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# **Greater Wellington Water**

**July/August 2005**

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# **Operations Group**

**July/August 2005**

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# Operations Group Review of Operations for the Period Ended 31 August 2005

## 1. Items of Note

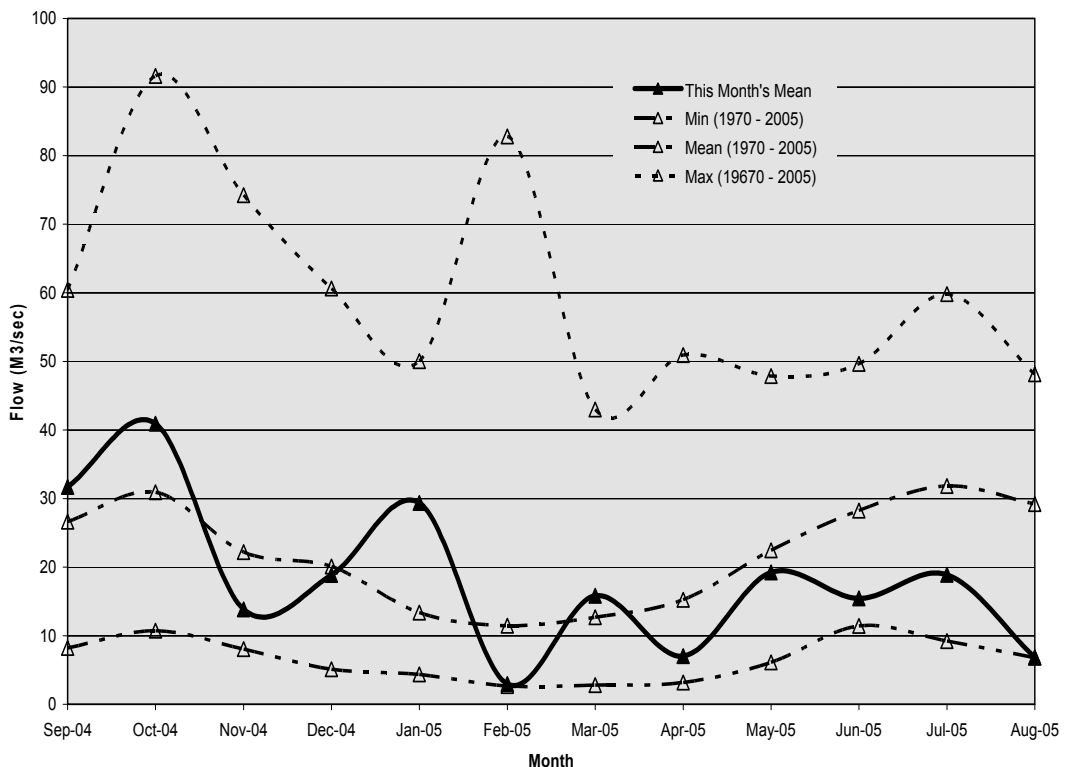
- The flood damage repair work in the Orongorongo Catchment is nearing completion. Additional work was required to secure the end of the rail track and reinstate the turntable.
- The 1080 drop in the Wainuiomata/Orongorongo Catchment was completed successfully on 3 August 2005. At the time of writing the water treatment plant is still off because of the lack of rain in the catchment.
- The only day of the month when water was not abstracted from the Kaitoke weir was on 1 August 2005. This is very unusual at this time of year and is an indication of the dry winter weather.

## 2. Supply Situation

There were no supply issues for the period.

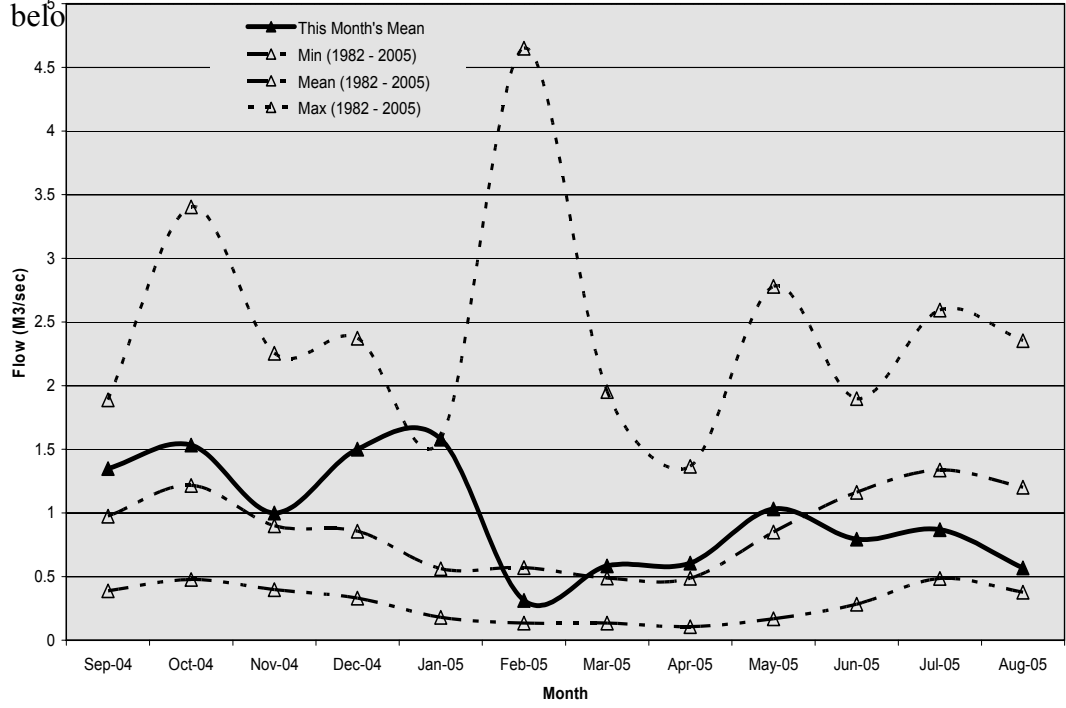
### Hutt River Flows

The mean monthly flows in the Hutt River for July and August were the lowest on record.



