



## STAFF REPORT

**TO:** Environment & Planning Subcommittee

**FROM:** Daryl Page, Compliance Officer

**REFERENCE:** C653

**SUBJECT:** **END OF SEASON WATER METERING REPORT 2004 / 2005 -  
REPORT EP05/08/13 - Report prepared for 24 August 2005 Meeting**

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## **1. ACKNOWLEDGEMENTS**

Thanks to Council staff Suzanne Westley, Jenny Mason, Mandy Tomlinson, Neil Tyson, Joseph Thomas, Rose Smith, Carl Cheeseman, Kat Bunting, Heather Stanton, Jim Trembath, Matt McLarin, Brenda Clapp, and Rob Smith for their input into the 2004-2005 water metering season.

## **2. INTRODUCTION**

The purpose of this report is to present an overview of the water metering project for the 2004 - 2005 irrigation season. Its content covers three key areas:

- The Resource Management Act (RMA) and Tasman Resource Management Plan (TRMP) framework,
- The degree of compliance with firstly the furnishing of water meter readings, and secondly, the authorised and allocated water takes, and
- How the project was administered and looking to the future.

## **3. SUMMARY**

- Accurate water metering data is an essential tool in managing the District's valuable and limited water resource.
- Returns rates (on average) in the 2004 / 2005 season for zones subject to full metering ranged between a low of 77% and a high of 91%. Zones subject to miscellaneous metering had a much poorer average return rate. Council's aim must be for a minimum return rate of 95%.
- There was no water rationing imposed during the 2004 / 2005 season and average water use in each zone during the season was less than 45% of the allocated maximum.
- Notwithstanding non compliance, no infringement or abatement notices were issued during the 2004 - 2005 season.
- In the 2004 / 2005 season, 554 water meters required monitoring. A pre-season check was achieved on 364 meters.
- An increasing number of consent holders are sending in returns by email.
- Further work and recommendations for the future administration of the water metering project will be required.

## **4. THE RMA AND TRMP FRAMEWORK**

Section 14 of the RMA states (inter alia) that no person may take or use water in a manner which contravenes a rule in a regional plan or proposed regional plan unless expressly allowed by a resource consent.

The TRMP divides the Tasman district into water management zones. Some zones have been identified as traditional water short catchments and it is a requirement to install a water meter and supply meter readings to Council. Appendix 1 lists the TRMP water management zones and indicates the requirement for water metering.

The policy basis for the use of water meters is set out in 30.2.11 of the TRMP and states:

- a) to ensure compliance with permit allocations or allocation limits; or
- b) when there is full allocation of water in a zone; or
- c) when there is a need for water use data to assess effects of abstraction on a water resource or in relation to an allocation limit; or
- d) in any zone where there is a rationing trigger

Accurate water metering data is an essential tool in managing the District's valuable and limited water resource. The information is used for:

- Management of the districts water resources and improving/enhancing future understanding of the system;
- Monitor the effectiveness and suitability of the policy provisions within the TRMP and the exercise of resource consents;
- Bona fide review/renewal of existing consents; and
- Compliance with drought restrictions

## 5. COMPLIANCE MONITORING

Council resolution EP04/08/16 (in part) reads:

*For the 2004/2005 irrigation season that a close eye be kept on those zones with a continuing history of non-compliance and that immediate enforcement action be taken with respect to the over-taking of water and that ongoing education and communication with the water users concerned be continued.*

Daryl Page was the Compliance Officer responsible for the 2004 / 2005 water metering project. The primary aim of compliance monitoring is to ensure accurate water meter data is received. This is crucial in improving and enhancing water management in the Tasman district, For example, data has been used in the past to develop water management computer models for the Waimea Basin, Wai-iti Valley, Motueka Plains, and the Deep Moutere Aquifers.

Non-compliance issues ranged from missing meter returns to investigation of excessive takes. A number of water takes were identified where there was a shared water meter. This is not the intention of the individual consent and leads to confusion and administration difficulties.

There was an inability to work full time on the water metering project due to other compliance work. Because of this, priorities in respect to non compliance were established and have meant that there are some outstanding compliance matters from the 2004 / 2005 season. The intention is to deal with these prior to the next season. The compliance team will also be looking at new initiatives and the allocation of staffing resources for the administration of the project in 2005 / 2006 to ease the project burden on individual staff.

One such initiative is the updating of an existing Compliance Monitoring Flowchart for water metering. This has been updated to (a) reflect the practice during the 2004 / 2005 season and (b) confirm that the cost of monitoring will be recovered pursuant to section 36 RMA where Council has to make a site visit due to missing returns and/or take enforcement action where an allocation has been exceeded. This amended flowchart is included as Appendix 2 and forms part of the recommendations..

## **6. METER READING RETURN RATES**

The following return rates may not represent the return being received on time.

Unfortunately, there is no data to show the 'timely' rate of returns however staff confirm that a number of returns were received retrospectively and/or after phone calls and other follow up. To receive returns on a timely basis is preferable for water management purposes and is a condition of consent. The intention is to put procedures in place next season to ensure returns are received on a timely basis.

Notwithstanding the timeliness of a return particularly during droughts, the bottom line is that the information is received and the consumption records become more useful when looking back on the season.

As stated earlier however, the information from water meter returns is crucial in improving and enhancing water management in the Tasman district. There must be two key objectives in respect to water meter return rates. The first relates to the end use of the data and the aim is to have a minimum return rate of 95%. The second relates to compliance monitoring and the aim must be a return rate of 100%.

Appendix 3 shows the average return rates for the water management zones monitored during the 2004 / 2005 season. While some zones achieved a 100% return rate for individual weeks, this situation was uncommon. Returns rates (on average) for zones subject to full metering ranged between a low of 77% and a high of 91%. Zones subject to miscellaneous metering had a much poorer average return rate.

## **7. WATER TAKE DATA**

Appendix 4 provides graphical representation for each zone subject to full water metering and shows the amount of water used (from returns received), the amount of water that those sending in returns could have used, and the total zone allocation. The difference between these last two data sets (and shown in red) represents missing returns. These missing returns and/or inaccurate data can undermine the integrity of future research and management decisions.

While there were some individual overtakes recorded and allowing for a worst case scenario (e.g. double the allocation) for the missing returns, total water use for each zone was below the allocation maximum. The data indicates that on average, water use in each zone during the season was less than 45% of the allocated maximum. Notwithstanding this, it is worthwhile highlighting some of the data/trends represented in the graphs.

