

WATER METERING PROGRAMME ANNUAL REPORT 2012 / 2013

Information Only - No Decision Required

Report To:	Environment and Planning Committee
Meeting Date:	15 August 2013
Report Author:	Carl Cheeseman, Co-ordinator Compliance Monitoring
Report Number:	REP13-08-09
File Reference:	C653

1 Summary

1.1 This report presents a summary of the water metering programme for the 2012 - 2013 summer irrigation season. The report covers the performance of the programme with respect to monitoring and enforcement, activities covered under the umbrella of the programme such as zone use, rationing and the implementation of the Reporting of Water Takes Regulation 2010.

1.2 Key findings from this season were:

Prevailing dry weather patterns occurring in the summer prompted the Dry Weather Taskforce to convene on six occasions to impose restrictions under Section 329 of the Resource Management Act 1991.

The number of consents administered under the water metering project in the 2012 / 2013 season increased substantially from 866 to 1018.

There are now 71% of water meter readings being received electronically. Of those filing electronically a significant proportion (83%) are now using the web page service offered by Council.

A total of 671 or 84% of meters received an audit during the season using summer student assistance to undertake this critical task.

Overall compliance was very good however a range of enforcement actions were required predominantly for overtakes. There were 14 Infringement Notices issued for overtakes deemed less than minor up from seven last year. One overtake with aggravating circumstances is now the subject of an elevated enforcement response.

Implementation of the Reporting of Water Takes Regulation 2010 continues. There are 220 consented takes 20 l/s or greater that were required to install a complying water meter and have that meter verified by November 2012. The second stage implementation requires the >10 litres/second but < 20 litres/second takes to comply by November 2014. At present 402 water takes in this district will be subject to this stage.

2 Draft Resolution

That the Environment and Planning Committee receives the Water Metering Programme Annual Report 2012 / 2013 REP13-08-09.

3 Purpose of the Report

3.1 This report presents a summary of the water metering programme for the 2012 - 2013 summer irrigation season. The report covers the performance of the programme with respect to monitoring and enforcement, activities covered under the umbrella of the programme such as zone use, rationing and the implementation of the Reporting of Water Takes Regulation 2010.

4 Regulatory Framework

- 4.1 Proposed changes to the Plan referred to in last year's report have now been completed (Plan Changes 35 and 36). These provisions were made operative by Council on 27 April 2013 and will continue to underpin the Compliance Sections monitoring framework in the new season.
- 4.2 The date for the first implementation stage of the Reporting of Water Takes Regulation 2010 occurred November 2012 when consented takes 20 l/s or greater were required to install a complying water meter and have that meter verified. In this district 220 takes were subject to this deadline. Performance on this sector is reported in the later sections.
- 4.3 The next significant milestone for the regulations is the second stage implementation which requires the >10 litres/second but < 20 litres/second takes to comply with the meter and verification requirements by November 2014. At present 402 water takes in this district will be subject to this stage.
- 4.4 Irrespective of the requirements of the Reporting of Water Takes Regulation requirements 60 consent holders in the Moutere surface water zone (various l/s rates) were bound by a November 2012 water meter requirement through the TRMP.
- 4.5 The TRMP also requires Moutere domestic (permitted activity) takes to install meters and provide water use returns April and November. 107 users are currently bound by this requirement and are administered through this compliance programme.

5 Water Rationing

- 5.1 Due to the prevailing dry weather patterns occurring in the district over the summer the Dry Weather Taskforce was required to convene on six occasions to consider and impose restrictions under Section 329 of the Resource Management Act 1991.
- 5.2 The following is a timeline of the meetings and rationing stages as they were imposed over this period.

DWTF Meeting: 17-12-12	
Date Implemented	24-December-12
Rationing Stage	1
Zone	Upper Catchments Reservoir Waimea West Golden Hills Delta Unconfined Aquifer Upper Confined Aquifer Lower Confined Aquifer
DWTF Meeting: 24-12-12	
Date Implemented	31-December-12
Rationing Stage	1 continued
Zone	Upper Catchments Reservoir Waimea West Golden Hills Delta Unconfined Aquifer Upper Confined Aquifer Lower Confined Aquifer
DWTF Meeting: 31-12-12	
Date Implemented	Immediately
Rationing Stage	Lifted all zones
DWTF Meeting: 19-02-13	
Date Implemented	25-February-13
Rationing Level	Stage 1
Zone	Upper Catchments, Reservoir, Waimea West, Golden Hills, Delta, Unconfined Aquifer, Upper Confined Aquifer, Moutere Western, Moutere Eastern
DWTF Meeting: 25-02-13	
Date Implemented	4-March-13

Rationing Level	1
Zone	Lower Confined, Hope Aquifer, Motupiko, Moutere Western cont, Moutere Eastern cont
Rationing Level	2
Zone	Upper Catchments, Reservoir, Waimea West, Golden Hills, Delta, Unconfined Aquifer, Upper Confined Aquifer
DWTF Meeting: 05-03-13	
Date Implemented	11-March-13
Rationing Stage	1
Zone	Motupiko; cont, Moutere Western; cont, Moutere Eastern; cont, Baton, Tapawera Plains, Wangapeka, Stanley Brook
Rationing Stage	2
Zone	Lower confined, Hope Aquifer
Rationing Stage	3
Zone	Upper Catchments, Reservoir, Waimea West, Golden Hills, Delta, Unconfined Aquifer, Upper Confined Aquifer
Rationing Stage	Cease Take
Zone	Moutere Surface
1	
DWTF Meeting: 12-03-13	
Date Implemented	18-March-13
Rationing Stage	1
Zone	Moutere Western; cont, Moutere Eastern; cont, Baton, Tapawera Plains, Wangapeka, Stanley Brook, Wai-iti
Rationing Stage	2
Zone	Lower confined, Hope Aquifer, Motupiko
Rationing Stage	3
Zone	Upper Catchments, Reservoir, Waimea West, Golden Hills, Delta, Unconfined Aquifer, Upper Confined Aquifer
Rationing Stage	Cease Take
Zone	Moutere Surface
DWTF Meeting: 19-03-13	
Date Implemented	Immediately
Rationing Stage	Lifted all zones

6 Administrative Functions

6.1 Water Meter administration

The total number of meters on the database at the end of the 2012 / 2013 season is 1018 (866). This number of meters comprises the following:

- 911 Consented meter takes
- 107 Moutere domestic (permitted activity) metered takes

Of the consented metered takes the following applies:

- 682 (643) were deemed active and required to file weekly returns. These were the consent holders irrigating that season.
- 106 (89) were deemed non active and not required to file weekly returns. These were consent holders not irrigating that season

- 6 were active but on annual meter returns.
- 117 are on future implementation

6.2 Return Method

71% of all meter reading returns are received electronically including domestic takes. The remainder are those that still provide their information through weekly card returns.

Of the electronic methods this season saw a significant shift towards webpage return with 83% of all returns coming in via the web page entries. Last year this figure was 63% and indicates the increasing preference for usage of Councils web page service. Email returns are relatively consistent at 16% (17%). Telemetry data now makes up 1% of returns.

6.3 Other Administrative Requirements

In addition to the ongoing collection, monitoring and reporting of water use data during the summer season, other administrative tasks include:

- Pre-irrigation season set up. Staff time is dedicated to the set up of the upcoming season. This is associated with bringing new consents in, database and data integrity audits and mail outs
- End of water year reporting. This is an important feedback mechanism to water users and forms an integral part of the overall reporting process. While this occupies a considerable amount of staff time it is considered invaluable and worth the effort. The reporting consists of a summary letter and graph of the individuals and wider zone usage and commentary on consent condition performance and any deficiencies.
- Electronic records. A small number of surface take consents are required to send their water use data electronically (data logger). While currently an annual requirement for these consent holders, the supply of electronic data in this format is likely to increase as a result of the Regulations. Council processes to manage this form of data continue to develop to meet this change.
- NCS database changes. The rapid changes occurring in the management and reporting of water use has meant the demand for increased database functionality. The implementation of the Regulations and their reporting requirements has certainly compounded this and it is likely that the current system will not meet increasing demand long term. This is currently under strategic review with a view to long term solutions.

