

**Year End**  
**REPORT**

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30 June 2013

WATER SUPPLY GROUP

<b>1</b>	<b>Executive summary for Social and Cultural Wellbeing Committee</b>	<b>2</b>
1.1	Group overview	2
1.2	Key results for the quarter	4
1.3	Quality performance	6
1.4	Environmental performance	6
1.5	Capital works programme	7
1.6	Departmental business plan performance indicators	8
<b>2</b>	<b>Group financial summary for the Social and Cultural Wellbeing Committee</b>	<b>11</b>
2.1	Financial summary	11

# 1 EXECUTIVE SUMMARY FOR SOCIAL AND CULTURAL WELLBEING COMMITTEE

## 1.1 Group overview



### Water use

#### Fourth quarter

Water supply for the three months to 30 June 2013 totalled 11,755 million litres (ML), or 129.2 ML/day. This represents a reduction of 3.2% for the fourth quarter year on year, and the lowest fourth quarter total in records to hand, going back to 1986/87<sup>1</sup>. The very low level of June-quarter water use is no-doubt influenced by the summer water shortage. While the summer's outdoor water use ban was lifted on 9 April, daily water use remained relatively low. This indicates that individuals and organisations retained at least some of their changed water-use behaviours from the time of the bans.

#### Full Year

Water supply during the 2012/13 financial year was 49,685 ML, the lowest annual total on recorded in over 25 years. The 2011/12 year was itself a record low for water supply, in records going back to 1986/87. Supply during 2012/13 was 2.0% less than during 2011/12.

Average daily water supply was 136.1 ML.

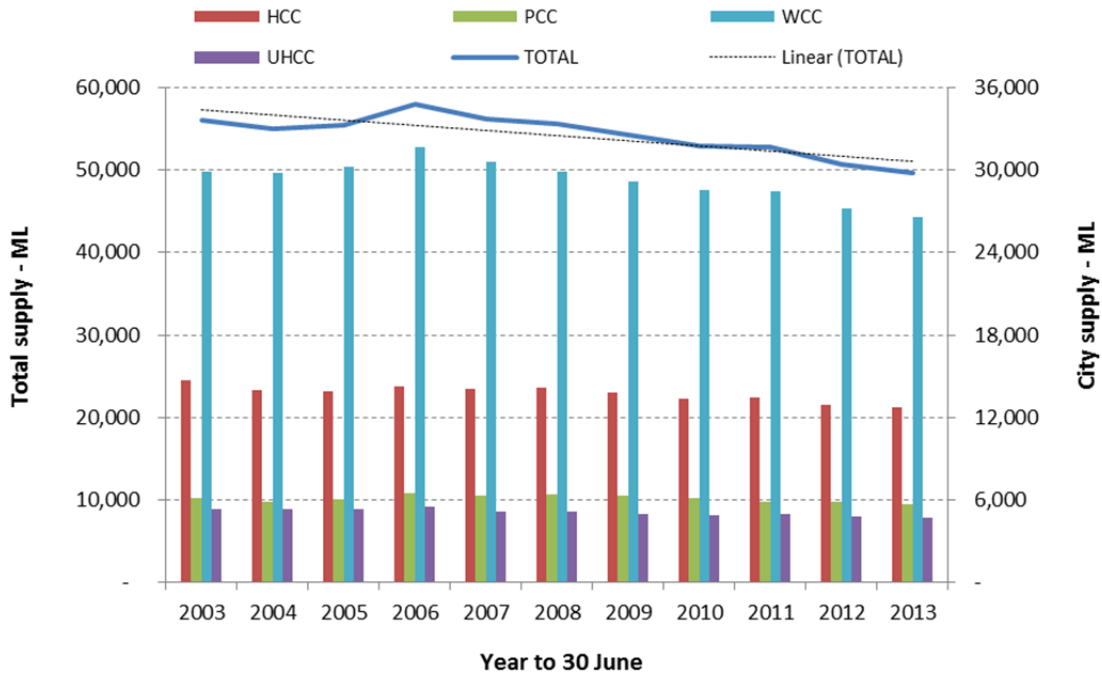
Each of the four cities reduced its water use year-on-year, Hutt City by 1.5%, Porirua by 2.5%, Upper Hutt by 2.0% and Wellington by 2.2%

The following graph shows total and city-by-city water use since 2003 (note that city water use figures are read from the right-hand vertical axis).

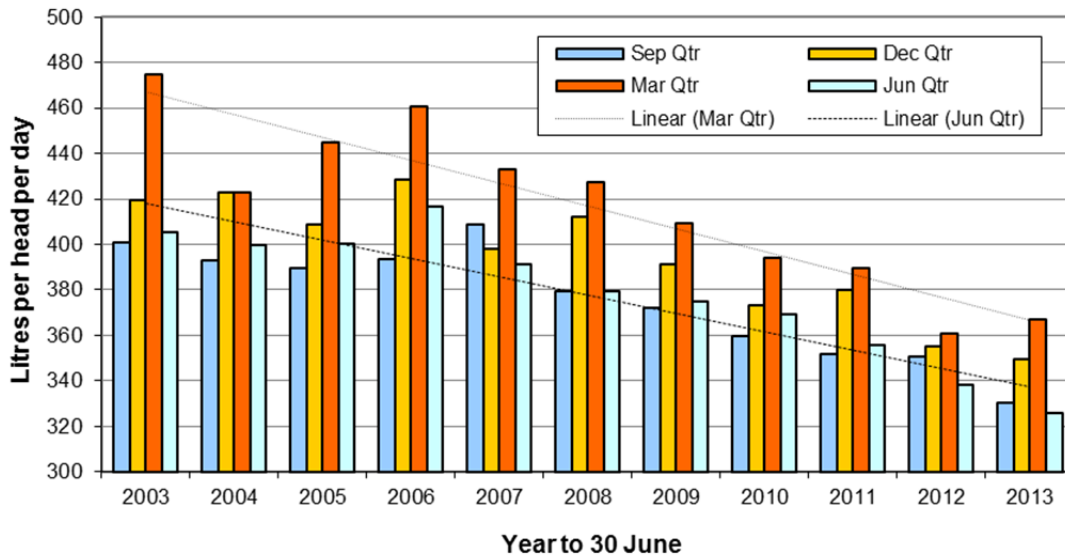
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<sup>1</sup> Please note that data recording technology has changed significantly since 1986 and the accuracy of data is not consistent over this period