Examples of highest weekly water use as a percentage of the allocation

Date	Zone	% water use
24-1-05	Motueka Transition	62%
31-1-05	Moutere Western Groundwater	62%
	Waimea Upper Confined Aquifer	62%
	Waimea Lower Confined Aquifer	68%
	Waimea West	85%
21-2-05	Waimea Golden Hills	53%
28-2-05	Motueka King Edward	62%
	Moutere Eastern Groundwater	55%
14-3-05	Waimea West	96%

## 8. WATER RATIONING/WEATHER PATTERNS

There was no water rationing imposed during the 2004/2005 season.

Prior to January 2005, higher rainfall than normal ensured groundwater and river levels were at a healthy level. The water use graphs reflect for all zones an initial low use that starts to build in December followed by a fall in use at the start of January.

From January however, typical summer trends re-established causing groundwater and river levels to decline. Towards the end of March water rationing was being considered especially in the Waimea basin. A rainfall event in late March increased groundwater and river levels and deferred any need for rationing. April was drier than normal with many low rainfall records across the district, for example, the Waimea Plains received only 4 mm during April. With a drop in irrigation demands however, groundwater and river levels remained above the trigger points for water rationing.

## 9. PROJECT ADMINISTRATION

### 9.1 Background

Water metering has expanded steadily within Tasman District since it was first introduced for 20 users of the Lower Confined Aquifer in the 1980's. Before then, only large users such as Council for its urban water supplies bothered with metering water take at its source.

In the 2004 / 2005 season, 554 water meters required monitoring. Most recently, meters have been required in the Golden Hills and Delta zones (Waimea Plains) following the significant drought in the summer of 2000 / 2001. At this same time, other zones and users were identified in the TRMP for metering but have not yet been instructed to install meters.

The main reasons for this “deferred” metering, has been the lack of a clear mandate from management and a reluctance by compliance and other affected staff to take on the additional workload. Once subject to water metering (in accordance with TRMP policy 30.2.11), there becomes an additional workload to maintain the metering database. Limited funding means priorities have had to be established in respect to certain zones.

The staff resource required to implement water metering to new zones can be significant. In proposed new metered zones, staff have assisted user representatives with bulk tendering for meters and assisted users to identify the best location and method of metering for their individual situation. Staff may also be required to review individual consent conditions with negative implications for cost recovery of staff time.

The following table (formed from 31.1B in the TRMP) shows those zones (**highlighted**) where water metering implementation has been deferred and zones subject to water meter implementation in the future. The number on the left hand side represents the **highlighted** number of consents involved.

<b>Water Meter Requirements</b>	
<b>Water Management Zone</b>	<b>Zones where Water Meters are Required</b>
<b>Motueka/Riwaka Plains</b>	
(30)	<b><i>Riwaka Plains Zone – by 3 November 2004</i></b>
Metered	King Edward Zone
Metered	Hau Plains Zone
(23)	<b><i>Swamp Zone – by 3 November 2004</i></b>
(42)	<b><i>Umukuri Zone – by 3 November 2004</i></b>
<b>Moutere</b>	
(50-80 Domestic bores) Irrigation already metered.	Moutere Eastern and Western Groundwater zones
<b>Waimea</b>	
(26 Hope Aquifer consents. All other Waimea Zones are fully metered)	<b><u>All zones unless the water supply would have failed at the onset of rationing</u></b>
<b>Upper Motueka</b>	
	<b><i>Motupiko – by 2006</i></b>
(Total of 80+ consents)	<b><i>Tadmor - by 2006</i></b>
	<b><i>Tapawera Plains - by 2006</i></b>
	<b><i>Wangapeka - by May 2006</i></b>

## 9.2 Pre-season Letter

Council resolution EP04/08/16 (in part) reads:

*For the 2004 / 2005 summer season a method be employed to encourage water users to continue to submit their meter readings or notify Council that they are no longer taking water. This could be achieved through media releases and/or the pre-season letter.*

One of the first pre-season tasks was to audit the relevant records between Council's consents database (NCS) and a stand alone water meter database (WCM) to ensure both databases reflected each other. Significant progress was made towards including a grid reference (X,Y) for the actual meter (as opposed to the bore) so accurate location maps could be produced.

A letter dated 27 September 2004 was sent to all consent holders subject to water metering. The letter advised of a preseason meter check, the first weekly reading requirement of 1 November and provided the prepaid return cards. The information brochure 'How to Read your Meter' was included. A copy of the 27 September letter and the information brochures are included as Appendix 5.

Also included with this season's pre-season letter was an individual printout of the previous season's data. The intention was to show each user how Council records the information received and their water use records for the previous season e.g. the information showed where returns were missing and/or where an overtake situation occurred. Some feedback and retrospective explanations were received as a result of this initiative.

Pre printed meter reading return cards were sent out with the Pre season letter. The template for these was printed off site and Council data was then copied onto the cards by Council staff. The production of the return cards and the mail out of the pre-season letter again proved to be a time consuming process.

### **9.3 Pre-season Meter Check**

The aim was to carry out the pre-season meter check and first reading for all consents subject to water metering during October. This was not achieved with only 364 of 554 (66%) being completed. In this respect, the season was no different to previous ones. Completing the pre-season check proves difficult due to the desire to get a first reading as close to the start of the season as possible and the (increasing) number of consents subject to water metering. This preseason audit requires several staff which has a detrimental flow on effect as other work is effectively put on hold during this period. Appendix 6 provides a water management zone breakdown of the pre-season check.

The pre-season water meter check was undertaken by staff in the compliance team with some assistance from the hydrology team.

With the objective of achieving an annual visit to all sites subject to water metering, staff have discussed a revised water meter check for the 2005 / 2006 season. This could still take the form of a 'pre-season' check or audit but spread over the period October to December in order to better manage the workload. It could also see audits completed anytime between January and April. There are advantages and disadvantages that need to be considered in respect to the data requirements and staff resources.

## **9.4 Publicity**

In September 2004 an article was provided for Council's EnviroNews publication that acted as a summary of the 2003 / 2004 water metering season and an introduction to the 2004 / 2005 season. A copy is included as Appendix 7.

At the start of April, a summary of return rates to date, a thank you to those users making returns, and a reminder to all users that returns are required through to 2 May was included in the TDC Newslines section of the Nelson Mail.

The intention for 2005 / 2006 is to use this media tool more often and include the water take data graphs similar to those in Appendix 4.

