

---

# Greater Wellington Water

August to October 2004

---

---

# Operations Group

August to October 2004

---

# Operations Group Review of Operations for the Period Ended 31 October 2004

## 1. Items of Note

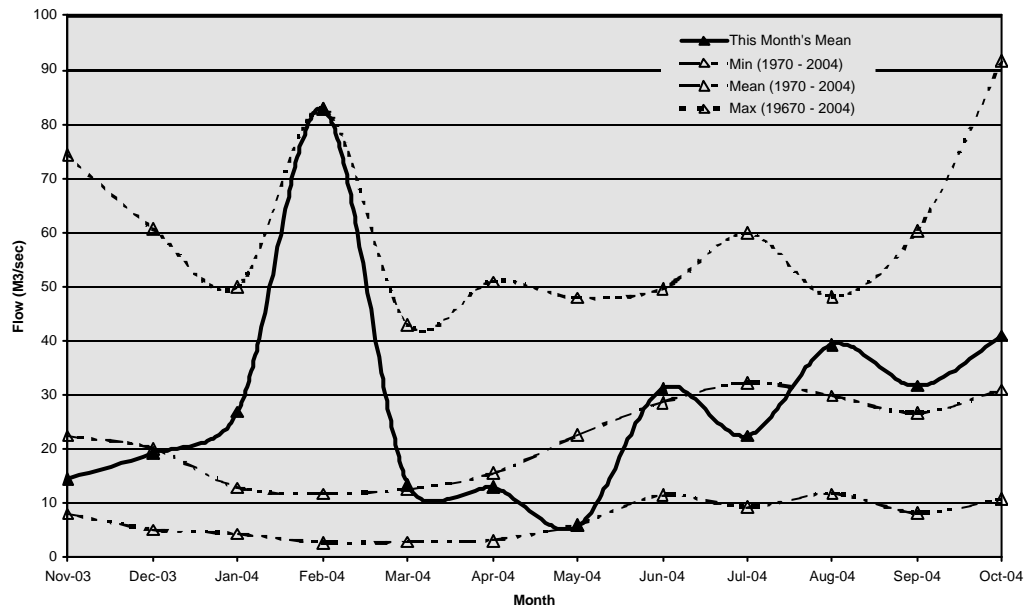
- Lake 2 refilling has commenced.
- A Pipelines Foreperson has been appointed. None of the four applications for the position of Treatment Technician were acceptable. This position was readvertised in October.
- The debate over the proposed *Drinking-Water Standards for New Zealand* changes reached a new level following a meeting between Watercare and Greater Wellington Water (GWW).
- Discussions with Capacity regarding integration of the Region's telemetry and Scada systems have been put on hold until their organisational structure is confirmed.
- The Ministry for the Environment's proposed National Environmental Standard for water supply catchments came and went.
- The annual ISO compliance audit was completed successfully.
- A change to the Operations Group management structure was carried out.

## 2. Supply Situation

Stuart Macaskill Lake 1 is full and Lake 2 is 80 percent full. There have been no issues with supply during the period.

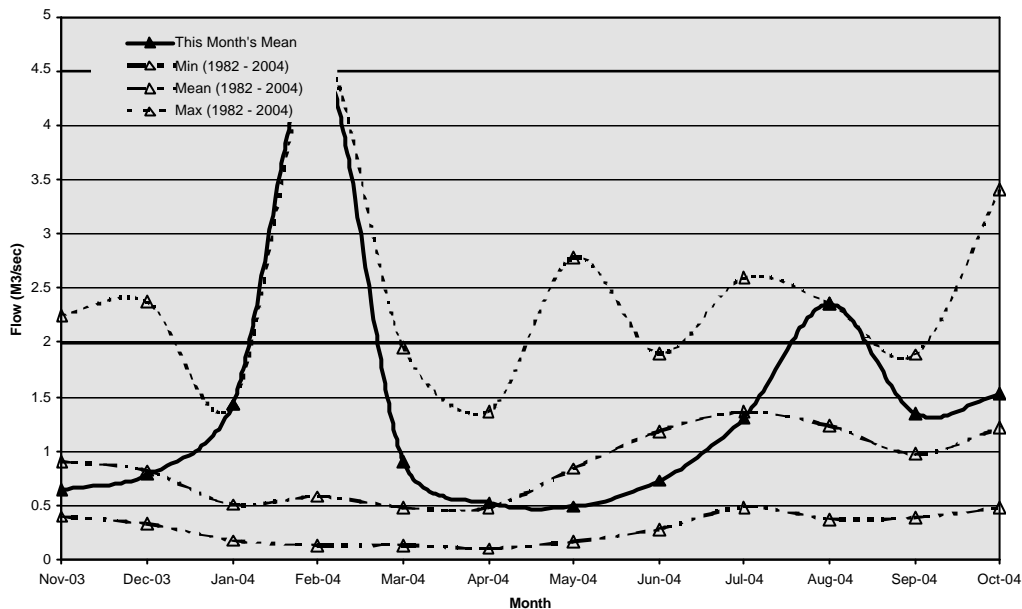
### Hutt River Flows

Mean monthly flows in the Hutt River for August, September and October were above average for each month.