## Annual water supply - total and cities



## Water Supply Trend by Quarter



## Water supply conservation

### Water teaching resource for schools and treatment plant visits

The Marketing team's work to promote Water Supply's tap-water teacher resource, *Turning on the tap*, and school visits to a treatment plant are reaping positive results.

In the June quarter we hosted 27 water treatment plant tours – 733 visitors – with 23 of these tours by school parties. For the full year we hosted 54 tours (46 from schools) and more than 1,400 visitors in total.

An example of the positive feedback we've received about the resource and plant visits during the year, from Renwick School, follows:

*"I would definitely recommend this unit (Turning on the tap) to others. It is comprehensive and relevant and the kids really enjoyed it."*

*"[The visit to the treatment plant] brought the topic alive for them and made the activities that followed more relevant."*

*"We looked at ways to conserve water around our school and at home as a result of our awareness of water as a finite and precious resource."*

## Responding to the drought

The recent drought placed extra stress on the water supply systems and resources. A full report to Council was compiled after debriefing meetings with all the major parties involved. Three of the key achievements during and after the event were:

- ▶ Despite running all water source levels below usual levels no resource consent conditions were breached
- ▶ Despite not being able to run the network in its optimum configuration in regards to using the cleanest water source, (which is often lake water) chemical costs were held within the annual budget due to savings made in previous months.
- ▶ Despite disabling control system functionality that controlled the optimum time to pump water in relation to electricity costs, electricity costs were only \$117k over budget.

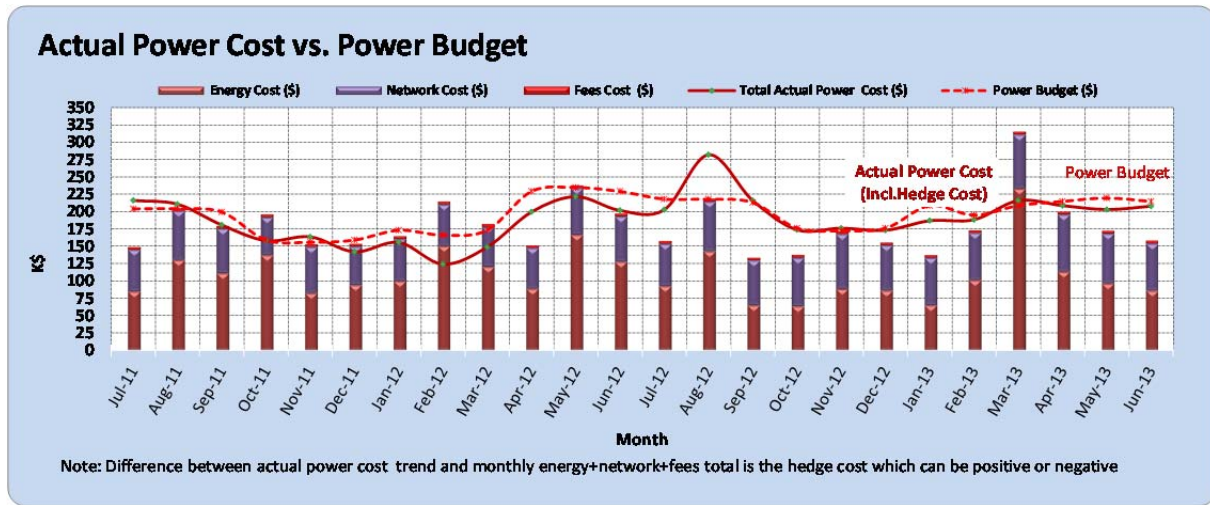
## 1.2 Key results for the quarter

### Power and chemicals

#### Power

Year end result is a spend \$117k over budget. Both quantity and per unit price of electricity has varied over the year. We have been fortunate that during some of our heavy power usage periods, the per unit prices have been low. Our hedge contract that we have in place has also been effective

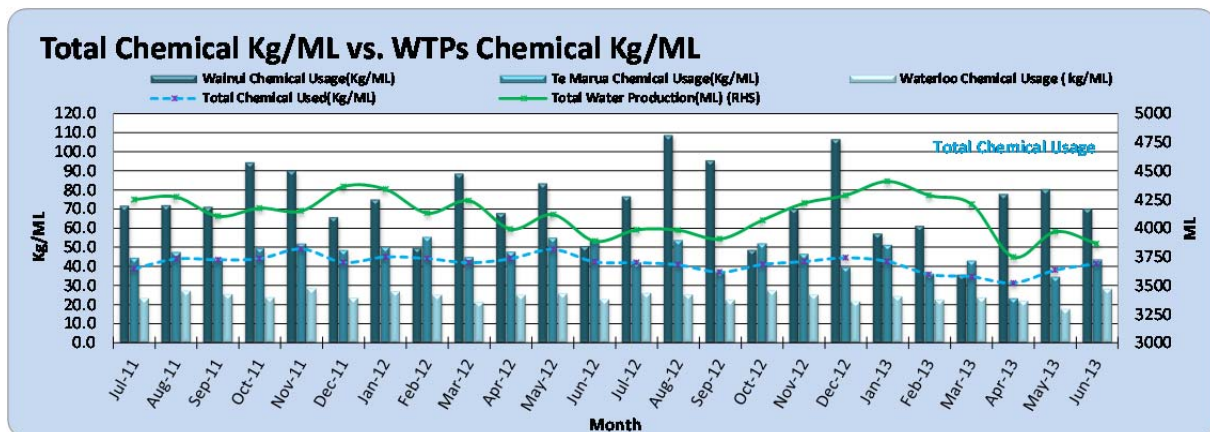
in smoothing out the price fluctuations over the year. The peak in March was during the drought where we had to use large quantities of power to pump water up Ngauranga Gorge.