7 Monitoring and Enforcement

7.1 At present 37 water management zones in this district have either a full or partial metering requirement on abstractive takes imposed through the TRMP. For the actively metered zones consent holders are required to furnish weekly usage readings on a fortnightly basis over the water metering period. This forms the basis of the compliance monitoring programme and has three primary objectives:

- Ensuring compliance with the obligations imposed in consent conditions and responding to non compliance accordingly. This is a statutory requirement and underpins all monitoring programmes.
- Ensuring comprehensive usage data is available for the purpose of sound water resource management and policy setting.
- Ensuring ability to provide accurate usage data to central government agencies in meeting national reporting objectives.

7.2 With the introduction of the Reporting of Water Takes Regulations 2010 the duties imposed through this have also been built into the programme as a dedicated project interlocking with the current framework. As the monitoring, enforcement and ability to report are integral to the success of implementation in this district and it has equal status to the normal consent monitoring.

7.3 The 2012-2013 season performance is reported as follows:

Missing Readings

Overall performance in respect to returns for active meters was high. Where circumstances warranted it staff continued to contact consent holders directly without site visits (no direct recovery) which generally improved those individuals future compliance. Unfortunately 14 invoices were issued across nine consent holders following persistent failure to submit readings despite Council efforts.

Excessive Water Use

All excessive water use situations were investigated and responded to in accordance with Councils enforcement policies. For the very minor overtakes warnings were used as a means of addressing non compliance and gaining future compliance however these were used sparingly particularly in the rationing stages. 14 Infringement Notices were issued for overtakes deemed less than minor (compared to 7 last year); one overtake with aggravating circumstances is now the subject of more significant enforcement action.

Water Meter Audit

A total of 671 or 84% of meters were audited during the season. This was undertaken by the summer student who had this as their primary task over the period of employment. Meter audits continue to include a reading of the meter dial, ensure integrity of the seal and obtain an updated (digital) photographic record of the meter. Where a reading discrepancy is found these are reported for follow up.

Fictitious Meter Readings

Some reading discrepancies were identified and all were followed up with the consent holders. Enforcement action was taken for all cases where deliberateness was evident and one such case has now become a significant enforcement response.

Moutere Domestic Metering

As at 30 June 2013 a total of 107 domestic bores have been identified and registered on the database. Effort put into the monitoring and enforcement of this TRMP requirement this season has seen this progress considerably from the previous year. While that is the total registered not all have installed the required meters and 14 users remain in non-compliance. These individuals will be the subject of additional action in the coming months as we look to finalise this matter.

In respect to these domestic meters where the water use data readings are required April and November each year, as at 30 June 2013 all readings had been received from those with meters.

Regulation Implementation

As at 30 June 2013 a total of 220 meters on takes greater than 20 l/s were required to be verified as accurate. 16 had not achieved verification either because they had failed or were on a waiting list with accredited service providers. Eight have not complied whatsoever and are subject to enforcement action.

In the next couple of months the next stage of implementation will commence with the sending out of an advisory and information sheet to those with takes greater than 10 litres/second but less than 20 litres/second. The installation deadline for these meters is November 2014.

As at 30 June 2013 the current number of resource consents within this target group is 402. Of these 263 are known to be metered however their level of compliance with the requirements contained in the Regulation is presently unknown. The remaining 139 consents are currently unmetered.

8 Water Use and Trend Data

8.1 Metered Take Data

One of the main objectives of the water metering programme is to provide Council, resource users and the community data on the consumptive use of water in the individual management zones. This data provides information on the volumes, pattern of use, return rates and the stages and effects of rationing in the individual zone. Graphical representation of each water management zone is also provided on the Council's website www.tasman.govt.nz for public viewing.

As usual, end of season summaries were sent to all consent holders together with graphical representation of their individual water use record and the relevant water management zone. This

reporting method was used for the majority of consent holders and is generally well received despite the time and cost involved. If a matter of non compliance was associated with the particular consent a monitoring note outlining the matter was also included for reference.

The water management zone data for the 2012 - 2013 water year is attached in Attachement A

8.2 Moutere Domestic Data

Data on consumption is not managed or reported through this programme but the information gathered on usage from these meters is forwarded to the Resource Scientist - Water.

9 Budget

- 9.1 A summary of the Compliance Monitoring Water income/costs for the 12 month period ending 30 June 2013 is follows.

Total expenditure for the period was \$160,252. This comprised wages and overheads. Total income for the period was \$150,028. This comprised income from the annual charges, meter levies, rate appropriation and sundry enforcement fees. The result was a net cost of -\$10,224. Traditionally one officer is dedicated full time to the water metering compliance programme The Compliance Administrator is diverted to provide support during the season as is a summer student. This year due to the implementation of the Reporting of Water Takes Regulation 2010, the need to respond in the field to incidents in a drought and ever increasing administrative demand from the programme and regulations it was necessary to engage additional staff resource. This came in the form of a five month fixed term employee tasked with monitoring and enforcement in key focus areas and the additional services of an administration officer to assist in data management. Due to the utilisation of additional man-hours to achieve some critical objectives there was a noticeable increase in staff cost this year which is explained in the net cost. See following section for further discussion on this.

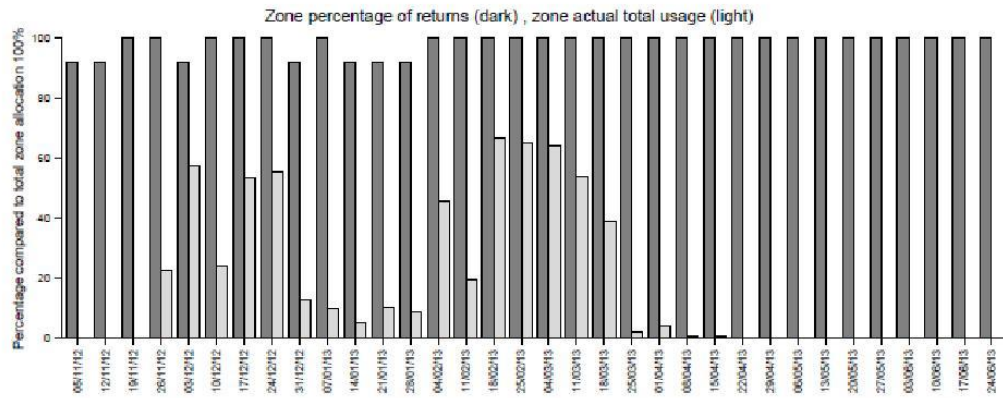
10 Discussion

- 10.1 This season the administrative effort and increased field presence saw a much improved level of compliance from water users, which is particularly pleasing given the drought impacts.
- 10.2 The difficulty lies in maintaining this momentum for future seasons as ongoing success relies on sufficient staff resources. While the addition of a short term employee dedicated to enforcement response and the diversion of an administration officer was instrumental in the improved performance this year, these come with obvious cost. Fiscal restraints will mean this approach will not be a sustainable option next season unless funding changes are made. That said it is hoped the budgeted Water Metering & Resources Environmental Monitoring Officer position may alleviate some technical data management pressures however this position cannot realistically give much relief to the compliance and enforcement demands and we will have to navigate through this. Certainly as the roll out of the Reporting of Water Takes Regulation 2010 requirements gathers pace demand will inevitably increase the pressure on our limited staff resource. It is for that reason that consideration to reviewing the targeted fees and levies will be required in the near future.
- 10.3 It is also at this point worth noting the impact the expanding water programme and regulations is now having on database requirements. The current NCS add-on (WCM database) was originally designed to capture basic consumption monitoring and this functionality remains. Unfortunately the demand to capture meter verification data, year round monitoring, and greater reporting requirements means the NCS add-on is reaching the end of its abilities to support the programme. In order to find solutions a process mapping exercise is being considered in order to identify the best options for the future. Any cost impacts will have to be addressed in the next Annual Planning round.

