
Greater Wellington Water

May 2006

Operations Group

May 2006

Operations Group

Review of Operations for the period ended 31 May 2006

1. Items of Note

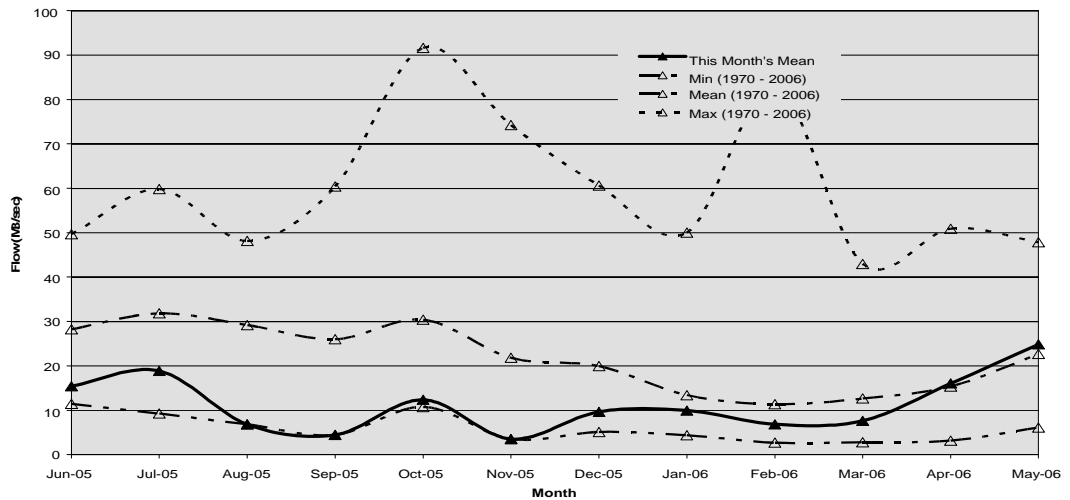
- A new position for a pipeline foreperson was advertised.
- Two staff members attended the three day operators' workshop in Palmerston North.

2. Supply Situation

There were no supply issues for the period.

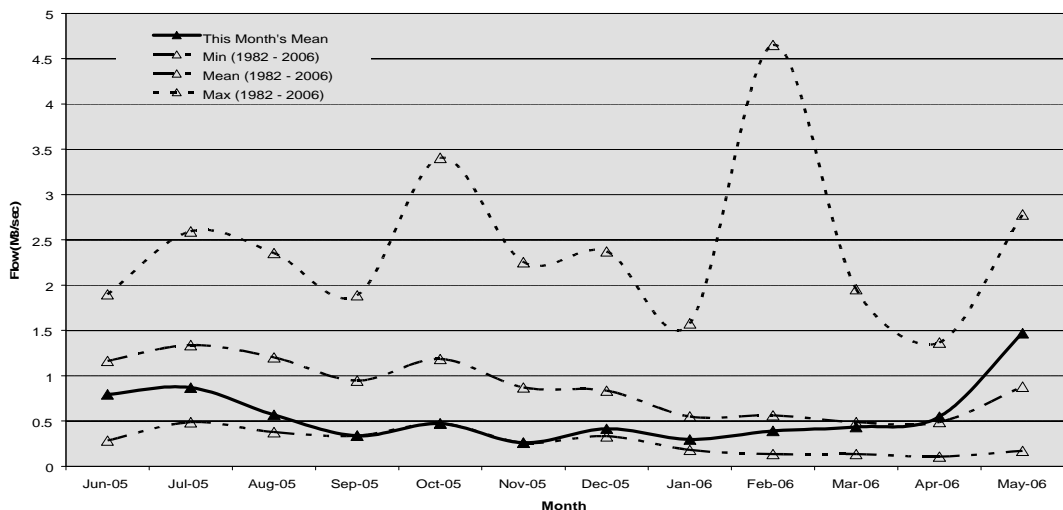
Hutt River Flows

The monthly flow in the Hutt River for May was just above the mean.



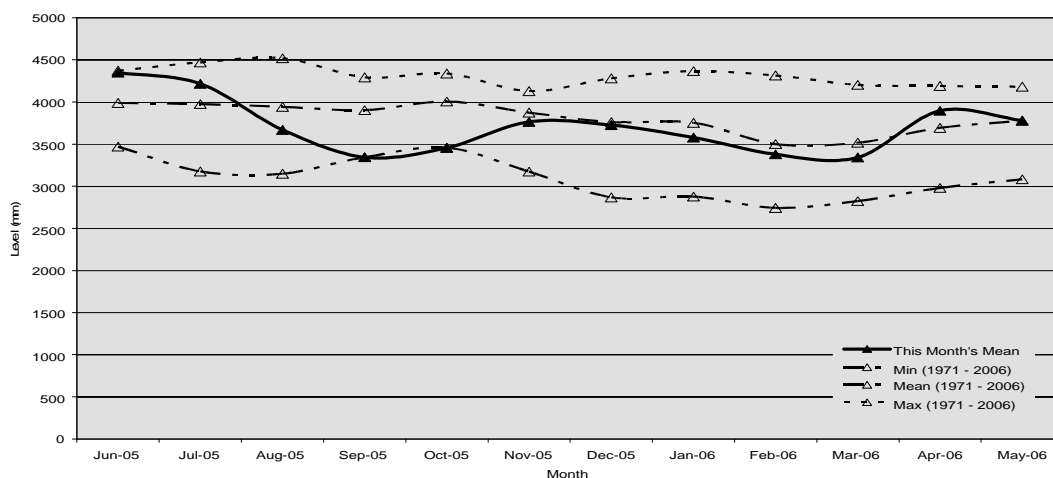
Wainuiomata River Flows

The monthly flow in the Wainuiomata River during May was above the mean.