## **9.5 Data Entry Person**

Council employed a temporary staff member whose role was to enter the data received from water meter returns into the Council database and to follow up missing returns with consent holders.

Notwithstanding, the brochure 'How to read your Meter' being sent for a second year, a number (acknowledged as a reducing minority) of returns still came in with incorrect readings and required auditing.

Telephone contact with the consent holder was found to be an effective means of chasing up returns and/or clearing up confusion regarding a reading. An increasing number of consent holders are sending in returns now by email and if any clarification was needed, the ability to correspond by email proved to be very efficient. For the 2005 / 2006 season, it is hoped to promote and increase the use of email returns and also investigate and expand on of this electronic transfer of data by enabling consent holders to enter the information directly into the database via the Council's website.

## **9.6 Budget**

The staffing cost for the 2004 / 2005 season was \$71,863 and was offset by income of \$40,000 from the annual charge levied on water permits holders. The shortfall of \$31,863 was met from the general rate. The funding of water metering needs review to ensure a greater proportion of the cost is borne by the water user and not the general rate. An increased monitoring effort is needed to meet the requirements of the project and staff will look to recover more of the costs directly from the consent holder in the future.

## **10. GENERAL DISCUSSION**

During recent years, the purpose and implementation of water metering has not always received the full support from Council staff and this has had a negative effect on the administration of the water metering project. In addition there have been changes in staff responsibilities and a satisfactory or up to date 'procedures manual' does not exist.

As a result of this and following recent staff discussions about improvements in the 2005 / 2006 season, further work regarding the recommendations for the future administration of the water metering project will be required. The recommendations below reflect this.

## **11. RECOMMENDATIONS**

1. That Council receive this report.
2. Adopt the Water Metering Compliance Monitoring Flowchart (Appendix 2).
3. That staff report back to Council in November 2005 on how the water metering project administration can be improved in the future.

Daryl Page

**Compliance Officer**

## **WATER METERING ZONES AND USERS**

The TRMP currently identifies 29 water management zones. For the 2004 / 2005 season, there were 12 zones subject to full water metering. In addition, six zones are subject to some individual water metering for a variety of reasons. There are five zones where the implementation of water metering has been deferred and six sub zones where implementation is required prior to the 2006 / 2007 season.

The number of consents where a water meter should be installed, readings supplied, and subject to monitoring totalled 554 in the 2004 / 2005 season. The corresponding number was xxx for the 2004 / 2005 season.

### **Zones subject to full water metering in the TRMP**

#### **Motueka/Riwaka Plains**

MHAU	Hau
MTRN	Transition
MKEZ	King Edward
MSZ	Swamp (by 2004 but implementation deferred)
MUMU	Umukuri (by 2004 but implementation deferred)
MRWS	Riwaka Surface (by 2004 but implementation deferred)

#### **Moutere**

OMEG	Moutere Eastern Groundwater
OMWG	Moutere Western Groundwater

Note: Metering of *permitted* activity users of deep Moutere bores in the Moutere is by 2004 but implementation has been deferred)

#### **Waimea**

WDEL	Delta
WGHZ	Golden Hills
WLCA	Lower Confined Aquifer
WRES	Reservoir
WUCA	Upper Confined Aquifer
WWW	Waimea West Aquifer
WWAI	Wai-iti
WDSA	Wai-iti Dam Service Zone (new for 2005 / 2006)
WHAQ	Hope Minor Aquifer (Currently, partly implemented)

#### **Upper Motueka**

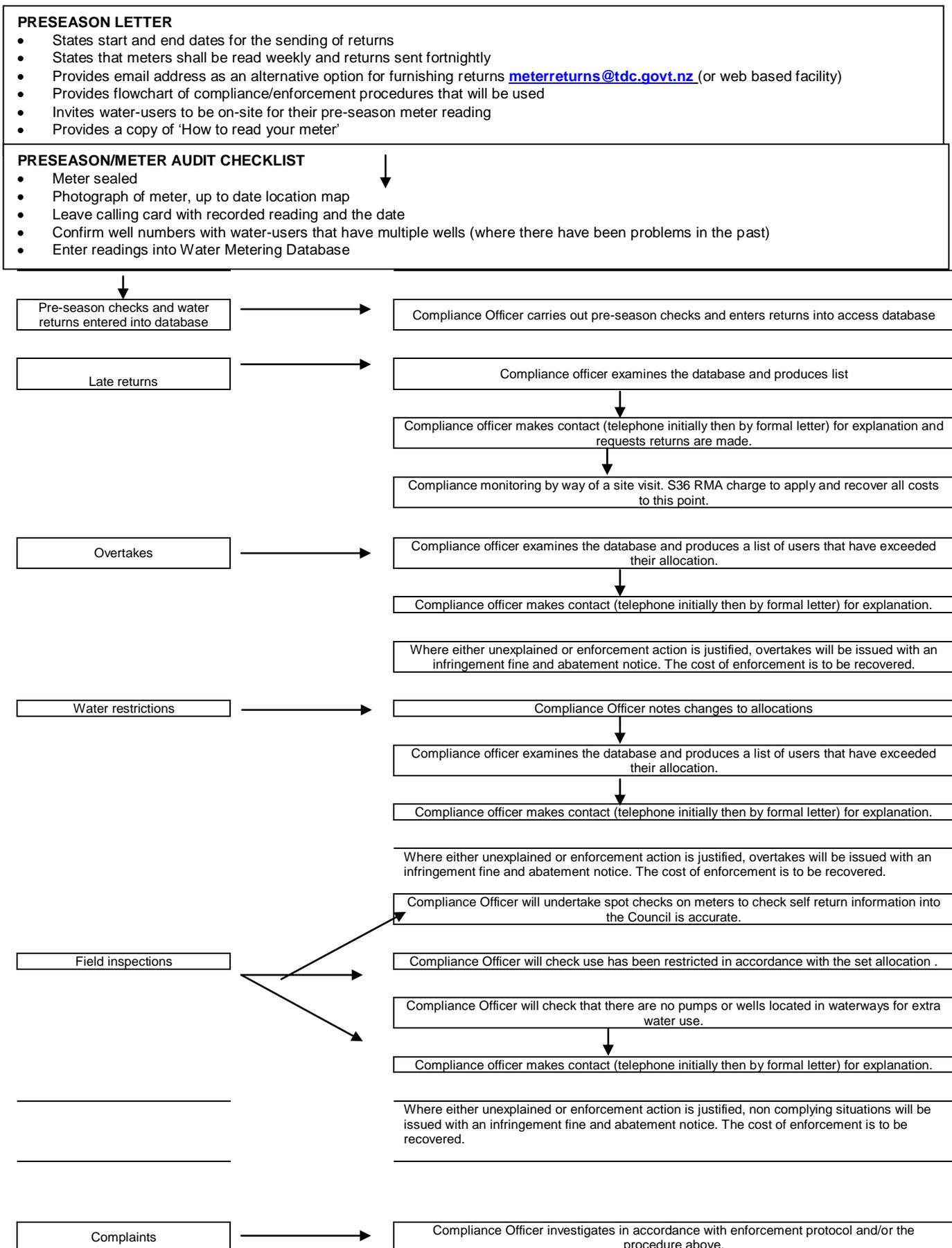
MUMG	Upper Motueka	proposed implementation 2006 / 2007
UMMS	Motupiko	proposed implementation 2006 / 2007
UMTP	Tapawera Plains	proposed implementation 2006 / 2007
UMTS	Tadmor	proposed implementation 2006 / 2007
UMWS	Wangapeka	proposed implementation 2006 / 2007