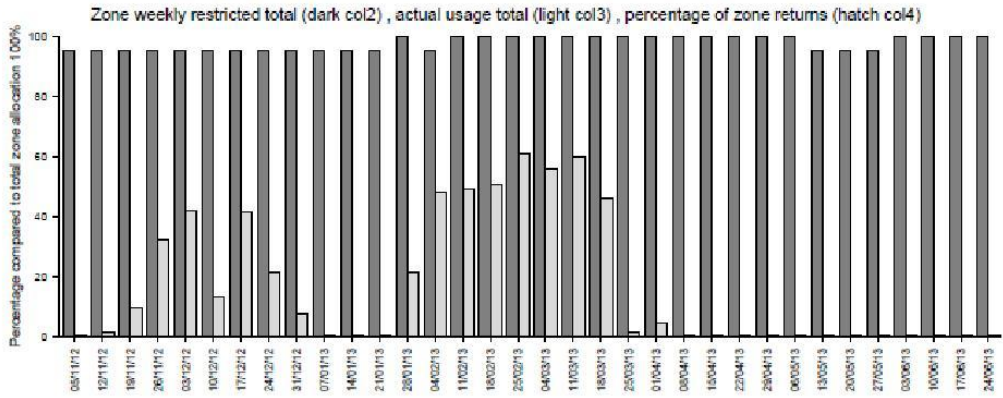
11 Attachments

1. 2012-13 Water Report Graphs

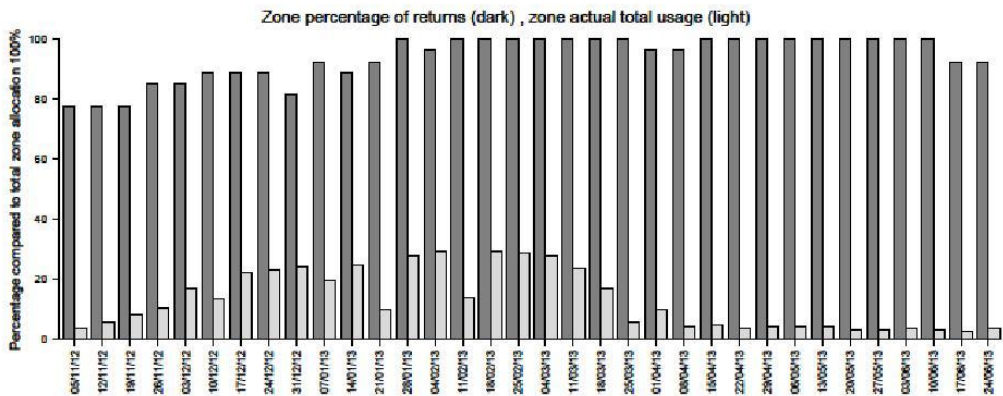
Aorere/WestCoast



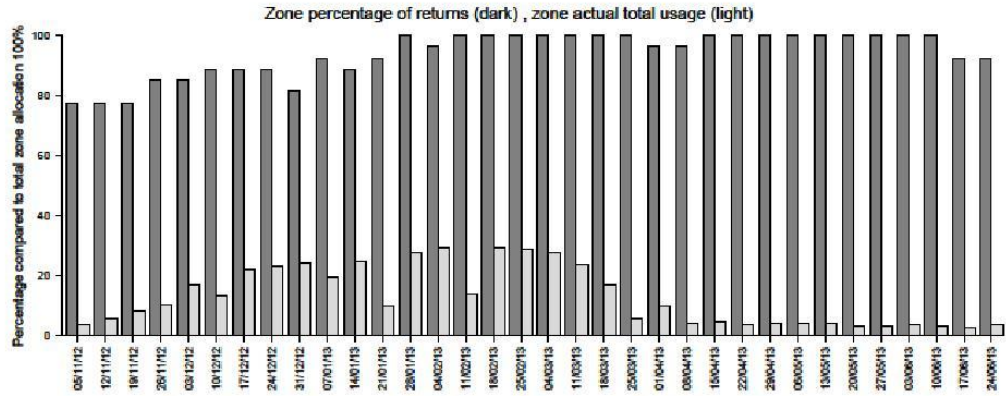
Upper Buller



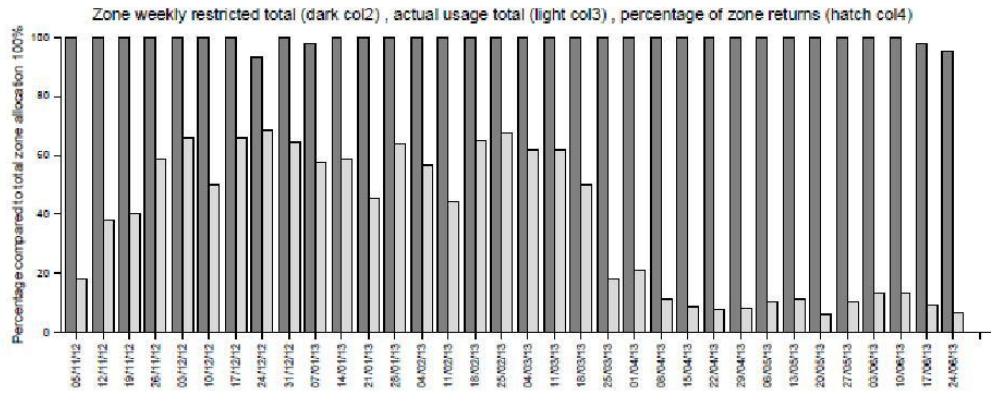
Motueka Central Plains Zone



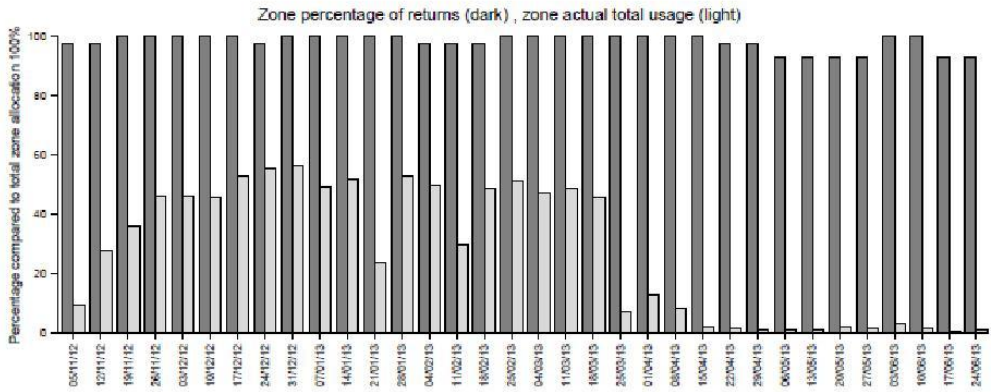
Motueka Central Plains Zone



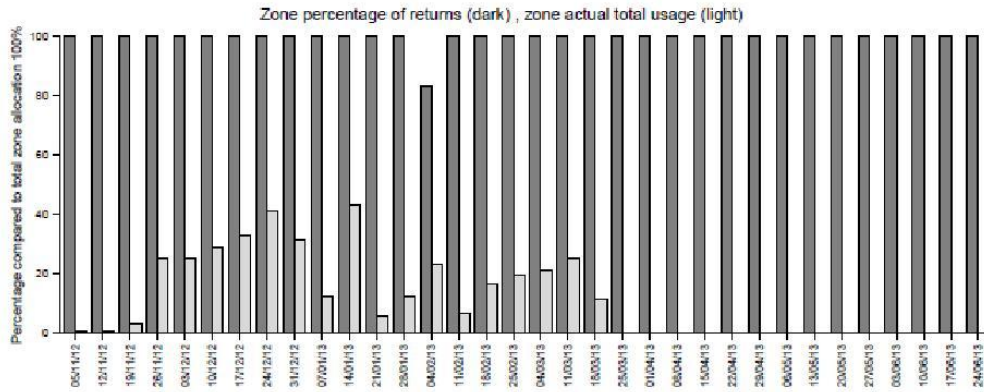
