mr Phil Mitchell who was prevented from attending the hearing, for urgent personal reasons, noted in his written evidence that he considered the proposed take to be diametrically opposed to the policy direction of the TRMP. He said that any allocation must be equitable and not affect others' ability to get access. He considered the application, in advance of a demonstrated demand or need for the water, is unreasonable.

165. Ms Sandra Morrison and Ms Kura Stafford (Rore Lands Ltd and Ngāti Rārua) described Rore Lands Ltd as a family land-owning company in Motueka. Ms Morrison said that the company and an associated trust is a nodal point for distribution to their whanau.

166. Ms Morrison said that deep groundwater is taonga, is life and is not a tradable commodity which can be banked. She said that their family's right to development could be affected. They are trying to make the best of the unfair perpetual lease regime imposed upon them and they have a ten year development strategy to build a sustainable economic base. The export of water will detrimentally affect those plans.

167. Ms Morrison said that protection of the Motueka River is important and they fear that it will be diminished.

Other Communications

168. The Director-General of the Department of Conservation advised us by letter that he no longer wished to be heard at the hearing. The Department expressed concerns about the large increase in water abstraction without proper monitoring and/or staging. Therefore, the Department sought that the staging of the abstraction proposed by Ms Holmes be implemented by way of a condition on the consent.

169. The Department sought that monitoring of flows in the Motueka River and from groundwater-fed springs be required, along with a more rigorous environmental monitoring regime.

The Officer Reports

170. **Ms Gillian Holmes**, a consultant reporting officer for the Council, told us that the aquifer testing, data analysis, well field design and determination of well interference effects were all appropriate.

171. She said that the assessment of interference effects was conservative but did show that there may be some reduction in the ability of some existing bore owners to continue to abstract water at currently consented levels. She supported the condition offering free connection to reticulated water for domestic users within the zone of effect.

172. Ms Holmes had identified a number of areas where she felt not enough information had been provided or insufficient refinement had been achieved. Following the presentation of more information during the course of the hearing and after engaging in a Panel-directed meeting with the relevant technical witnesses for the applicant, she said that she was satisfied that, overall, the hydraulic parameters used in the modelling were appropriate.

173. Ms Holmes considered the match between the simulated and observed levels in eight of the nine monitoring bores to be good. The simulated river loss also had a good match with gaugings.
174. However, Ms Holmes raised a concern about the spring flows. She said that the spring flow reduction simulated (1,002 l/s) was within the range of measured flows of Thorp Drain. As the flow from the other modelled springs in the Central Plains zone was unknown, the overall accuracy of the simulated spring flow could not be concluded. Information provided by Mr Joseph Thomas, for the applicant, based on low flow gauging completed between 1989 and 1990 indicated that the base flow was between 49 and 526 l/s. Mr Thomas also stated that the flows within the other springs to the north of Thorp Drain were likely to be between 5 and 20 L/sec. Overall, the model simulations indicate that the proposed abstraction would reduce the spring flows by an annual average of 12% and 16% during the 1 in 24 year drought.
175. Ms Holmes considered that the model was probably overestimating the flow from the springs, but that it is conservative as the model is simulating more water leaving the model than may occur in reality.
176. Turning to the effect on the Motueka River, Ms Holmes agreed that the calculated loss from the Motueka River by this take would have a very minor effect.
177. Overall, Ms Holmes said that the model indicated that the proposed abstraction of 20,000 cubic metres per day would be sustainable. However, she recommended that conditions that required a staged implementation of the water take be applied to the consent.
178. **Mr Neil Tyson**, The Council's Consents Planner – Water, spoke to his written report. He said that he was now satisfied that the effects on the Motueka River would be minor.
179. With regard to effects on shallow wells, Mr Tyson supported the volunteered condition of free connections to those potentially affected. He said that the alternative water supply should be available early in the development of the reticulation system.
180. Mr Tyson accepted that there is demand for high quality water in the CTA and that many such landowners are prepared to pay considerable sums of money for good quality water supplies. He said that there is insufficient water available in Rural 3 areas for the development that is proposed and being implemented.
181. Mr Tyson accepted that the imposition of noise standards on the water permit was not appropriate.
182. With regard to the duration of the consent, Mr Tyson said that Policy 30.2.8 seeks to ensure that common expiry dates are set for water permits to ensure consistent and efficient management of the resource. He agreed that the first common expiry date (2015) would be too soon given the capital development proposed but that the next common expiry date (2033) should be imposed. He did not accept the reasons given by the applicant for seeking a 35 year term. He agreed that the consent should lapse in 10 years (rather than 5) unless given effect to.
183. Mr Tyson was asked for his opinion regarding the TRMP's policy which stated that owners of shallow wells would not be protected. Mr Tyson agreed with the

applicant's approach in distinguishing between household users and irrigators. It was Mr Tyson's view that the applicant's position was reasonable.

Further information

184. In a preliminary deliberation after the two public hearing sessions we found that we had some unanswered questions and some disquiet about some of the issues.
185. Firstly, we considered the water demand projections that had been calculated by the applicant alongside the various options that had been put in front of us for the term of the consent, should it be granted. The demand figures had been calculated using a development projection horizon of 2060 for Motueka and 2040 for the remaining demand zones. The various consent terms that were put in front of us were 2015 (being the first common expiry date in the TRMP), 2033 (being the second common expiry date in the TRMP) and 2045 (being 35 years and the maximum that the consent could be granted for).
186. We did not consider that there was a justification for using a demand projection horizon longer than the term of the consent; and as we considered it likely that, in the event that we were to grant the consent it would be for one of the latter two terms in Paragraph 185. We therefore sought further information about the calculated demand using these two horizons.
187. Secondly, Section 6(e) requires that we, as a matter of national importance, recognise and provide for "the relationship of Maori and their culture and traditions with their ancestral lands, water ... and other taonga". During the hearing the Tāngata Whenua submitters stated that they hold mana whenua and the proposal will affect, in particular, the mauri of the Motueka River. The applicant was therefore asked to provide its opinion on the appropriateness and approach to assessing Maori cultural beliefs within the decision-making framework of the Act.
188. Thirdly, a number of parties (in particular Ms Bryant and Ms Holmes) had raised concerns about the level of certainty regarding the effects on the springs, and in particular Thorp Drain, which is well away from the river and, presumably, more controlled by regional groundwater levels than by the level of the river. We found that we shared these concerns.
189. Finally, we had some concerns about the appropriateness of the applicant's intention to provide water at rates greater than 1.5 m³/day to those rural users who currently have higher entitlements under existing rural water supply schemes.
190. Therefore, in summary, we sought further information from the applicant as follows:
- Projected future water demand for the zones in the MCCWS out to 31 May 2033;
 - Projected future water demand for the zones in the MCCWS out to 31 May 2045;
 - An opinion from the applicant on the appropriateness and approach to assessing Maori cultural beliefs within the decision-making framework of the Act
 - A breakdown of the model-predicted depletions from each of the cells in the model that represent spring flows to give a more accurate estimation of the actual effect on Thorp Drain under average and drought conditions;

- Any conditions that the applicant would volunteer to ensure that the identified values of Thorp Drain are not compromised by the proposed abstraction;
 - What, if any, sunset or phase-out policy will or should there be for the proposed higher volume entitlements for the rural land owners who currently enjoy allowances higher than 1.5 m³/day under other water supply schemes.
191. The applicant provided estimates of total water demand of 16,000 m³/day in 2033 (see Appendix 5 attached) and 17,000 m³/day in 2045. Helpfully, these calculations retained their separate calculations for zones as well as considerable levels of conservatism (over estimation).
192. In providing his opinion on the legal status of the matters raised by Tāngata Whenua submitters, Mr Ironside stated that the Courts have stated that where metaphysical concepts or values are raised, they must be proven or objectively established, and cannot simply be asserted.
193. Where metaphysical concepts are based on alleged physical effects (i.e. degradation of the river), and it is established that there is no such physical effect, the Courts have not taken the 'indirect non-physical effects' into account. Mr Ironside referred to the *Sea-Tow* case which stated that "*because we do not accept the premise that the extraction would have direct physical effects on the environment, leading to erosion and consequential adverse effects, we do not take the beliefs of effects into account in deciding these appeals.*"
194. Mr Ironside also referred to the *Ngati Rangī* case identified by Mr Majurey. He said that there were a number of distinguishing points in that case. In particular, the asserted metaphysical effects were matched with some probatively established physical effects on the river (depletion of flow volumes). He supported his contentions with references to and/or excerpts from relevant decisions, all of which we found helpful to our consideration of these matters.
195. In addressing the Thorp Drain matters raised, Mr Ironside provided an updated consultant's report which separated the Thorp Drain flow from other spring flows. The revised model better predicts the effect of the groundwater take on the spring flow in an average year and a 1 in 24 year drought, and predicts that the proposed take will further deplete Thorp Drain by 9% in an average year and by 11% during a 1 in 24 year drought.
196. Mr Ironside volunteered that an automated flow recorder be installed in the Drain when the abstraction reaches 60% of the maximum authorised daily take. He also volunteered that any adverse effects arising from the exercise of the consent be considered as a matter which may trigger a Section 128 review of the conditions of consent.
197. Finally, Mr Ironside advised that there are existing water users in the Dovedale, Redwood Valley and Mapua supply areas who have current entitlements to more than 1.5 m³ per day. He said that there is no intention to alter those supply arrangements. He said that any change would need to be the subject of an LTCCP process. He indicated that there is no intention to review the supply arrangements on the sale of a property.