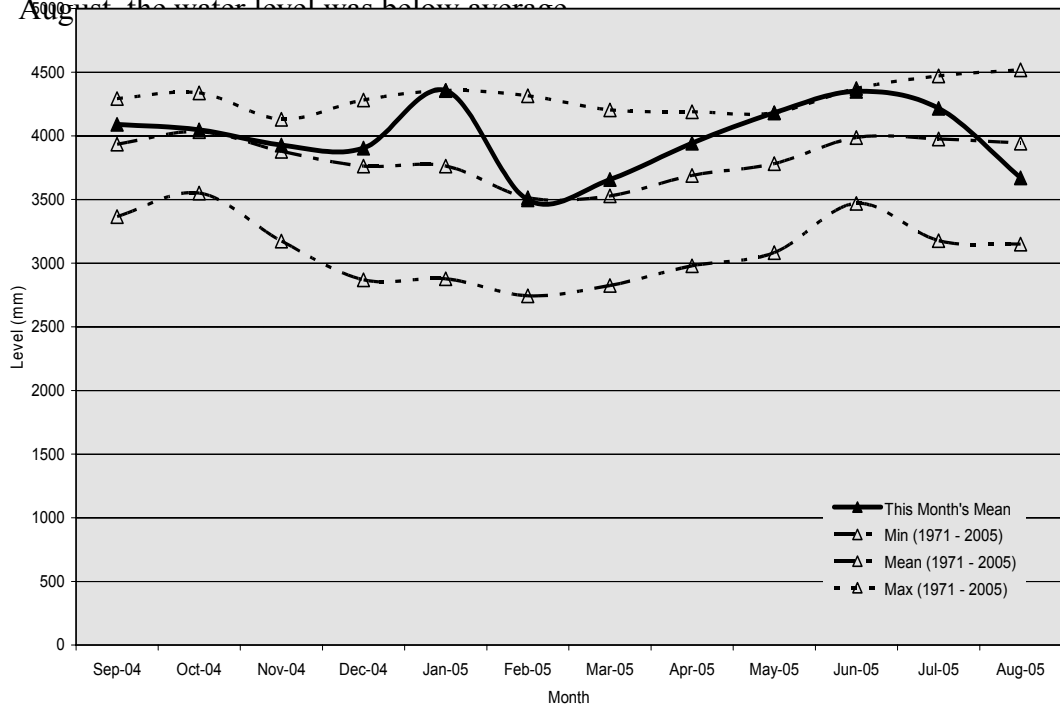
### Wainuiomata River Flows

The mean monthly flows in the Wainuiomata River for the period were



### Aquifer Levels

The water level in the Waiwhetu aquifer during July was above average. For August, the water level was below average.



### **3. Treatment Plants**

#### **3.1 Wainuiomata**

##### **3.1.1 Quality**

- There were no IOFs or transgressions during the period.

##### **3.1.2 Health and Safety**

- There were two minor injuries during the period. One instance was where an employee felt minor back pain when lifting a valve actuator and another employee received a cut hand from a stainless steel strap. Neither resulted in lost time.

##### **3.1.3 Environmental**

- There was a lime slurry spill in the lime room when the drainpipe to the lime waste tank became blocked. The spill was contained in the room and the blockage was soon cleared.

##### **3.1.4 Operations and Maintenance**

- Structural and equipment repairs were completed in the Orongorongo Catchment and the sources were brought back on-line on 7 July 2005.

##### **3.1.5 Plant Tours**

- There was one plant tour during the period:
  - An Opus management group.

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

##### **3.2.1 Quality**

- There were no IOFs or transgressions for the period.

##### **3.2.2 Health and Safety**

- There was one accident, where an employee cut a finger on stainless steel trunking.

##### **3.2.3 Environmental**

- On the weekend of 27/28 August there was a lime powder leak on the transfer line from the bulk silo to the day hoppers. The leak was small and mostly contained in the basement but resulted in the whole area being covered in a fine film of lime dust. Some dust was also dispersed

to other parts of the plant through the ventilation system. The leaking pipe was repaired and all affected areas thoroughly cleaned.

### 3.2.4 Operations and Maintenance

- Work continues on optimising the pH correction control following the installation of new aerators.
- The repaired Wellington No. 2 Pump motor and variable speed drive were reinstalled and commissioned.
- Refurbishment work was carried out on the Gear Island aerator blades.
- Modifications were completed to Aerator B's subfloor and dosing injection points.

## 3.3 Te Marua

### 3.3.1 Quality

- There were no IOFs or transgressions for the period.

### 3.3.2 Health and Safety

- The lime supplier has reviewed its procedures and provided a satisfactory response regarding corrective actions. This follows receipt of our letter voicing our concerns over the appropriate use of personal protective equipment and clothing.
- There were no accidents or incidents during the period.

### 3.3.3 Environmental

- One IOF was raised for the period relating to a minor overflow of the Ascot Park Reservoir.

### 3.3.4 Operations and Maintenance

- Issues with the reliability of the main gate and its automatic operation are being discussed with Parks and Forests.
- Temporary repairs were made to a leaking scour valve in the Kaitoke intake weir access tunnel.
- There was a pipe blockage in the centrate to sewer discharge pipe. Specialist contractors were called in to clear the blockage.

### 3.3.4 Plant Tours

- There were five plant tours during the period:

- A GWRC induction tour on 13 July (9 people)
- A group from Whitirea Community Polytechnic on 26 July (9 people).
- Environmental Health students from Massey University on 2 August (10 people).
- Opus water treatment students on 11 August (10 people).
- Weltec students on 29 August (8 people).

## **4. Distribution**

### **4.1 Health and Safety**

- There was a serious motor vehicle accident on the River Road in the Hutt Valley that involved two Pipeline Section employees. Both employees were very lucky to survive. However, the GWRC vehicle (a Toyota Hilux 4WX) was not so fortunate and had to be written off. The accident resulted in 14 days' lost time, which is surprisingly low considering one of the injuries was a broken sternum. The driver of the GWRC vehicle was not responsible for the accident.
- A Pipelines Section employee received a bruised finger.