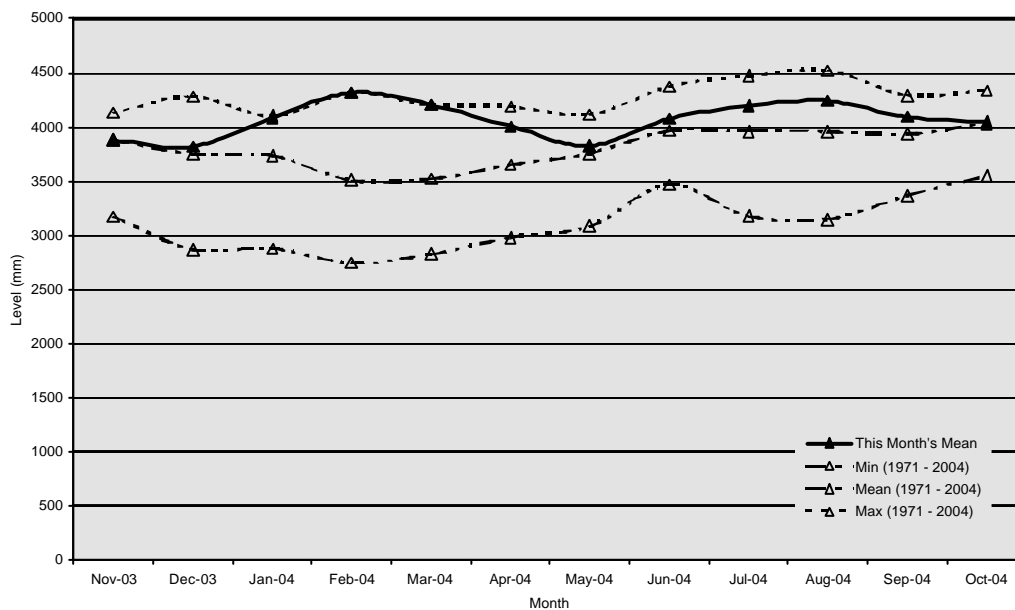
### Wainuiomata River Flows

Mean monthly flows in the Wainuiomata River for August were near maximum and above average for September and October.



### Aquifer Levels

The water level in the Waiwhetu aquifer was above average in both August and September, and about average in October.



### **3. Treatment Plants**

#### **3.1 Wainuiomata**

##### 3.1.1 Quality

There have been some low fluoride test results during late October. The cause is being determined.

##### 3.1.2 Health and Safety

There were no injuries or incidents for the period

##### 3.1.3 Operations and Maintenance

- The No. 2 air scour blower sheared a driveshaft and caused terminal damage to the machine. A replacement is being sought .
- We are investigating ways of reducing “float off” volumes from the DAF. If successful, this will lead to an increase in operating efficiency for the treatment plant.

#### **3.2 Waterloo and Gear Island Water Treatment Plants**

##### 3.2.1 Quality

- pH control problems are back under control now that the variable speed pumps are back in service.
- The occasional positive coliform results that we were getting at Waterloo have ceased. Despite some pretty thorough searching, the source was not found.

##### 3.2.2 Health and Safety

There were no accidents or incidents for the period.

##### 3.2.3 Operations and Maintenance

- Wellington Pump No. 3 motor windings burned out and the supplier has been contacted to investigate. Initial suspicion is on the quality of the winding insulation coupled with voltage spikes from the variable speed drive.

#### **3.3 Te Marua**

##### 3.3.1 Quality

There was one high pH incident, caused by the failure of a control system power supply. The out of specification water was contained in the wholesale distribution system and flushed out at the Te Marua Pumping Station.

### 3.3.2 Health and Safety

There are no accidents or incidents to report.

### 3.3.3 Operations and Maintenance

Failure of the power supply, as outlined above.,

## 4. Distribution

### 4.1 Quality

There are no quality issues to report.

### 4.2 Health and Safety

There was one reported incident where an accident in a four wheel drive vehicle was narrowly missed. The incident occurred off-road and corrective actions have been taken.

### 4.3 Operations and Maintenance

- All scheduled maintenance activities were carried out as planned:
- A major review of all exposed pipelines has resulted in a large number of small repair jobs and a small number of pipe replacements. This work will be programmed to occur over the next 18 months.
- Refurbishment of some of the smaller older pumping stations is under way.

## Utility Services Division Health and Safety Data - July 2004 - Total Injuries

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
<b>PRODUCTION (+ 4 OPS ADMIN)</b>													
Hours worked	2,517	2316	3306	2005									
Employee numbers	15	15	16	16									
Incidents	0	0	0	0									
Days lost	0	0	0	0									
Incidence rate (number of incidents per 100 workers)	0	0	0	0									
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	0									
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0									
<b>DISTRIBUTION</b>													
Hours worked	1,195	1233	1861	1307									October 2004 - Back strain October 2004 = Cut finger
Employee numbers	8	8	9	8									
Incidents	0	0	0	0									
Days lost	0	0	0	0									
Incidence rate (number of incidents per 100 workers)	0	0	0	25									
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	15									
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0									
<b>ENGINEERING CONSULTANCY</b>													
Hours worked	1,709	1710	2300	1388									July - Sprain/strain trunk September - Sprain/strain hand September - Bruising
Employee numbers	12	12	12	12									
Incidents	1	0	0	0									
Days lost	0	0	0	0									
Incidence rate (number of incidents per 100 workers)	8	0	0	0									
Frequency rate (incidents per 10,000 hours exposure)	6	0	0	0									
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0									
<b>UTILITY SERVICES SUPPORT</b>													
Hours worked	755	784	916	964									
Employee numbers	7	7	7	7									
Incidents	0	0	0	0									
Days lost	0	0	0	0									
Incidence rate (number of incidents per 100 workers)	0	0	0	0									
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	0									
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0									
<b>LABORATORY</b>													
Hours worked	1,061	1125	1466	988									
Employee numbers	7	7	7	7									
Incidents	0	0	0	0									
Days lost	0	0	0	0									
Incidence rate (number of incidents per 100 workers)	0	0	0	0									
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	0									
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0									