Motueka Hau Zone



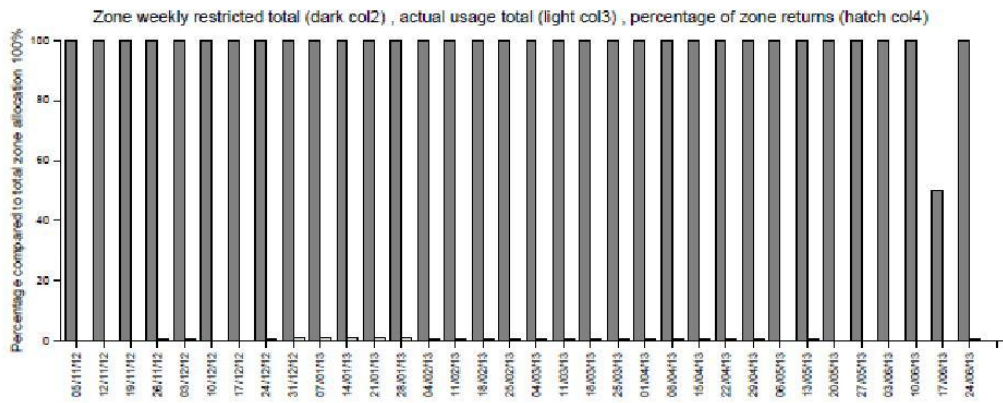
Motueka King Edward Zone



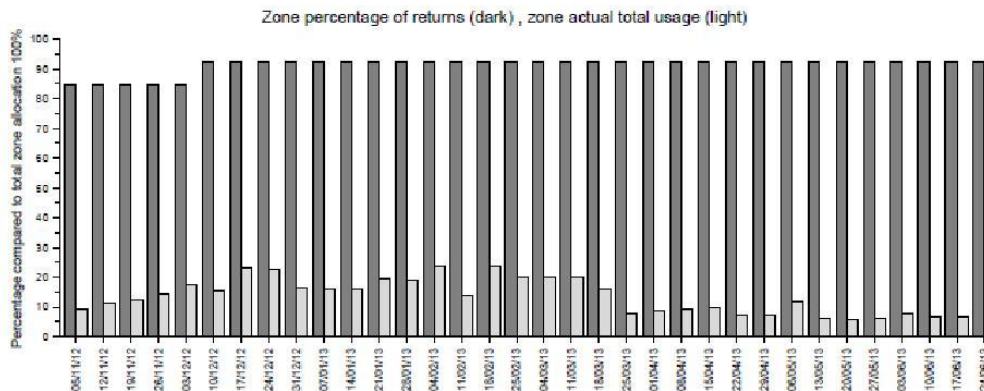
Motueka Swamp Zone



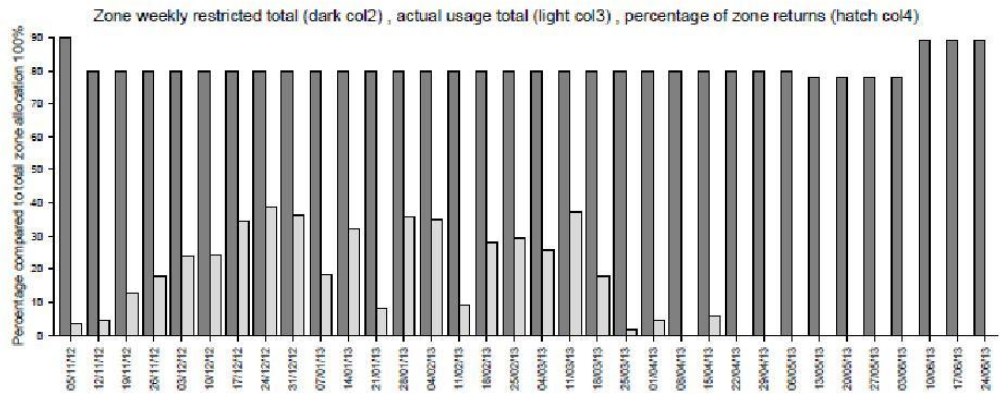
Marahau and Adjoining Aquifers



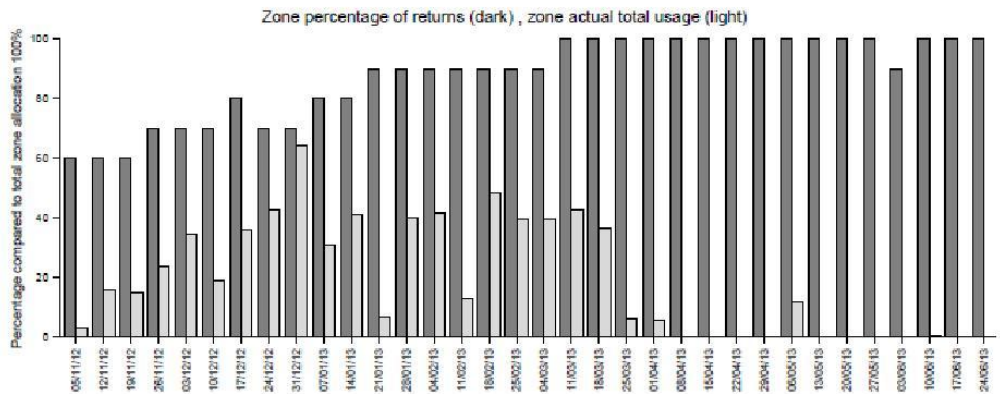
Middle Motueka



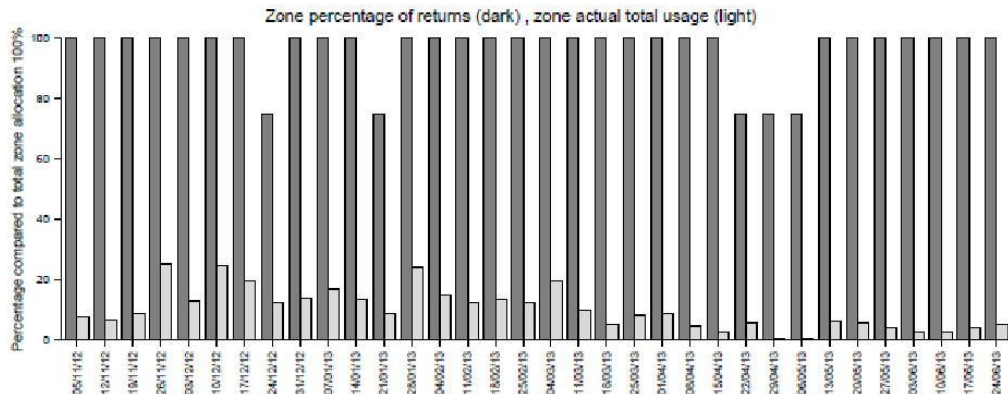
Motueka and Riwaka Zone



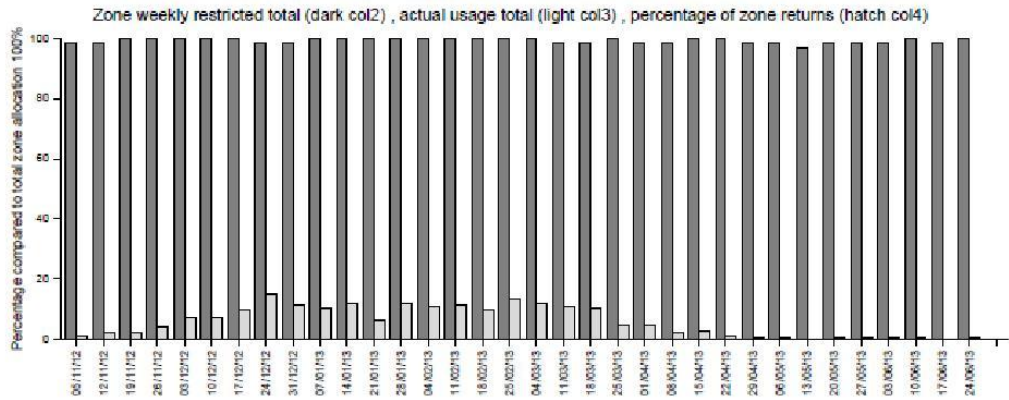