### **4.2 Environmental**

- There were no environmental issues for the period.

### **4.3 Operations and Maintenance**

- We are still providing ongoing supervision and mark-outs for the Paremata/Plimmerton State Highway 1 upgrade project.
- For the Korokoro Stream coupling project, the 1,050 mm main was shut down and the seismic coupling installed. Note - A Viking Johnson coupling had to be installed, as the 1,050 main lifted 25 mm once cut. Two sets of tie-bolts were installed across both couplings, plus cathodic protection straps.
- For the Karori Pumping Station external pipelines project, all service locations for the new valve and OK main connections were completed. The pipe specials, bolts and flanges were priced up and orders placed.
- Repairs were made to the 600 mm valve between the aeration tank and reservoir at Gear Island.
- The repaired Pump No. 1 was reinstalled at Pinehaven Pumping Station.

- Repairs were made to the 36" scour tailpipe at Kaitoke weir.
- The access road to the three bores for the Gear Island collector main was upgraded at Shandon Golf Course.
- The Ngaio branch line was shut down three times, the bell joints removed and new pipe sections with couplings and flanges installed.
- The two monthly scour valve exercise of the Hutt North and Hutt South scours was carried out.

#### 4.4 Pipeline leaks

- The 200 mm cast iron main in Mana Esplanade, Paremata was shutdown and the leaking bell joint repaired.
- The 1,050 mm main was shut down and welding repairs carried out downstream of Korokoro Stream.



## Utility Services Division Health and Safety Data from July 2005 - Total Injuries

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
<b>PRODUCTION (+ 4 OPS ADMIN)</b>													
Hours worked	24147	2316											July 2005 - Cut finger
Employee numbers	16	16											July 2005 - Injured back
Incidents	2	1											
Days lost	0	0											
Incidence rate (number of incidents per 100 workers)	13	6											
Frequency rate (incidents per 10,000 hours exposure)	8	4											
Severity rate (days lost to injury per 10,000 hours worked)	0	0											
<b>DISTRIBUTION</b>													
Hours worked	1227	1246											July 2005 - Vehicle accident [2 employees]
Employee numbers	9	9											July 2005 - Bruised finger
Incidents	2	3											August 2005 - Minor burns to hand
Days lost	11	14											August 2005 - Bruised finger
Incidence rate (number of incidents per 100 workers)	22	33											August 2005 - Cut and small burn to wrist
Frequency rate (incidents per 10,000 hours exposure)	16	24											
Severity rate (days lost to injury per 10,000 hours worked)	90	112											
<b>ENGINEERING CONSULTANCY</b>													
Hours worked	1840	1716											
Employee numbers	12	12											
Incidents	0	0											
Days lost	0	0											
Incidence rate (number of incidents per 100 workers)	0	0											
Frequency rate (incidents per 10,000 hours exposure)	0	0											
Severity rate (days lost to injury per 10,000 hours worked)	0	0											
<b>UTILITY SERVICES SUPPORT</b>													
Hours worked	951	1076											
Employee numbers	7	7											
Incidents	0	0											
Days lost	0	0											
Incidence rate (number of incidents per 100 workers)	0	0											
Frequency rate (incidents per 10,000 hours exposure)	0	0											
Severity rate (days lost to injury per 10,000 hours worked)	0	0											
<b>LABORATORY</b>													
Hours worked	1078	1142											August 2005 - Bruised foot
Employee numbers	7	7											August 2005 - Sprained neck
Incidents	0	2											April 2005 - Stress
Days lost	0	0											May 2005 - Stress
Incidence rate (number of incidents per 100 workers)	0	29											
Frequency rate (incidents per 10,000 hours exposure)	0	18											
Severity rate (days lost to injury per 10,000 hours worked)	0	0											

**STRATEGY AND ASSET**

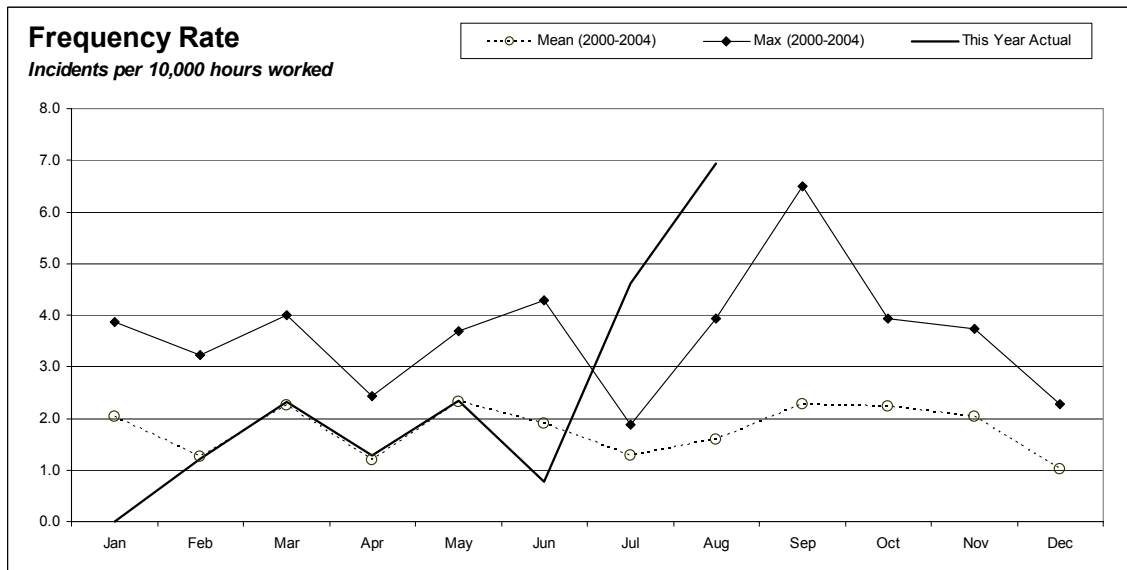
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Hours worked	712	644										
Employee numbers	5	5										
Incidents	0	0										
Days lost	0	0										
Incidence rate (number of incidents per 100 workers)	0	0										
Frequency rate (incidents per 10,000 hours exposure)	0	0										
Severity rate (days lost to injury per 10,000 hours worked)	0	0										