**STRATEGY AND ASSET**

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Hours worked	560	612	1096	736								
Employee numbers	5	5	5	5								
Incidents	0	0	0	0								
Days lost	0	0	0	0								
Incidence rate (number of incidents per 100 workers)	0	0	0	0								
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	0								
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0								

**FORESTRY**

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Hours worked	423	450	572	422								
Employee numbers	3	3	3	3								
Incidents	0	0	0	0								
Days lost	0	0	0	0								
Incidence rate (number of incidents per 100 workers)	0	0	0	0								
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	0								
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0								

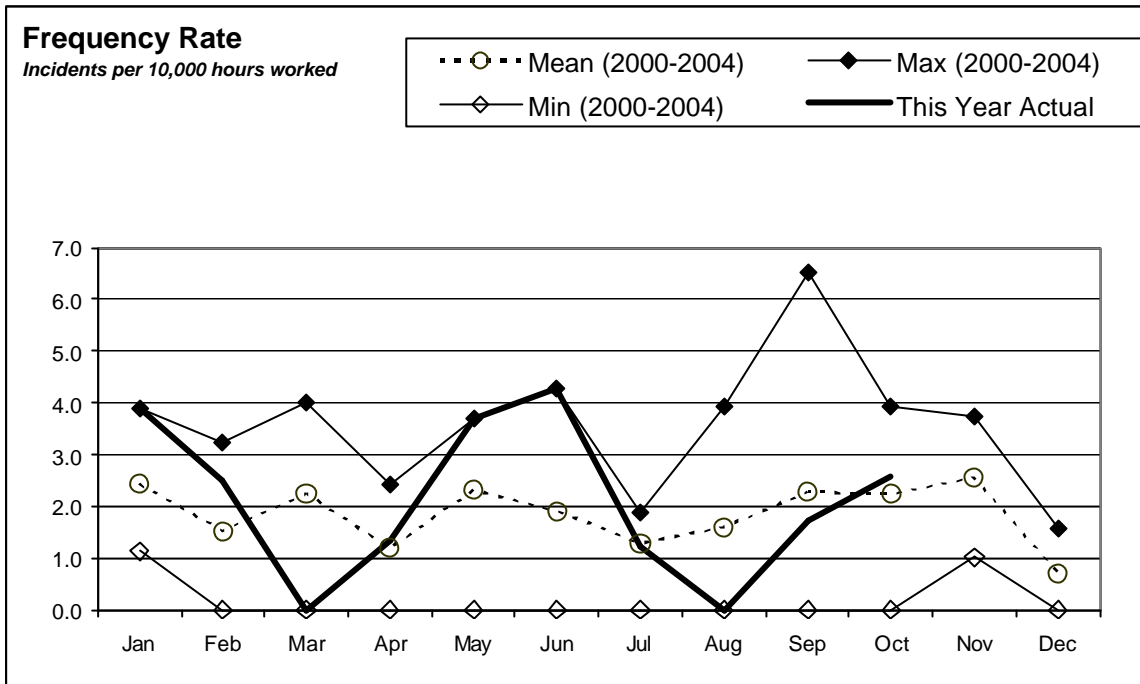
Utility Services Division Combined	Jul	12 Month Average	Aug	12 Month Average	Sep	12 Month Average	Oct	12 Month Average	Nov	12 Month Average	Dec	12 Month Average	Jan	12 Month Average	Feb	12 Month Average	Mar	12 Month Average	Apr	12 Month Average	May	12 Month Average	Jun	12 Month Average
Hours worked	8,219	8,668	8229	11516	7809																			
Employee numbers	57	59	57	59	58																			
Injuries	1	2	0	2	2																			
Days lost	0	1	0	0.5	0																			
Frequency rate (incidents per 10,000 hours exposure)	1	2	0	2	3																			
Severity rate (days lost to injury per 10,000 hours worked)	0	1	0	0	0																			