Aquifer Levels

The water level in the Waiwhetu aquifer in May was about the mean.



3. Treatment Plants

3.1 Wainuiomata

3.1.1 Quality

- There were no improvement opportunity forms (IOFs) or transgressions during the period.

3.1.2 Health and Safety

- There were no accidents or incidents for the period.

3.1.3 Environmental

- There was a lime spill of approximately 500 kg during a delivery. The spillage was contained and disposed of according to procedure, and an investigation carried out.
- The annual resource consent audit was carried out.

3.1.4 Operations and Maintenance

- A series of freshes resulted in slips in the catchments, the most significant being in the Orongorongo Catchment, which took out the pipeline supplying water to the treatment plant.
- The variable speed drive on Centrifuge Pump No. 2 was repaired.

3.2 Waterloo and Gear Island Water Treatment Plants

3.2.1 Quality

- There were no IOFs or transgressions during the period.

3.2.2 Health and Safety

- There were two minor incidents during the period - a cut finger and a strained back.

3.2.3 Environmental

- There was a spillage of approximately 200 litres of lime slurry at Waterloo Water Treatment Plant, which was handled appropriately and an investigation carried out.

3.2.4 Operations and Maintenance

- An external audit of our existing maintenance procedures and practices was carried out.
- The pump performance tests continued.
- Alkalinity/lime dosing control trials also continued.

3.3 Te Marua

3.3.1 Quality

- There were no transgressions during the period.
- There were six IOFs during the period - three low fluoride, two high turbidity and one low pH.

3.3.2 Health and Safety

- There was a near miss incident during the period when an operator tripped on a loose grating step. There were no injuries sustained. As a result, all the steps were inspected and tightened where necessary.

3.3.3 Environmental

- There were no environmental issues for the period.

3.3.4 Operations and Maintenance

- There are no significant issues to report.

4. Distribution

4.1 Health and Safety

- There was one incident during the period. A staff member was struck in the face with a piece of reinforcing steel.

4.2 Environmental

- There were no environmental issues for the period.

4.3 Operations and Maintenance

- The culvert crossing stage for the Haywards Hill pipeline deviation project was excavated. A 15 m pipe special and three anchor/thrust blocks were installed. Stage 1 excavation was completed and an 800 mm butterfly valve, pipework and valve chamber were installed. Pipework fabrication for stage 2 and removal of the existing anchor/thrust block over the 900 mm main began.
- A new air valve and valve chamber were installed on the Messines Road rising main in Waiapu Road as part of the Karori pipelines project. The closing sections were installed for the new branch valve at Chaytor Street and also for the new Messines Road and Kelburn mains in Waiapu Road.
- The air valve and 90° bends were installed for the new Karori Pumping Station. The blank plate from the electromagnetic flow meter was removed and cathodic protection installed.
- The Judgeford 900 mm culvert was excavated and shored up alongside State Highway 58.
- The team provided assistance with the removal of the old electrical cabinets and installation of the new ones at Wainuiomata No. 1 Pumping Station.
- The faulty Wainuiomata No. 1 electromagnetic flow meter was removed and a valve chamber and new meter installed.
- The installation of steelwork over the infiltration chamber above Kaitoke weir was completed.
- The pipe specials were fabricated for the Hutt City Council's (HCC) 200 mm reticulation main and Greater Wellington Water (GWW) Point Howard rising main for the water main deviation project along Seaview Road. The HCC deviation and Point Howard rising main were installed.
- The 750 mm main along the Johnsonville motorway was marked out for the new Lincolnshire Avenue branch main.

4.4 Pipeline Leaks

- There were no leaks during the period.

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

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
PRODUCTION (+ 4 OPS ADMIN)													
Hours worked	24147	2316	2262	2313	3475	2429	1492	2105	2255	2224	3396		Jul 2005 - Cut finger / Injured back
Employee numbers	16	16	16	16	16	16	16	16	16	16	16		Aug 2005 - Cut finger
Incidents	2	1	2	0	2	2	1	0	0	0	2		Sep 2005 - Bruised hand / Blistered hand on nylon rope
Days lost	0	0	0	0	0	0	0	0	0	0	0		Nov 2005 - Hit head on tank / Twisted knee from slipping on stairs
Incidence rate (number of incidents per 100 workers)	13	6	13	0	13	13	6	0	0	0	13		Dec 2005 - Lime in eye / Head in contact with live wires
Frequency rate (incidents per 10,000 hours exposure)	8	4	9	0	6	8	7	0	0	0	6		Jan 2006 - Slipped and hurt Achilles tendon
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0	0	0	0	0	0	0	0		May - Cut finger / Strained back
DISTRIBUTION													
Hours worked	1227	1246	1332	1290	1977	1357	659	1229	1384	1259	2056		Jul 2005 - Vehicle accident [2 employees] / Bruised finger
Employee numbers	9	9	9	9	9	9	9	9	9	10	10		Aug 2005 - Minor burns to hand / Bruised finger / Cut and small burn to wrist
Incidents	2	3	2	1	1	0	0	0	0	0	1		Sep 2005 - Cut hand on pipe / Cut hand and knee on pipe
Days lost	11	14	0	0	0	0	0	0	0	0	0		Oct 2005 - Cut finger on flange
Incidence rate (number of incidents per 100 workers)	22	33	22	11	11	0	0	0	0	0	10		Nov 2005 - Burnt arm on cut pipe
Frequency rate (incidents per 10,000 hours exposure)	16	24	15	8	5	0	0	0	0	0	5		May 2006 - Hit in face with reinforcing steel
Severity rate (days lost to injury per 10,000 hours worked)	90	112	0	0	0	0	0	0	0	0	0		
ENGINEERING CONSULTANCY													
Hours worked	1840	1716	1732	1808	2628	1816	576	1300	1452	1476	2168		
Employee numbers	12	12	12	12	12	12	12	10	9	9	10		
Incidents	0	0	0	0	0	0	0	0	0	0	0		
Days lost	0	0	0	0	0	0	0	0	0	0	0		
Incidence rate (number of incidents per 100 workers)	0	0	0	0	0	0	0	0	0	0	0		
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	0	0	0	0	0	0	0	0		
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0	0	0	0	0	0	0	0		
UTILITY SERVICES SUPPORT													
Hours worked	951	1076	1008	961	1295	882	587	933	1083	977	1436		
Employee numbers	7	7	6	6	6	6	6	7	7	7	7		
Incidents	0	0	0	0	0	0	0	0	0	0	0		
Days lost	0	0	0	0	0	0	0	0	0	0	0		
Incidence rate (number of incidents per 100 workers)	0	0	0	0	0	0	0	0	0	0	0		
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	0	0	0	0	0	0	0	0		
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0	0	0	0	0	0	0	0		