**FORESTRY**

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Hours worked	433	466										
Employee numbers	3	3										
Incidents	0	0										
Days lost	0	0										
Incidence rate (number of incidents per 100 workers)	0	0										
Frequency rate (incidents per 10,000 hours exposure)	0	0										
Severity rate (days lost to injury per 10,000 hours worked)	0	0										

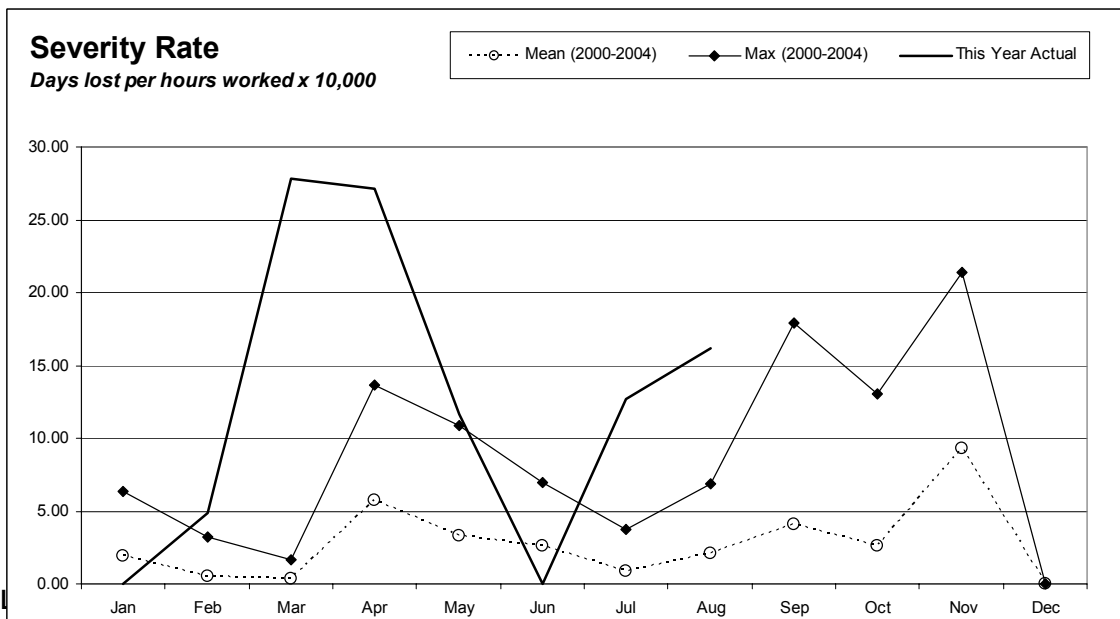
<b>Utility Services Division Combined</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>
Hours worked	8653	8651										
Employee numbers	59	59										
Injuries	4	6										
Days lost	11	14										
Frequency rate (incidents per 10,000 hours exposure)	5	7										
Severity rate (days lost to injury per 10,000 hours worked)	13	16										

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

Four incidents in July 2005  
Six incidents in August 2005



11 days lost in July  
14 days lost in August

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# **Strategy and Asset Group**

**July/August 2005**

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## Strategy and Asset Group Review of Operations for the Period Ended 31 August 2005

### 1. Items of Note

- A major project to consider possible options for a new water supply source has been completed and the information was presented to the customers. A separate report outlines the options for immediate and longer term developments of new water sources.
- The new *Drinking-Water Standards for New Zealand* were announced by the Ministry of Health in July with the start date of 1 January 2006. As noted in an earlier report, the impact on GWW is not significant.
- Sales volumes for the last two months of the winter period have been about average, even though August has been particularly dry.
- A draft agreement has been received from Wellington City Council for GWW to partly fund a new Wellington Central Business District reservoir. There would be a specific water allocation for GWW's use to assist in controlling the wholesale water supply system.
- Good progress has been made in developing the Water Management Plan in conjunction with the four city council customers.
- Work has started on replacing the pipeline between State Highways 2 and 58 at Haywards. The main reason for this project is to reduce the risk of pipeline damage followed by a long repair period following a major seismic event.
- The network agreement with UnitedNetworks is being renewed for another five years. The rates are the same as any other customer would pay in the same circumstances. The main advantage to GWW is to have a direct link to the network provider other than through an energy company. A separate report seeks approval to sign the agreement.

### 2. Water Usage

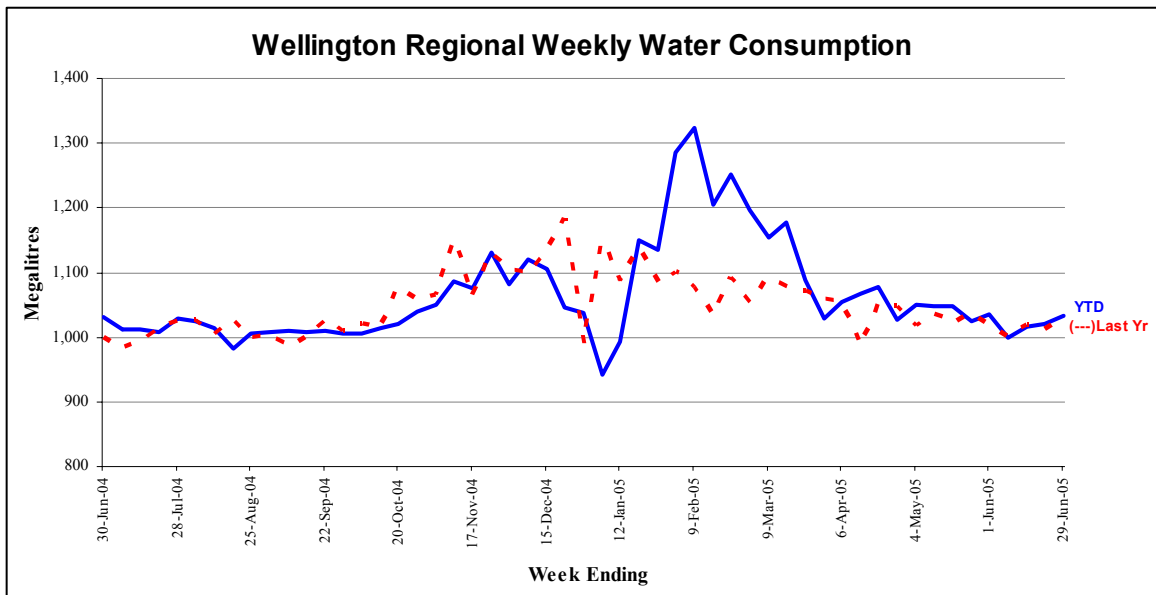
One of the ways of roughly identifying the steady state water usage is to measure it over the period when there is minimal garden watering. Table 1 on page 13 provides a comparison over the last six years. All the readings are for a period of 18 weeks, ending with the last weekly reading in August. The information in the table suggests an annual average change in base consumption of about 0.7 percent a year, which is less than the population change of in excess of 1.0 percent a year.