198. Following the receipt of this information from the applicant it was circulated to all submitters participating in the hearing, as well as the Council's reporting staff, with an opportunity for those parties to comment on the information received.
199. One letter was received from Ms Bryant who supported the protection of Thorp Drain as a regionally significant spring. She emphasised the importance of the other springs as well. Finally she pointed out that the adverse effects on the environment are always "little-by-little" and that this must be guarded against.
200. The applicant chose not to exercise its right to reply to these comments and the hearing was closed on 28 April 2010.

Principal Issues and Our Main Findings

201. This section sets out the questions (in bold) that we consider to be the principle issues in this matter, along with our findings on these issues.

Local Drawdown

202. **To what extent will residents and domestic bore owners within the "zone of effect" identified by the applicant be adversely affected by the proposed abstraction? To what extent does the volunteered condition providing for the free connection of those residents to reticulation remedy or mitigate this adverse effect?**
203. From the evidence presented by Mr Joseph Thomas and Mr Weir we are satisfied that the local drawdown cone around the wellfield has been accurately measured and determined. On this basis, we are satisfied that the zone of effect identified in the evidence provided reasonably reflects the impact that the abstraction will have on existing shallow domestic bores. We are also mindful of, and comforted by, the considerable level of conservatism that has been built into the modelling.
204. Because of this conservatism we also have confidence that there will be no significant adverse effects outside the zone of effect. Mr Peters told us that his mother-in-law lives just outside the zone of effect and he wants to ensure that she will not be deprived of water as a result of the application. From the evidence provided we are confident that this will be the case.
205. We are however, aware that it is very difficult to determine the cause of a gradual or sudden failure to obtain water through one's domestic bore. Mr Thomas alluded to this matter too. In the future there will, for one reason or another, be bores both in and outside of the zone of effect that will fail; possibly soon after the water abstraction has commenced. Such failures would, no doubt, result in fingers being pointed at the MCCWS take. We note and accept that bore or pump failures may occur for a range of reasons and on the basis of the evidence, it is not inevitable, nor even likely, that the abstraction of groundwater will cause serious reductions in people's ability to access water through their domestic bores outside the immediate effect zone. Provisions have been proposed by the applicant for alternative supplies for residents within the zone of effect, regardless of the real reasons for any failure, which will mitigate the economic and social consequences of failure.
206. These proposals are intended to remedy the occasional and slight reduction in access that residents and bore owners may have to groundwater via their shallow domestic bores in the identified zone of effect by offering to reticulate such residents without a connection charge. We consider this to be an appropriate measure. It

does not remove all the costs for residents as they will still have to pay for the physical connection from the boundary to their house (which we understand to be a relatively small cost) and they will still need to pay for their water usage, but we are satisfied that it is an appropriate step given the predicted impact on those people and the benefits they will gain from having a high quality, safe and reliable supply provided.

207. We heard evidence from expert witnesses for the applicant to the effect that the system is designed to maximise the induction of recharge from the Motueka River and thereby, as far as possible, minimise the local drawdown effect. We heard no contrary expert evidence on this point. Therefore, we are satisfied that the applicant has done all it that it reasonably can to minimise the effect on nearby domestic bore owners and to mitigate any such effects.

208. To what extent will nearby irrigation bore owners be adversely affected by the proposed abstraction? To what extent should these effects be avoided, remedied or mitigated?

209. We do not have a clear picture of exactly how the nearby irrigation bores will be affected as information about the depth, age and construction of the bores was not available. However, we are aware that bores installed and used for irrigation purposes are generally deeper and more substantial than domestic bores.

210. Using conservative estimates of the depth of nearby irrigation bores (i.e. shallow) and based on conservative modelling, Mr Weir told us that irrigators would still be able to abstract their consented allocation, but that they may have to pump for a little longer each day to do so.

211. We are also mindful of Policy 30.1.14 that exempts the protection of bores that do not fully penetrate the aquifer. We consider that this policy is a particularly relevant consideration when considering the irrigation bores. Any bore that fully penetrates the aquifer will not be affected by the proposal.

Saltwater Intrusion

212. To what extent will the proposed abstraction trigger or exacerbate saltwater intrusion into aquifers?

213. Submissions had raised the spectre of saltwater intrusion occurring as a consequence of granting the consent applied for. We accept that the occurrence of saltwater intrusion in the Hau Plains Zone in the 1990's would have provided grounds for such a view.

214. The applicant was well aware of this issue and one of its expert witnesses, Mr Weir, dealt with the matter extensively in his evidence. He noted that in managing all abstractions from the Motueka/Riwaka Plains, the Council's principal concern is saltwater intrusion. He said that in the 1990's the intrusion was quite localised and was largely a result of localised intensive pumping coupled with failure of stormwater non-return valves allowing seawater to enter drains during high tides. He noted that no such intrusion had been detected with the subsequently installed monitoring system since the late 1990's.

215. His evidence, and indeed his more detailed treatment in his report, which formed part of the applicants AEE, dealt with the regional model simulations which had been done to address the issue, concluding with an outline of the results of an extreme

(maximum possible take) simulation which demonstrated that at least an additional 33,000 m³/day could be extracted before any saltwater intrusion triggers would be reached in the Hau Plains Zone (assuming that the Hau Plains Zone water restrictions were applied and that all domestic takes from the coastal areas of the zone were removed)

216. The application is for a quantity of less than two thirds of this and, should we grant consent, it would be for a quantity that is less than one half of it.
217. We accept his contention that the proposed abstraction is unlikely to have any significant effect on the likelihood on regional scale saltwater intrusion.

The Motueka River

218. To what extent will the proposed abstraction of groundwater adversely affect the amenity or aquatic values of the Motueka River?

219. Clearly, avoidance of any significant adverse effect on the Motueka River must rank highly in considering this application.
220. As stated above, we are told that the wellfield has been sited so that the abstraction will induce the maximum possible recharge from the lower Motueka River so as to minimise a widespread reduction in the water table on the Plains. However, from the modelling done by Mr Weir, the parameters and calibration of which is supported by Ms Holmes, and their evidence of Mr Joseph Thomas, we understand the effects on the Motueka River to be very small indeed, resulting in a drop in the level of the river by approximately 9 millimetres and a reduction in the wetted perimeter by 40 millimetres in the 1 in 5 year low flow situation. Such reductions would not be noticeable and indeed barely measurable.
221. We heard that even in a 1 in 20 year low flow the drop in the level of the river would be about 27 millimetres resulting in a loss of wetted perimeter in the order of 240 millimetres in total.
222. We heard no ecological evidence that would challenge our assumption, based on the evidence presented, that these levels of reduction in head and wetted perimeter on a lowland alluvial river bed would be negligible and likewise any adverse effects on the ecology of the river.
223. The Motueka River is of critical cultural importance to Maori, as was made clear from the submissions from Tāngata Whenua groups, with reference to concerns that the Mauri of the river may be adversely affected. We discuss this aspect further below, beginning in paragraph 228.

Freshwater Springs

224. To what extent will the proposed abstraction of groundwater adversely affect the amenity or aquatic values of the identified coastal springs?

225. From the evidence presented we deduce that the drains at the northern end of Thorp Street are likely to be largely driven by the head of the Motueka River. Mr Thomas told us that they are old river delta outlets which were cut off when the stop banks were constructed. Therefore, it follows that they are likely to be fed by buried permeable old gravel river channels connected to the river, and that their flow is

determined directly by the head of the river. Since only a minimal change in head is predicted we are satisfied that the flows will not be compromised.

226. The other major spring is Thorp Drain and we consider it reasonable that this spring is driven by the regional groundwater levels rather than directly by the head of the Motueka River. As stated above we initially had some concerns about the effects of the proposed water take on Thorp Drain, but with the more refined information provided from the applicant we are now satisfied that it will be affected to only a minor degree.
227. The applicant's volunteering of conditions that will provide information about the flow of the stream, as well as proposing it as a matter which may be reviewed under Section 128 of the Act, gives us comfort that any unforeseen adverse effect can be dealt with should it eventuate.

Maori Cultural Values

228. The right of Tāngata Whenua to exercise the right of kaitiakitanga is expressly recognised by the Act. We accept that the right of kaitiakitanga includes the obligation to consider the spiritual or metaphysical elements of stewardship as well as the physical elements and we have accordingly given both matters considerable thought.
229. We observe that on occasions economic interests seem to overtake purely metaphysical considerations from a Maori perspective, as evidenced by the obvious commercial interest of the Wakatu Incorporation in this application and its outcome. We have however considered both the metaphysical and commercial arguments put forward by submitters when reaching our decision.
- 230. Is there any resource management reason why water should not be transferred out of the Motueka catchment? To what extent can we take metaphysical objections to transferring water out of the catchment into account?**
231. The Wakatu Incorporation expressed concern at the possibility that the applicant was effectively "water banking" as part of this application. We address that issue in Paragraph 264.
232. The transfer of water outside the catchment was raised by many submitters – both Maori and pakeha – as an adverse effect that we should consider. However, we are quite unconvinced that there is any practical resource management reason that would prevent water being transferred from a water-replete catchment to an adjoining water-short catchment. We can see no physical reason why water could not be taken from the Motueka River catchment and transferred to citizens living in Upper Moutere, Mapua or other areas where we are satisfied that no practical alternatives exist to obtain sufficient quantities of good quality water for reticulated domestic supply, subject of course to that water being provided and used in an efficient and non-wasteful manner.
233. Indeed we see that it is essential in a modern society that, where necessary, water is transferred from areas where water is abundant to water short communities to enhance their development where directed by statutory processes. To restrict water use to the land of its origin would see residential development largely restricted to the fertile river flats where it would both cover the best productive land and be vulnerable to flooding while the dryer lands remain undeveloped and inferior for productive uses.