Incidence rate = (number of incidents/number of employees) x 100

Frequency rate = (number of incidents/person hours worked) x 10,000

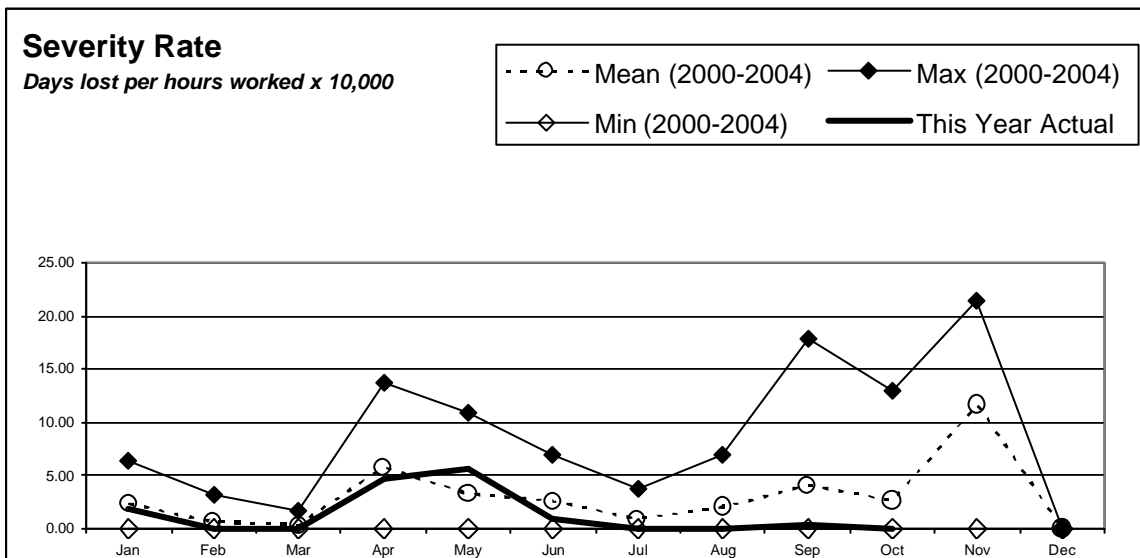
Severity rate = (days lost/person hours worked) x 10,000





### Incidents

One incident in July 2004  
Two incidents in September 2004  
Two incidents in October 2004



### Lost Days

No lost days

---

# Strategy and Asset Group

August to October 2004

---

## Strategy and Asset Group Review of Operations for the Period Ended 31 October 2004

### 1. Items of Note

- The Parliamentary Select Committee considering the Wellington Regional Council (Water Board Functions) Bill is making progress and there is a reasonable expectation that the Bill will be passed before the end of the parliamentary year.
- GWW, along with many of the other water suppliers and interested parties, had some serious concerns about a draft National Environmental Standard that would apply to raw water sources. Following a round of public consultation, it appears the Ministry for the Environment has listened to the various groups and is now looking at modifying its proposal.
- Water sales for the period have been in line with normal expectations, with minor rises in consumption as the temperature has increased and there has not been rainfall for a few days. Consumption then drops again following rainfall.
- One of the major projects for the year is a contribution to the Wellington Regional Strategy in regard to how the water requirements will be met as the population increases. This work is expected to be completed by May next year. Given that the population growth in the Wellington area has followed the Statistics New Zealand high growth scenario, it appears that a new water source will be required well before 2020, which was based on a medium growth scenario. The current investigation work will allow new source options to be considered prior to formulating the LTCCP at the end of next year.
- The proposed *Drinking-Water Standards for New Zealand 2005* are near finalising. It is expected that the Ministry of Health will specify 1 July 2005 as the introduction date. Based on all the current information, it is expected that there would not be any significant expenditure for GWW to achieve compliance.
- A resource consent has been granted for the new Karori Pumping Station, which means that the project is now largely under the control of GWW.
- An information pack that will be used as part of visits by school classes to various treatment plants is being developed. This is being tested on some schools and, following some refinements, is expected to be introduced relatively quickly. This will tie in better with the school pupils' learning processes with what they see during the treatment plant visits.

- Over the last year or so a number of signs have been produced under the GWRC brand for placing at various water supply facilities. This work is now nearing completion, with major interpretation signs for the Te Marua and Kaitoke area being finalised at present.

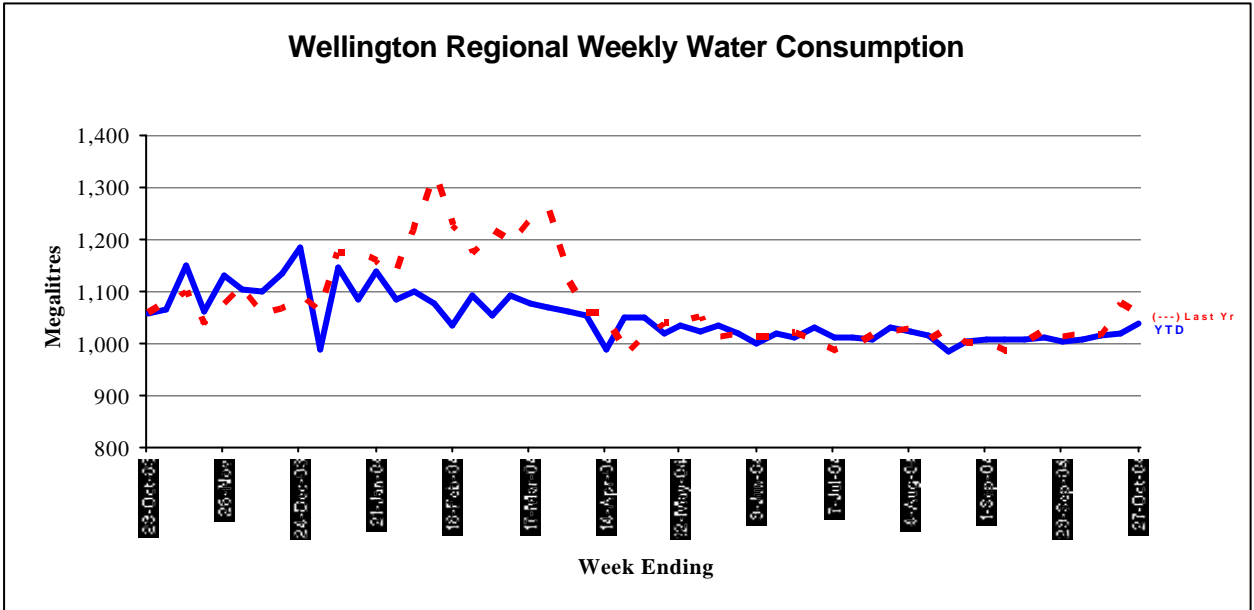
## **2. Sales Volume**

Graphs detailing the sales volume information are shown on page 15.