Graphs detailing the sales volume information are on pages 13 and 14.

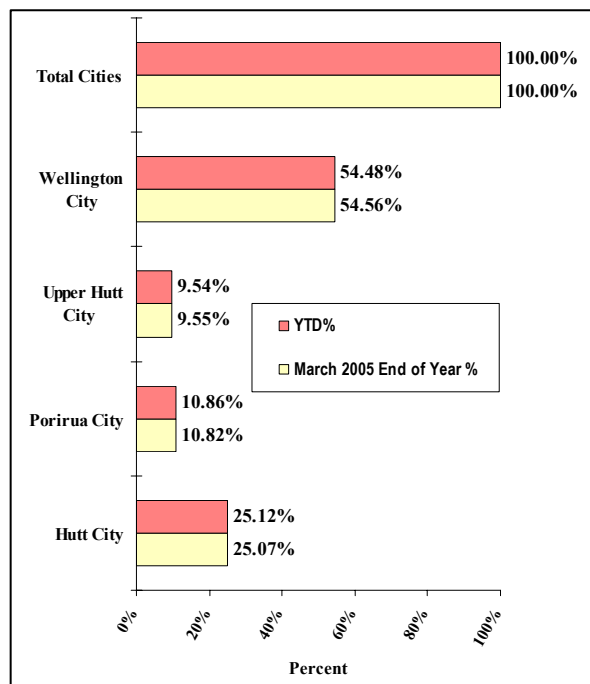
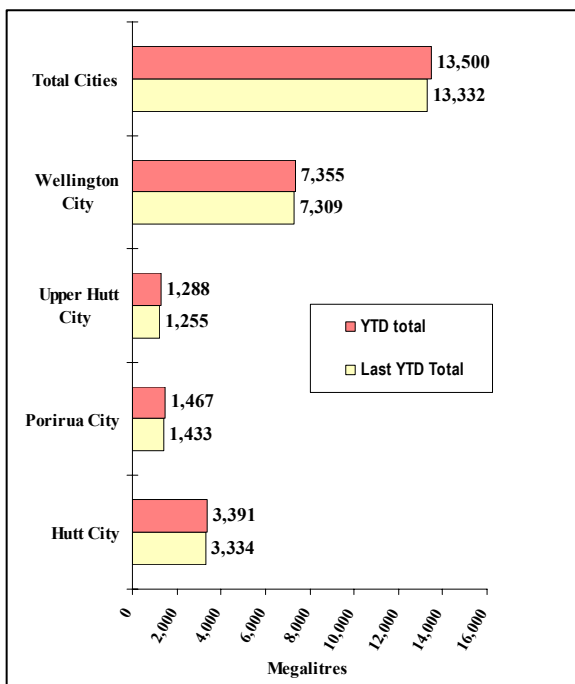
Table 1

City Council	18 Week Consumption ML							
	Year						ML change over 6 years	% change over 6 years
	2000	2001	2002	2003	2004	2005		
Hutt	4,584	4,686	4,796	4,769	4,590	4,667	83	1.8
Porirua	1,835	1,874	1,958	1,936	1,958	2,026	191	10.4
Upper Hutt	1,773	2,002	1,805	1,718	1,704	1,751	-22	-1.2
Wellington	9,603	9,623	9,870	9,869	10,107	10,037	434	4.5
Total	17,795	18,185	18,429	18,292	18,359	18,481	686	3.9

Water Sold Over the Last 12 Months



Water Sold from 30 April to 31 August 2005



### 3. Asset Management

- The Capital Works budget for 2005/6 is \$5.937 million. The more significant projects included in the Capital Works Programme are as follows:
  - Strengthening of the Stuart Macaskill Lake intake towers. Budget \$100,000. One tower will be strengthened this year and the second in 2006/7.
  - Investigation work associated with the proposed Te Marua intake. Budget \$100,000.
  - The fourth (and final) stage of the Wainuiomata Catchment boundary fence. Budget \$100,000.
  - Construction of two sentinel wells on the Petone Foreshore. Budget \$100,000.
  - Modifications to the Te Marua Water Treatment Plant to enable lake and river water to be treated separately. Budget \$300,000.
  - Replacement and refurbishment of water treatment plant equipment. Budget \$620,000.
  - Replacement of valves in the wholesale distribution network. Budget \$120,000.
  - Relocation of the Kaitoke main on the Silverstream Bridge, including a \$60,000 contribution to the strengthening of the bridge. Budget \$140,000.
  - Duplication of the Kaitoke main between State Highways 2 and 58 to improve the seismic resistance of this section of main. Budget \$1,200,000.
  - Purchase of pipe stock to repair seismic damage. Budget \$200,000.
  - Construction of the new Karori Pumping Station. Budget \$1,820,000. Work has commenced on this project and excavation is complete.
  - Refurbish equipment at Thorndon Pumping Station. Budget \$60,000.
  - New Point Howard Pumping Station. Budget \$312,000.
  - Modification to Randwick Pumping Station. Budget \$50,000.
  - Power factor correction work to improve electrical efficiency. Budget \$95,000.
  - Telemetry and control system upgrades and replacements. Budget \$30,000.
  - Minor work. Budget \$300,000.
  - Seismic protection work. Budget \$100,000.