Motueka Umukuri Zone



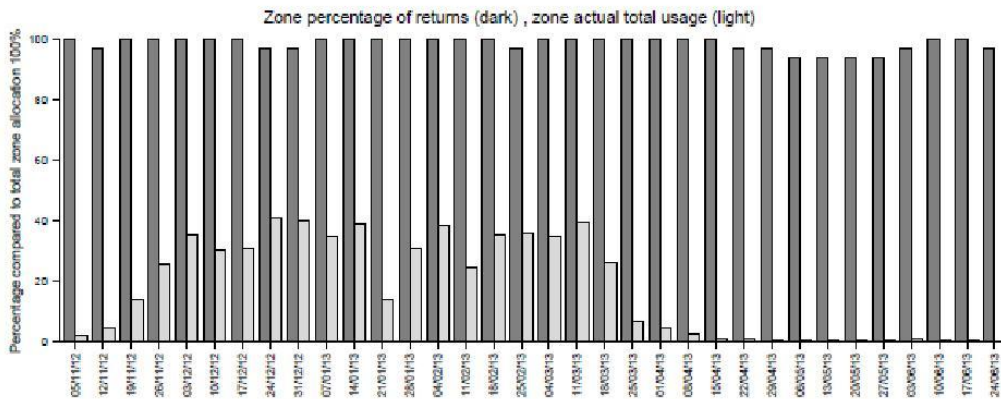
Deep Moutere Gravels - Moutere



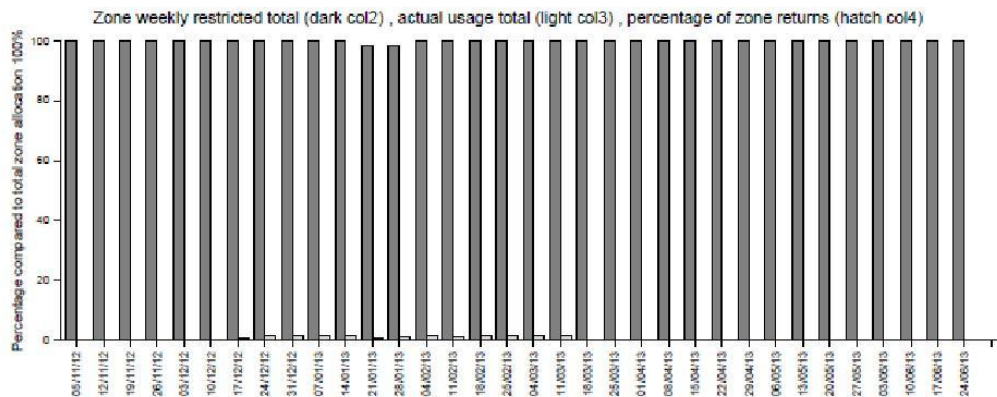
Moutere Coastal Groundwater



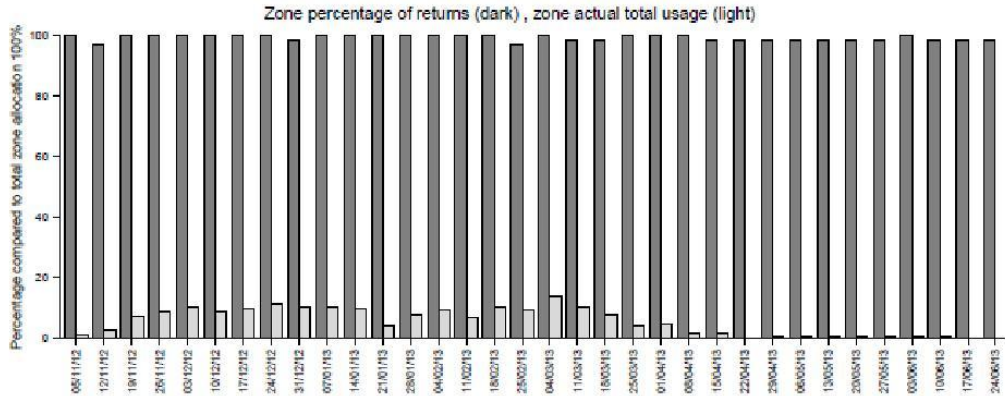
Moutere Eastern Groundwater Zone



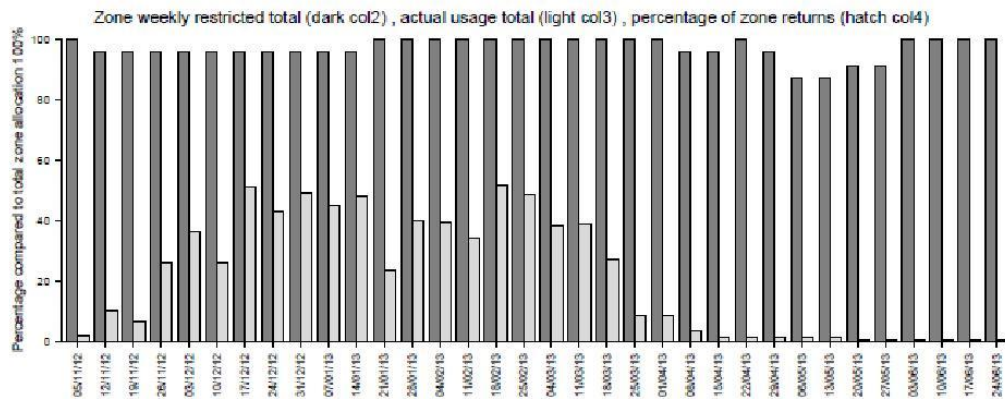
Moutere Surface water



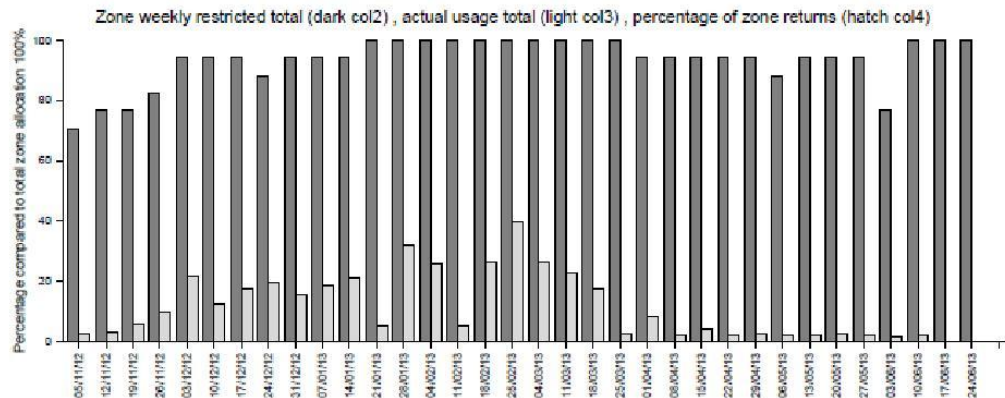
Moutere Southern Groundwater