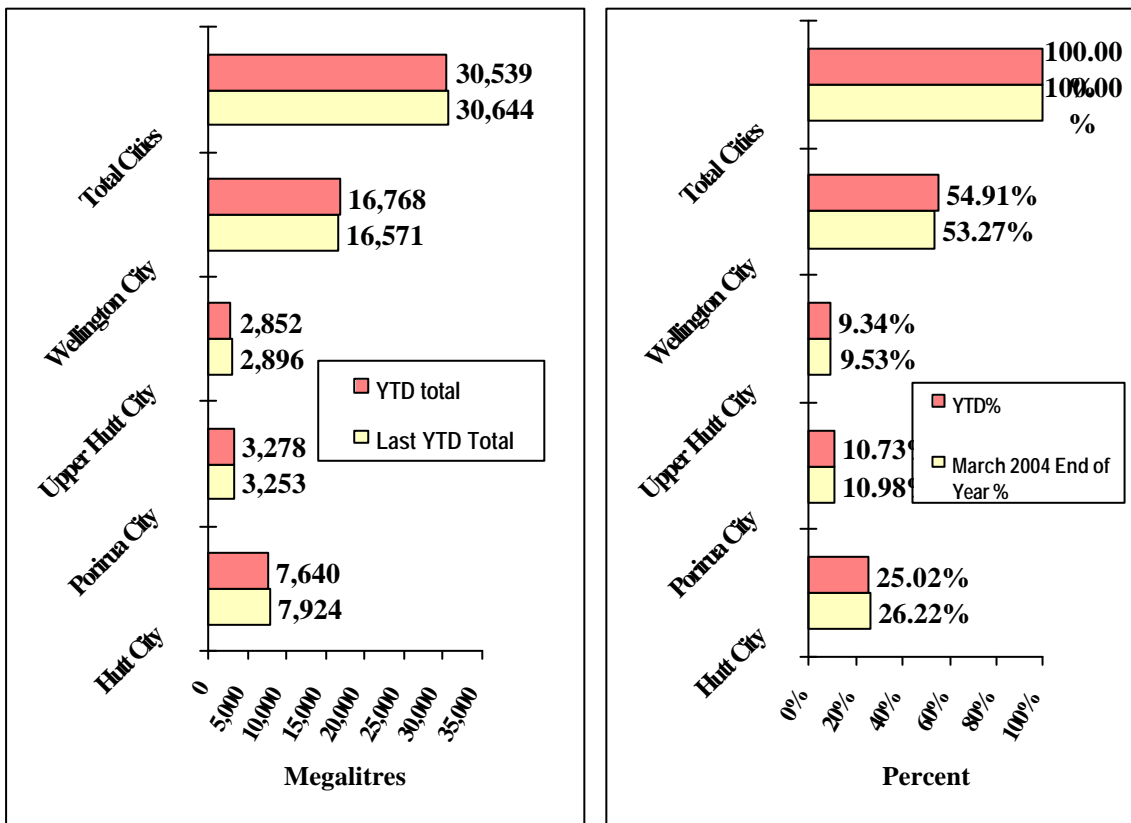
## **3. Asset Management**

- The Capital Works budget for 2004/5 is \$5.312 million. The more significant projects included in the Capital Works Programme are:
  - Construction of the Wainuiomata Catchment western boundary fence. Budget \$100,000. Clearing of the fence line has begun.
  - Design of seismic strengthening of the Stuart Macaskill Lakes intake towers. Budget \$30,000. Publication of the new seismic loading code, which is relevant to this work, is expected in December.
  - Rehabilitation of the Wainuiomata Lower Dam, and creation of a wetland. Budget \$300,000. A design report is in preparation.
  - Purchase of a spare pump for the Waterloo wellfield (two pumps failed in 2003/4). Budget \$60,000. The pump has been ordered.
  - Further investigation of off-river storage at Wainuiomata. Budget \$100,000. A report looking at the justification of this project will be prepared in 2005.
  - Modifications to Te Marua Water Treatment Plant to facilitate independent treatment of lake and river water. Budget \$200,000. Report and estimate in preparation.
  - Installation of aeration equipment at Waterloo Water Treatment Plant to reduce lime use. Budget \$100,000. Plant adaptations in preparation for aeration being trialled.
  - Relocation of the Kaitoke main on the Silverstream Bridge, including a contribution of \$60,000 to bridge strengthening. Budget \$150,000. Upper Hutt City Council has delayed this project awaiting formal Transfund New Zealand approval.
  - A start on the relocation of the Kaitoke main between State Highways 2 and 58 at Haywards to avoid a gully susceptible to seismically induced instability. Budget \$800,000. Design and pipe procurement proceeding
  - A start on a new pumping station at Karori at a location away from the Wellington Fault. Budget \$870,000. Design proceeding. Consent granted.