- Design of the proposed new Lincolnshire Pumping Station to be located near the Grenada Landfill is proceeding. Pumps have been ordered and tenders for construction of the building have been received. The work is being funded by Wellington City Council but GWRC will take over ownership of the assets on completion. Therefore, officers are working closely with the consultant to ensure the work meets GWRC requirements.
- Preliminary studies of potential new sources have been completed. Although this work was initiated as an input to the Wellington Regional Growth Strategy, it has shown that with the lead times involved, and recent significant lifts in population numbers, decisions about future sources need to be seriously considered in the near future. A second more detailed stage of investigation of the Upper Hutt aquifer has been commissioned, and a brief for more detailed studies of the storage options developed. This issue is discussed in more detail in a separate report.

#### 4. Quality Assurance

- The new *Drinking-Water Standards for New Zealand 2005* were published late in August. The implications for GWRC will be studied in detail but are expected to be limited to rebuilding data acquisition and compliance reporting mechanisms, and working with the customer territorial authorities on how to most effectively publicise the plumb solvency (soft water) issue. The new Standard requires six monthly distribution of a notice to consumers and publication of a public notice that advises consumers to flush drinking taps if the water has been standing in them for an extended period before using the water for drinking or food preparation. Soft water standing in taps for an extended period may leach minute quantities of lead and other heavy metals from the tap body.
- Work on a new proposal by the Ministry for the Environment to establish a National Environmental Standard for drinking water sources has been delayed and the approach reassessed following the outcome of consultation meetings. The main thrust now appears to be to require regional councils to take account of public water supply when preparing plans and issuing consents. The scope of the new Drinking-Water Standards has been widened to include classification of raw water quality using *Cryptosporidium* numbers.
- The A1 grading for the Wainuiomata Water Treatment Plant has been reconfirmed. Te Marua has achieved compliance with all aspects of the *Drinking-Water Standards for New Zealand 2000* in 2004, including aesthetic requirements, and is expected to also receive an A1 grading. The gradings of the other treatment plants are also expected to be reviewed this calendar year.



## 5. Environmental

- Rehabilitation and lowering of the Wainuiomata Lower Dam spillway to provide an opportunity for the development of a wetland upstream has been delayed because of the high cost of the work proposed. The engineering of the project is being re-evaluated.
- Design work has begun on a larger culvert for Sinclair Creek, just upstream of the Wainuiomata intake. The existing culvert is regularly overtopped, making the road impassable, and acts as a barrier to fish. It is to be replaced with a much larger culvert that will allow fish to move up Sinclair Creek.
- Power factor correction equipment is to be installed at the Gear Island and Wainuiomata Water Treatment Plants, and at the Ngauranga Pumping Station. This equipment improves electrical efficiency and reduces energy use.
- Two sentinel wells are to be drilled along the Petone Foreshore and equipped with instruments that will provide early warning of saline intrusion into the Waiwhetu aquifer. This work is being undertaken jointly with the Resource Investigations Section.

## 6. Catchment Management

- Initial reports suggest that the 1080 drop in the Wainuiomata/Orongorongo Catchment was exceptionally successful, helped no doubt by the drier weather. It has now reached the time when we would need some persistent rain to enable the catchment to be reopened. Since the drop (3 August), the Orongorongo Catchment has received 54.5 mm of rain and Wainuiomata 62.5 mm. Officers estimate that at least 100 mm will be required to ensure all baits are detoxified.
- A programme to reduce the numbers of rats in the area of the proposed “Mainland Island” within the Wainuiomata Catchment has been successful, with post-treatment surveys showing a 95 percent reduction in tracking.
- The rangers still report regular instances of trespass and mindless vandalism, predominantly in the Wainuiomata Catchment. In all cases an attempt is made to identify the culprits but this is seldom successful.
- Plantation Forestry employees were used to clear slips on the walking tracks adjacent to the Orongorongo intake.

## 7. Marketing

- GWRC’s web site. The project to add live water supply data to the web site was further progressed, with development of screen graphics by a

content designer. A software problem has meant that some of the data tags needed to populate the system diagram have to be recreated, which has slowed progress.

- Development work on the proposed Wellington Water Management Plan was carried out, including drafting text for the situation analysis and policy/plans/strategies sections of the report in relation to GWRC. We are waiting on information from one city council before we can produce a second draft of the plan.
- Water Supply History Update. Following interviews we have identified a suitably qualified historian who has agreed verbally to undertake this project for us. We expect a contract to be agreed shortly. The project scope was refined and a chronology outline of key events and issues written to provide focus to the historian's research. We envisage the update text being completed by 31 December, with design and publication taking place in the first half of 2006.
- *Drinking-Water Standards for New Zealand 2005*. New Standards were released by the Ministry of Health on 29 August. In the lead-up to the release we spent some time consulting with NZWWA and the Ministry to ensure we understood how the changes would affect GWRC and its customers, and reporting that information to our customers. A briefing about the new Standards was also written for Greater Wellington Regional Councillors.
- Water Supply Annual Reporting. A *Social and Environmental Matters Report* covering the 2004/5 year was researched and written for the Utility Services Division's *Annual Review* document. This material will form part of the more comprehensive *Water Supply Annual Report*, to be compiled and published by 30 November.
- A submission about the value to GWW of a proposed water efficiency labelling scheme was drafted in response to the Ministry for the Environment's discussion paper *Product Stewardship and Water efficient Labelling* (July 2005). Our contribution was forwarded to GWRC's Environment Division, which co-ordinated a single response on behalf of GWRC.
- An analysis of key changes to GWRC's water supply infrastructure and methods of operation over the last decade was written for inclusion in the GWRC Environment Division's draft *State of the Environment Report*.
- There were five treatment plant visits during July and August.
- One news release was made (29 August), in relation to work starting on a deviation to the Te Marua-Wellington wholesale water main at Haywards Hill. This work is expected to reduce the probability of damage and

speed repair of the pipeline in the event of a large movement on the Wellington Fault.