It seems to us that the more sensible approach in this case is to reserve water for all the foreseeable potential productive uses on the river floodplains and to provide suitable water for both the town that serves the floodplains (Motueka) and for further residential development on the nearby dryer elevated land.

234. That being so, the argument against transferring water is raised principally to a metaphysical level.

235. We are very conscious that an impact on a metaphysical aspect of Maori culture is capable of giving rise to an adverse effect pursuant to Sections 3 and 6(e) of the Act. However the Courts have made it plain that when considering potential impacts on metaphysical concerns a hearing panel such as ourselves must give weight to the practical physical resource management factors when determining an outcome where an application adversely impacts primarily or only on metaphysical cultural considerations. This has been called the “rule of reason” approach. We return to this in Paragraph 243 when discussing the effect on the mauri of the Motueka River.

236. To what extent will the proposed take have an adverse effect on the mauri or life-force of the Motueka River?

237. A basic argument raised by many submitters was the fear that the application would have an adverse effect on the Motueka River itself. Submitters raised such issues as the historical levels of the river and the progressive loss of surrounding vegetation. Concerns were also raised about the potential impact on eels and whitebait and on the water quality of the River

238. It was apparent that the major concerns of Tāngata Whenua were the loss of mauri in respect of the Motueka River as a consequence of the applicant’s proposal to consign water to other catchments, thereby affecting the mauri of the river, and the potential impact of the take on Maori reserve leasehold land. Although many submitters expressed concern at the possible physical impact of the proposed take on the river and its aquifers, no submitter produced any technical evidence contesting that produced by the applicant who maintained that there would in fact be a minimal, indeed barely measurable, impact on the river.

239. We accept without reservation that the waters of the Motueka River are taonga to Maori. We also note that the concept of taonga involves a notion of ancestral identity and spiritual personification and forms part of the metaphysical estate to which we shall refer to shortly. “Taonga” also includes the elements of mana and mauri to which we shall also refer to shortly. We think that the waters of the Motueka River as such are viewed as a treasure by both Maori and Pakeha alike, and we are required by the Act to consider this application with that in mind.

240. We particularly note that the concern expressed by the majority of submitters who addressed the issue was the impact of the proposed take on the mauri of the Motueka River, and not its associated groundwater.

241. Mr Barney Thomas said that the depletion of the mauri of the Motueka River could be expressed in a quantitative way; that is, if we were to consider the waters of the River as a jug of water, the removal of half of the water would diminish the mauri by a similar percentage.

242. Tāngata Whenua made it clear to us that they did not oppose the proposed water take in so far as the water would be used in and about the Motueka Plains area, and

it was only the percentage that the applicant intended to transport out of the catchment that was of concern to it.

243. As we have said earlier, we have been guided in our consideration of these matters by the Courts who have dealt with metaphysical issues by largely taking a “rule of reason” approach. In some cases the Courts have disregarded intangible metaphysical effects entirely if those “effects” did not have a direct physical impact on the environment – see *Sea Tow Limited v Auckland Regional Council A112/06*. In that case when considering an application to extract sand near a sea shore the Environment Court said:

“We do not intend to belittle Maori attitudes to sand extraction, and how it affects the metaphysical values described. However their concerns are premised on their understanding that the sand extraction would have direct physical effects on the environment, leading to erosion and consequential adverse effects.

“ In considering the expert evidence we have not found that the extraction would have these effects. Nor would it affect the customary activities of tangata whenua. So we do not accept the premise on which these concerns are based.

“Beliefs themselves are not a natural or physical resource; they are metaphysical. The Act does not require the absolute protection of beliefs, even beliefs that are expressions of relationships of Maori, their culture and traditions, with their ancestral lands, waters, sites, waahi tapu and other taonga [footnote to Friends and Community of Ngawha v Minister of Corrections (HC Wellington 110/02 Wild J) paragraphs 49 – 51.

244. Put another way, the Courts have said that intangible metaphysical effects can only be given credence if there is a corresponding tangible physical effect on the waterbody. Essentially, if the quantity and quality of the river is not physically changed or degraded in any way, then how can there be a significant adverse effect on the mauri of that river?
245. The evidence that we heard from the applicant was that the impact of the proposed water take, which of course will not come from the Motueka River itself, but from aquifers fed from that river, will have a minimal effect on the flow of the river itself. Indeed the expert evidence from the applicant was that the potential reduction in level of the Motueka River would be too small to be measurable in a practical way, and was therefore considered to be imperceptible. This evidence was not contested by Tāngata Whenua, or indeed any submitter.
246. We have stated above that we accept the modelling work done by the applicant. In our view, therefore, we find that the proposed abstraction will not have any more than an imperceptible impact on the Motueka River and, therefore, it will not have any more than an imperceptible impact on the mauri of the Motueka River. The change resulting from the granting of consent will most certainly not result in either the river or its aquifers becoming “unrecognisable”. We have decided therefore that the impact on the mauri of the Motueka River is less than minor.
247. We record our recognition of the significance of Maori cultural values as being highly relevant to this application. We further record our opinion that generally cultural values, in so far as they affect matters that we must consider, are in the main firmly

based on what are generally considered to be sound resource management principles.

248. We accept that sometimes however, the metaphysical aspect of Maori cultural values may depart from the values that we must concern ourselves with. We note that, in a way, such concerns were also expressed by pakeha. A number of pakeha submitters opposed the transfer of water out of the Motueka River catchment for what can be described as purely parochial reasons. We see little difference in that view from the diminishing of mauri argument, other than the “mauri argument” seems to us to be rather better conceived.
249. **Will the proposed water take adversely affect Tāngata Whenua by depriving them of water for lands that may be returned to them as part of a Treaty of Waitangi Settlement? Do Maori have a form of “ownership” of water under the Treaty that we must consider?**
250. This matter was raised by Tāngata Whenua submitters and is summarised in Paragraph 159 above. As we understand it all irrigable land that currently belongs to Tāngata Whenua has water reserved for it under the TRMP, specifically including any such land which is currently occupied by others under a perpetual lease. We were told that the land that may be returned is hill country land much of which is currently in forestry. Land of this type is not considered irrigable; water will simply run off causing wastage and other potential environmental problems. Mr Barney Thomas said that they may consider using the land for housing. We find that if this were to be the case the housing would be sparse and the volumes of water necessary to provide for such rural-residential use would be insignificant.
251. The question of ownership of water was raised by Tāngata Whenua in the course of the hearing. We do not think that this is an argument that we can properly consider because the “ownership” of the water is not a resource management issue and it is our understanding that water in its natural state is in fact the property of the Crown and that any person can apply to take and use it.

The Development and Wellbeing of Motueka and surrounding lands

252. **To what extent will the proposed take and use of water in the manner proposed adversely affect the development and economic wellbeing of Motueka?**
253. Many submitters stated, both in written submissions and verbally at the hearing, that the economic wellbeing of Motueka must come first and that the export of water out of the Motueka Plains area will hold back the growth of the town.
254. We had little or no evidence presented to us to demonstrate that this would, or even may, be the case. The applicant’s evidence showed that the modelling undertaken is very conservative. All potentially irrigable land has been allocated water. Water has been reserved for Maori Perpetual Lease land. And still the modelling suggests that there is more water available. Therefore, we do not think that Motueka will suffer at all from the provision of water to the proposed areas beyond the Motueka-Riwaka Plains in the quantities sought.
255. Indeed, we agree with Mr Thomson and Mr Cuthbertson that provision of high quality water is important for the Motueka Township and there may indeed be considerable economic benefits resulting from the reticulation of the town.

256. We heard little evidence about the risks to the aquifer from contamination, but we do agree with the applicant that a shallow and unconfined aquifer upon which a medium to large town is sited carries many risks. Among the sources mentioned were hydrocarbon contamination from spills or underground leaks from tanks, pesticide residues from the horticultural land to the west, and sewerage from a reticulation system in an unknown state of repair.
257. Mr Molloy also referred to the risks to the quality of the water and said that high quality potable water is an important public health consideration. We were presented with no information in relation to the number of illnesses in Motueka caused or contributed to by contamination of the groundwater; although it may be that it is difficult or impossible to keep data on the causes of such illnesses. However, the Blenheim example described by Mr Molloy shows that the risks are real.

Efficiency of Use and “water banking”

258. Will the water taken from the Te Matu Zone be used efficiently?

259. We are satisfied that the applicant will supply 1.5 cubic metres per day of water to rural residents and that there will be little or no opportunity for abuse of this system. We feel this is a fair volume for residential use that strikes a balance between the need for caution and efficiency of water use versus supplying a plentiful, high quality and reliable supply for achieving good public health outcomes. Similarly we are satisfied that an open connection in residential areas is appropriate where people have to pay per cubic metre and thus have an economic incentive to use water efficiently.
260. We have some concerns about the allowance for leakage that the applicant considers to be unavoidable – 15% to 20%. This certainly seems high but in line with other reticulations around the country. We also understand that leakage will no doubt initially be lower than this but is likely to increase over the lifetime of the reticulation assets.
261. The exception to the 1.5 cubic metre limit for certain MCCWS water supply areas that is sought by the applicant gives us some cause for concern. The applicant clearly told us that the water supply is definitely “*not a rural water supply*”. But the applicant also told us that they do not want to reduce their level of service to customers who currently have allowances higher than 1.5 cubic metres per day.
262. We are concerned that there will be no phase-out of this unequal provision of water. We sense that many people may be happy for Motueka water to be used for efficient domestic use in dryer areas but would be substantially less happy for high-quality Motueka water to be used for stock and pasture watering on dryer country. We feel that it is an important line that is being crossed by providing water for such rural purposes. The volumes are not insignificant either. Basic calculations from the most up-to-date version of Table 3.1 provided by the applicant shows that the exceptions may apply to as many as 14.5% of the all existing connections or 37.2% of all existing rural connections. That is not appropriate, and we have imposed conditions which will require a two stage sunset condition to be imposed on any such “over” takes which may be connected. Such a condition will focus the redirected user on effective use of the new high quality water and at the same time allow time to make other adjustments/arrangements to provide for any agricultural/horticultural water needs separately.