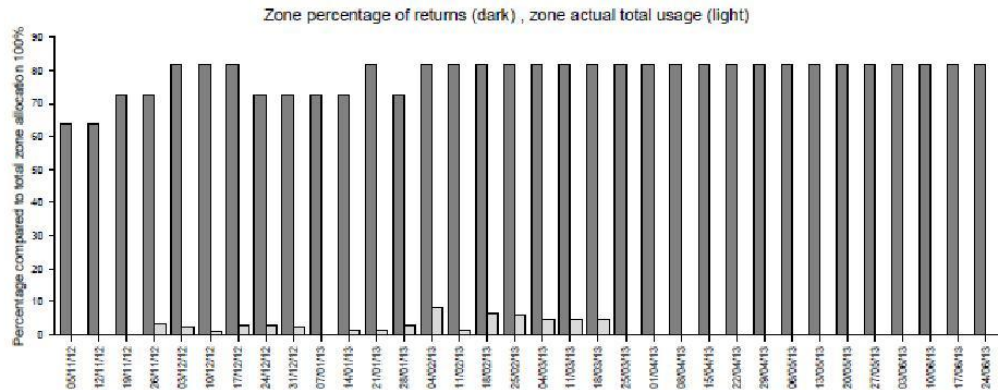
Moutere Western Groundwater Zone



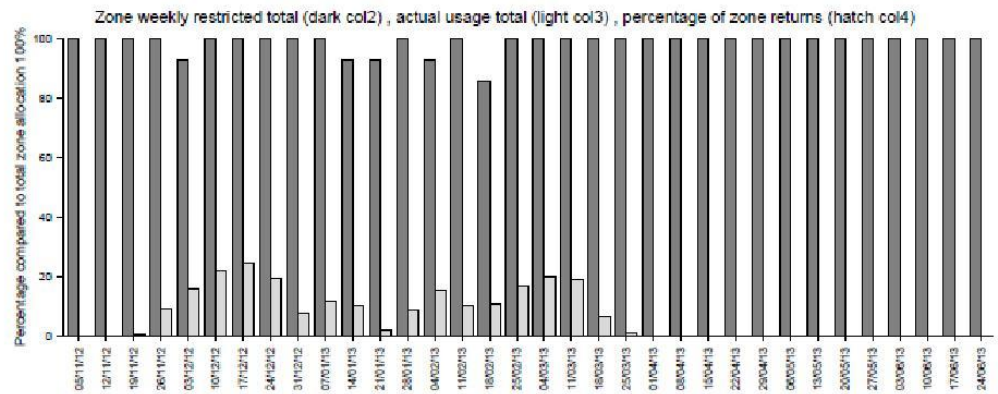
Takaka Aquifer - Takaka



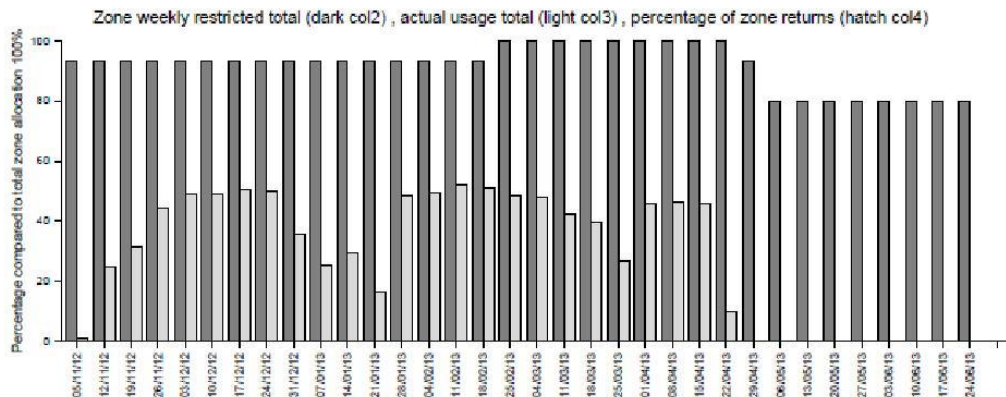
Takaka Surface - Takaka



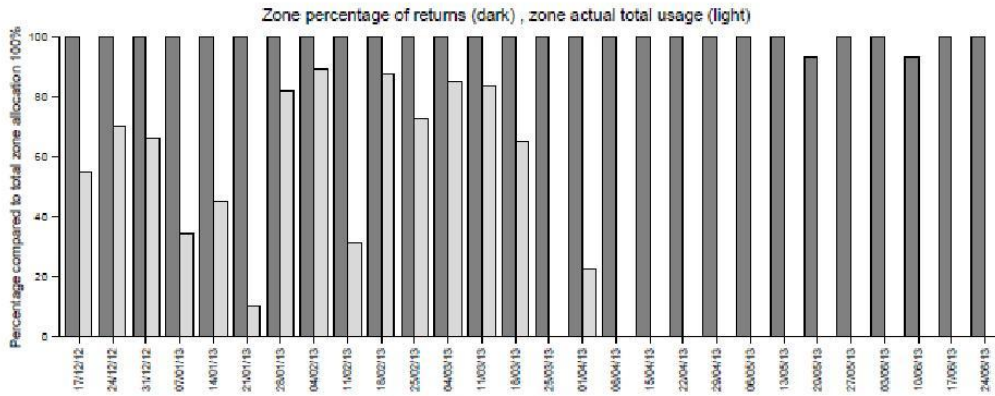
Dovedale



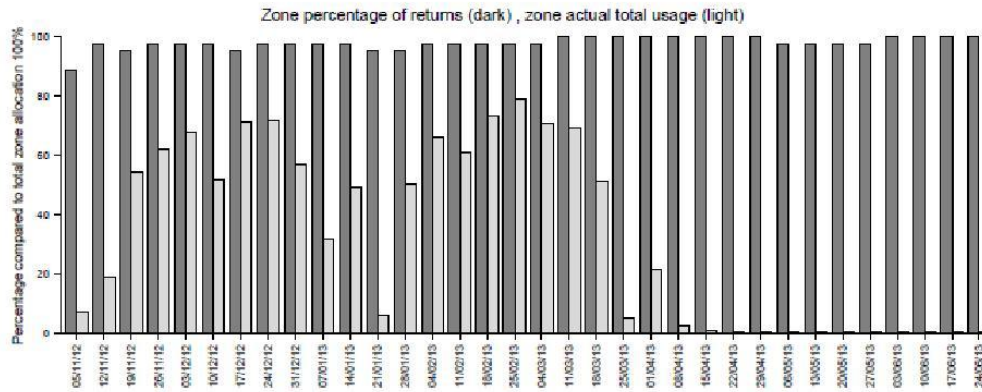
Motupiko



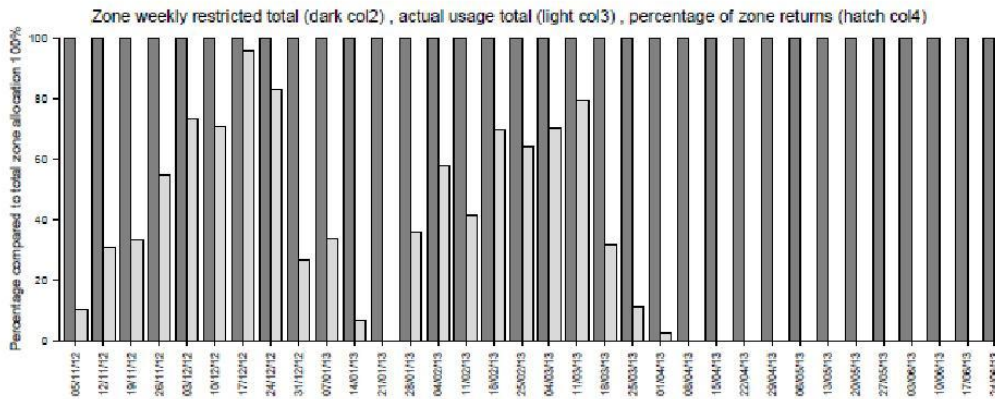