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

- **Wainuiomata/Orongorongo Catchment Fence**  
An assessment is being made of route options for the final stage of the fence line at the southern end of Moores Valley ridge.
- **Wainuiomata Lower Dam**  
A review of the design for lowering the spillway is proceeding.
- **Sinclair Creek Ford**  
An assessment is being made of the options for replacing the Sinclair Creek ford in the Wainuiomata Water Collection Area. The existing ford does not allow access following heavy rain and is a barrier to fish passage.
- **Future Water Source Pipelines**  
The route of a pipeline from the Pakuratahi Dam site to Te Marua Water Treatment Plant is being investigated.
- **Wainuiomata Water Treatment Plant Outlet Control Valve**  
Installation drawings are being prepared to relocate this control valve to Tunnel Grove valve chamber. Delivery of the new control valve is expected in November 2005.
- **Wainuiomata Pumping Stations Variable Speed Drives**  
Installation of variable speed drivers at the Moores Valley and Wainuiomata Pumping Stations is proposed.  
  
The variable speed drives will even flows and improve efficiency of the pumps. The variable speed drives have been received and arrangements are being made for installation.
- **Duplicating Te Marua to Karori Pipeline at Haywards**  
The Contract for installing the new pipeline has been awarded to E Carson and Sons Ltd. Work has started on-site clearing the pipeline route alongside State Highway 2.
- **Emergency Water Supply Points for UHCC**  
A drawing detailing a cross connection at the Fergusson Drive/Camp Street intersection has been prepared. Arrangements are being made to install this cross connection in October 2005.

- **Karori Pumping Station Replacement**  
Excavation of the Site for construction of the replacement pumping station in Northland Tunnel Road is complete. Unexpected unstable ground conditions have necessitated additional ground retaining work.  
  
The basement floor slab has been poured and preparations are being made to form the first lift of the walls.
- **Karori Pumping Station Replacement - External Pipelines**  
Tenders have been received for the installation of the pipelines between the pumping station and existing mains. The Tenders are being assessed.
- **Point Howard Pumping Station**  
The underground pumping station at Hutt Park is being replaced. The proposed site of the new pumping station is alongside Seaview Road. The subdivision consent is being finalised. Tender Documents for the construction of the building are being finalised.
- **Warwick Street Pumping Station**  
Noise emissions from the Warwick Street Pumping Station exceed the levels specified in the Wellington City District Plan. A contractor has installed soundproofing in the pumping station. A noise survey has been arranged to confirm the effectiveness of the soundproofing.
- **Minor Seismic Projects**  
Installation of a flexible joint on the Wainuiomata to Wellington pipeline, Korokoro Stream crossing is almost complete.

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# **Engineering Consultancy Group**

**July/August 2005**

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## **Engineering Consultancy Group Review of Operations for the Period Ended 31 August 2005**

### **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**

No new commissions for WCC work have been received. Current projects underway are detailed in the following sections.

#### **3.2 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 backfilled to partially bury the reservoir. The reservoir has been commissioned. The extensive planting programme is almost complete along with the finalisation of minor items.

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

This Contract is complete, apart from minor tidy-up items and additional drainage work requested.

#### **3.4 Northern Water Main Renewals**

A commission was awarded to carry out the design of water main replacements in the northern suburbs. The comments from Capacity have now been received and incorporated. Alternative proposals have been developed for the replacement of rider mains in Churton Drive.

#### **3.5 Fox Street Water Main Renewal**

This Contract has been completed and commissioned.

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# Laboratory Services

July/August 2005

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## Laboratory Services Department Review of Operations for the Period Ended 31 August 2005

### 1. Items of Note

- Laboratory finances were down a bit for this period largely because of the amount of work subcontracted out. Future cost recovery from ongoing and incomplete projects should relieve the imbalance.
- We purchased a Ford Courier Super Cab as a replacement 4WD vehicle for the 1998 Suzuki Vitara that had served us so well for so long. The Ford has proved to be a popular choice in handling the arduous State of the Environment sampling runs. However, latest fuel prices will have negated any anticipated savings through switching to diesel.
- We have taken delivery of the new Olympus BX51 microscope that will bring us into the 21<sup>st</sup> century with regard to *Giardia/Cryptosporidium* analysis. In an ever changing world several extra attachments have already been identified as being essential to meet the latest and final requirements for the *Drinking-Water Standards for New Zealand 2005*.
- We have been unable to find or appoint a suitable microbiologist to fill our current vacancy. As an interim stopgap measure we have had to employ a technician on a short-term contract basis.

### 2. Business Summary

#### 2.1 Quality

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

#### 2.2 Health and Safety

There were two incidents reporting during the period, although there was no time lost to injury.



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# **Plantation Forestry**

**July/August 2005**

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## Plantation Forestry Department Review of Operations for the Period Ended 31 August 2005

### 1. Log Harvest Contract

During this period we were able to revert to standard logging without the need to deal with significant numbers of windthrown trees. Three logging crews were used in Valley View and Pakuratahi West in order to increase production and make up some of the lost production of earlier months.

The large hauler moved from Grattons to Green Knob, the block overlooking State Highway 2 above Riverstone. This harvest has gone relatively well, with the only issue being the signal horn used for communication between the hauler operator and personnel in the bush. The horn has to be loud enough to be heard over the sound of chainsaws and on the recent clear winter mornings has been heard as far away as Pinehaven. When the reason for its use is explained, most complainants accept that there is a genuine reason for its use. At the end of August the hauler is to relocate further to the north in the block and it will be shielded by a hill from the eastern end of Upper Hutt.

The second Tuckey crew worked in Pakuratahi West until the wet weather precluded continuing use of the road and they were relocated to Valley View. It is interesting how much more rain falls in Pakuratahi West as compared with Valley View, given the two blocks are only about 2 km apart. This crew completed a small piece of Clarkes Creek, which could not be reached from Grattons, and then commenced harvesting the Longspur block off Airstrip Drive.