Water Sold Over the Last 12 Months



Water Sold from 31 March to 27 October 2004



- Completion of a new pumping station at Point Howard at a more secure location. Budget \$367,000. Pumps delivered. Design proceeding. Resource consent application submitted.
- Replacement of obsolete electronic control equipment at Te Marua Pumping Station. Budget \$145,000.
- Renewal/upgrade of the telemetry system. Budget \$160,000. Most of this work is on hold pending the outcome of integration discussions with Capacity.
- NIWA consultants have completed a computer model to predict summer water demand and provide a probability based early warning of possible shortfalls. The model will be trialled in November.
- Flood protection works to minimise the risk of damage to the Wainuiomata raw water main are being designed. A section of this main was washed out in the February floods.
- Repairs to the Wainuiomata access bridge damaged in the February floods have been completed by the insurer. Some costs directly incurred by GWW are yet to be recovered from the insurer.
- Reconstruction of a section of State Highway 2 immediately south of the Mangaroa Bridge is expected to go ahead this summer, subject to final Transfund New Zealand approval. It will require 150 m of the Kaitoke pipeline to be relocated. Transit New Zealand will meet 50 percent of the cost of this work.

#### 4. **Quality Assurance**

- Development of revised Drinking-Water Standards is continuing. GWW has a staff member on the Experts Committee considering the changes. Further consultation is expected before the standard is finalised.
- Work on a new proposal by the Ministry for the Environment to establish a National Environmental Standard for drinking water sources has been halted following the outcome of consultation meetings. The Ministry has advised it will announce a new proposal at the end of November.

#### 5. **Environmental**

- A proposal to lower the Wainuiomata Lower Dam spillway is being developed. The Landcare Division will take future responsibility for the area immediately upstream of the dam in recognition of the recreational opportunities it presents. The public will be consulted by the Landcare Division on possible development options.
- A report certifying full compliance with all consents, with the exception of a minor technical breach at Kaitoke, has been received from the

Environment Division. The minor breach was associated with the spurious reporting of high abstraction flows during calibration of the flow meters. A detailed explanation has been submitted to the Environment Division and a full compliance certificate is expected.

## 6. Catchment Management

- There were several slips and washouts on the Orongorongo access road following the winter storms and snow. These were repaired during September and both the road and the access tracks at the Orongorongo intake are now clear.
- The 17 October catchment tour was cancelled following heavy rain, with further bad weather forecast. On the day of the tour the forecast proved to be incorrect and the day was fine. Those walkers spoken to accepted that the decision to cancel was prudent, given the weather at the time and all will be accommodated on subsequent tours.
- There are still regular incidents of trespass and/or vandalism, usually in the public area below the Wainuiomata Water Treatment Plant.
- Preparatory work is under way for the next stage of the Wainuiomata Catchment boundary fence, with most of the vegetation removed from the alignment. The opportunity has been taken to ensure the full length of the track remains within Council land. Construction of the fence commenced in January 2003??.

## 7. Marketing

- Water conservation. We have been working with Communications and Clemenger BBDO to develop a water conservation campaign for summer 2004 that continues the conservation strategy followed in recent years and is consistent with the style and approach of the Council's *Be the Difference* communications work. Press and radio advertising space has been booked in January and February. A direct mail communication piece for *Be the Difference* members is also being developed. Specific creative content for the advertising and direct mail piece is under development. Supporting publicity and information has also been worked on, including for the Council's newspaper *Elements* and the Council's web site.
- The process of researching and writing the annual report for GWW has taken considerable time over the last three months. A designer has been engaged to produce page layouts. These were being refined at the end of October. The finished report, subject to approval by the Utility Service Committee and final proofreading corrections, is attached with a separate Committee paper.
- Teaching resource for years 3-8 - Further progress has been made on

finalising the content of a teaching guide that links water study activities to the national curriculum. The guides – in three versions for different age groups – have been researched and written by a communications consultant with teaching experience. The draft resource was trialled with three classes during the period and a debrief session has been arranged with all three. The study guides also promote visiting one of our treatment plants as part of the learning outside the classroom requirement of the national curriculum. Once content is finalised, the guides will be designed and printed before promoting them to teachers in the next calendar year.

- Editing the water interpretation signs for Kaitoke and Te Marua has been completed and it is now expected that the signs will be installed by the end of November.
- A structure for GWW content on the Council web site has been agreed with Information Technology. Transfer and editing of content from the current web site to the new one is to be completed by Christmas.
- There were three treatment plant visits during the reporting period, involving 120 people.
- One media release was made during the reporting period, in relation to the start of refilling Lake 2 of the Stuart Macaskill Lakes in September.

## **8. Projects Undertaken by Engineering Consultancy for Strategy and Asset**

- Wainuiomata/Orongorongo Catchment Fence

A Contract has been awarded and work is progressing with upgrading the access track and clearing the route for erection of the third stage of the deer and stock fence along the western boundary of the water collection area. Quotations are being obtained for the supply of the posts and netting.

- Wainuiomata Lower Dam

The Wainuiomata Lower Dam is maintained in a semi-drained state. Normal river flows pass through scour pipes beneath the dam. Regular flood flows exceed the capacity of the scour pipes, filling the reservoir behind the dam. This water takes some days to drain. Investigations are proceeding into lowering the spillway and sealing the scour pipes. A pond and wetland area would be formed in the bed of the reservoir.

- Wainuiomata Water Treatment Plant Outlet Control Valve

The proposal for the replacement and relocation of this control valve is being reviewed. Pressure surges in the pipeline are being analysed.