Takaka Marble Aquifer Recharge Zone



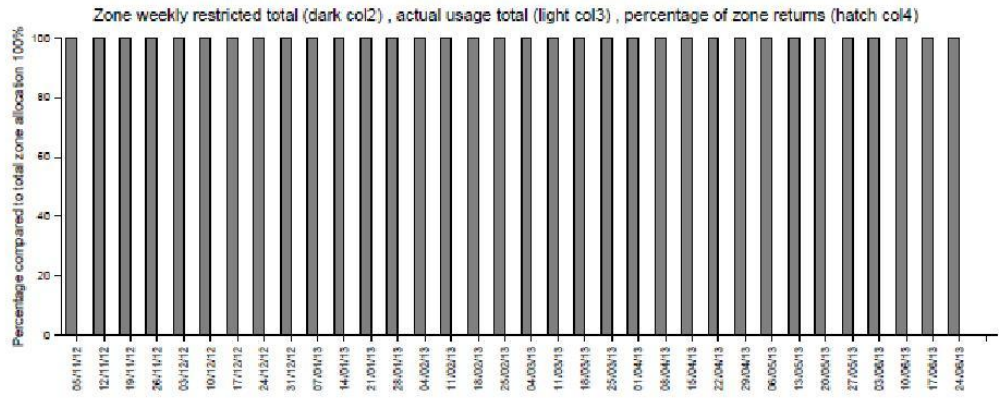
Tapawera Plains



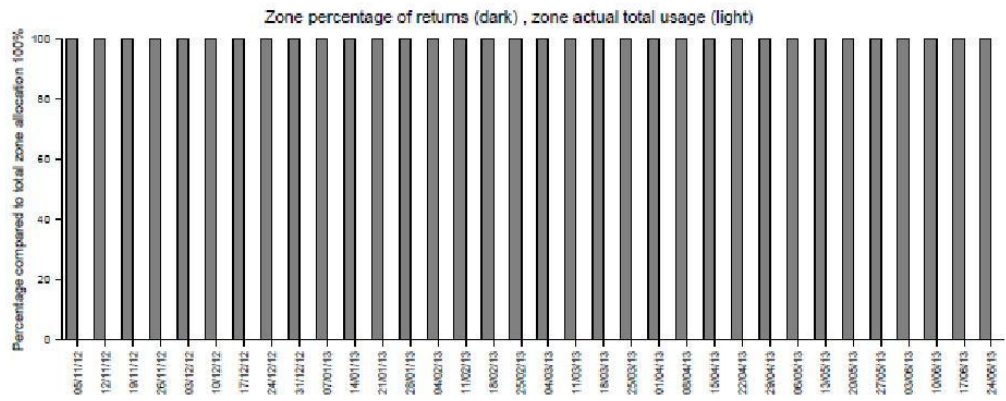
Tadmor



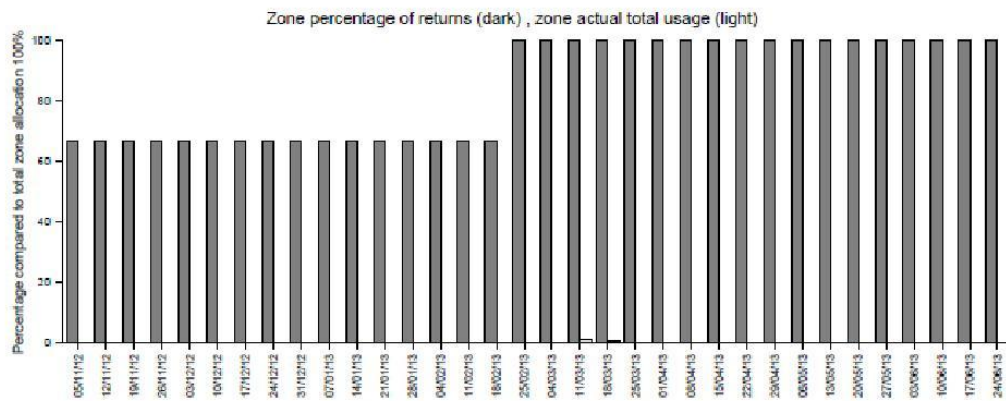
Upper Motueka



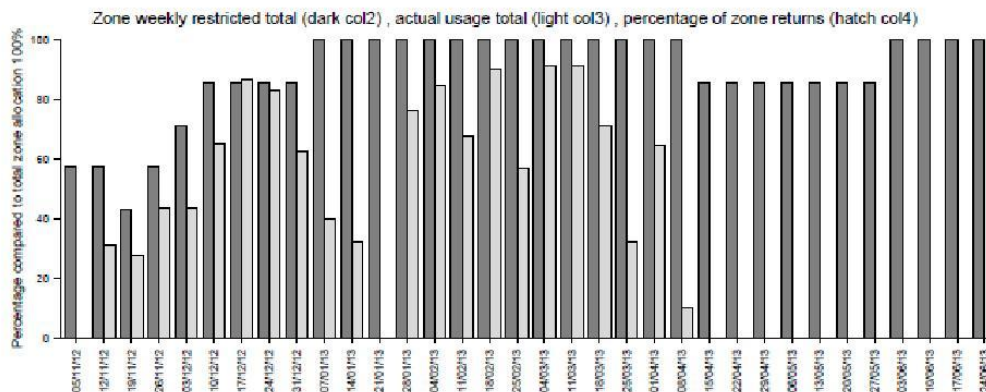
Stanley Brook



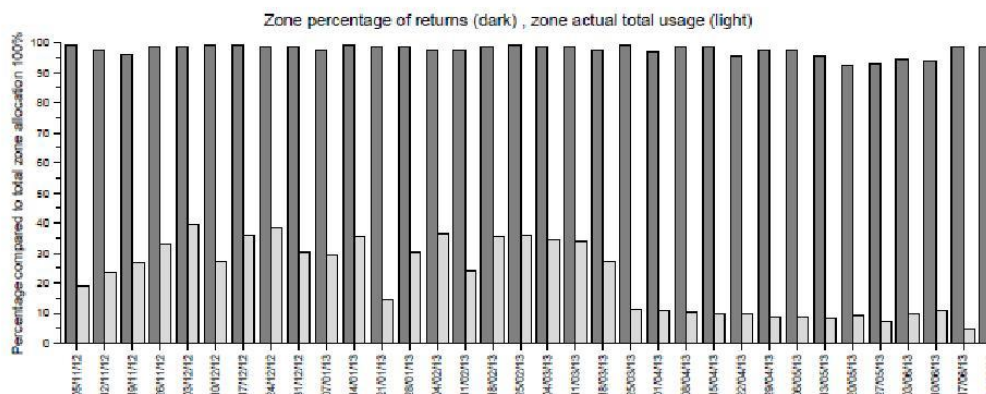
Baton



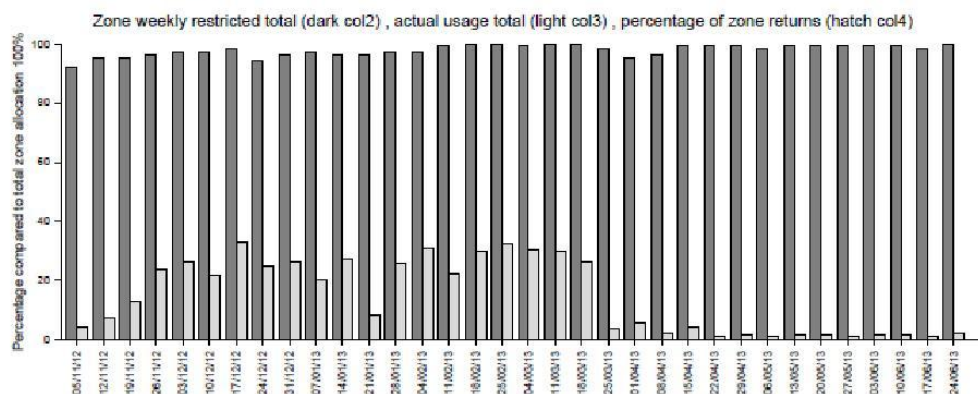
Wangapeka



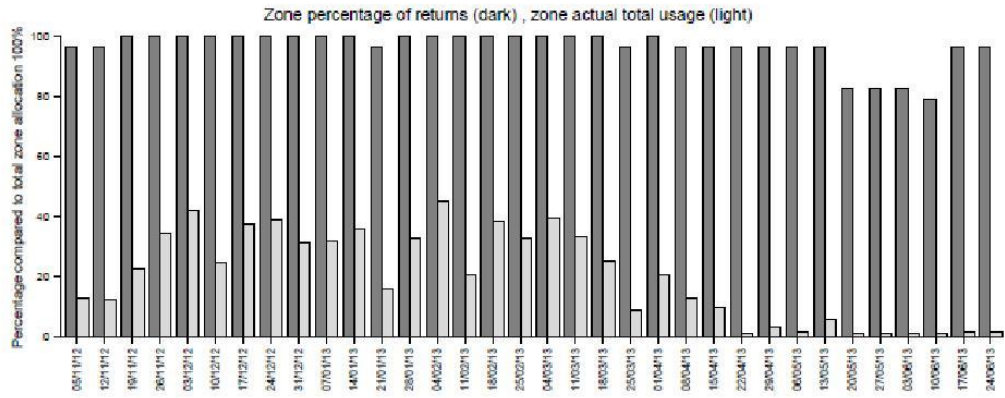