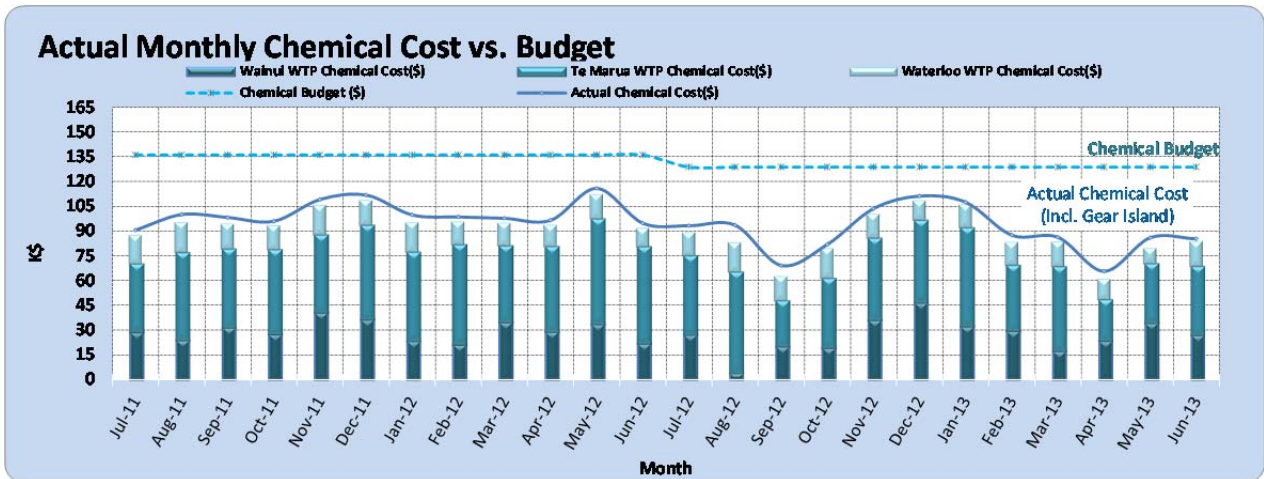
## Chemicals

**Chemical costs for the year are \$85k under budget.** There are individual variances for each type of chemical due to the difficulty of predicting in advance which plant will be used for what period in the next year (each plant uses a differing mix and ratio of chemicals to treat the water). Overall chemical use costs resulted in the small savings against budget of \$85k. This is more to do with source variability than any operational changes.

This effect is illustrated by the following graph where it can be seen that the volume of chemicals per mega-litre required to treat the aquifer water remains fairly constant due to the consistent quality of the water as opposed to the other two treatment plants where the raw water quality is more variable.



Note: the graph below reflects on the direct chemical costs associated with treating the water. Other costs such as the sludge and chemical waste removal costs are coded against chemicals in SAP because the residual chemical content of the sludge means it requires special handling and disposal. The gap between the budget line and the chemical usage figures represent this cost.



## 1.3 Quality performance

Ministry of Health Microbiological compliance - 100%.  
 Ministry of Health Chemical compliance (fluoride) - 100%.  
 Aesthetic compliance - No issues for the quarter

## 1.4 Environmental performance

### Consents

#### Compliance

All consent reporting is up to date, with full compliance to all consent conditions during the quarter.

- ▶ No trade Waste consent breaches occurred in this quarter.

#### Development work

- ▶ Work is being carried out to develop a comprehensive consents register. This will incorporate all active consents and each condition that have reporting requirements or operational control. This will enable better understanding by plant operators of the critical parameters of plant operations that can impact on consent compliance.
- ▶ Tonkin & Taylor have reviewed the 3 Te Marua consents that have an annual requirement to report to Hutt Valley Health, Wellington Flyfishers and Hutt Valley Angling Club. The intent is to surrender consent numbers WGN970041-12 and WGN970041-17 as we believe these are unnecessary. (These consents relate to the filling of the lagoons from the treatment plant) Consent WGN970041-15 will be modified to remove reference to the liaison group, which has not met since 1998. (This consent relates to discharge from one of the lagoons into the Hutt River) The next step will be to evaluate rationalisation of all Te Marua consents.

## Ecological monitoring of the Hutt River

Field surveys and sampling runs concluded on 31 April. However follow up laboratory testing to identify macro invertebrate and algae taxa was not completed until 30 June, owing to the large work load experienced by the laboratory as a result of the long dry summer.

Reports on the implementation of the Hutt River Low Flow Management Plan (HRLFMP) and the Hutt River Ecological Monitoring Plan are in preparation. The HRLFMP report will be sent to stakeholders in early July. Preliminary indications from nutrient testing suggest that the nutrient load is increasing significantly between the Whakatikei confluence and Silverstream.

## Discussions regarding Regional Plan Review

Discussions with the Environmental Monitoring Group staff on various aspects of the Regional Plan Review have continued. Draft plan provisions are being prepared and further discussion are planned to ensure water supply aspirations are met to the greatest extent possible.