- Waterloo Well Pump Control Valves

Testing of a replaced Waterloo well pump control valve has confirmed that higher abstraction flows and energy saving have been achieved. Arrangements are being made to replace four further control valves.

- State Highway 1 Bridge at Paremata

The new pipeline on the new Paremata Bridge has been commissioned. Final costs are being determined.

- Rerouting Te Marua to Karori Pipeline at Haywards

The existing pipeline route from State Highway 2 to the Haywards Pumping Station is susceptible to earthquake induced landslide damage. The proposed route for a duplicate pipeline is through Transpower land. Negotiations are proceeding with Transpower to provide an easement for our pipeline. Quotations have been received for the supply of the pipe.

- Emergency Water Supply Points for Upper Hutt City Council

Installation of emergency water supply points to supply water to Upper Hutt City without going through a service reservoir is being investigated.

- Karori Pumping Station

A replacement pumping station located on Northland Tunnel Road is proposed. Resource consent for the construction of the pumping station has been obtained from Wellington City Council. Detailed design of the building is proceeding. The four pumpsets for this pumping station have been ordered.

- Point Howard Pumping Station

The underground pumping station at Hutt Park is being replaced. An application for the construction of the pumping station on the proposed site alongside Seaview Road has been submitted to Hutt City Council. The structural design of the building is proceeding. Internal and external pipework is being detailed.

- Pinehaven Pumping Station

The new pumpsets and switchboard have been commissioned. The pump flow test has confirmed the satisfactory operation of the pumps.

- Minor Seismic Projects

A number of minor seismic protection projects are being attended to.

These include:

- Installation of a non-return function on the Gracefield Reservoir inlet control valve has been completed and commissioned.
  - Installation of a new line valve on the 525 mm pipeline at Moores Valley Pumping Station is proposed. An order has been placed for the supply of the valve. Detailed installation drawings have been prepared.
  - Installation of standpipes on the bottom entry inlets to service reservoirs is being investigated.
- Wainuiomata River Intake Pipeline

The flood on 16 February 2004 caused 27 m of this pipeline to collapse into the river. The pipeline has been reinstated. Permanent riverbank protection works have been designed. A resource consent application for the construction of the protection work has been submitted to the Consents Management Department.

---

# Engineering Consultancy Group

August to October 2004

---

## Engineering Consultancy Group Review of Operations for the Period Ended 31 October 2004

### **1. Work Carried Out for the Strategy and Asset Group**

The main capital projects for which the Engineering Consultancy Group has responsibility are itemised in the Strategy and Asset Group report. Support is also provided for other projects being undertaken by this group.

### **2. Work Carried Out for the Operations Group**

The Engineering Consultancy Group has continued to provide support for smaller projects arising from the operation and maintenance of the wholesale water supply system.

### **3. Work Carried Out for Wellington City Council**

#### **3.1 General**

The work carried out for WCC has picked up in recent months. Current projects under way are detailed in the following sections.

#### **3.2 Rugby, Sussex and Cable Streets**

Pipelaying is complete in Rugby and Sussex Streets, with connections under way. Because these are busy streets and partly State Highway, some construction work was carried out at night.

#### **3.3 Aramoana Reservoir, Miramar**

There is a storage deficit of 10 ML in the Low Level Zone of Wellington City. Of this storage, approximately 6.5 ML is required in the Eastern Suburbs (Miramar) and 3.5 ML in the Southern Suburbs (Island Bay).

The structure has been completed and initial filling for the water test is well under way.

Pipework has been connected from the reservoir to the reticulation system.

#### **3.4 Mt Albert Reservoir**

This 3.5 ML reservoir will be sited in Mount Albert Park within Berhampore Golf Course. Pine trees have been felled on the site. Contract Documents are almost finalised, awaiting a programme for tendering.

#### **3.5 Onslow Reservoir**

The new 4.5 ML capacity rectangular reservoir is complete and in service.

Backfilling and associated topsoiling is complete, with only minor tidy up items still remaining.

### **3.6 Warwick Street Pumping Station**

This pumping station includes pumpsets for both WCC and GWW, supplied by a common electrical and controls panel. The Engineering Consultancy Group has been commissioned by WCC to arrange for the replacement of the two WCC pumps that deliver to Wadestown Reservoir and the installation of a combined electrical control panel.

Both new pumpsets are in operation and the installation contract is complete. Arrangements are being made for soundproofing of the building.

### **3.7 Wellington City Council Flow Meters**

Contract Documents were prepared, Tenders invited and a Contract awarded.

### **3.8 Automatic Shut-off Valves 2004/5**

A commission has been received to design and prepare Contract Documents for the installation of automatic shut-off valves at various locations. Preliminary design work is well advanced.

### **3.9 Wakefield and Victoria Street Water Main Renewals**

This Contract was tendered 18 months ago but was delayed because of the conflict with the stormwater tunnel construction. The Contract has now been reactivated and pipelaying will commence immediately after Christmas.

## **4. Miscellaneous Projects**

### **Kapiti Water Supply- Lindale Underpass**

The Engineering Consultancy Group was engaged to design an alternative deviation of the water main. The diversion would be down to the lower ground level and not on the bridge as originally proposed by the Consultants. The diversion was installed with minimal interruption to the water supply to Paraparaumu.