LABORATORY

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Hours worked	1078	1142	1219	1156	1681	1343	845	1243	1196	1131	1646		Aug 2005 - Bruised foot
Employee numbers	7	7	6	6	6	6	6	6	6	6	7		Aug 2005 - Sprained neck
Incidents	0	2	0	0	1	0	0	0	0	1	0		Nov 2005 - Bee sting on head
Days lost	0	0	0	0	0	0	0	0	0	0	0		Apr 2006 - Bruised finger in door
Incidence rate (number of incidents per 100 workers)	0	29	0	0	17	0	0	0	0	17	0		
Frequency rate (incidents per 10,000 hours exposure)	0	18	0	0	6	0	0	0	0	9	0		
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0	0	0	0	0	0	0	0		

STRATEGY AND ASSET

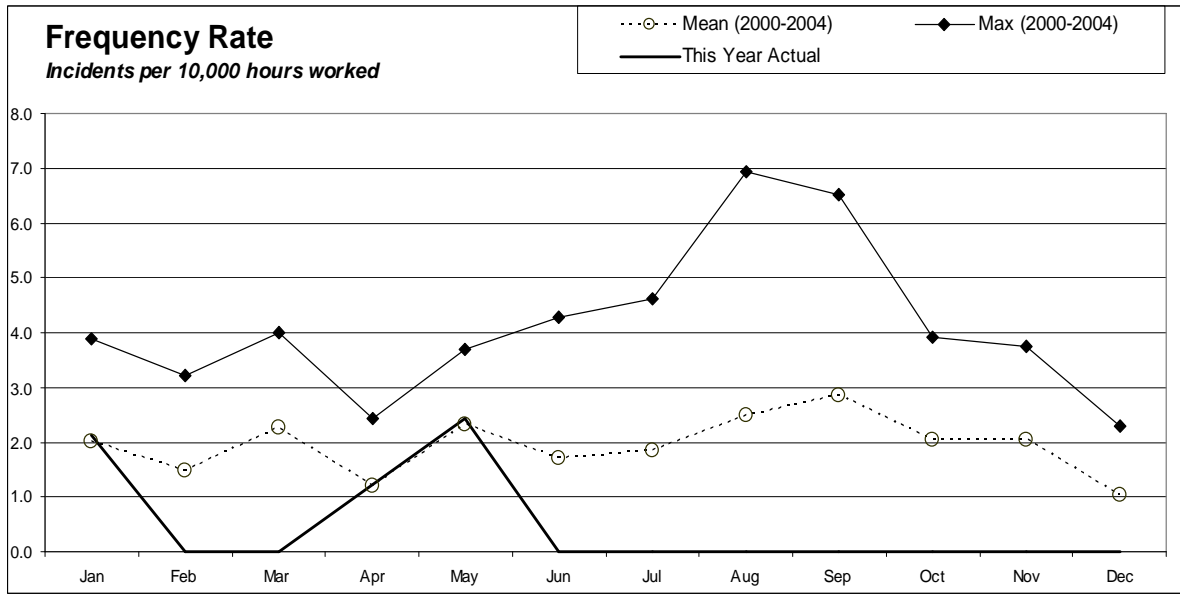
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Hours worked	712	644	688	676	1152	700	408	664	768	696	1064		Nov 2005 - Strained back while lifting boxes
Employee numbers	5	5	5	5	5	5	5	5	5	5	5		
Incidents	0	0	0	0	1	0	0	0	0	0	0		
Days lost	0	0	0	0	0	0	0	0	0	0	0		
Incidence rate (number of incidents per 100 workers)	0	0	0	0	20	0	0	0	0	0	0		
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	0	9	0	0	0	0	0	0		
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0	0	0	0	0	0	0	0		

FORESTRY

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Hours worked	433	466	455	470	627	453	142	245	438	447	588		Sep 2005 - Sprained and cut hand
Employee numbers	3	3	3	3	3	3	3	3	3	3	3		Nov 2005 - Stung by stinging nettle on hand
Incidents	0	0	1	0	1	0	0	0	0	0	0		
Days lost	0	0	0	0	0	0	0	0	0	0	0		
Incidence rate (number of incidents per 100 workers)	0	0	33	0	33	0	0	0	0	0	0		
Frequency rate (incidents per 10,000 hours exposure)	0	0	22	0	16	0	0	0	0	0	0		
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0	0	0	0	0	0	0	0		