# 1.5 Capital works programme

## Summary of capital works programme

The expenditure summary for 2012/13 projects are:

Budget:	\$14.466m
Actual YTD	\$9,528m
Variance:	\$4.938m (34.1% under-spend) (9% excluding the \$4.000m land purchase)

## Summary of variance to budget by major expenditure area

SOURCES	\$30,000	\$30,589	-\$589
TREATMENT PLANTS	\$880,000	\$1,016,144	-\$136,144
PIPELINES	\$1,980,000	\$1,894,227	\$85,773
PUMP STATIONS	\$505,000	\$408,086	\$96,914
RESERVOIRS	\$0	\$0	\$0
MONITORING/CONTROL	\$960,000	\$688,786	\$271,214
MISCELLANEOUS	\$1,711,000	\$1,713,537	-\$2,537
NEW SOURCES	\$8,400,000	\$3,776,935	\$4,623,065
TOTAL - Assets & Compliance	\$6,066,000	\$5,751,369	\$314,631
TOTAL - Development & Strategy	\$8,400,000	\$3,776,935	\$4,623,065
TOTAL - PROGRAMME	\$14,466,000	\$9,528,304	\$4,937,696

- Note: Although capital works are divided into operational areas, each area contains provisions for unplanned capital replacements. These are managed as a total pool of available funds. Individual "overspends" are compensated for by "underspends" in other areas. The net effect was that \$0.171m of replacement funds were not required.



## Brief programme summary

77 of the planned 128 projects have been completed. The remainder, with the exception of those re-budgeted to 2013/14 have made substantial progress towards completion.

Fifteen projects have been notified as deferred with a combined value of \$5.112m. This includes the \$4.000m for the land purchase at Kaitoke. Negotiations with AgResearch to purchase the Kaitoke research farm are going slowly due to caveats on the title requiring investigation of Maori heritage issues. AgResearch have commissioned the Historic Places Trust to investigate these issues.

This year has been particularly challenging for Project Managers which is evident in these results. Many of our project managers had to put their projects on hold while dealing with the drought conditions. Once the drought alleviated extra effort was made to get as many projects finished by year end as possible.

One of the other difficulties Water Supply faces is the large number of projects initiated during the year that require completion before year end. For example this year Water Supply started with fifty one projects and added a further seventy seven during the course of the year. These projects arise from breakdowns and equipment replacement requirements that are not known in advance. We do, however, make general provisions in our Capex budgets for these to make sure funding is available.

A more conservative approach has been adopted in finalising the programme for 2013 onwards. Work continues on improving project delivery. Initiatives include more upfront detailed planning, better co-ordination between projects and up skilling of project managers in financial budgeting/reporting and forecasting. Work is also being undertaken to improve our ability to manage our Capex as a programme of work rather than single projects.

## 1.6 Departmental business plan performance indicators

Level of Service	Performance Measure	2012/13 Planned	2012/13 Actual
Provide water that is safe and pleasant to drink	Number of waterborne disease outbreaks	0	0
	Number of taste complaint events related to the bulk water supply	0	0
	Percentage compliance with the Drinking Water Standards of New Zealand	Microbiological and aesthetic compliance – 100%	100%
		Chemical compliance – 90%	100%
	Treatment plant and	Maintain current	No change to grading

	distribution system grading	grading	
Provide a continuous and secure water supply	Number of shut-offs of the wholesale water supply network resulting in loss of water or pressure to consumers	0	0
	Improve the resilience of the wholesale water supply to catastrophic events such as earthquakes	Establish a methodology for assessing improvements to the resilience of the wholesale water supply	A methodology to assess projects based on their contribution to increasing the resilience of the network has been developed

<b>Level of Service</b>	<b>Performance Measure</b>	<b>2012/13 Planned</b>	<b>2012/13 Actual</b>
That water supply infrastructure is adequate to meet future needs while minimising environmental impacts	Modelled probability of annual water supply shortfall	No greater than 2%	1.8%
	Compliance with environmental regulations	Full compliance	Full compliance

Specific areas of work for this year	2012/13
Renew and improve water supply infrastructure, including improvement of earthquake resilience	We have surveyed the three largest water plant buildings and some pump stations. A criticality assessment of structures is being carried out so we can prioritise the remaining surveys. Key Security of Supply Improvement projects have been identified. Value \$6.270 million
Increase the water storage capacity of the Stuart Macaskill lakes	Lake 2 completed, work on Lake 1 expected to be completed under budget and ahead of scheduled time and cost.
Earthquake strengthen the Stuart Macaskill lakes	Lake 2 completed, work on Lake 1 is ahead of schedule
Confirm preferred option for a significant new storage facility	Further work is being done on the Whakatikei Dam investigations
Investigate options for an interim solution to increase capacity	Currently investigating additional storage lakes at Kaitoke and Takapu