263. Is the quantum of water sought in this application appropriate?

264. The original demand figures presented by the application used a development projection horizon of variously between 35 and 50 years. We consider that the consent granted only needs to reflect demand that is projected at the time that the consent expires. At such time as a replacement consent is lodged and considered the volumes of water can be adjusted for the new development projection horizon that exists at that time. Clearly, whatever is consented by us until that date, will not affect the amount of water that is reserved for community supply under the TRMP. Indeed we fully support the Council's concept of management of this very valuable water resource by planning and not by allocation.

Statutory Provisions

Section 104D of the Act

265. As a non-complying activity, Section 104D applies and we must be satisfied that the proposal passes through at least one of the two gateways before we can consider granting the application under Section 104. In the terms of Section 104D we "may grant a resource consent for a non-complying activity only if [we are] satisfied that either

a. The adverse effects of the activity on the environment ... will be minor; or

b. The application is for an activity that will not be contrary to the objectives and policies of the [TRMP]."

266. On the basis of our findings described above we are satisfied that any physical adverse effects of the proposal are minor.

267. However, we must also consider whether or not the adverse effects **asserted** by the Tāngata Whenua submitters could be considered as an adverse effect that is more than minor. After the hearing we were left in no doubt that most Tāngata Whenua submitters felt extremely strongly that there would be a significant adverse effect as a result of this proposal. Does this, in itself, constitute an adverse effect on the environment since, under Section 2 of the Act, "Environment" includes "people and communities" and "the social, economic, aesthetic, and cultural conditions that affect the [environment]"?

268. We find that it does not. The Courts appear to have held that it is appropriate to consider such beliefs alongside the physical effects on the environment. It is not enough for any person or group to simply assert an effect, there must be evidence. While the evidence of the Tāngata Whenua submitters was genuine and heartfelt, it did not persuade us that there was any actual physical effect that was more than minor. The Courts support our contention that, if there are to be adverse metaphysical effects, there must be a parallel physical basis or manifestation to give substance to the belief.

269. On its own this is enough to satisfy the requirements of Section 104D, but for completeness it is also appropriate to examine the second "objectives and policies" gateway test. This assessment is provided under the reasons for our decision and begins in Paragraph 281. Our overall finding in that section is that the proposal is not inconsistent with the objectives and policies of the TRMP.

Section 104 of the Act

270. Section 104 requires that, subject to Part 2 of the Act, we consider the following matters that are potentially relevant to the present application:

- a) *any actual or potential effects on the environment of allowing the activity; and*
- b) *any relevant provisions of-*
 - (i) *a national policy statement;*
 - (ii) *a New Zealand Coastal Policy Statement;*
 - (iii) *a regional policy statement or proposed regional policy statement;*
 - (iv) *a plan or proposed plan; and*
- c) *any other matter the consent authority considers relevant or reasonably necessary to determine the application.*

Importantly Section 104(1)(b)(iv) includes the proposed provisions of the TRMP and therefore our consideration includes the changes made through Variation 66.

271. There is no National Policy Statement relevant to the present applications, nor are the provisions of the NZ Coastal Policy Statement relevant. The Tasman Resource Management Plan is the principle regional and territorial local authority plan for consideration.

Decision

272. Pursuant to Section 104B of the Act, we **GRANT** consent to the applicant to take up to 16,000 cubic metres of water per day until 31 May 2033 from a well field to be established in Parker Road Motueka, subject to conditions, all as detailed in the consent document, referred to below.

273. The consent document, including the conditions (pursuant to Section 108 of the Act), follows this decision.

Reasons for the Decision

274. We set out below the reasons for our decision.

Effects on the Environment

275. We are satisfied that the effects on the environment as a result of the water take will be minor or less than minor. While there may be a degree of uncertainty with some of the predicted effects on the environment, we hold a high level of confidence in the predictive modelling work done by the applicant. This confidence is due in no small part to Ms Holmes' assessment as an independent reviewer and auditor, as well as Dr Thorpe's independent peer review of that work.

276. The particular areas of potential effect that the modelling gives us comfort to the extent that we can dismiss any identified adverse effects as minor or will be mitigated to achieve that status, are:

- Regional drawdown effects;
- Saltwater intrusion effects in the Hau Plains Zone; and
- Effects on the natural character, the ecosystemic values, the amenity and the mauri of the Motueka River and the coastal springs (including Thorp Drain).

277. We are satisfied that the volunteered waiving of the connection fee for reticulated water supply for existing water users inside the “zone of effect” sufficiently remedies the adverse effect caused by the water take within that zone.

278. In considering the use of the water, which Section 14 of the Act and the provisions of the TRMP allow us to do, we found that we were not satisfied that the applicant needed the volume of water sought. We asked the applicant to revise its demand calculations based on the expiry date we considered appropriate, see discussion in Paragraph 310, as we see no reason why the quantity of water granted should exceed the projected demand at that date. As a result our decision has been to reduce the amount of water granted from 20,000 m³ per day to 16,000 m³ per day. Further commentary on this change begins in Paragraph 315.

279. We are satisfied that there is no restriction on us granting a consent to take water out of the catchment. The water taken is from the aquifer not a surface water body. We consider it a modern necessity that water that is otherwise available, is able to be transported by reticulation to where people require it for domestic purposes, so long as appropriate measures and infrastructure is put in place to ensure that the water distributed, reticulated and used efficiently.

280. Indeed we see a considerable benefit in allowing people to live sustainably on higher, dryer and relatively unproductive lands if it means that the floodplains can be used for productive purposes. A policy of zero transfer of water out of catchment would be an incentive for more development on the productive and flood-prone plains. We reject the contention that people should be required to live within the environmental and resource limits of their location.

The Tasman Resource Management Plan

281. We agree with Ms Lojkinė and Mr Tyson that the TRMP is the principle planning document that we should have regard to.

282. We agree with Ms Lojkinė’s assessment that Objective 30.1.0(1)⁴ of the TRMP is most relevant and, based on our acceptance that there will be no significant adverse effects on the environment, we are satisfied that the proposal as modified and set about with conditions will be not be inconsistent with this objective. The objective refers to fishery values including eels; this is one of the reasons why we pursued the Thorp Drain depletion matter.

283. Policy 30.1.1 of the TRMP is:

To maintain and enhance the uses and values of rivers, aquifers, wetlands and lakes that may be adversely affected by reduced water flows or levels including:

⁴ Ms Lojkinė refers to this as Objective 30.1.1. The numbering in this part of the TRMP is ambiguous but we believe the objective is better referenced as 30.1.0(1) as we have done.

(a) *the uses and values of water bodies identified in Schedule 30.1, particularly the internationally, nationally and regionally significant uses and values of water bodies;*

(b) *the customary and traditional uses and values of iwi, including wāhi tapu, mahinga kai and other taonga, particularly in relation to sustaining the mauri of the water;*

(c) *the capacity of water bodies to dilute contaminants;*

by taking into account the management objectives specified for each of the water bodies in Schedule 30.1.

284. We agree with Ms Lojkine's thorough assessment of point (a) of Policy 30.1.1.

285. With regard to point (b) of Policy 30.1.1 we find that the customary and traditional uses and values of the Motueka River and the coastal springs to iwi will be maintained as has been discussed above. The policy makes specific mention of the mauri of the water. As we have previously stated we find that the lack of tangible, physical effect on the Motueka River means that any reduction in the mauri of the River cannot be supported.

286. Policy 30.1.6 seeks to ensure that water allocation limits take into account changes in drought frequency resulting from climate change. We accept the applicant's evidence that there will only be minimal change in water recharge potential due to predicted increases in winter precipitation which will offset slightly increased summer dry periods. Given the term and conditions of this consent, there will also be ample opportunities to review the effects of the water take as climate science progresses and effects are monitored.

287. Policies 30.1.6 and 30.1.6A, the latter being introduced to the TRMP via Variation 66, are only peripherally relevant to our consideration as they refer to the setting of water allocation limits. This has been done through a separate process which we have not been party to. We merely note that the allocation limits have been appealed by parties who are also submitters on this current application.

288. Policy 30.1.6B, also introduced to the TRMP by Variation 66, seeks to avoid, remedy or mitigate adverse drawdown effects on other water users resulting from water takes from the Te Matu Zone. While the policy framework (Policies 30.1.6B and 30.1.14) explicitly does not protect owners of bores which do not fully penetrate the aquifer we still consider that effects on those people must be considered. We consider that the volunteered condition which waives connection fees to domestic water users within the zone of effect sufficiently remedies the projected adverse effects on these people.