**Zones containing individual water meters**

(includes TDC water supplies)

AA	Aorere/West Coast
BWLD	Buller/Westland
MCPZ	Motueka Central Plains
MLSZ	Motueka Little Sydney
MRWZ	Riwaka Groundwater – Motueka (by 2004 but implementation deferred)
ODMG	Waimea – Moutere Gravels
TTA	Takaka

## APPENDIX 2: Metered Groundwater Compliance Monitoring Flowchart



**APPENDIX 3:  
2004 / 2005 Water Meter Return Rates**

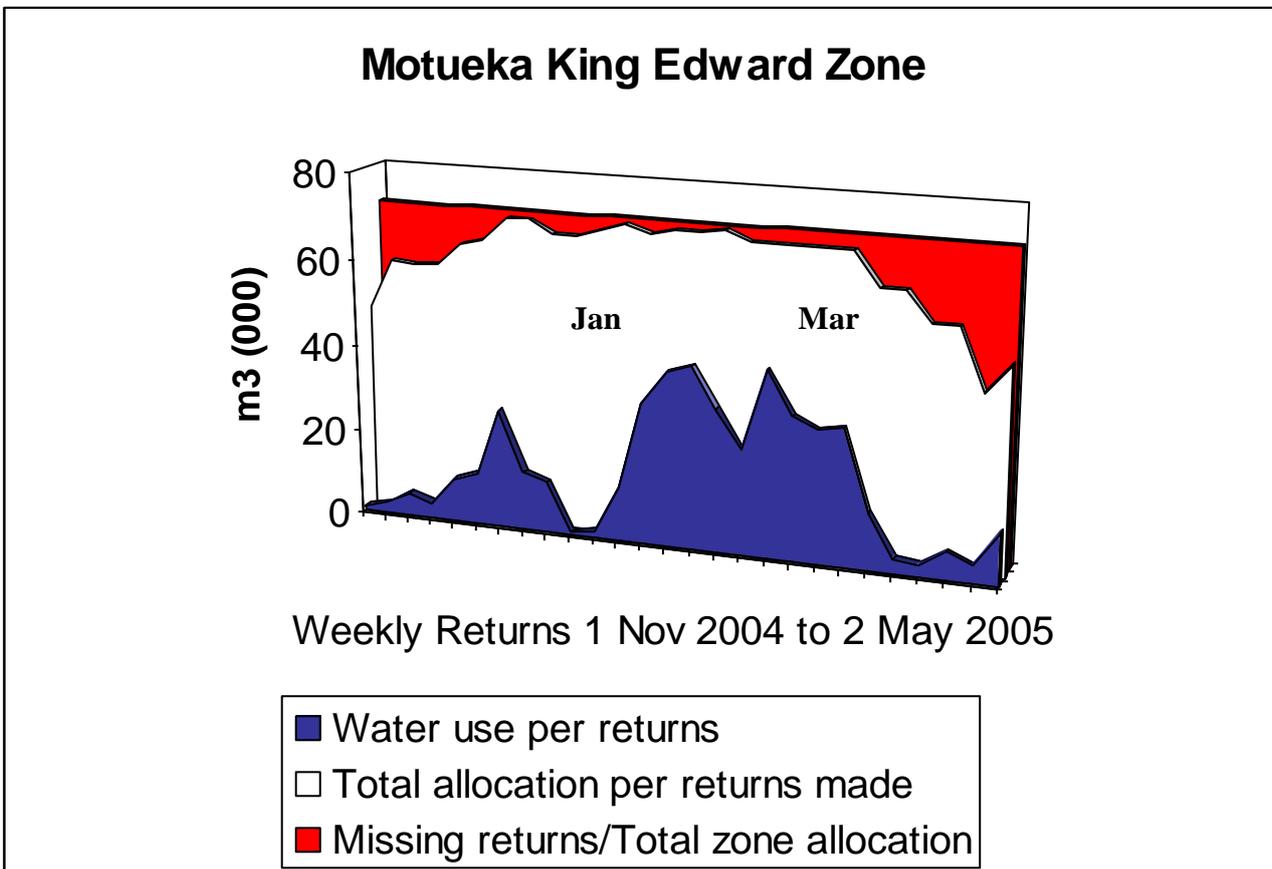
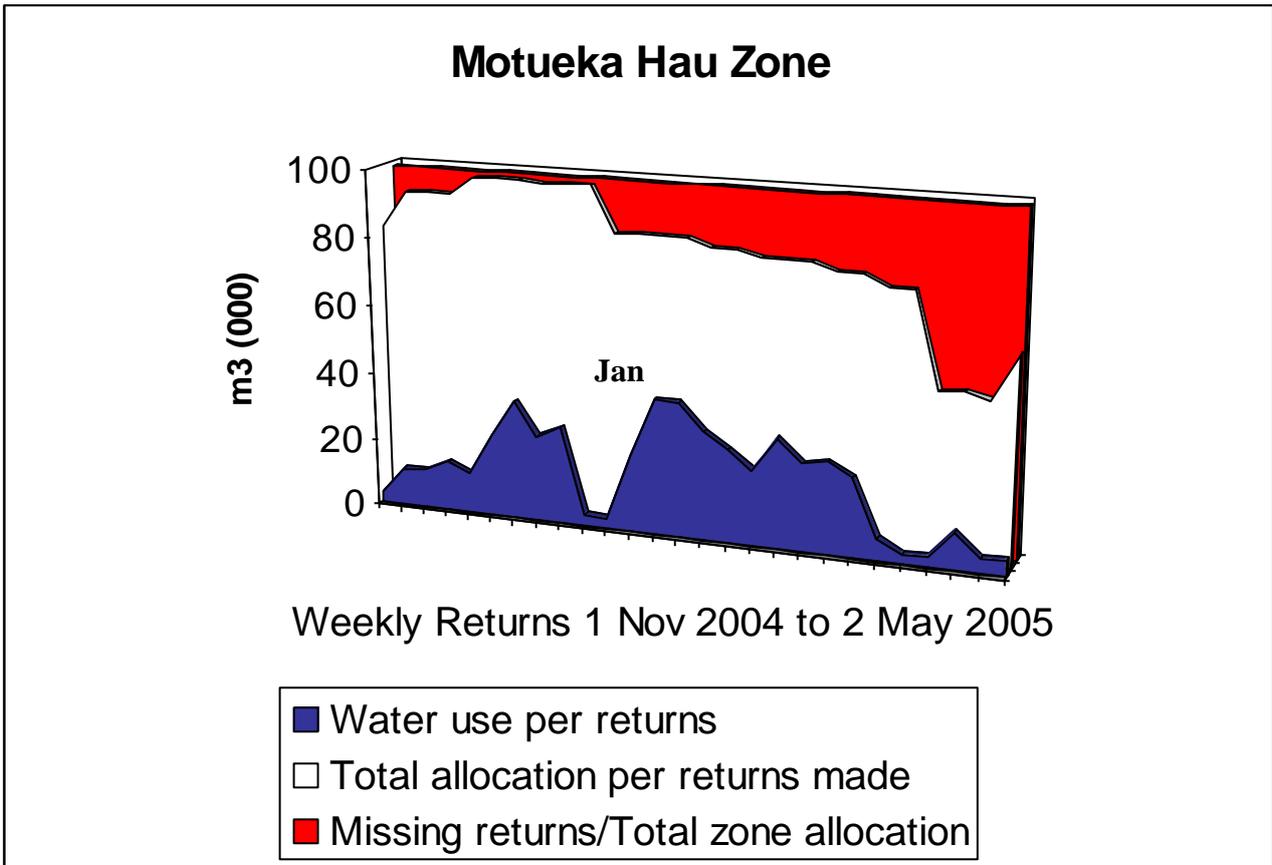
Zones subject to full water metering