# 2 GROUP FINANCIAL SUMMARY FOR THE SOCIAL AND CULTURAL WELLBEING COMMITTEE

## 2.1 Financial summary

### Operating Statement



Water Supply Group Income Statement For the 16 months ended 31 October 2013	YTD as at 30 June 2013			Last Year	notes
	Actual \$000	Budget \$000	Variance \$000	FY Actual \$000	
Rates & Levies	24,890	24,888	2	24,164	
Government Grants & Subsidies	-	-	-	-	
External Revenue	559	328	231	347	2
Investment Revenue	705	546	159	660	3
Internal Revenue	565	1,876	(1,311)	2,833	1
<b>TOTAL INCOME</b>	<b>26,719</b>	<b>27,638</b>	<b>(919)</b>	<b>28,004</b>	
less:					
Total personnel costs	5,423	5,325	(98)	5,368	
Less resource costing	(1,693)	(963)	730	(558)	
<b>Net payroll costs</b>	<b>3,730</b>	<b>4,362</b>	<b>632</b>	<b>4,810</b>	4
Chemicals	1,462	1,547	85	1,527	5
Power used in production	2,498	2,381	(117)	2,184	5
Other	4,917	5,092	175	4,268	6
<b>Total Materials,Supplies &amp; Services</b>	<b>8,877</b>	<b>9,020</b>	<b>143</b>	<b>7,979</b>	
Travel & Transport Costs	287	284	(3)	241	
Contractor & Consultants	2,213	2,545	332	2,015	7
Grants and Subsidies Expenditure	-	-	-	-	
Internal Charges	1,243	2,577	1,334	3,509	1
<b>Total Direct Expenditure</b>	<b>16,350</b>	<b>18,788</b>	<b>2,438</b>	<b>18,554</b>	
Financial Costs	3,587	4,059	472	3,206	8
Bad Debts	-	-	-	-	
Corporate & Department Overheads	1,378	1,378	-	1,051	
Depreciation	8,257	8,185	(72)	8,334	
Loss(Gain) on Sale of Assets / Investments	4,373	35	(4,338)	388	9
<b>TOTAL EXPENDITURE</b>	<b>33,945</b>	<b>32,445</b>	<b>(1,500)</b>	<b>31,533</b>	
<b>OPERATING SURPLUS/(DEFICIT)</b>	<b>(7,226)</b>	<b>(4,807)</b>	<b>(2,419)</b>	<b>(3,529)</b>	
Add Back Depreciation	8,257	8,185	72	8,334	
Other Non Cash	4,373	35	4,338	388	
Net Asset Acquisitions	(9,776)	(14,792)	5,016	(9,360)	
Net External Investment Movements	(1,107)	(946)	(161)	(1,149)	
<b>NET FUNDING BEFORE DEBT &amp; RESERVE MOVEMENTS</b>	<b>(5,479)</b>	<b>(12,325)</b>	<b>6,846</b>	<b>(5,316)</b>	
Debt Additions / (decrease)	9,531	14,037	(4,506)	9,038	
Debt Repaid	(4,117)	(1,928)	(2,189)	(3,614)	
Net Reserves (Increase) / decrease	65	216	(151)	(108)	
<b>NET FUNDING SURPLUS (DEFICIT)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	

The Water Group full year result was a worse than budgeted deficit of \$7.226m. However, approximately \$4.0m of this loss was due to the asset revaluation process (see note 9). This means that the Water Group operating result was a better than budget deficit of a \$3.229m against a budgeted deficit of \$4.807m. A positive variance of \$1.578m. These savings were used to retire additional debt. The main reasons for the cost savings are as follows:

**1) Internal income/Internal charges:** These variances are the result of accounting changes to the way the Engineering and Projects team's time is charged to capital projects. Previously they were charged to the Assets and Compliance Team and then settled to the capital projects. This time is now charged directly to the capital project eliminating the internal revenue and internal charges transactions. These changes were made to simplify the process and save on time and effort caused by the double handling of the charges. The 2013/14 budgets reflect these changes.

**2) External Revenue:** \$231k better than budget. The majority of the variance is due to unbudgeted charges for work done for external parties and the sale of scrap metal from replaced equipment.

**3) Investment revenue:** \$159k better than budget. **Interest rates gained on invested funds continue to be better than budget.** Our Asset Rehabilitation Fund money is invested in the short term money market which at the moment is paying a premium for short term funds.

**4) Net personnel costs:** \$632k better than budget. **The YTD variance is mainly due to the above budget level of cost recovery on capital projects.** This is a combination of a degree of under budgeting and a greater effort across the Water Group over the past year in ensuring work on capital projects is properly recorded. 2013/14 budgets have been adjusted to reflect this higher level of recovery.

**5) Power used in production/Chemicals.** Power \$117k worse than budget. Power cost against budget has been variable during the year on a month by month basis. Some periods of extremely heavy usage – for example, during the summer shortage – have been offset by low per unit charges. We also experienced periods where the opposite was true. These conditions are hard to predict and budget for.

Chemicals \$85k better than budget. Similarly, the volume of individual chemicals used is dependent on the day to day decisions on which water treatment plants are used and at what volumes. This to a large extent is dependent on factors that are difficult to predict.

**6) Other direct costs:** \$175k better than budget. **The single biggest variance was a credit against stock adjustments of \$187k.** This was to account for the increased value of seismic repair and production stock on hand at the end of the year.

**7) Contractors and consultants:** \$332k better than budget. **Main saving was in the split of the old development group.** The budgets transferred to Water had general provisions for the engagement of consultants on various projects. With the split up of Development this money was not spent.

**8) Financial costs:** **Savings against budget due to capital expenditure being slower than budget therefore delaying the creation of new loans.** The delay in the \$4.000m land purchase is the single largest contributing project.

**9) Loss on disposal/revaluation of assets:** **\$4.4m loss. \$0.4m of the loss was the result of the replacement of assets that were not fully depreciated and the residual value write off was not**

**budgeted for.** Processes have been put in place to better identify any book value of scheduled asset replacements prior to replacement so these residual amounts can be budgeted for.

**Loss on revaluation of assets: \$4.0m loss.** During the revaluation process, based on more detailed information on hand than when the last valuation was performed, we were able to identify a large number of assets that had incorrect remaining useful lives. By adjusting these remaining lives downwards we incurred an operational loss. Other assets, where we knew they were to be replaced also had their remaining lives reduced so they would have no residual value when they were replaced. (Technically know “optomising” the replacement cost). This is an accounting loss only and in no way reduced the amount of levy available for operational expenses nor resulted in increased debt. The loss also needs to be taken in the context of the total revaluation exercise which also resulted in the increased value of the other assets by \$112.7m.