289. Objective 30.2.0 is to achieve equitable water allocation and efficient use of water by water users. We agree with Ms Lojkine that efficient use of water is a relevant consideration here. We agree that metering of the urban flows and restricting the rural flows is appropriate. However, we are not satisfied that providing more water to some supply zones based on historic entitlements, and its use as rural water supply (as opposed to potable domestic), is appropriate or efficient.

290. We note that Policy 30.2.1 certainly places an indirect emphasis on the importance of maintaining public health. We accept that granting this consent enabling the provision of high quality and reliable water will contribute to this objective.

291. Policy 30.2.8 seeks that water permits have common expiry dates. We see no reason to deviate from that policy and have set an expiry date accordingly.
292. Dr Phil Mitchell, in his written evidence, extensively described the structure and provisions of the TRMP and the nature of the changes made through Variation 66, as well as the nature of the application. We note that he accepted Tāngata Whenua's assertions that the taking of water would be spiritually and culturally offensive and his conclusion therefore, that the proposal is "diametrically opposed" to the policy direction of the TRMP. Mr Mitchell did not make reference to any actual physical effects that the Court has said must provide a basis for such claims.
293. Dr Mitchell stated that the policy direction of the TRMP seeks to preserve⁵ cultural and spiritual values and maintain and enhance customary and traditional uses. However, he did not seem to take into account the evidence of the applicant which clearly suggests that these values will be almost entirely protected. We heard clear and uncontested evidence that the depletion of the river, which is the physical basis for the metaphysical effects alleged, will be unnoticeable and probably unmeasurable as well. (As we noted earlier, Dr Mitchell was unable to attend the hearing and therefore we were not able to examine him on these matters.)
294. Overall, we are satisfied that the proposed water take for the purposes of community supply is not inconsistent with the objectives and policies of the TRMP.
295. In addition to the objectives and policies we have had regard to the overall changes to the TRMP as we are required to do by Section 88A(2) of the Act. The adjusted water allocation regime – both total abstraction volumes and reservation for specific uses – has clearly been a significant consideration in reaching our decision.

Other Matters

296. There were no "other matters" that we consider particularly relevant to our decision.

Section 6

297. We consider the following matters of national importance to be relevant and we have taken them into account in making our decision:
- 6(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development.
 - 6(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.
298. On the evidence of the applicant, and supported by the reporting officers, we are satisfied that the natural character of the Motueka River and the various springs that may be affected will be preserved.
299. Based on the lack of demonstrable and tangible effects on the environment, we are also satisfied that the relationship of Maori with their ancestral lands, water and other taonga will not be significantly adversely affected. Water is reserved for Maori land

⁵ In fact, the word "protect" is generally used which has a different meaning to "preserve", however "preserve" is used in Objective 30.1.0(1).

interests in the TRMP and the Motueka River, which is an extremely important taonga, will be affected to only a negligible extent. Maori and Tāngata Whenua submitters may believe that this matter of national importance has not been upheld but we have to base our findings on physical effects on their interests. On the evidence presented, that finding is clear.

Section 7

300. We have also had particular regard to the following other matters in making our decision:

- 7(a) kaitiakitanga:
- 7(b) the efficient use and development of natural and physical resources:
- 7(c) the maintenance and enhancement of amenity values:
- 7(d) intrinsic values of ecosystems:
- 7(g) any finite characteristics of natural and physical resources:
- 7(i) the effects of climate change:

301. In particular, we have had regard to the Tāngata Whenua's role as kaitiaki of the Motueka area. In making our decision we paid very special attention to this consideration. However, on the basis of the lack of any significant adverse effect on the environment we have not found that there is likely to be any effect that will affect Tāngata Whenua's kaitiaki role to a more than very minor extent.

302. We consider the proposed use of the water to be efficient.

Section 8

303. We heard no evidence that the current applications are contrary to the Principles of the Treaty of Waitangi.

Section 5

304. Section 5 of the Act promotes sustainable management as the purpose of the Act. Case law requires that we make a "broad overall judgement" as to whether the application before us to take water for a community supply will promote the sustainable management of natural and physical resources. In this regard Section 5 of the Act is paramount.

305. Relevant to this decision, Section 5(2) defines Sustainable Management as managing *the use, development and protection of natural and physical resources in a way, or at a rate, which enables communities to provide for their social, economic, and cultural wellbeing and for their health and safety...*

306. We think the current application readily meets this test. The MCCWS will provide social and economic benefits and the graded high quality potable water will assist in providing for the reticulated communities health and safety.

307. Clause 5(2)(a) requires that the potential of natural and physical resources is sustained to meet the reasonably foreseeable needs of future generations. The

resource in question – groundwater – is infinitely renewable, if managed carefully and respectfully will be in plentiful supply for future generations.

308. Clauses 5(2)(b) and (c) seek that the life-supporting capacity of *inter alia* water be safeguarded, and adverse effects on the environment are avoided, remedied or mitigated. We consider that this has been achieved in this case.

309. Overall, we are satisfied that this proposal meets the purpose of the Act.

Commentary on the Conditions of Consent

Consent Expiry

310. The applicant sought that a term of 35 years be granted. The reporting officer, Mr Tyson, considered that the applicant should be bound by the common expiry dates set out in Schedule 31.1A of the TRMP. He initially considered that the first common expiry date (approximately five years away) should be used, but then moderated this stance by acknowledging that the scale and nature of the proposal would warrant the later common expiry date (1 May 2033) being imposed.

311. The TRMP has a clear policy direction that common expiry dates are set and should not be deviated from without very good reason.

312. Ms Lojkin for the applicant said that the scheme will involve significant investment on the part of the applicant. She considered that a lack of certainty could cause problems in relation to the design and construction of the MCCWS and that the term of the consent should be 35 years.

313. We do not agree as the TRMP would currently require a replacement consent to be considered as a controlled activity. Further, we anticipate that Section 104(2A) would hold considerable weight when a replacement consent is considered under Section 104. Clearly, a five year term would be too short given the scale of investment necessary – the applicant would barely be getting started when the consent would come up for renewal – but we do consider the common expiry date in approximately 23 years time as being appropriate.

314. We accept the considerable benefits of having a common expiry date regime and we are aware that the more exemptions and deviations there are from these dates, then the less merit the regime has. As we see no burning reason for a longer term we have imposed a condition causing the consent to expire at the next but one common expiry dates for the Te Matu Zone.

Volumes of Water that can be taken

315. The total daily volume has been reduced to fall in line with the 2033 projections. The maximum pumping rate has also been reduced to allow the daily allocation to be abstracted over the 18 hour period sought by the applicant. This may also reduce the effects on nearby bore owners by reducing the peak take rate and therefore any acute effect on the surrounding groundwater level. We note also that a side effect of the reduction will be to build even more conservatism into the predictive model. This was not the intention but it will be an added benefit.

316. With regard to the “grandfathering” of existing volume entitlements greater than 1.5 cubic metres per day when existing consumers are connected to the MCCWS, we think that there should be a phase out of this policy. We heard submissions and

evidence to the effect that the water is to be taken for potable community supply purposes and not for rural water supply purposes. If the applicant feels either a moral or legal obligation to continue providing greater volumes to these consumers for a supply in excess of that for which the scheme has been promoted then an alternative source will need to be found for those properties, presumably based on their existing quality limited rural water supply schemes.

317. We note that the amount consented (16,000 cubic metres per day) is slightly less than the calculated demand by 2033 (16,026 cubic metres per day). However, the cessation of the grandfathering of some rural water supplies (Paragraph 316) will more than make up for this shortfall.

Thorp Drain monitoring

318. The applicant volunteered that they begin monitoring flows in Thorp Drain once 60% of the consented take is being abstracted. We do not consider that this provides sufficient baseline information to enable a determination of the measured effect on the flow. We consider it more appropriate that the baseline monitoring starts when the 30% trigger is hit. This will then allow an assessment of the effect when the 60% and 90% triggers are reached conditions to require this have been set.

Issued this 31st day of May 2010

A handwritten signature in black ink, appearing to read 'J. Jones', is written on a light yellow rectangular background.

Dr Jeff Jones

Chair of Panel of Independent Commissioners



RESOURCE CONSENT DECISION

Resource Consent Number and activity:

RM070187 To take and use water from the Te Matu Water Management Zone for the purpose of community supply.

Pursuant to Section 104B of the Resource Management Act 1991 ("the Act"), resource consent for the above activity is hereby granted to:

Tasman District Council

(hereinafter referred to as "the consent holder")

Location Details:

Address of property: Parker Street, Motueka
Valuation number: 1956001703
Legal Description: Lot 1 374788
Title Reference: 301414
Easting and Northing 2509957E 6011293N

Pursuant to Section 108 of the Act this consent is granted subject to the following conditions:

CONDITIONS:

1. Category of Source: Groundwater
Zone: Te Matu Zone
Catchment: Motueka-Riwaka Plains
Maximum rates of take: 247 litres/second (185 litres/second averaged over 24 hours)
16,000 cubic metres per day

Bore Details

Well Numbers: WWD2179, WWD2182, WWD2175 (a back-up bore) - (with six additional production bores to be drilled)
Wellfield Location: Within Lot 1 DP 374788 Certificate of Title 301414 (Nelson Land Registration District)
Meter Required: Yes

Water Meter Specifications, Maintenance and Reading

2. The Consent Holder or its agent shall, at its own expense, install, operate and maintain a bulk water meter that complies with the Council's Water Meter Specifications as stated in Chapter 2 of the Tasman Resource Management Plan.
3. The Consent Holder shall as a minimum record its bulk meter reading each day at the same time and, throughout every November to April inclusive, shall return its daily

meter readings to the Council's Co-ordinator Compliance Monitoring at the end of each two week period or by the dates specified each year by Council.