<b>Zone</b>	<b>Missing returns (average)</b>	<b>Returns made (average)</b>	<b>Total Returns Required</b>	<b>% Returns Made (average)</b>
Motueka Hau	5*	24	29	84%
Motueka King Edward	4*	39	43	90%
Motueka Transition	2*	13	15	88%
Moutere Eastern Groundwater	14*	47	61	77%
Moutere Western Groundwater	4*	18	22	81%
Waimea Delta	25*	105	130	81%
Waimea Golden Hills	6*	23	29	80%
Waimea Lower Confined Aquifer	5*	20	25	81%
Waimea Reservoir	5*	35	40	88%
Waimea Upper Confined Aquifer	5*	24	29	83%
Waimea West Aquifer	2	20	22	91%
Wait-iti	14*	69	83	83%

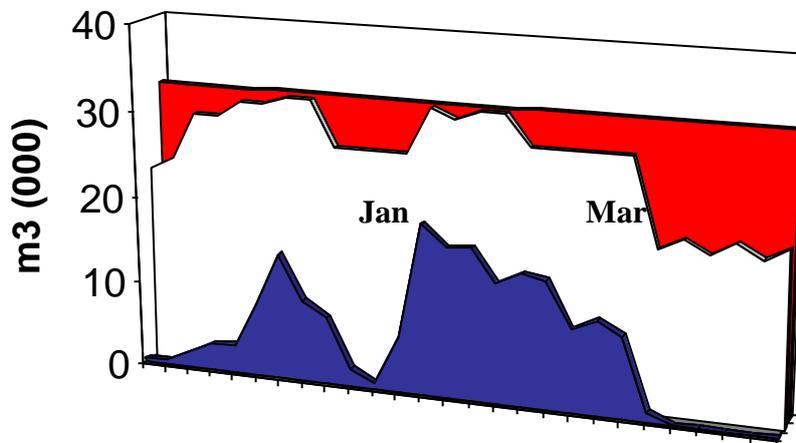
\*the number of missing returns increased near the end of the season (early April on) and to some extent, were higher at the start of the season (November).

Zones subject to miscellaneous metering

<b>Zone</b>	<b>Total Returns Required</b>	<b>% Returns Made (average)</b>
Aorere/West Coast	1	78%
Buller/Westland	2	50%
Motueka Central Plains	6	91%
Motueka Little Sydney	5	46%
Moutere – Deep Moutere Gravels	1	22%
Moutere Surface	4	58%
Takaka	3	23%
Takaka - Surface	1	59%
Waimea Hope Minor Aquifer	3	88%



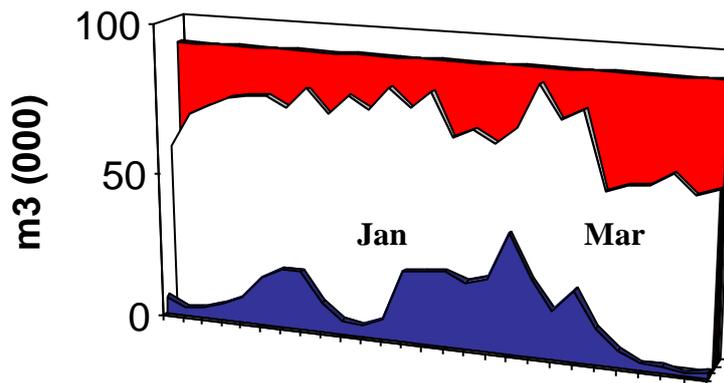
### Motueka Transition Zone



Weekly Returns 1 Nov 2004 to 2 May 2005

- Water use per returns
- Total allocation per returns made
- Missing returns/Total zone allocation