## Capital expenditure

Water Supply Group Capital Expenditure Statement For the 16 months ended 31 October 2013	YTD as at 30 June 2013			Last Year	notes
	Actual \$000	Budget \$000	Variance \$000	FY Actual \$000	
Total Asset Acquisitions	373	441	(68)	3,464	
Capital Project Expenditure	9,528	14,466	(4,938)	9,038	1
Asset Disposal Cash Proceeds	(72)	(115)	43	(142)	
<b>Net Capital Expenditure</b>	<b>9,829</b>	<b>14,792</b>	<b>(4,963)</b>	<b>12,360</b>	
Investments Additions	1,107	946	161	1,149	2
<b>Net Capital and Investment Expenditure</b>	<b>10,936</b>	<b>15,738</b>	<b>(4,802)</b>	<b>13,509</b>	

1) Total capital expenditure was \$4.938m under spent for the year. \$4.000m of this was for the land purchase at Kaitoke which was not completed this financial year. The rest of the under spend is due to the reprioritisation of several projects until next year, combined with a variety of cost savings and increases.

# Balance Sheet

Greater Wellington Water Statement of financial position	YTD as at 30 June 2013			notes
	2013	2012	Movement \$000	
Total Retained Earnings	192,698	199,858	(7,160)	1
Asset Revaluation Reserves	213,855	101,183	112,672	
Departmental Reserves	151	216	(65)	
Movement in Equity	484	431	53	
<b>Total Ratepayer Funds</b>	<b>407,188</b>	<b>301,688</b>	<b>105,500</b>	
Receivables	2,828	2,601	227	2
Accrued Revenue and Prepayments	81	29	52	3
Stocks	2,367	2,145	222	4
<b>Total Current Assets</b>	<b>5,276</b>	<b>4,776</b>	<b>500</b>	
Total Investments	19,241	18,199	1,042	5
Net Fixed Assets	435,595	325,294	110,301	
Capital Works In Progress	3,670	4,157	(487)	
<b>Total Non Current Assets</b>	<b>458,506</b>	<b>347,650</b>	<b>110,856</b>	
<b>Total Assets</b>	<b>463,782</b>	<b>352,426</b>	<b>111,356</b>	
Payables and Accrued Expenses	1,724	1,289	435	6
Employee Provisions and Accruals	596	557	39	
<b>Current Liabilities</b>	<b>2,319</b>	<b>1,846</b>	<b>473</b>	
Internal Debt	54,275	48,892	(5,383)	
<b>Total Liabilities</b>	<b>56,594</b>	<b>50,738</b>	<b>(5,856)</b>	
<b>Net Assets</b>	<b>407,188</b>	<b>301,688</b>	<b>105,500</b>	

**1) Asset Revaluation Reserves:** The increase in the net book value of Water Supply assets as a result of the recent revaluation. A comprehensive valuation of all Water Supply assets was undertaken between March and June 2013. The last full valuation was performed in 2008. Assets are valued on an optimised depreciated replacement cost basis. Which means the starting point of the valuation is the cost to totally replace the asset on a like for like basis. This is then discounted for the age and condition of the assets to arrive at a net value. It is this net value that has increased by \$112.672m.

The primary reasons for the large movement in value are the large increases in replacement costs over the five years, most replacement costs have increased by between twelve and twenty per cent. Other factors affecting the increase have been:

More comprehensive detailed list of assets since 2008 enabling valuation of individual assets rather than groups of assets.

Items that had previously been valued separately have now been associated with larger structures and valued accordingly, some examples are: From our valuer, "Stuart Macaskill Lakes in 2008 were valued as part of the Te Marua overall site, there has been capital cost inflation and expenditure plus many assets originally included in 2008 as "Water Miscellaneous" are now directly attributed to the Lakes"

The overall effect of inflation and cost increases in the construction of certain types of assets, particularly pipelines: Again from our valuer ". In addition to the capital cost inflation and expenditure a significant cost increase in Traffic Management costs has now been allowed for within the appropriate items as discussed with GWRC based on current costs of such charges"

Another benefit of the more comprehensive asset detail has been our ability to review asset lives in greater detail. This extra detail will help us in asset management planning by having better knowledge of when individual assets are due for replacement and the cost of replacing them.

2) **Receivables:** Higher due to cost recoveries from external parties being billed in June

3) **Accrued revenue/prepayments:** Prepayment of rent in advance for the new Petone office

4) **Stocks:** Mainly due to the increased value of seismic and production stock held at year end (\$187k)

5) **Total Investments:** See detailed analysis below.

6) **Payables and accrued expenses.** Increase in accounts payable and goods receipting for work completed in June. Significant effort was placed on year-end financial process to ensure that completed but unbilled work was properly accounted for.

## Investments – Insurance

Greater Wellington Water Movement In Investments - current year 000's	Balances as at 30 June			notes
	2013 Actual	Budget		
Reinstatement fund opening balance	17,983	17,983		
Investment additions	400	400	-	
Interest on investments	747	546	201	1
<b>Reinstatement fund closing balance</b>	<b>19,130</b>	<b>18,929</b>	<b>201</b>	
Other reserve investments	151		-	
<b>Closing balance total investments</b>	<b>19,281</b>	<b>18,929</b>	<b>201</b>	

1) The Asset Rehabilitation Fund balance is \$0.201m ahead of budget due to better than budgeted interest rates earned. The purpose of the fund is to provide funding for the repair/replacement of lakes, pipes and tunnels in the event of severe damage as the result of an untoward event.