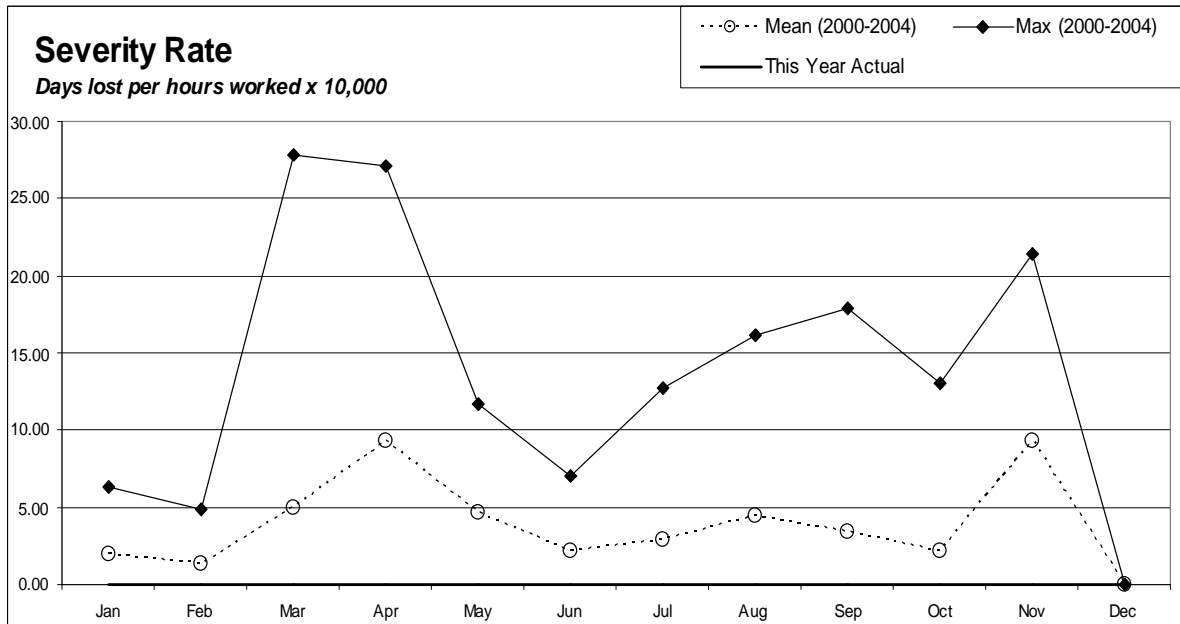
Utility Services Division Combined	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Hours worked	8653	8651	8696	8673	12834	8980	4709	7718	8576	8209	12353	
Employee numbers	59	59	58	58	57	57	57	56	55	56	58	
Injuries	4	6	5	1	6	2	0	0	0	1	3	
Days lost	11	14	0	0	0	0	0	0	0	0	0	
Frequency rate (incidents per 10,000 hours exposure)	5	7	6	1	5	2	0	0	0	1	2	
Severity rate (days lost to injury per 10,000 hours worked)	13	16	0	0	0	0	0	0	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 January 2006
One incident in April 2006
Two incidents in May 2006



Lost Days

0

Strategy and Asset Group

May 2006

Strategy and Asset Group Review of Operations for the period ended 31 May 2006

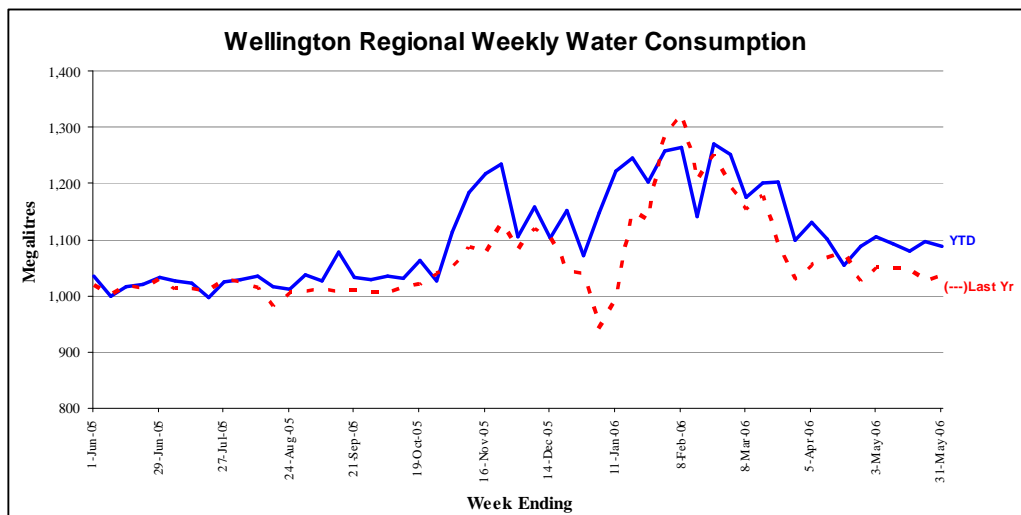
1. Items of Note

- Water use during May 2006 was about 5 percent higher than for the same period last year. The highest daily demand was 164 ML on 30 May 2006.
- Construction of the new Karori Pumping Station has been completed and the pumps are being commissioned.
- Stage 2 planning, environmental and engineering studies for new major storage sources, and the Upper Hutt aquifer have commenced.
- Work has begun on an underpass at Judgeford Golf Club. A major alteration to the Kaitoke to Karori main is required to facilitate this. The alteration work will be funded by the Judgeford Golf Club.
- A significant increase in the amount of water being used by Wellington City has been noticed.
- Proposals from consultants to peer review the Wellington Water Management Plan discussion document on background and options were received on 5 June.

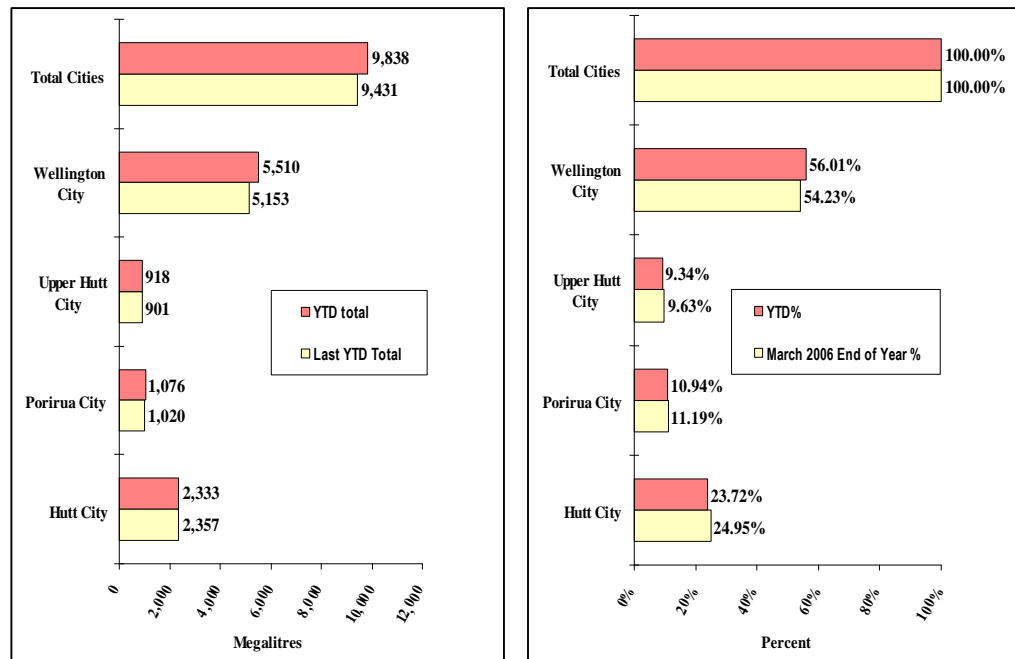
2. Water Usage

Consumption volumes for the supply (from 1 April 2006) year to date are approximately 4 percent up on last year. The bulk of this increased use has occurred in Wellington City (up 7 percent). Porirua City use has also increased by over 5 percent.

Water Sold Over the Last 12 Months



Water Sold from 30 March 2005 to 31 May 2006



3. Asset Management

- The Capital Works budget for 2005/6 is \$5.937 million. Progress on the more significant projects included in the Capital Works Programme is as follows:
 - Work is completed on construction of the forth (and final) stage of the Wainuiomata Catchment boundary fence. Budget \$100,000. This means that the Wainuiomata Catchment, and the mainland island, is fenced along the northern and western boundaries.
 - Modifications to the Te Marua Water Treatment Plant, to enable lake and river water to be treated separately, are close to completion.
 - Replacement and refurbishment of treatment plant equipment.
 - Upper Hutt City Council has let a contract for strengthening the Silverstream Bridge. However, the GWRC contribution of \$60,000 will not be made until 2006/7. The benefits of raising the pipe on the bridge (programmed for 2006/7) are being closely evaluated.
 - Duplication of the Kaitoke main between State Highways 2 and 58 to improve the seismic resistance of this section of main has been completed and tested. It will be brought into service in early July.
 - Construction of the new Karori Pumping Station has been completed, and commissioning is under way.
 - Construction of the new Point Howard Pumping Station is well under way. Further delays have occurred and completion of the building by 30 June 2006 is not now expected.

- Seismic protection. Work is proceeding on strengthening reservoir inlets, providing emergency connection points and other minor seismic protection works.

Additional funding of \$447,000 required to complete the capital works programme this year was approved at the Policy, Finance and Strategy Committee meeting in March. It is expected that the overall expenditure on capital works can be accommodated by this additional funding.

- Construction of a new pumping station building at Grenada (Lincolnshire Avenue) being undertaken by Wellington City Council (WCC) is complete. Pipework and pumps will be installed in June/July and the switchboard is currently being manufactured. The project is part of the WCC Northern Suburbs Development Plan and will be taken over by GWRC on completion. Therefore, officers are working very closely with the consultant employed by the WCC to ensure the completed project meets GWW requirements.
- Work is under way on the construction of an underpass at Judgeford to enable golfers and maintenance workers to cross State Highway 58 safely. To facilitate this work, the Kaitoke to Karori main will be raised locally. This work is being funded by the Judgeford Golf Club. The culvert has been installed and raising of the pipeline will occur in the next few weeks. Officers have spent considerable time working with the contractor to develop a practicable method of undertaking the work, since the main can only be shut down for a few hours.

4. New Sources

- Studies of the potential to take water from the Upper Hutt aquifer are progressing. Stage 2 includes the installation of two exploratory wells to confirm the availability of water, a computer model to study the potential impact on flows in the Hutt River and the impacts on other aquifer users, investigation of water quality and contamination risks, and environmental studies of streams fed from the aquifer.
- Preliminary environmental, planning, geological, hydrological and engineering studies have been completed on possible water storage sites at Pakuratahi, Skull Gully and Whakatikei. A detailed scope for more detailed Phase 2 studies has been agreed and some aspects are under way. A workshop covering fish and ecology issues was held with stakeholders on 16 June, and another covering heritage and recreational issues associated with the Pakuratahi Valley is planned for 28 June. A high resolution aerial survey of the sites will be carried out in June, weather permitting.
- Consultants have been engaged to undertake studies of the Hutt River to determine the environmental impact of reducing the minimum low flow downstream of the Kaitoke weir. A methodology for habitat studies has

been developed, following a workshop with stakeholders, including Department of Conservation, Fish and Game New Zealand and officers from the GWRC Environment Division. Comments on the draft methodology have been received from Fish and Game New Zealand and the peer review consultant.

5. Quality Assurance

- Compliance with the new *Drinking-Water Standards for New Zealand 2005* is being achieved at all plants. However, mechanisms for formal reporting and assessment have not yet been updated by the Ministry of Health. Raw water sampling of the plant inlets is also in place. However, monitoring of source water, which is essentially voluntary, will not be undertaken until discussions between the New Zealand Water and Wastes Association and the Ministry of Health have resolved how this should best be done. Monitoring in the wholesale distribution network, except the Lower Hutt/Petone unchlorinated zone, is to be changed to continuous chlorine testing as soon as equipment is upgraded. In the meantime, direct testing for *E. coli* will continue.
- A revised proposal by the Ministry for the Environment to establish a National Environmental Standard for drinking water sources provides an enhanced role for water suppliers in the consideration of resource consent applications and permitted use rules which may impact on source water. The Ministry for the Environment is presently finalising the standard in the light of submissions received.
- The A1 grading for the Wainuiomata Water Treatment Plant has been reconfirmed. Information supporting the grading of the Te Marua Water Treatment Plant was submitted to the Hutt Valley District Health Board (HVDHB) several months ago. However, staff changes at HVDHB have delayed consideration of gradings of the other plants and the wholesale distribution zones. Te Marua, Waterloo and Gear Island Water Treatment Plant are currently listed as ungraded.

5. Environmental

- The ISO 14000 Environment Management System has been updated to bring it into line with the new ISO 14001:2004 Standard. Issue of the formal certificate by the accrediting agency is awaited.
- 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 has been re-evaluated and altered to reduce the cost. Construction in 2006/7 is funded.
- 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, which will allow fish to move up Sinclair Creek. Construction is planned in 2006/7.

- Power factor correction equipment is being installed at the Gear Island and Wainuiomata Water Treatment Plants, and at the Ngauranga Pumping Station. This equipment will improve electrical efficiency and reduce energy use.
- Three 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 Department. Investigation and design work are about to begin.

6. Catchment Management

- The catchment fence at Wainuiomata is all but complete, with Engineering Consultancy Group staff undertaking the final inspection and “measure-up”.
- There were two catchment tours this month and, although numbers were down, the days were pleasant and the trip enjoyed by all.
- An approach was made by the members of the “veterans” section of the Kamatua Tramping Club who were looking for new walks with suitable grades for a change of scenery. At that time they mentioned that they were going to walk at Wainuiomata and would like to see the area round the Morton Dam, etc., but could not join a guided tour as the trips were too arduous. After a discussion with the Ranger he met the group and gave them a “mini tour” and brought them up-to-date with progress and proposals for the area.
- Following a track inspection it was planned to use the small digger from Upper Hutt to clear slips on the walking tracks in the Orongorongo Valley. Two days later the large slip came down and destroyed part of the track and the pipeline. Consequently the digger has been postponed until the major work has been completed.
- On 20 May the Department of Conservation released kiwi into the Tutere Stream watershed in Rimutaka Forest Park. As the catchment shares a boundary with that watershed, we may have “guests” some time in the future.
- Instances of accidental and deliberate trespass and vandalism in the vicinity of the Wainuiomata Water Treatment Plant continue and are dealt with by the Ranger as they arise.

7. Marketing

- Draft Wellington Water Management Plan. Three Consultants were contacted to gauge their interest in peer reviewing aspects of the draft technical report for the plan, with expressions of interest received from all of them. A brief for proposals to review the cost-benefit analysis work for the demand management options in regard specifically to our supply area was sent to these consultants.
- Source Development Communication. Discussions were held with Council Secretariat, Finance and legal consultants as to whether the *Long-term Council Community Plan 2006-16* (LTCCP) consultation document provided for a decision to build one of the new water source options being considered without further change to the LTCCP. The conclusion of these discussions was the LTCCP will have to be amended. This opinion was sought to inform our understanding of consultation timing options for source development.
- Water Supply History Update. The Consultant is editing the first draft text. This work, together with photo selection and several other minor tasks, is due to be completed in mid-July.
- Water Supply Service Level Agreement. A meeting held with Capacity in early May resulted in agreement on most of the outstanding concerns that we had. An updated draft has subsequently been received. While a few matters need further work, these are not considered significant. The schedules to the agreement, covering specific levels of service for water supply quantity and quality, will be worked on in June.
- Intranet Development (*Gwennie*). Content for Water Supply, Wind Energy, Forestry and the Laboratory was created and posted in preparation for the anticipated “go live” date of 31 May.
- Community Engagement Review. A summary of community engagement activity for Water Supply was produced as part of the background material for discussion at a Councillor workshop held in May.
- News Releases. No news releases were made.
- Treatment Plant Visits. Seven visits were hosted, involving some 110 visitors.

8. Projects Undertaken by Engineering Consultancy for Strategy and Asset

- Wainuiomata/Orongorongo Catchment Fence
The final stage of the fence has been erected.

This completes 16.2 km of deer fence along the northern and western boundaries of the Wainuiomata Water Collection Area.

- Future Water Source Pipelines

The route of a possible pipeline from the Pakuratahi Dam site to Te Marua Water Treatment Plant has been determined and a report prepared.

The route of a possible pipeline from the Whakatikei water treatment plant site to the Te Marua to Karori pipeline is being investigated. A report estimating the cost of upgrading the road to the Whakatikei site has been prepared.

- Wainuiomata Water Treatment Plant Outlet Control Valve

The new control valve for installation in the Tunnel Grove valve chamber has been received. Electrical installation details are being prepared. Replacement of air valves on the Wainuiomata pipeline is being investigated to reduce the effects of air slam. Installation of the control valve is programmed for August 2006.

- Waterloo Lime Dosing

A report assessing the options for the siting of a lime water plant at the Waterloo Water Treatment Plant has been prepared.

- Power Factor Correction Equipment

Delivery of power factor correction equipment to be installed at three facilities - Wainuiomata Water Treatment Plant, Gear Island Water Treatment and Ngauranga Pumping Station is expected in June. A Contactor has been commissioned for installation of the equipment.

- Wainuiomata Pumping Stations Variable Speed Drives

Variable speed drives are being installed at Wainuiomata No. 1 Pumping Station. The variable speed drives will even flows and improve efficiency of the pumps.

- Duplicating Te Marua to Karori Pipeline at Haywards

Work is progressing with the installation of valves and pipework at the connection point alongside State Highway 2. Arrangements are being made for the cut-in on State Highway 58.

- Emergency Water Supply Points for Upper Hutt City Council

The pressure reducing valve has been received for a proposed cross connection at the Fergusson Drive/Camp Street intersection. Installation has been postponed until after the new pipeline at Haywards is operating.

- Judgeford Golf Course Underpass

The Judgeford Golf Club is proceeding with construction of an underpass beneath State Highway 58. Arrangements are being made to lift the Te Marua to Karori pipeline.

- Rerouting Paremata Main at Staithe Drive

A developer is arranging to replace a length of the Paremata main. A Specification for this work has been provided to the Contractor and the work is being monitored.

- Pukerua Bay Bypass Pipeline

Drawings have been prepared for the installation of a bypass pipeline around the Pukerua Bay Reservoir. This is programmed for installation next financial year.

- Karori Pumping Station Replacement

Installation of the switchboard and wiring is complete. Pre-commissioning checks are under way.

- Karori Pumping Station Replacement - External Pipelines

The external pipelines have been completed and connected to the Te Marua to Karori pipeline and the pumping station.

- Existing Karori Pumping Station Decommissioning

Planning is under way for the decommissioning of the existing Karori Pumping Station. A drawing detailing alterations to the pipework has been prepared.

- Point Howard Pumping Station

The construction of the new pumping station alongside Seaview Road is progressing satisfactorily. The concrete walls are about to be poured.

- Lincolnshire Pumping Station and Reservoir

Advice is being provided to the designers of the Lincolnshire Pumping Station and pipelines for installation of the pumpsets and pipework.

Engineering Consultancy Group

May 2006

Engineering Consultancy Group Review of Operations for the period ended 31 May 2006

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. Other projects are as follows:

- Proposed GWRC/WCC/Capital and Coast District Health Board Reservoir

This project is being managed by WCC. An agreement setting out the responsibilities of the parties is being negotiated.

- Stuart Macaskill Lakes Tower Strengthening

The peer review of the proposal to strengthen the lake towers has been completed. Further analysis of the structure is proposed.

- Wainuiomata Mainland Island

The pest control operation is proceeding. A strategic plan is being finalised to clearly identify the aims, goals and management of the area.

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 water supply system.

Arrangements are being made to clear the slip that has damaged the pipeline in the Orongorongo Valley. Access to the slip is very restricted. It will take some time to clear.

3. Work Carried Out for Wellington City Council

The Engineering Consultancy Group is undertaking the following projects for Capacity:

- Northern Water Main Renewals

Detailed design of the pipeline installation in Churton Drive is being finalised.

- Ngaio and Wadestown Water Main Renewals

Tender Documents for the replacement of water mains in seven roads in Ngaio and Wadestown have been prepared.

- Rajkot Terrace Pumping Station

Design work is proceeding for replacement of the Rajkot Terrace pumpsets.

4. Work Carried Out for Flood Protection

The Engineering Consultancy Group is providing most of the draughting services for Flood Protection.

5. Corporate Projects

- Pandemic Preparation

A web site that is accessible to staff from their homes has been set up. The site will be activated in an emergency.

Presentations are being made to staff on preparations for a pandemic.

The corporate pandemic plan preparation is well under way.

Laboratory Services

May 2006

Laboratory Services Department Review of Operations for the period ended 31 May 2006

1. Items of Note

- Laboratory finances finished in the black for the year to date.
- Tom Pegler completed his one year contract to yet again take up a supervisory position in an American “summer camp”. Between this and the premature departure of our former field officer, we now find ourselves short staffed for the June period.
- Repairs have now been affected regarding our ion chromatograph analyser. The breakdown posed a slight problem during April/May. We appreciate the tolerance and understanding displayed by our clients to the hiccough in the service.
- We were unsuccessful with our proposal for the GWRC Environment Division tendered work in connection with the *Sample collection and analytical services for surface water and groundwater quality monitoring programmes 2006-2009*.
- Good news is that we have been able to add several significant chemistry tests to expand the scope of our laboratory accreditation.

2. Business Summary

2.1 Quality

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

2.2 Health and Safety

There were no accidents or incidents during the period.

Plantation Forestry

May 2006

Plantation Forestry Department Review of Operations for the period ended 31 May 2006

1. Log Harvest Contract

May continued the April theme of good demand for domestic grades and gains in export grades being undermined by a price spike in shipping costs. As the month passed, there must have been a significant drop in overall production, as the local mills started purchasing "L" grade logs to make up volumes since there simply was not sufficient "S" grade to meet demand. There has been comment that mills have had to go on to short hours because of a shortage of raw product.

July is the beginning of the rainy season in Korea and is accompanied by a drop off in construction activity and demand for the grades we export from GWRC forests. It has been frustrating to hear that Rayonier has gained reasonable price increases in Korea only to have the benefits go in increased shipping prices. These are running in the mid-\$US40s, down from \$US50s but a long way from the \$US18 a tonne paid a couple of years ago. Rayonier is of the view that shipping prices will continue to trend downwards.

Logging has now finished for the meantime in Hukinga and this month's sale was largely the Douglas fir, which was interplanted with the radiata in the latest block to be completed.

The set up at Dick's Yard was not without its own problems, with the need to road-line on the main ridge to provide a pad for the hauler, and the need to transport three diggers, a bulldozer and a delimber and to drive the skidder and hauler. The result was poor wood, as it was off the top of the main ridge and reduced production during the setup period. This was compensated somewhat by sending the spare crew to Pakuratahi to assist with the harvest of the Martins block. Dick's Yard is now up and operating after further delays at the end of the month with breakdowns on the hauler, skidder and one of the diggers!

On 22 May the driver of a loaded truck and trailer misjudged a corner just short of the 17 km in Puketiro and as a result the trailer tipped over into the water table. No injuries were sustained and the vehicle was unloaded and righted by the logging crew digger.

The crew at Ladle Bend did not load out any logs in the May month, as they concentrated on recovering all the merchantable logs from over the stream. There were about 15 loads on the skid at 1 June.

Production for May is shown in tables 1 to 3 on pages 27 and 28.

2. Silviculture Contracts

To date, 179.1 ha of an adjusted total of 197.7 ha.

The Tender Documents for the 2006/7 Silviculture Contract have been prepared and will be advertised in early June.

Table 1 – Pakuratahi West- Output by Grade - Martins

Grade	May 2006	
	Tonnes	%
Pruned	0	0
Short Pruned	0	0
S Grade	1,235.94	27.55
L Grade	130.37	2.90
R Grade	520.55	11.58
K Sawlog	1,121.48	24.94
Roundwood	0	0
K Rough	733.61	16.31
Dom Rough	0	0
Pulp	207.04	4.60
O/S Pulp	0	0
Export Pulp	544.87	12.12
Firewood	0	0
Total	4,496.86	

Revenue for May was \$125,021.79 at an average of \$27.80 per tonne

Table 2 - Puketiro- Output by Grade - Dick's Yard

Grade	May 2006	
	Tonnes	%
Pruned	68.20	6.10
Part pruned	50.84	4.55
S Grade	165.83	14.83
L Grade	150.73	13.48
R Grade	55.51	4.97
K Sawlog	155.72	13.93
Roundwood	0	0
K Rough	290.33	25.97
Dom Rough	0	0
Pulp	0	0
O/S Pulp	0	0
Export pulp	180.70	16.16
Total	1,117.86	

Revenue for May totalled \$18,672.19 at an average of \$12.18 per tonne

Table 3- Hukinga- Output by Grade

Grade	May 2006	
	Tonnes	%
Pruned	0	0
Part pruned	0	0
S Grade	0	0
L Grade	0	0
R Grade	15.64	10.11
K Sawlog	0	0
Roundwood	0	0
K Rough	0	0
Dom Rough	0	0
Pulp	26.59	17.19
O/S Pulp	0	0
Export pulp	180.70	16.16
Firewood	112.42	72.69
Total	154.65	

Total revenue for May was -\$673.17 at an average of -\$ 0.54 per tonne after prior period adjustments of \$2,545.93

Total revenue for May was \$143,020.92 at an average of \$25.23 per tonne

3. Plantation Forestry Operations

Some time has been involved in developing strategies to allow the consultants in the forthcoming wind farm tender to access the plantation areas and work safely with the loggers and logging trucks. A number of tracks have been upgraded to four wheel drive standard to allow access to potential wind turbine sites.

Further work proved necessary on the Puketiro Road. Early rain following the grading resulted in a layer of mud which in turn left the trucks without traction. A further weekend of rain solved that problem and selective metalling below the skid where the road surface was marginal has ensured ongoing access.

The logging through the stream at Ladle Bend was completed prior to 31 May, the beginning of the restriction on access because of spawning.

4. Forest Access

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

All main routes are accessible but, with the recent wet weather, many of the tracks outside the “logging road” network are effectively impassable.

This should not cause any disruption to normal forest operations.

Some of the more overgrown routes were weed sprayed to restore clearances.

5. Market Trends

The last month has been more of the same - small increases in both domestic and export prices, with the export being undermined by the increase in shipping costs. Unfortunately the increase in domestic demand has not been translated into significant price increases. One would have expected that, if supply was so constrained the mills were buying lower grades to make up total volumes, they might have offered a little more to secure a higher proportion of the desired grade of logs. Instead they appear to have elected to stay just ahead of their perception of the export market.

The dollar has continued to ease, with a drop of a couple of cents only to regain it over the next week or so. The “pundits” are predicting the dollar to be at 53 cents in a year’s time. If this occurs, we can expect some real sustained price increases. The good news is that, apart from seasonal variations, the annual demand from Korea, China and India is predicted to continue to increase.