The Marriott crew was initially assisting with the harvest of those areas of Green Knob which were "blind" for the hauler and the section of the block on the northern side of the road. Unfortunately their bulldozer had a serious breakdown and they were moved to Beech Spur where they could work without the bulldozer. On completion of the clearance and road lining required in Beech Spur, this crew will leave to harvest a private block and return to complete Ladle Bend and Maire Creek in Pakuratahi East. Both these blocks are outside the current Contract, so the volume will be additional.

Tables 1 and 2 on page 28 give production details for July and August.

### 2. Silviculture Contracts

Only a further 8.4 ha out of a total of 257 ha were completed in July and August at a cost of \$3,286.50. To date 131.6 ha have been completed. The contractors allocated this work continue to have difficulty retaining sufficient staff and during this period they have planted 197,000 seedlings as part of the 2005 planting.

**Table 1 - Output by Grade, Valley View**  
**July - Clarkes Creek, Reservoir Ridge and Green Knob [Crews 36 and 4 - hauler/ground based]**  
**August - Charles Creek, Reservoir Ridge, Beech Spur and Green Knob [Crews 36, 4 and 6 - hauler/ground based]**

Grade	July 2005		August 2005	
	Tonnes	%	Tonnes	%
Pruned	116.67	2.71	0	0
Short Pruned	106.99	2.48	0	0
S/A Grade	1,048.54	24.32	1,242.6	30.26
L Grade	437.01	10.14	53.65	1.31
R Grade	440.31	10.21	502.26	12.23
K Sawlog	888.17	20.60	1,044.39	25.43
Roundwood	0	0	0	0
K Rough	730.09	16.94	652.73	15.89
Dom Rough			45.22	1.10
Pulp	302.58	7.02	330.16	8.04
O/S Pulp	30.37	0.70	0	
Xport Pulp			175.45	4.27
Firewood	210.00	4.87	60.39	1.47
Total	4,310.83		4,106.85	

Revenue for July was \$93,939.14 at an average of \$21.79 per tonne  
Revenue for August was \$85,600.37 at an average of \$20.84 per tonne

**Table 2 - Output by Grade, Pakuratahi West**  
**Martins 4/01 [Crew 6 - ground based]**

Grade	July 2005		August 2005	
	Tonnes	%	Tonnes	%
S/A Grade	682.83	28.17	297.38	28.65
L Grade	161.44	6.66	0	0
R Grade	459.98	18.98	149.86	14.43
K Sawlog	333.95	13.78	233.05	22.45
Roundwood	86.47	3.57	30.49	2.94
K Rough	185.42	7.65	120.55	11.61
Dom Rough	266.92	11.01	104.35	10.05
Pulp	203.69	8.41	102.39	9.86
O/S Pulp	0	0	0	0
Xport Pulp	15.17	0.63	0	0
Firewood	27.7	1.12	0	0
Total	2,423.57		1,038.07	

Revenue for July totalled \$57,006.85 at an average of \$22.67  
Revenue for August totalled \$25,092.93 at an average of \$23.09

For the month of July, the total harvest was 6,734.36 tonnes for \$150,514.08 at an average of \$22.41. This accounting period covered 5 weeks. For August the total harvest was 5144.92 tonnes for \$110,092.70 at an average of \$21.40.

The work allocated to Green Gold Forest Contractors cannot be carried out until Forest Developers and Management have completed their tasks. It is still anticipated that all tasks will be completed within the current year.

It is proposed to fly 24 tonnes of fertiliser on to six blocks in the Pakuratahi West Forest early in September.

### **3. Plantation Forestry Operations**

Most of this period has been taken up with supervising the construction of access roads into Beech Spur and Green Knob, as well as the day-to-day contact with the harvesting contractors. It is proposed to take crew 4 out of the contracted areas, as they were not included in the Tender submitted by Rayonier. It is hoped to find additional areas to harvest outside the Contract sale area to enable an overall increase in the volume harvested.

There has been no progress with the request by Transpower to lower the ground level under the high tension lines to maintain clearances when they increase voltage.

The repairs to the bridge on Bulls Run Road have still not commenced and the bridge and the 2,500 kg weight limit remains.

### **4. Forest Access**

Maungakotukutuku access remains the only significant problem, with the only access requiring two crossings of the Maungakotukutuku Stream.

It has been reported that the repairs to the Hukinga Road reported last month were not sufficient to allow access for the large hauler and loaded logging trucks. It appears likely that the uphill banks will have to be cut back to provide sufficient height in areas where the running surface has been moved away from the bank down to the Akatarawa River West.

Access to block 4/01 in Pakuratahi West has been restored following the withdrawal of logging operations. However, it is still too soft to permit logging to recommence. This crew is now working in Valley View and we will ensure that we are well into spring and the weather has settled before we allow them back to complete this block.

### **5. Market Trends**

There has not been much change in the markets. Domestic demand for “s” grade remains strong, with some mills taking less favoured grades to make up volume when there is not enough “s” to go around.

Export prices have moved both up and down within a narrow margin as shipping prices both fell and then recovered and the dollar inched back up to the 70s following the earlier fall.

Pruned prices remain in the doldrums and have probably eased further from the already unsatisfactory prices reported earlier. It remains to be seen if the recovery following Cyclone Katrina will increase the demand for mouldings, etc.

Rayonier has signed a Contract to supply 3,800 tonnes of firewood to Akatarawa Sawmills. Most of this will be sourced from GWRC forests.

## **6. Harvest Contract No. 1240 - 2005-2009**

While negotiations were under way for this Contract, Rayonier - together with a foreign partner - purchased a significant portion of Carter Holt Harvey's forest holdings. The consequences of this sale were that Rayonier has restructured their New Zealand operation and will reinstate an office in this region to look after their Lower North Island and Marlborough Sounds forests and customers. The downside is that the local Rayonier staff member we have dealt with for a number of years has taken this opportunity to go back into main stream forestry and will manage some Rayonier forests in Canterbury.

There was a minor consequential hiccup with the Contract as following the purchase all Rayonier forests, both old and new, were placed into a new entity - thus Rayonier no longer holds any forests in their own name.

The bulk of the Contract has now been agreed and the document has been sent to the United States for final corporate approval.

In the meantime the existing Contract has been extended to cover the period until the new document is signed.