Waimea Delta Zone



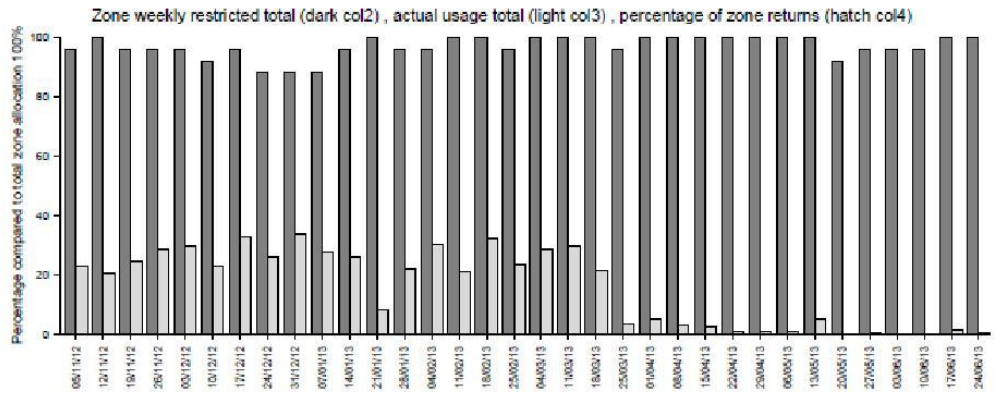
Wai-iti Dam Service Zone - Waimea



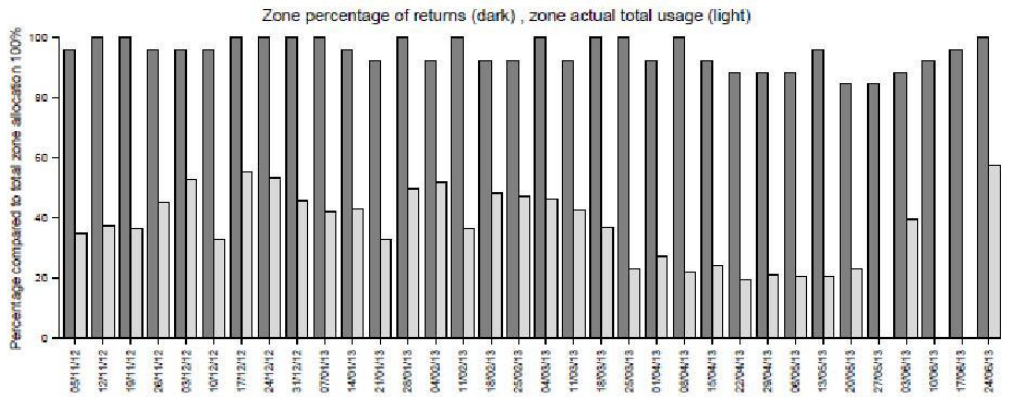
Waimea Golden Hills Zone



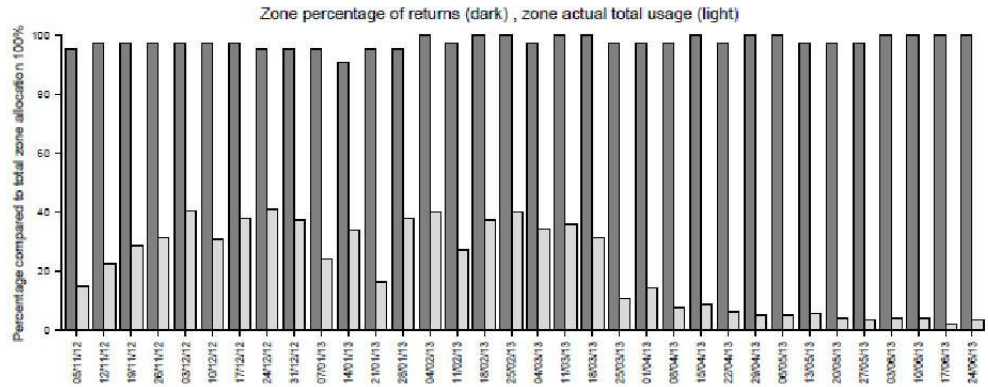
Waimea Hope Minor Aquifers



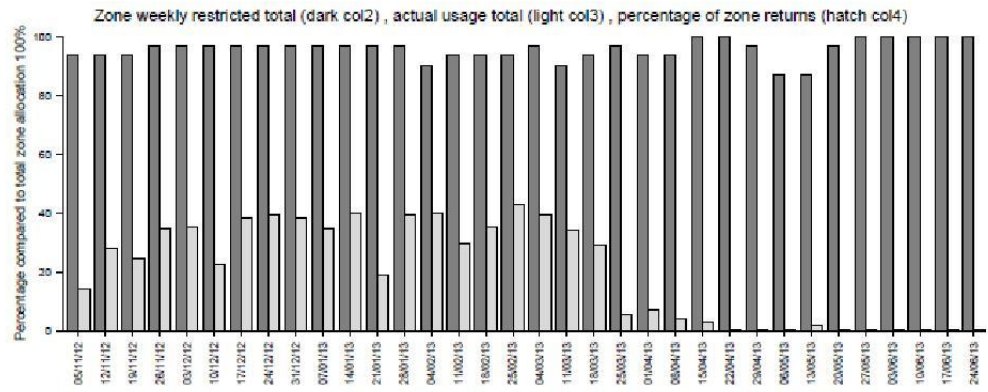
Waimea Lower Confined Aquifer



Waimea Reservoir Zone



Waimea Upper Confined Aquifer



Wai-iti Zone