### Brief history of the fund

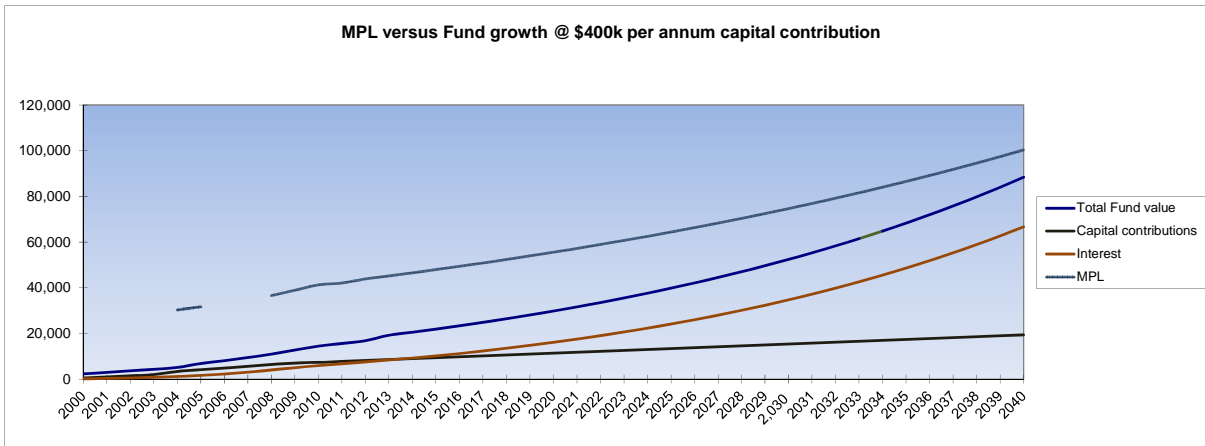
A review of the Bulk Water Earthquake Insurance was completed in 1995. The Utilities Services Committee decided to discontinue paying annual insurance premiums for earthquake damage and establish a self-insurance regime on the basis that a fund could be established to cover the maximum probable loss (MPL). The fund was to provide for lakes, pipelines and tunnels with water treatment plants and pumping stations continuing to be fully insured.

In October 2008 a review of the wholesale water infrastructure assets insurance policy was carried out. The outcome being that the Parks, Forests and Utilities Committee approved insurance “top up” to the maximum probable loss in conjunction with the fund and that the provisions be reviewed every five years or if the insurance premium increases significantly more than the rate of inflation.

This insurance cover was bought for the difference between the MPL and the value of the fund. In 2012 this cover cost approximately \$500k per year with a substantial deductible. The growth in the fund was also lagging behind the annual increase in the MPL and was projected to take more than thirty years to start closing the gap to any significant degree.

The graph illustrates the position and projected growth of the fund before the changes.

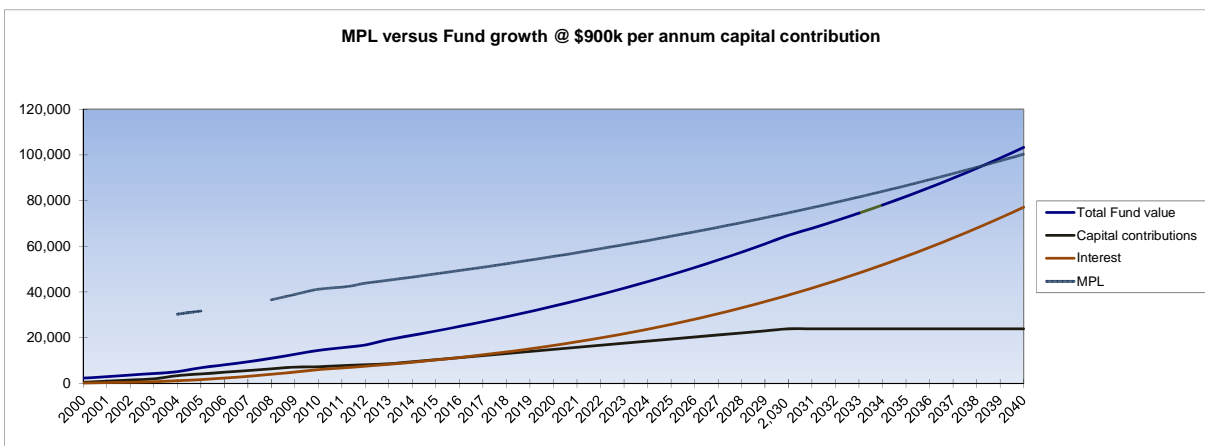




It was decided to cancel the insurance and place the money previously paid for insurance into the fund. This was approved as part of the Water Supply 2013/14 Annual Plan

The risk of cancelling the insurance was deemed to be acceptable, considering that in the event of a major earthquake, the government, under its National Civil Defence Emergency Management Plan - provided we can demonstrate mechanisms to fund 40% of the loss - will cover the remaining 60% of the cost. This is not guaranteed, but recent events in Christchurch show that at least the current government is prepared to provide the funding.

Modelling of these changes, assuming the same increase in the MPL and the same interest rates earned on the funds' investments – currently invested in the short term money market - the extra \$500k would only need to be invested until 2030 and after that the interest growth will overtake the growth in the MPL. The fund would be fully become self-sustaining by 2039 if these conditions hold true.



Water Supply is currently reviewing the maximum probable loss (MPL). This assessment provides the value required for the fund. Further work is also to be carried out to better understand the Material damage insurance cover. These analyses will be the basis of a Risk/Insurance framework against which future insurance/self-funding decisions will be made.