4. The Consent Holder shall maintain a complete and accurate record of its daily meter readings and supply these meter readings to Council upon request.

Scheme Documentation/Monitoring

5. Prior to commissioning the Scheme, the Consent Holder shall submit to the Council's Co-ordinator, Compliance Monitoring, a Water Activity Management Plan (AMP) that details, as a minimum:

- (a) all monitoring associated with the Scheme, including:
 - (i) rate and volume of take, as required by Conditions 2 and 3 of this consent;
 - (ii) at least daily water levels at 2 monitoring bores located at the Parker St wellfield (Bore No WWD 2178 – shallow aquifer piezometer and Bore no WWD 2188- deep aquifer piezometer) in order to confirm drawdown effects;
 - (iii) continuous monitoring results from Bore No WWD 2164 in order to monitor impacts of the take on the Motueka River;
 - (iv) salinity measurement in bores WWD2510 and WWD 2629 (or else replacement monitoring bores) to monitor for saltwater intrusion (in accordance with Schedule 31.1C of the Tasman Resource Management Plan);
- (b) all reporting procedures and protocols to the Council's Coordinator Compliance Monitoring;
- (c) the supply areas and, on an annual basis, the total volume allocated for each supply area, the rates of supply per connection and any other conditions of supply in each area;
- (d) 'as-built' plans of the scheme including pipeworks and the locations of water meters; and
- (e) a water efficiency programme including, but not limited to:
 - (i) appropriate, timely and regular leak detection programmes;
 - (ii) requirements for and integrity of low flow restrictors;
 - (iii) schedules and protocols for checking water meter accuracies;
 - (iv) provision of user education, including advice that the supplied water is for high quality use; and
 - (v) a leak detection program that has the objective of minimising scheme losses and includes a proactive program to detect illegal connections.

The AMP shall be available for inspection by Council monitoring staff if requested.

6. The Consent Holder shall provide a reviewed copy of the AMP to the Council's Co-ordinator, Compliance Monitoring within one year of the commissioning of the Scheme.

The AMP shall then be reviewed at least every three years and an updated AMP along with a report documenting the monitoring results, any changes to the scheme, and the results of the water efficiency programme for the previous three years, shall be provided to the Council's Co-ordinator Compliance Monitoring by 1 September each year the new AMP is required.

7. The Consent Holder shall at all times operate the MCCWS in accordance with the latest version of the AMP.

Area Supply Restriction

8. The Consent Holder shall supply water from the authorised take only to the areas shown on the attached map 'Motueka Coastal Community Water Supply Proposed Supply Areas' Revised Fig 1.1 dated 26 February 2010. The maximum supply volumes shall be as follows:

	m ³ /day	Percent
Motueka Urban Area/Motueka Rural/Riwaka	10,109	63.2%
Coastal Tasman Area/Mapua ¹	5,891	36.8%

¹This includes Lower Moutere, Braeburn, Tasman, Coastal Strip, Rural 3 North, Rural 3 South, Gardner Valley, Dovedale, Mapua as shown on Revised Fig 1.1.

Volume Supply Restriction

9. The Consent Holder shall restrict the supply of Scheme water to all new connections which do not have a metered supply to a maximum allocation of 1.5 cubic metres per day per dwelling.

Advice Note:

New connection users may also need to be advised that the quantity taken and used should be reduced if the volumes exceed the capacity of their onsite wastewater treatment system.

10. Any existing connection to a rural water supply scheme that, at the date that this consent is granted, is entitled to an allocation that is greater than 1.5 cubic meters per day, and which is to be transferred to be supplied by the MCCWS, may be supplied with a equivalent allocation entitlement until:
 - (a) 1 year after the property is connected to the MCCWS when the entitlement shall reduce to 2.0 cubic metres per day; and
 - (b) 5 years the each property is connected to the MCCWS when the entitlement shall reduce to 1.5 cubic metres per day

Unless:

- (c) either, the ownership of the property changes;

- (d) or, the property is subdivided into two or more titles

In which case the entitlement of the connection shall be limited to 1.5 cubic metres per day per property in the same fashion (flow restrictor) as all other rural supply connections supplied by the MCCWS.

Advice Notes:

The intent of this condition is to require that all water taken for the MCCWS is used for potable supply (not a rural water supply). A phase-in period is allowed.

The consent holder should ensure that the loss of entitlement when a property changes hands, and the phase-in of restrictions, should be communicated to potential purchasers of land. The best way to do this may be to include such details on the Council's property file and ensure that the information is included in Land Information Memorandums (LIMs).

Zone of Effect

11. The Consent Holder shall allow all existing developed residential properties that:
- (a) are not connected to the Council's reticulated water supply for Motueka as at the date of grant of this resource consent; and
 - (b) are within the wellfield drawdown zone of effect outlined in blue on the attached aerial photograph ('Motueka Properties Wellfield Drawdown Zone of Effect' dated 26 February 2010)

to connect to a Council reticulated supply without payment of a water connection charge. This connection arrangement shall be made available to those properties immediately prior to the Motueka Coastal Community Water Scheme becoming operational and shall continue to be available for the duration of this consent.

Staged uptake

12. The Consent Holder shall commission a re-run of the most recent version of the Motueka-Riwaka groundwater model on abstracting:
- (a) 30% of its maximum authorised daily take;
 - (b) 60% of its maximum authorised daily take; and
 - (c) 90% of its maximum authorised daily take.

The purpose of the requirement to re-run the model on the three abstraction triggers (above) being reached shall be to provide:

- (a) further information on the localised drawdown effects from the wellfield abstraction;
- (b) an assessment of the effect of wellfield abstraction on the Motueka River flows; and
- (c) an assessment of the effect of wellfield abstraction on Thorp Drain flows (60% and 90% abstraction triggers only).

A report detailing the re-run model and discussing the results will be supplied to the Council within 18 months (1.5 hydrological years) of the appropriate abstraction trigger being reached. The report shall also identify any effects on the environment that were not anticipated at the time that the consent was granted and shall identify any measures or conditions that may be appropriate to impose at that time.

13. On the 1 June 2020 and 1 June 2030 the Consent Holder shall undertake a re-estimate of growth projections for the Scheme zones and assess the volume of water required to provide for that growth. A report, outlining the growth projections and the volume of water required as a consequence, shall be provided to the Council's Coordinator Compliance Monitoring by 1 September 2020 and 1 September 2030.

Monitoring and Maintenance of Spring Flow

14. The Consent Holder shall, within one month of abstracting 30% of its maximum authorised daily take, install an automated flow recorder at the Thorp Drain recording site (at the site previously used for state of the environment monitoring); and, once installed, supply flow recorder recordings to the Council's Coordinator Compliance Monitoring to enable a 7 day average flow for Thorp Drain to be calculated.

Review Condition

15. The Council may, within the months of September and October each year or alternatively within a two month period after each report required by Condition 12 is provided to the Council, review any or all of the conditions of the consent pursuant to Section 128 of the Act for all or any of the following purposes:
 - a) to deal with any unexpected adverse effect on the environment that may arise from the exercise of the consent including any adverse effects identified in the Motueka-Riwaka groundwater model that has been re-run in accordance with Condition 12; and/or
 - b) to require the adoption of the best practicable option to remedy or reduce any unexpected adverse effects on the environment; and/or
 - c) to comply with requirements of an operative regional plan, including any allocation limit, minimum flow regime, rate of use limit, or rationing or rostering restriction; and/or
 - d) to comply with relevant national environmental standards made under Section 43 of the Act; and/or
 - e) to ensure that the quantity of water authorised to be taken is needed for the operation of the MCCWS, including by assessing the reports provided in accordance with Condition 13; and/or
 - f) to deal with any adverse effects on Thorp Drain arising out of the exercise of the consent and including a review of the information provided pursuant to Condition 12.