---

# Laboratory Services

July 2004

---

# Laboratory Services Department Review of Operations for the Period Ended 30 June 2004

## 1. Items of Note

- Laboratory finances were in the red for the year to date but, latterly, obvious signs of recovery were good cause to remain upbeat about the situation.
- It was business as usual for the chemistry and microbiology sections, both being committed to their bread and butter testing programmes and schedules.
- With the SoE sample collection contract, extra vehicle maintenance was necessary and running costs were higher than those reflected in the last annual producer price index.
- The few divisional projects undertaken were interesting and encouraging, with the potential for more to come.
- Various training courses and seminar/workshops were arranged to keep staff stimulated and outgoing. The rewards have been in both personal development and team improvement.

## 2. Business Summary

### 2.1 Quality

There were no requests for retesting samples and test reports were timely.

### 2.2 Health and Safety

There are no workplace accidents to report, therefore no time lost to injury this period. However, one incident was reported as a “near miss”, which involved our on-road then off-road field officer driving skills being challenged, the only injuries (to staff) being a bit of wounded pride and counter-climatic red faces.

---

# Plantation Forestry

October 2004

---



## Plantation Forestry Department Review of Operations for the Period Ended 31 October 2004

### 1. Log Harvest Contract

The Contract has been focused on the continued recovery of windthrown material from both Pakuratahi and Valley View Forests. On current information this operation will continue until Christmas, by which time an estimated 49,600 tonnes will have been harvested since the February storms. Of this, at least 50 percent would have been fallen trees, which would have had no value if they had not been harvested before the onset of sapstain.

With Council supplementing its harvest operation with an additional crew and other affected forest owners doing the same, the domestic market has drifted along at saturation point. This has not been a major problem while export markets have been available but, of recent times, the combination of a restrengthening of the New Zealand dollar and growing shipping costs have caused problems with domestic mills regularly refusing loads for two to three days per week because of oversupply.

Our plan to return to harvesting pruned logs from Puketiro in October did not eventuate, as all the merchantable windthrow had not been harvested and pruned prices were marginal at best. This option has now been deferred until the New Year when hopefully pruned prices will have recovered to at least give us \$100 net per tonne for top grade logs.

JNL is currently milling all the pruned logs they require with their own crews and Eurocell is obtaining their requirements from the central North Island at prices we deem unacceptable.

Production for August, September October was as follows. Output by grade at Clarkes Creek/Upper Long Spur:

Grade		Tonnes	%
Pruned Domestic		589.18	4.82
Pruned Export		0	0
Run of Bush		0	0
S/A Grade		3,416.89	27.95
L Grade		528.66	4.32
R Grade		1,182.99	9.68
K Sawlog		2,183.63	17.86
Roundwood		0	0
K Rough		1,992.56	16.29
Pulp		1,372.39	11.22
Xport Pulp		811.31	6.64
O/S Pulp		149.5	1.22
Total		12,227.11	

Revenue was \$195,032.57, at an average of \$15.95 per tonne.

### **Tunnel Gully**

<b>Grade</b>		<b>Tonnes</b>	<b>%</b>
S/A Grade		1,987.13	55.68
L Grade		28.24	0.79
R Grade		455.36	12.76
K Sawlog		626.48	17.55
K Rough		119.28	3.34
Pulp		291.16	8.17
O/S Pulp		40.36	1.13
Total		3,568.45	

Revenue totalled \$110,776.68 at an average of \$31.04.

Overall harvesting for the quarter returned \$305,809.25 at an average of \$19.36 per tonne.

## **2. Silviculture Contracts**

A further 15 ha out of a total of 257 ha were completed in this quarter at a cost of \$6,142.50.

Planting continued for as long as the weather was suitable and an additional 74,785 seedlings were planted at a cost of \$29,166.15. This equates to approximately 49.86 ha, giving a total of 126.52 ha for the season.

## **3. Plantation Forestry Operations**

Work has continued monitoring the three harvest crews and the planting and carrying out quality control plots for the pruning. There have been numerous “nuisance” slips following each significant rainfall event. Up until very recently the ground has remained waterlogged, making access more difficult.

The slip onto Karapoti Road from the Lindsay’s block, which commenced in February, was finally cleared in mid-October. This work has been funded by Upper Hutt City Council and there is no assurance that it will not start slipping again should we have a sustained period of rainfall. Unless we have a drier than usual summer we can expect ongoing problems of this type through next winter.

Two more short access roads have been constructed in Valley View and planning is under way for an additional culvert to be installed in Martins block to provide access to further windthrown logs.

The 2004/5 Fire Plan was issued in late September and fire training was

given to the staff of the silvicultural crews. The logging crews have all received training in earlier years. All fire equipment was maintained and fuel changed.

#### **4. Forest Access**

There is still no access to Maungakotukutuku and, although there have been discussions, there appears to be no prospect of adequate access in the short-term. This block is also the target for trespass and vandalism of the access gates. From our forest the trespassers then travel through to Kaitawa Forest and the other blocks near Nikau grove and Reikorangi Road.

#### **5. Market Trends**

The domestic markets remain reasonably strong, while export markets are definitely weak. The dollar has remained strong and shipping costs have returned to their earlier highs. Rayonier's local representative has just returned from Korea where log buyers are paying around US\$90 compared with a long-term average of US\$60. While there, he visited a shipping company whose staff were at pains to tell him they were not making great profits from current prices. Later in the visit they let slip that they anticipated a profit of in excess of US\$2 billion for the current year!

While the harvest crews remain in windthrown logs, any return is good as they will be valueless when they become sapstained.