The preparation of a maximum probable loss assessment and the associated insurance framework are critical to ensure that in the occurrence of a seismic event Water Supply have minimised the financial loss/funding shortfall risk with appropriate funding and insurance mechanisms.

## Debt

### Current debt:

Greater Wellington Water Movement in debt - current year 000's	Balances as at 30 June			notes
	2013 Actual	Budget		
Internal debt opening balance	48,893	48,893		
Debt additions	9,527	12,707	(3,180)	1
Debt repayments	(4,145)	(1,446)	(2,699)	2
Net debt movement	5,382	11,261	(5,879)	
			-	
<b>Internal debt closing balance</b>	<b>54,275</b>	<b>60,154</b>	<b>(5,879)</b>	

- 1) Debt additions are significantly lower than budget due to the delays versus budget of incurring capital expenditure, in particular the \$4.000m Kaitoke land purchase
- 2) An additional \$2.699m of debt has been repaid due to lower than budgeted expenditure for the year. Any savings against operational budgets are applied to repaying old debt.

### Long term debt:

Water supply is currently in a situation where medium to long term planning are indicating the need to make substantial investment in additional water storage capacity to meet projected demand. This projected increase in demand is being driven by expected population growth. Although over recent years, there has been a marked drop in per capita water use in the region. The reason for this is not entirely clear but is thought to be a combination of such factors such as:

- ▶ More water efficient technology
- ▶ Greater conservation efforts
- ▶ Lifestyle changes
- ▶ Climate variations
- ▶ Leak detection by territorial authorities
- ▶ Lower level of industrial and economic activity in the region

The long term direction and sustainability of this trend is also unclear. It does however, have the effect of pushing the need for the additional storage beyond the range of our normal Long Term Plan horizon. If population growth occurs as projected the investment requirement is seen more of a question of “when” and “what” not “if”.

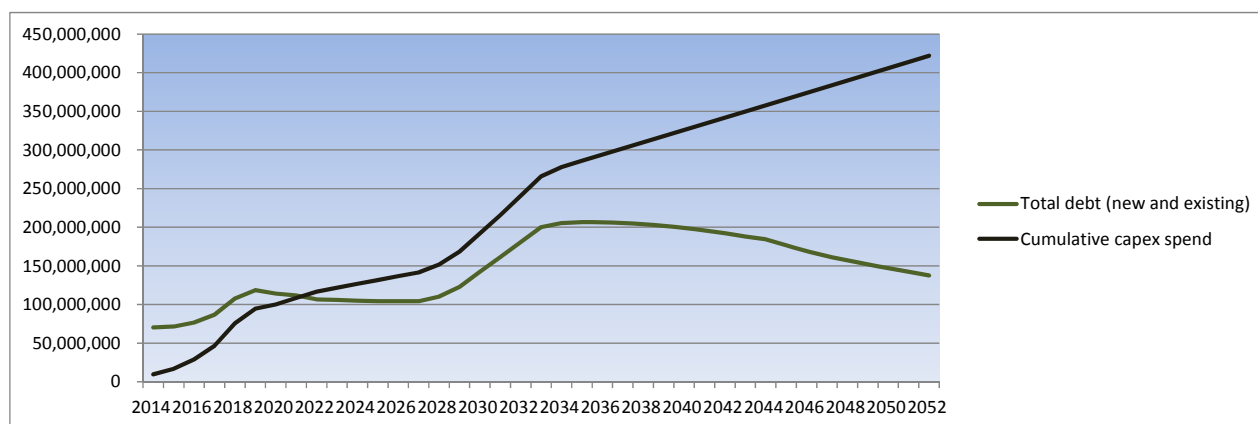
Initial studies indicated a large dam as the preferred option. Further discussion led to the favouring of smaller incremental increases to storage capacity rather than one large solution to help soften the financial impact. There is some resistance to this investment from some territorial authorities who favour other approaches such as investing in reducing demand to forestall the need to make the investment at all.

Due to the large capital investment required Water Supply need to raise awareness of the long term consequences, especially since this looming capital requirement has meant that the Water Levy will

have to increase in small increments from 2013/14 onwards after a long period of no increases. These increases are necessary to prudently manage debt levels to leave headroom to accommodate the large investments required.

The graph below shows the debt impact of Water Supply proposed capital expenditure over the next forty years: The projection is based on the following assumptions

- ▶ Interest rate on debt is held at six per cent
- ▶ The Levy increases by three per cent per year
- ▶ Costs increases held at two per cent per year
- ▶ Loan lives remain at thirty years
- ▶ Current projections driving the timing of expenditure remain constant



Total debt values

2014	2015	2016	2017	2018	2019	2020	2021	2022	2,023
70,221	71,670	76,733	86,989	108,211	119,052	115,000	112,511	107,701	107,269
2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
106,411	105,946	106,042	106,468	112,595	125,623	145,443	164,842	184,976	204,549
2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
210,668	212,133	212,671	211,982	210,649	208,855	206,438	203,378	199,890	195,601

Debt is projected to peak at \$212.6 million in 2036. These projections are based on the following assumptions

- ▶ There is no offset with Water Supply investments
- ▶ Interest rates are constant – currently 6%. Although this may drop in future as older more expensive debt is paid off.
- ▶ Current loan lives are constant – currently 30 years
- ▶ There is no change in funding mechanisms. These are currently restricted by The Water Board Act 1972 to debt funding
- ▶ There is an annual 2% increase in operating costs

These investment plans are not finalised – the projections are based on our current research and thinking and may change in the future as other storage solutions/options are explored.

Recent corporate analysis of thirty year debt projections for the whole Council have shown that this level of expenditure, combined with other divisions the Council remains within its prudent debt levels.





greater WELLINGTON

REGIONAL COUNCIL

Te Pane Matua Taiao