Lapse and Expiry dates

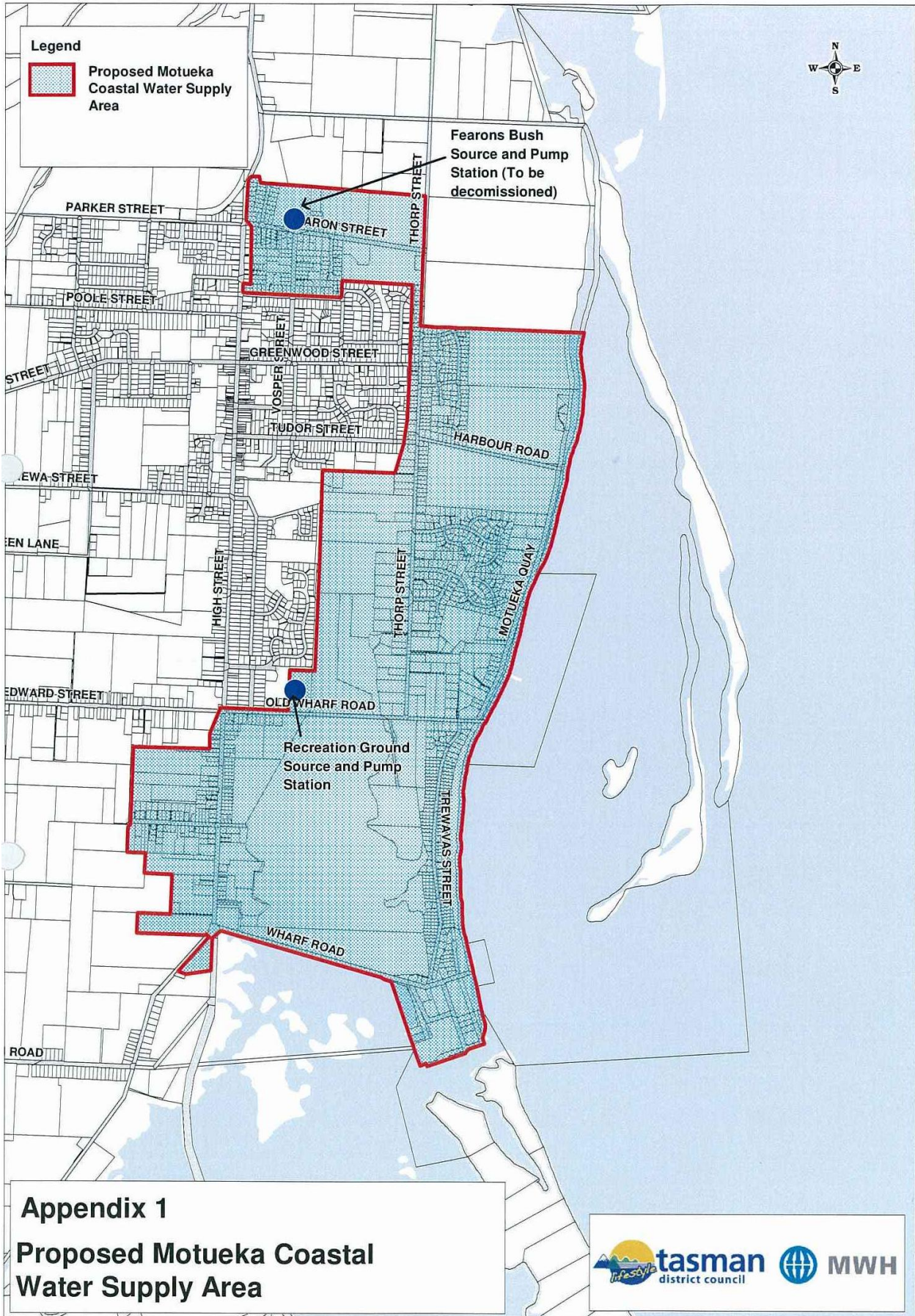
16. This consent shall lapse ten years after the date that the consent commences unless the consent is either: a) given effect to; or b) the Council has granted an extension pursuant to Section 125(1)(b) of the Act.

17. This consent shall expire on 31 May 2033, being the common expiry date for the Te Matu Zone as specified in the Tasman Resource Management Plan.

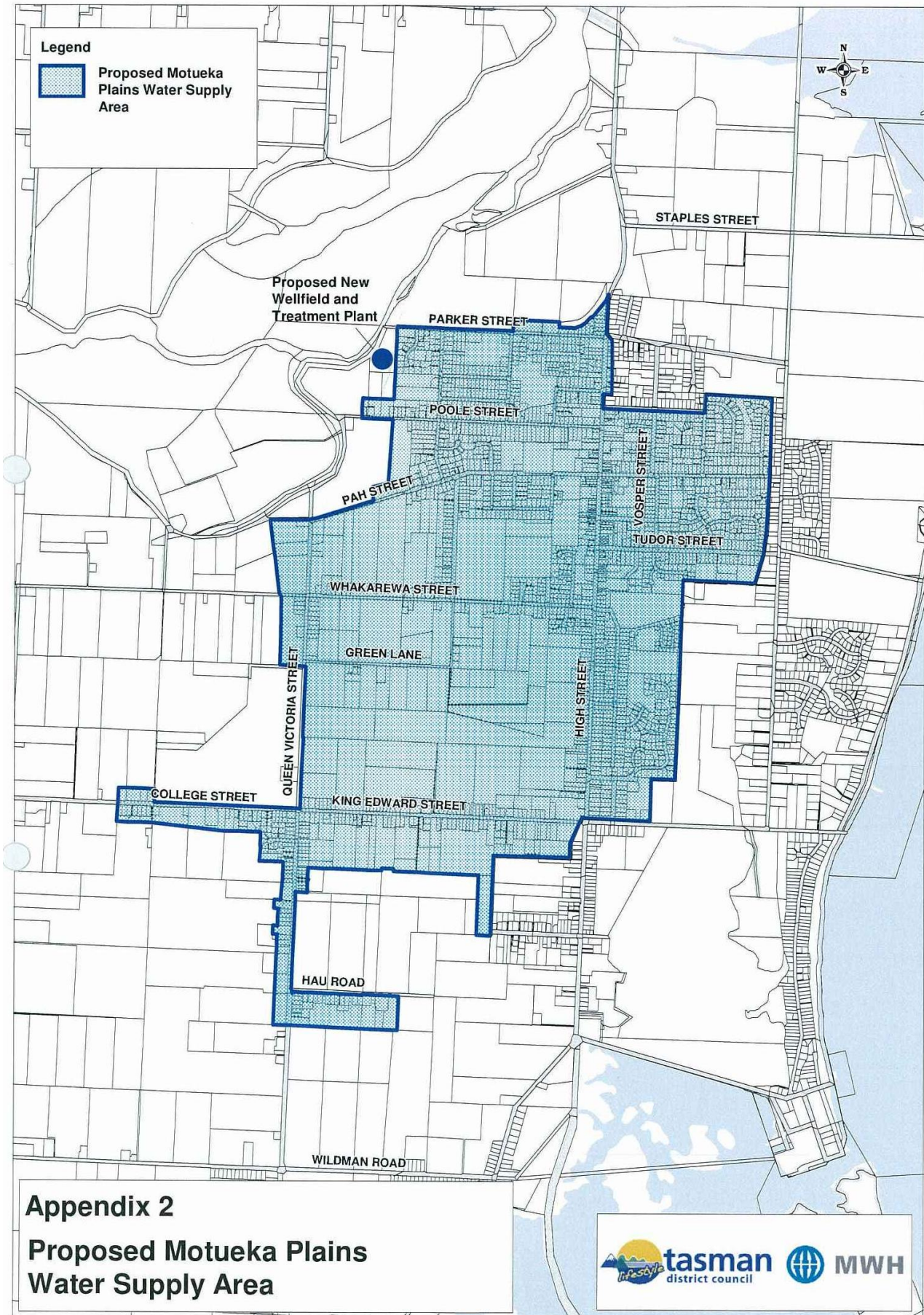
ADVICE NOTES

1. Any activity not covered in this consent (e.g. earthworks) shall either:
 - a) comply with all the criteria of a relevant permitted activity rule in the Tasman Resource Management Plan (TRMP);
 - b) be allowed by the Resource Management Act; or
 - c) be authorised by a separate resource consent.
2. Access by the Council's Officers or its Agents to the property is reserved pursuant to Section 332 of the Act.
3. Monitoring of this resource consent is required under Section 35 and 36 of the Act, and a deposit fee is payable at this time. Should monitoring costs exceed this initial fee, the Council will recover the additional amount from the resource consent holder. Monitoring costs are able to be minimised by consistently complying with the resource consent conditions.
4. This consent is not subject to Section 134 of the Act and therefore does not "attach to the land".
5. Council draws attention to the provisions of the Historic Places Act 1993. In the event of discovering an archaeological find during any earthworks (e.g. shell, midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga, etc) there is a requirement under the Historic Places Act, 1993 to cease the works immediately until, or unless, authority is obtained from the New Zealand Historic Places Trust under Section 14 of the Historic Places Act 1993.

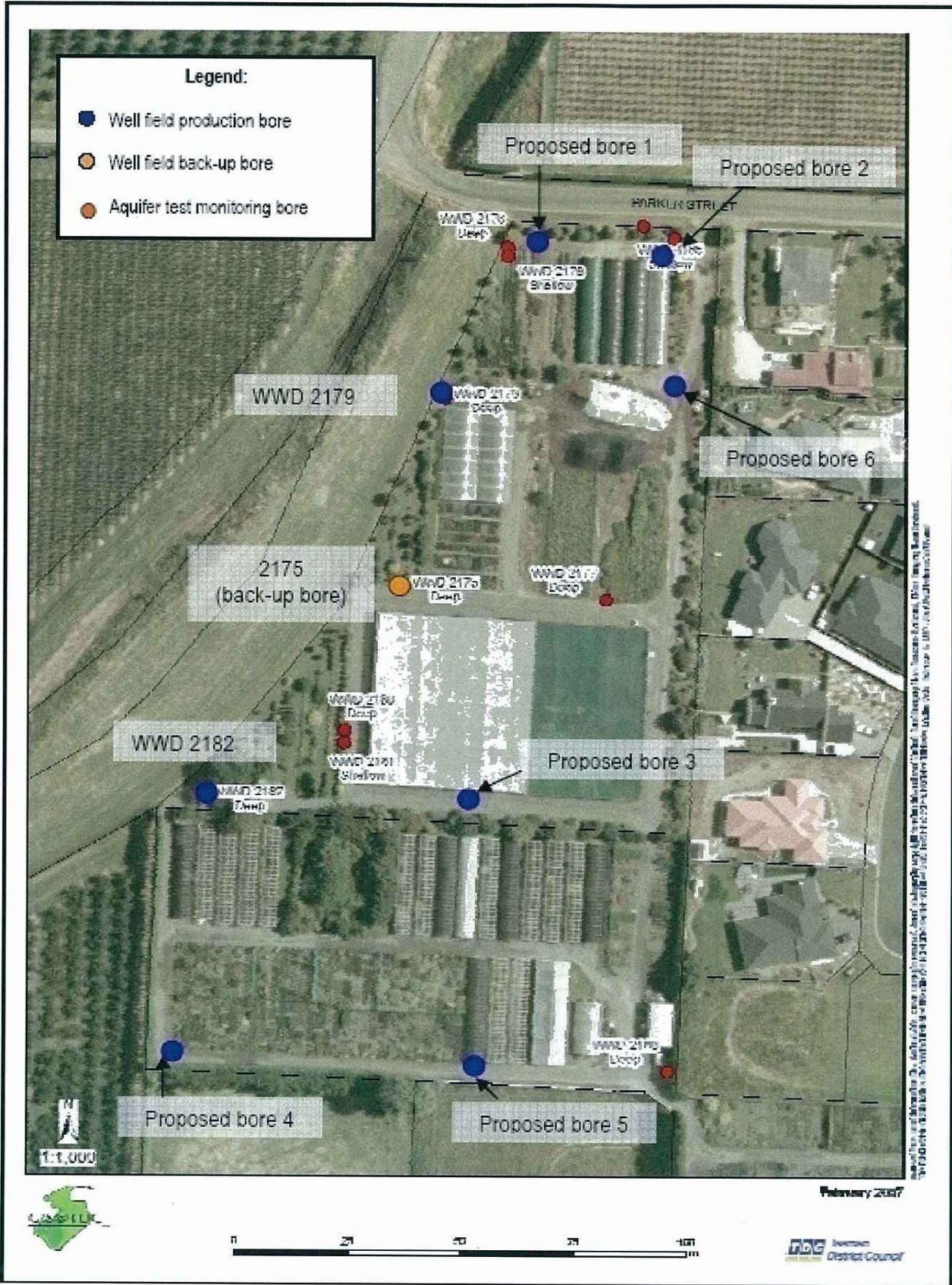
Appendix 1 – Proposed Coastal Water Supply (not included in MCCWS)