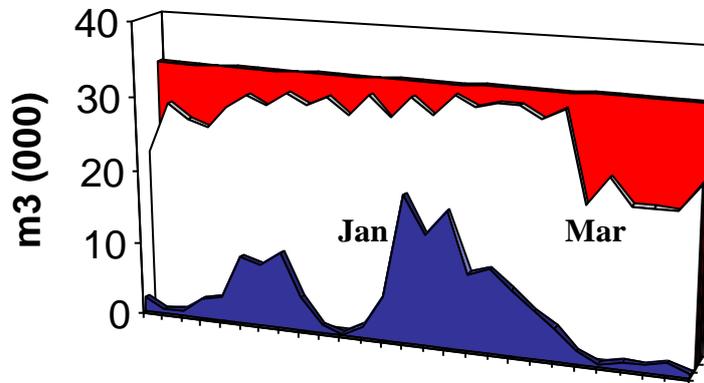
### Moutere Eastern Groundwater Zone



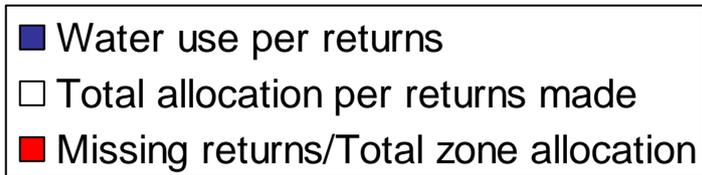
Weekly Returns 1 Nov 2004 to 2 May 2005

- Water use per returns
- Total allocation per returns made
- Missing returns/Total zone allocation

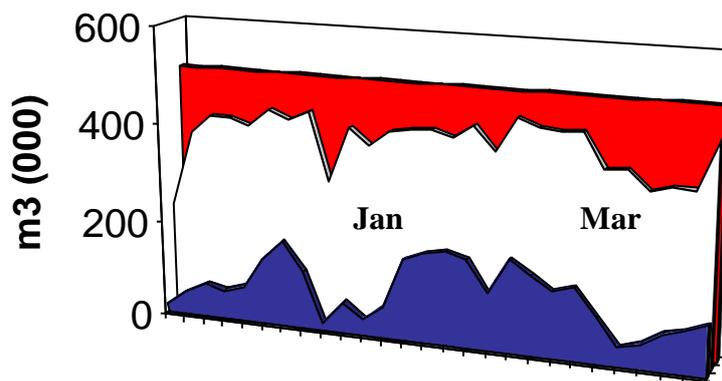
### Moutere Western Groundwater Zone



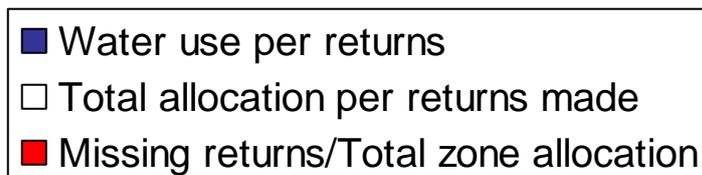
Weekly Returns 1 Nov 2004 to 2 May 2005



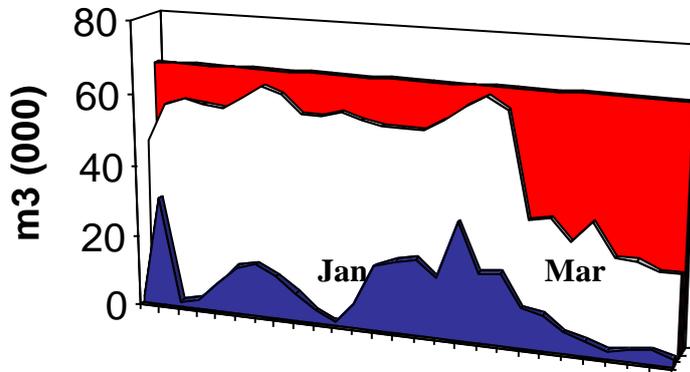
### Waimea Delta Zone



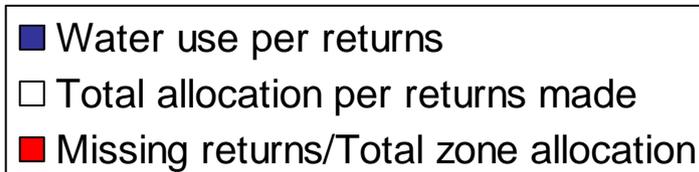
Weekly Returns 1 Nov 2004 to 2 May 2005



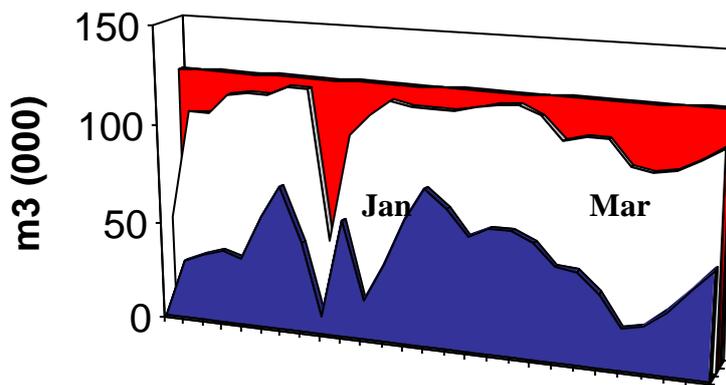
### Waimea Golden Hills Zone



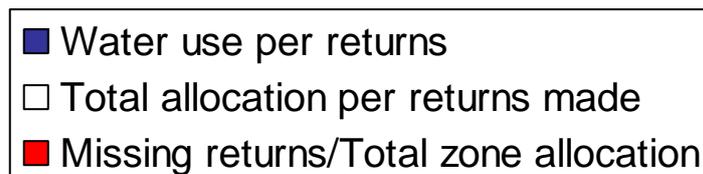
Weekly Returns 1 Nov 2004 to 2 May 2005



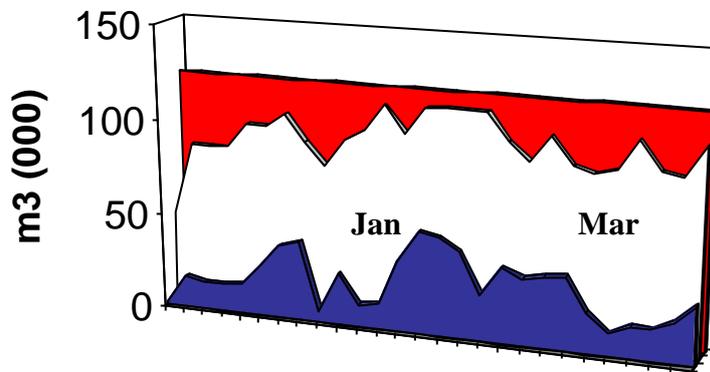
### Waimea Lower Confined Aquifer



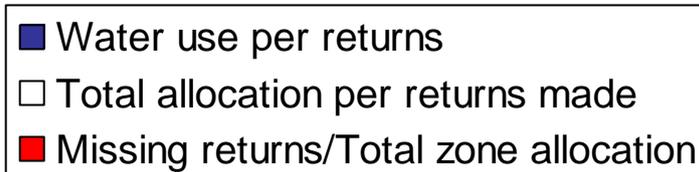
Weekly Returns 1 Nov 2004 to 2 May 2005



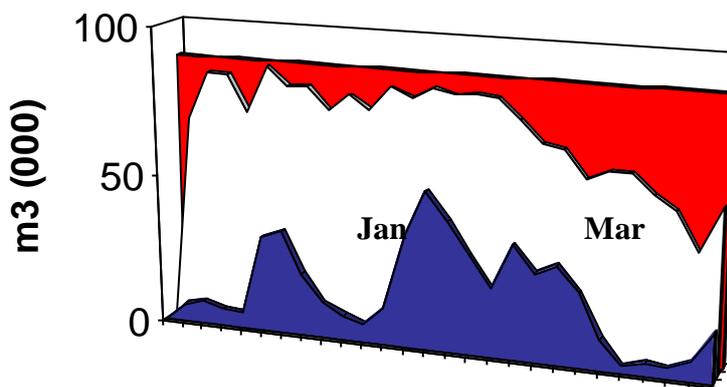
### Waimea Reservoir Zone



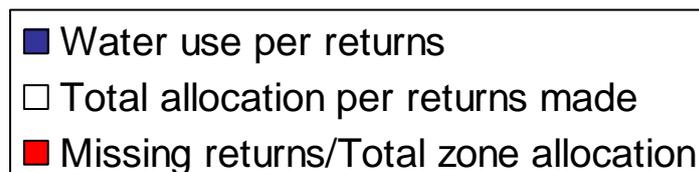
Weekly Returns 1 Nov 2004 to 2 May 2005



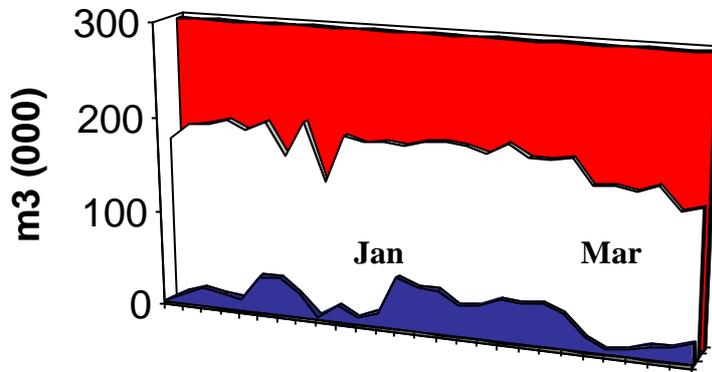
### Waimea Upper Confined Aquifer



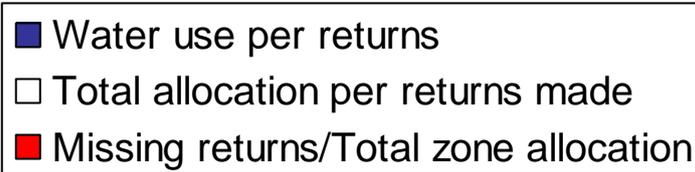
Weekly Returns 1 Nov 2004 to 2 May 2005



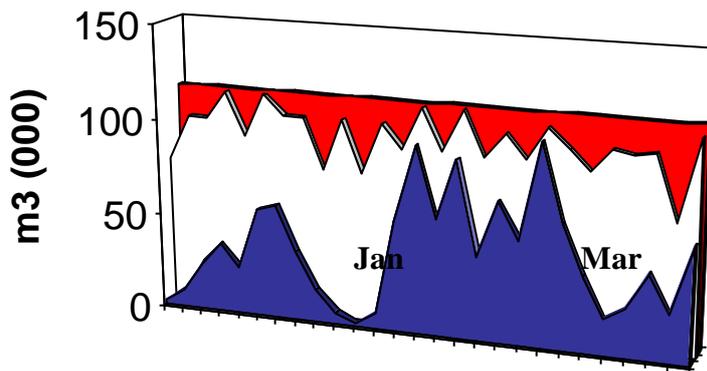
### Waimea Wai-iti Zone



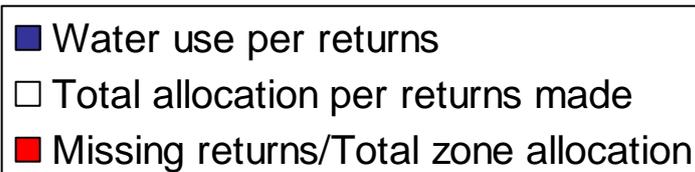
Weekly Returns 1 Nov 2004 to 2 May 2005



### Waimea West Zone



Weekly Returns 1 Nov 2004 to 2 May 2005



27 September 2004

«Applicant\_Name»

Dear Sir/Madam

**ATTENTION WATER USER – PLEASE READ**

**PRE-SEASON METER CHECKS**

According to Council records you are the holder of a consent to take groundwater and/or surface water and a condition of your consent is water metering. This letter is to advise you that Council staff will begin our pre-season meter checks from **Wednesday 6 October 2004**. The aim is to complete these by **Monday 1 November 2004**, which is the date of your first weekly meter reading.

Because of the number of meters involved, it is not practicable to contact all meter owners individually to advise exactly when your meter will be read. If you wish to be present when staff visit your property, please contact me before 4 October 2004. If you do this via e-mail, please use the heading 'pre-season meter check'. As part of the pre-season check, staff will leave a card to show that we have visited and the card will state:

- The consent and well numbers to which the water meter relates
- The date of the pre-season visit; and
- The meter reading at the time of the visit.

**WATER METER RETURN CARDS**

As mentioned above, your first meter reading is required on **Monday 1 November 2004** and weekly thereafter. Return cards for the 2004/2005 season are enclosed. Please note while your meter must be read weekly, the return is to be sent to Council on a fortnightly basis for this 2004/2005 season and this is a change from previous years. The return cards are pre-paid and no envelope is required. Alternatively, and many users did this last season, returns can be sent by email to [meterreturns@tdc.govt.nz](mailto:meterreturns@tdc.govt.nz) or by facsimile to 03 543-9524.

It is important that you:

- Read your meter each Monday
- Advise Council of the meter readings each fortnight (by the Wednesday)
- Advise Council of any nil reading
- Advise Council if you are not irrigating or do not intend to irrigate this season

Collectively, the information received from each user's return provides Council with essential data to manage the District's valuable water resource. Your 2003/2004 data is enclosed so you can not only see a summary of your weekly usage last year, but to highlight instances where there was no return made and/or an overtake situation. Where no return was received, there is no entry in the 'Reading' column. A significant trend in the 2003/2004 season to the previous year was the reduction of overtake situations and the increase in the weekly returns. Council asks you to continue this positive trend.

If you have more than one metered well it is important that the reading that you send to Council is on the correct card and/or corresponds to the correct meter. It is recommended that you keep the pre-season label left by Council staff on your meter, and ensure the consent and well number on the return card corresponds with what is on the pre-season label.

## **GENERAL**

Please find enclosed an information sheet titled 'How to read your Meter'. The purpose of this sheet is to avoid any possible anomalies between readings – it sets out how Council staff will read the meter in its pre-season check and we ask that your readings are done in the same way. Also enclosed is a brochure titled 'Keep it Fresh, Keep it Clean'.

Lastly and by way of introducing myself, my name is Daryl Page and I am the Council staff member responsible for water metering monitoring for the 2004/2005 season. I look forward to working with you during the season. You will find my contact details at the top of this letter.

Should you have any technical and/or consent enquiries, you can contact Joseph Thomas or Neil Tyson and their contact details are provided below.

Yours faithfully



Daryl Page  
**Compliance Officer**

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Resource Scientist – Water  
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## HOW TO READ YOUR METER

There are two basic types of meter. The first has only a rotating dial that ticks over as water is being used. Makes and models of meters in this sub-group include the new style Meinecke, Socam, and Kent meters. Two examples of this type of meter presented below.



**Figure 1:** A Socam Meter. Reading is 10402



**Figure 2:** A New Style Meinecke Meter. Reading is 002642

If your meter has a rotating dial only, you will notice there is one or three numbers coloured red which often follows a comma (,), these numbers record the tenths and hundredths of litres.

### **IMPORTANT** **IGNORE THE RED NUMBERS WHEN READING YOUR METER**

For example, the reading of the meter in **Figure 1** is 10402 and the reading of **Figure 2** is 002642

The second group of water meter have a rotating dial and also circular dials that record tenths, and hundredths of litres. Makes and models of meters in this sub-group include the old style Meinecke, Arad, and Fuzhou meters. An example of this type of meter presented below.



**Figure 3:** An old Style Meinecke Meter. Reading is 692666.

### **IMPORTANT** **READ ONLY THE NUMBERS OF THE ROTATING DIAL**

For example, the reading of the meter in **Figure 3** is 692666

**APPENDIX 6:  
Completed Pre-Season Checks**

Zone - full metering required	Total consents	Completed	% Completed
MHAU - Motueka Hau	29	25	86%
MTRN - Motueka Transition	15	11	73%
MKEZ - Motueka King Edward	43	39	91%
OMEG - Moutere Eastern Groundwater	61	5	8%
OMWG - Moutere Western Groundwater	22	18	82%
WDEL - Waimea Delta	130	105	81%
WGHZ - Waimea Golden Hills	29	23	79%
WLCA - Waimea Lower Confined Aquifer	25	15	60%
WRES - Waimea Reservoir	40	28	70%
WUCA - Waimea Upper Confined Aquifer	29	1	3%
WWAI - Wai-iti	83	75	90%
WWW - Waimea West Aquifer	22	15	68%
<b>TOTAL</b>	<b>528</b>	<b>360</b>	<b>68%</b>
 Zone - partial metering required			
AA - Aorere/West Coast	1	0	0%
BWLD - Buller/Westland	2	0	0%
MCPZ - Motueka Central Plains	6	4	67%
MLSZ - Motueka Little Sydney	5	0	0%
ODMG - Deep Moutere Gravels - Moutere	1	0	0%
OMOS - Moutere Surface water	4	0	0%
TTA – Takaka	3	0	0%
TTS - Takaka Surface – Takaka	1	0	0%
WHAQ - Waimea Hope Minor Aquifers	3	0	0%
<b>TOTAL</b>	<b>26</b>	<b>4</b>	<b>15%</b>



### **The 2003 / 2004 Tasman District Council Water Metering Database**

**WELL DONE to all metered water users on what can be considered a successful 2003/2004 water metering season.**

In a report to Council's Environment & Planning Subcommittee on 12 August 2004, it was noted that in comparison to the previous season, there was a significant reduction in the number of users who exceeded their authorised water take.

Another positive outcome from the season was that there had been a significant increase in the return of meter readings to Council. Some zones continued their good rate of return from the previous season but one of the highlights was advice that seven zones that had a very poor return rate in the previous season, did exceptionally well.

The meter reading return rate was typically over 85% for much of the season, and in some cases being between 95 and 100%. This increase may reflect the ability to now send returns in email and/or facsimile. Who knows, maybe returns will be entered direct via the internet in the future?

In commending those users who complied with their authorised water take and contributed to the high rate of meter reading returns and encouraging these users and others to continue the positive trends, there are areas that could still be improved.

Water meter returns are still required even if the return is 'nil usage' and regardless of whether the season is dry or not. The water metering season is from November to April inclusive each year. While the absence of a reading does not affect the water resource as such, it does affect the integrity of Council's records and the management of the resource. The aim is to get a 100% return rate for all zones.

Water metering is required in traditional 'water-short' catchments and there were 548 active meters in the 2003/2004 season. The information gained from water meter returns is essential so Council can manage one of the districts most valuable resources. Information allows Council to determine how much water has been taken in a particular catchment area and helps whether or not restrictions are required in times of drought. It also allows the evaluation of Council policy and resource consent provisions that may ultimately benefit users.

It is also apparent that there are a large number of consents not being exercised. It is important that where the need to take water no longer exists, Council is informed.

The Council staff member responsible for water metering monitoring for the 2004 / 2005 season is Daryl Page. Daryl will have administration assistance for receiving meter returns during the season. For technical and/or consent enquiries, users are able to contact Joseph Thomas or Neil Tyson. Contact details for these staff members are provided below.

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