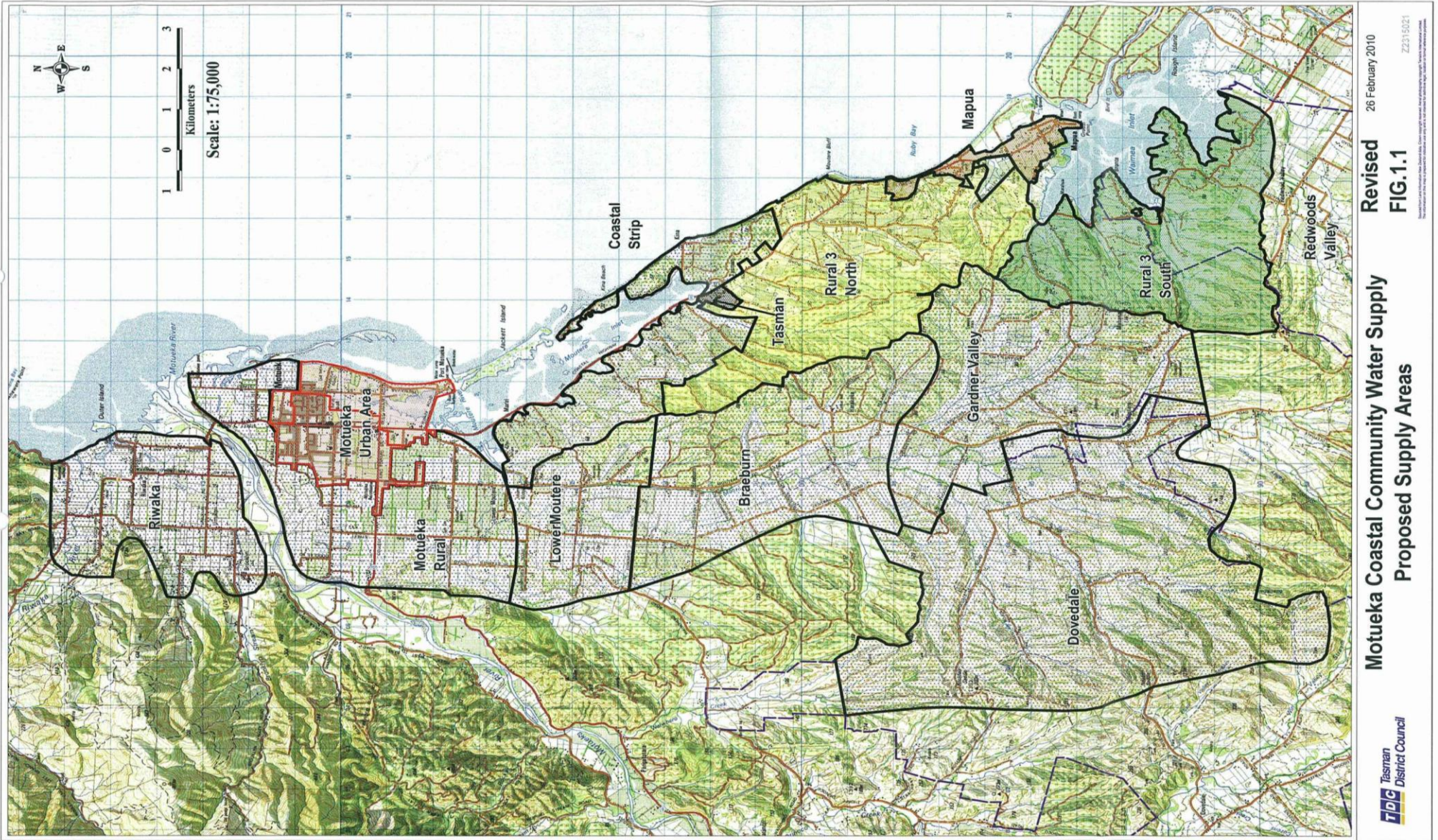
Appendix 2 – Proposed Plains Water Supply (included in MCCWS)



Appendix 3 – Wellfield layout



Appendix 4 – MCCWS supply areas



Appendix 5 – Estimated maximum demand for MCCWS to 2033

Table 3.1 (revised) - Estimated Future Demand for Zones in the MCCWS. Updated with 2008 Growth Projections and Projected to 2033 Horizon

Supply Zone	Potential Demand Zone	Forecast Current Connections (2009)	Development Projection Horizon	A Future Connections (2033)	B Average Day Demand – Excluding Leakage & Commercial/Industrial (m ³ /day)	C Commercial / Non-residential (m ³ /day)	D Leakage (m ³ /day)	E Average Day Demand – Including Leakage and Commercial/Industrial (m ³ /day)	F Peaking Factor	G 2033 Peak Day Demand (m ³ /day)	Ultimate Peak Day Demand (m ³ /day)	Water Asked For	
2a	Motueka Town Water Supply – Coastal Scheme	988	2033	1,173	1,173	100	Residential 20% ADD 235 Commercial 20% ADD 20 Total 255	E = B + C + D 1,528	2.5 on residential and commercial demand – not on leakage	G = F x (B+C) + D 3,437	3,837	To be supplied from existing wells	
2b	Motueka Town Water Supply – Plains Scheme	1,926	2033	2,286	2,286	605	Residential 15% ADD 343 Commercial 15% ADD 91 Total 434	3,325	2.5 on residential and commercial demand – not on leakage	7,661	9,760	To be supplied from new Parker Street Wellfield	
2c	Allowance for unanticipated future growth				1,000	-	-	1,000	1	1,000	1,000		
1	Riwaka	429	2033	486	729	10% of ADD 73	20% of ADD 146	948	1	948	1,110	Rounded to 12,500 m ³ /day as per proposed new condition 6	
3a	Rural Motueka	145	2033	178	267	10% of ADD 27	20% of ADD 53	347	1	347 After boundary adjustment rounded to 500	500		
Sub-total – excluding 2a Mot Coastal		2,500		2950	3,282	705	633	5,620	(Nett) 1.80	10,109	12,370		
3b	Lower Moutere	81	2033	91	137	10% of ADD 14	20% of ADD 27	177	1	177	201	To be supplied from new Parker Street Wellfield	
4	Coastal Strip	168	2033	183	275	10% of ADD 27	20% of ADD 55	357	1	357	725		
5	Tasman Village	58	2033	67	101	10% of ADD 10	20% of ADD 20	131	1	131	411		
6	Northern Rural 3 Zone	362	2033	508	1,057	10% of ADD 106	20% of ADD 211	1,374	1	1,374	4,746		
8	Southern Rural 3 Zone												
7a	Mapua Urban	811	2033	884	884	15% ADD 133 Tourist 100 Total 233	Residential 15% ADD 133 Commercial 15% ADD 35 Total 168	1,185 Tourist 100	2.0 on residential and commercial demand – not on leakage or Tourist	2,302	3,641		Limited to 7,500 m ³ /day as per proposed new condition 6
7b	Mapua Rural	144	2033	183	317	10% of ADD 32	20% of ADD 63	411	1	411	486		
9	Gardners Valley	217	2033	230	345	10% of ADD 35	20% of ADD 69	449	1	449	1,190		
11	Braeburn												
10	Dovedale	145	2033	194	552	10% of ADD 55	20% of ADD 110	718	1	718	747		
Sub-total		1,986		2,340	3,666	511	724	4,900	(Nett) 1.21	5,917	12,146		
TOTAL – excluding 2a Mot Coastal		4,486		5,290	6,948			10,520		16,026	24,516	20,000	

Appendix 6 – MCCWS wellfield drawdown zone of effect



Date Confirmed:

Chair: