
Greater Wellington Water

February/March 2007

Water Supply

February/March 2007

Water Supply

Review of operations for the period ended 31 March 2007

1. Items of note

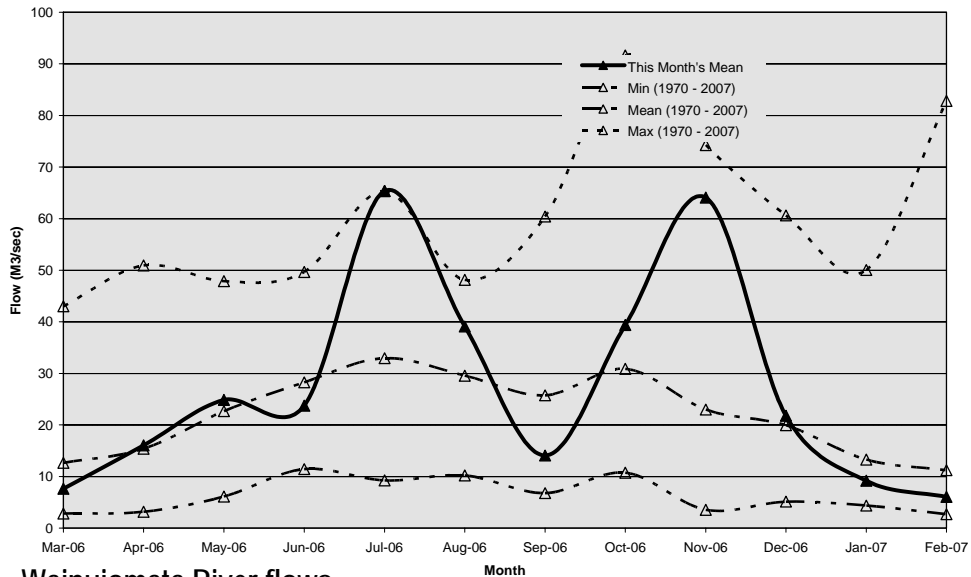
- On 26 March we had a German environmental engineering student join us for six months' work experience. The student will be assisting us with lakes' monitoring and management research, and a number of plant optimisation projects.

2. Supply situation

There were no supply issues for the period.

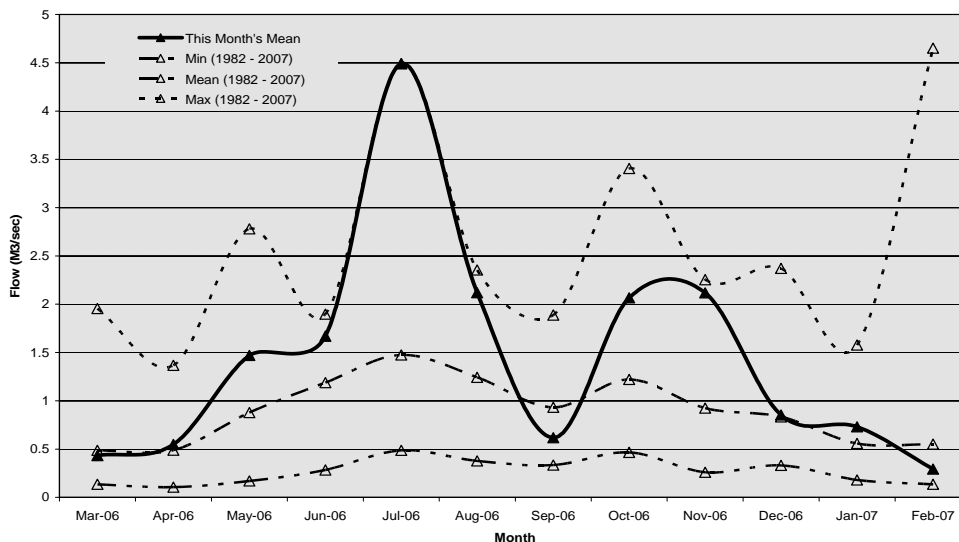
Hutt River flows

The monthly flow in the Hutt River for February was below average.



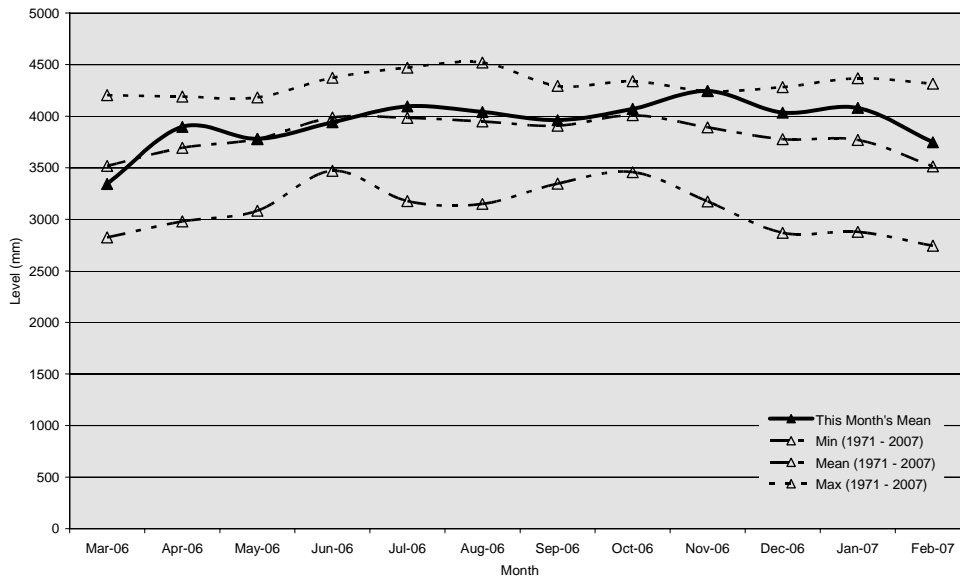
Wainuiomata River flows

The monthly flow in the Wainuiomata River during February was below average.



Aquifer levels

The water level in the Waiwhetu aquifer in February was above average.



3. Treatment plants

3.1 Te Marua

3.1.1 Quality

- There were three low fluoride Improvement Opportunity Forms (IOF) that were associated with tracer testing and one IOIF for high pH in treated water.

3.1.2 Health and safety

- There were no accidents or incidents during the period.

3.1.3 Environmental

- There were two transgressions during the period. During remote manual testing of the Kaitoke abstraction valves the flow over the weir dropped below 600 litres per second for two minutes. This testing was discussed with Environmental Regulation prior to being completed.

The second transgression was because recent low river levels resulted in abstraction controls operating very close to and occasionally below the consent minimum (1 mm to 2 mm). This condition falls within the accuracy range stated in the consent conditions.

3.1.4 Operations and maintenance

- The treated water reservoir curtain was inspected following questions raised during tracer flow testing. The curtain was found to be in perfect condition.

3.2 Wainuiomata

3.2.1 Quality

- There was one IOF for the period for low fluoride because of equipment maintenance.

3.2.2 Health and safety

- There were three incidents during the period. Two incidents involved back strains whilst employees moved heavy items and one where an employee was hit on the head whilst trying to lever a pipe. This employee was off work for three days because of the injury.
- Confined space training was held by Fire Emergency Training Services for treatment plant employees.

3.2.3 Environmental

- There were no chemical spills or accidental discharges during the period.

3.2.4 Operations and maintenance

- The Orongorongo repeater site construction continued.
- Repairs were completed on Chlorinator No. 2.
- Feed forward coagulation and waste water recovery trials continued.
- The pre-lime Pump No. 1 variable speed drive required replacement with the unit from the redundant set from the No. 2 Pump.

3.3 Waterloo and Gear Island Water Treatment Plants

3.3.1 Quality

- There were no IOFs or transgressions during the period.

3.3.2 Health and safety

- There were no accidents or incidents for the period.

3.3.3 Environmental

- There were no chemical spills or accidental discharges during the period.

3.3.4 Operations and maintenance

- Naenae Pump No. 2 has been reinstalled following refurbishment.
- The hydrofluorosilicic acid (HFA) process flow meter at Gear Island failed. A replacement meter has been installed.
- A manual control exercise was completed at Waterloo, with help from Engineering Services' employees.

- The bulk lime rotary valve was fitted with a variable speed drive.
- Vectek completed the six monthly check on the Wellington variable speed drives.

4. Distribution

4.1 Health and safety

- There were no accidents or incidents during the period.

4.2 Environmental

- A job at Randwick has been placed on hold until a groundwater abstraction consent can be issued.

4.3 Operations and maintenance

- The Tunnel Grove plug valve work has been put on hold.
- Excavations for the deviation of the Point Howard branch line at Randwick and the pipe specials for the branch line have been completed. The remainder of this work has to be put on hold because three shutdowns are required and only one reservoir is operating at Point Howard.
- All the manhole risers have been excavated and raised to the finished levels and valves 31 and 37 have been excavated for removal. The new access into the Randwick valve chamber has been cut out and boxing started. Presently this job is awaiting a groundwater abstraction consent.
- A new 100 mm water service has been cut in from the Kingsley branch in Eastern Hutt Road, Silverstream to replace the decommissioned private supply downstream of the Railway Museum.
- The 100 mm asbestos cement main from Paremata No. 1 Reservoir to the high level reservoir has been put out of service and the branch and inlet valves removed and blanked off.
- Work on the Waterloo wellfield valve replacements began in March. Willoughby Street fixed speed and variable speed branch valves, a high pressure scour valve (opposite Penrose Street), the Mahoe Street branch valve and the single air valves in the collector main from Penrose Street to Bloomfield Terrace have all been excavated and housed.
- The Judgeford and Porirua scour valves have been excavated for renewal and housing.
- The Transpower private supply was decommissioned and blanked.
- The two monthly Hutt North and Hutt South scour valve exercising was completed.

4.4 Pipeline leaks

- There were five leaks during the period as below:
 - The 750 mm pipeline from Waterloo Water Treatment Plant to Randwick valve chamber had a badly leaking air valve. The pipeline was shut down and the new double air valve installed.
 - The Linden branch line was shut down and drained, so a new air valve could be installed.
 - The air valve on the 900 mm pipeline downstream of Te Marua Pumping Station was isolated and serviced.
 - The OK main from Thorndon Pumping Station to Karori had a new section of pipe and two new couplings installed.
 - The 900 mm pipeline at Judgeford valve chamber was excavated to locate a leak. A section of steel plate was welded over the leak and the coating repaired.

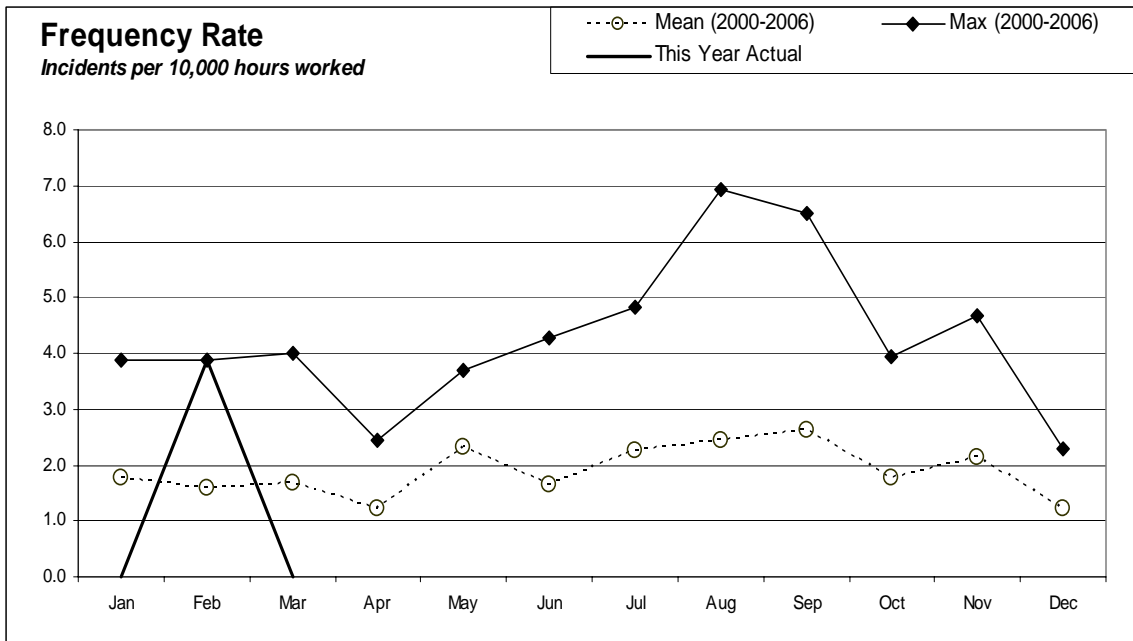
Water Supply and Forestry Health and Safety Data from July 2006 - Total Injuries

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
PRODUCTION (+ 4 OPS ADMIN)													
Hours worked	2473	2495	2535	2444	3399	2473	1650	2363	2620				Sep - Slipped off pipe
Employee numbers	16	16	15	15	15	15	17	17	17				Feb - Strained back / bruised head / sprained shoulder and lower back
Incidents	0	0	1	0	0	0	0	3	0				
Days lost	0	0	0	0	0	0	0	3	0				
Incidence rate (number of incidents per 100 workers)	0	0	7	0	0	0	0	18	0				
Frequency rate (incidents per 10,000 hours exposure)	0	0	4	0	0	0	0	13	0				
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0	0	0	0	13	0				
DISTRIBUTION													
Hours worked	1423	1541	1573	1491	2034	1507	784	1356	1578				Jul - Cut hand / Slipped and fell against ute
Employee numbers	10	10	10	10	10	10	11	11	11				Aug - Hit head on ute door
Incidents	2	1	0	0	0	0	0	0	0				
Days lost	0	0	0	0	0	0	0	0	0				
Incidence rate (number of incidents per 100 workers)	20	10	0	0	0	0	0	0	0				
Frequency rate (incidents per 10,000 hours exposure)	14	6	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				
ENGINEERING CONSULTANCY													
Hours worked	1531	1656	1652	1624	2521	1648	760	1320	1740				Aug - Hit head on bookshelf
Employee numbers	10	12	12	12	12	12	12	12	12				
Incidents	0	1	0	0	0	0	0	0	0				
Days lost	0	0	0	0	0	0	0	0	0				
Incidence rate (number of incidents per 100 workers)	0	8	0	0	0	0	0	0	0				
Frequency rate (incidents per 10,000 hours exposure)	0	6	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				
SUPPORT													
Hours worked	1035	1059	1122	1046	1572	1057	671	992	986				
Employee numbers	7	7	7	7	7	7	7	7	7				
Incidents	0	0	0	0	0	0	0	0	0				
Days lost	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				
Frequency rate (incidents per 10,000 hours exposure)	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				

LABORATORY	Jul	Aug	Sep	Oct	Nov0	Dec	Jan	Feb	Mar	Apr	May	Jun	Dec = Fell on gravel - cut knee
Hours worked	833	947	892	868	1350	813	592	716	761				
Employee numbers	7	6	6	6	6	6	6	6	6				
Incidents	0	0	0	0	0	1	0	0	0				
Days lost	0	0	0	0	0	0	0	0	0				
Incidence rate (number of incidents per 100 workers)	0	0	0	0	0	17	0	0	0				
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	0	0	12	0	0	0				
Severity rate (days lost to injury per 10,000 hours worked)	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	528	740	664	680	1140	792	304	652	732				
Employee numbers	5	5	5	5	5	5	5	5	5				
Incidents	0	0	0	0	0	0	0	0	0				
Days lost	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				
Frequency rate (incidents per 10,000 hours exposure)	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				
FORESTRY	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul - Slipped and strained leg Jul - Tripped on vine and hurt knee and back
Hours worked	466	492	421	386	526	308	245	369	390				
Employee numbers	3	3	3	3	3	3	3	3	3				
Incidents	2	0	0	0	0	0	0	0	0				
Days lost	0	0	0	0	0	0	0	0	0				
Incidence rate (number of incidents per 100 workers)	67	0	0	0	0	0	0	0	0				
Frequency rate (incidents per 10,000 hours exposure)	43	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				

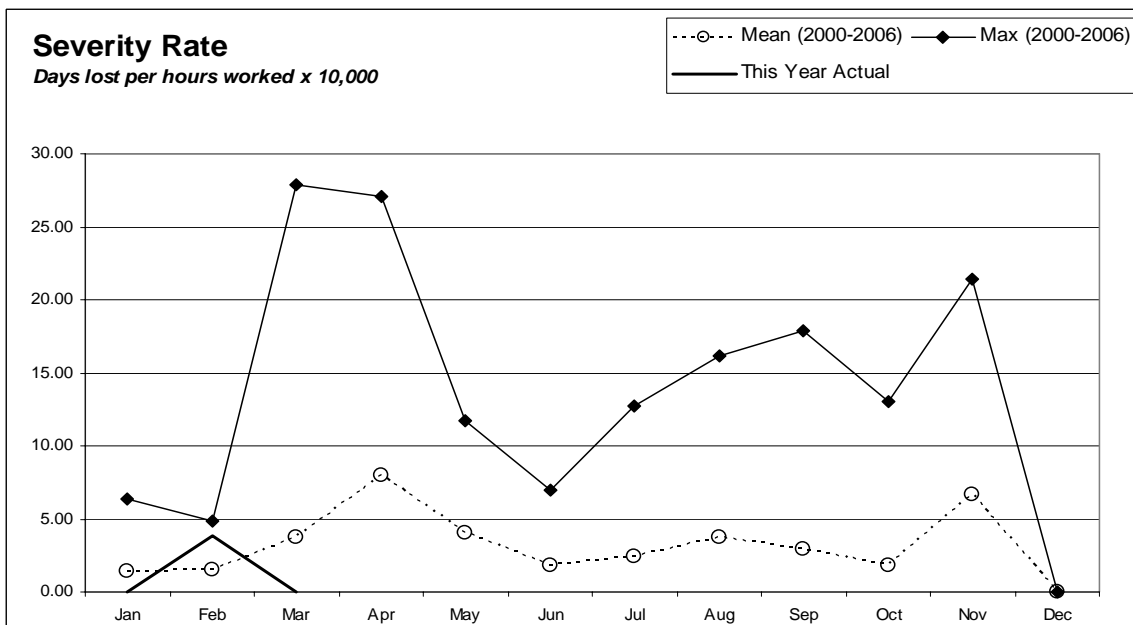
Water Supply and Forestry Combined	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Hours worked	8288	8929	8858	85380	12541	8597	5005	7767	8806			
Employee numbers	58	59	58	0	58	58	61	61	61			
Injuries	4	2	1	0	0	1	0	3	0			
Days lost	0	0	0	0	0	0	0	3	0			
Frequency rate (incidents per 10,000 hours exposure)	5	2	1	0	0	0	0	4	0			
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0	0	0	0	4	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

Four incidents in July 2006
 Two incidents in August 2006
 One incident in September 2006
 One incident in December 2006
 Three incidents in February 2007



Lost days

3

Engineering Services

February/March 2007

Engineering Services

Review of operations for the period ended 31 March 2007

1. Items of note

- An expenditure reduction of \$1.637M was forecast for the wholesale water capital works programme as at 28 February. The 3rd quarter forecast is currently being prepared.
- Improvements to the Wainuiomata Lower Dam are nearing completion with the spillway reduced in height and the final section of the new concrete spillway crest about to be poured. A resource consent has been sought to close the stream diversion, which will allow a wetland to be formed behind the dam.
- Drilling is underway on the first of the three sentinel wells on the Petone foreshore to monitor saline intrusion into the Waiwhetu aquifer.
- Replacement of the Sinclair Creek culvert has been successfully completed.
- Drilling of the first of up to eight bores into the Upper Hutt Aquifer is due to start early April.
- Information is being supplied to the HVDHB to support the grading of Waterloo and Gear Island treatment plants and the wholesale water distribution system. Our records indicate that compliance is being achieved at all four treatment plants.
- Follow-up workshops are planned for senior staff, water supply customers and Councillors in June/July to evaluate the three water supply dam site options against the attributes and weightings identified.

2. Asset management

- The capital work budget for 2006/07 is \$6.23 million. The forecast full year expenditure as at 28 February is \$4.593 million.
- Key projects and their status are as follows:
 - Work on improvements to the Wainuiomata Lower Dam is substantially complete,
 - A contract has been let for installation of three sentinel wells on the Petone foreshore.
 - Replacement control equipment for the Te Marua Water Treatment Plant is being purchased and will be installed next financial year.
 - Construction of a portable powdered activated carbon plant to combat taste and odour problems is well advanced.
 - The design of a small sewer to pipe the effluent from the

Wainuiomata Water Treatment Plant centrifuge to the Wainuiomata sewage system is under way. This sewer will reduce the risk of protozoa being recycled, and possibly concentrated, through the plant.

- A report on the condition of the pipeline on the Silverstream Bridge has been received from a specialist consultant.
 - The new Point Howard Pumping Station is complete and has been commissioned.
 - The installation of new, modern electrical equipment in the Thorndon Pumping Station is nearing completion.
 - New quality monitoring equipment is being installed at Thorndon, Karori and Pukerua Bay so that the microbiological quality of the water in the distribution network can be monitored continuously.
 - Various improvements to the telemetry system are being made at the request of Wellington City Council to facilitate its separation from the Wellington City Council telemetry system and free up channels for Wellington City Council use.
 - Construction of a new culvert at Sinclair Creek (on the access road to Orongorongo) has been successfully completed.
- Construction of a new pumping station building at Grenada being undertaken by Wellington City Council is basically complete but installation of the power supply and commissioning have been delayed. Construction of a new reservoir above Grenada to be supplied by the pumping station has commenced and a rising main to it is partially constructed. Greater Wellington Regional Council will take over ownership of the pumping station and the rising main on completion, so the standard of the work is being carefully monitored.

4. New sources

- Stage 2 studies of the potential to take water from the Upper Hutt aquifer are progressing. A start on investigation drilling has been made, and a good flow of water has been encountered in the first drill hole at a depth of 22 metres. At least four wells in the vicinity of Ward Street are proposed.
- Phase 2 studies of possible water storage dams are progressing well. The studies include work on environmental, ecological, heritage and botanic impacts, detailed aerial photography, more detailed geologic and engineering studies and costing work. A draft engineering report and a costing report have been received. This more detailed analysis has resulted in a considerable increase in the estimated costs over those reported following the phase 1 investigation. Draft reports on the planning and environmental issues have also been received.
- Three successful Multicriteria Analysis workshops have been held with senior staff, customers and Councillors. The objective of these

workshops was to decide what attributes should be considered when comparing the relative merits of the three dam sites and what their relative weighting should be. Follow-up workshops to evaluate the three options against the attributes identified will be held in June and July.

- Investigations and discussions are continuing with stakeholders on how best to evaluate the low flow requirements in the Hutt River with a view to reducing the minimum residual flow at Kaitoke so that more water can be abstracted in low flow conditions. Fish passage surveys in the upper reaches of the river have been completed by Greater Wellington Regional Council Environmental Regulation staff. Changes to the Regional Freshwater Plan to facilitate the taking of more water are being investigated.

5. Quality Assurance

- Our records indicate that compliance with the new *Drinking-Water Standards for New Zealand 2005* is being achieved at all four plants.
- The A1 grading of the Te Marua Water Treatment Plant has been confirmed by Hutt Valley District Health Board staff and an official certificate has been received. Information to support the grading of Waterloo and Gear Island Water Treatment Plants and the three wholesale distribution zones is being compiled. The wholesale distribution zones have not previously been graded.
- The Health (Drinking Water) Amendment Bill is being considered by the Health Select Committee. Further discussions have been held between Ministry of Health officials and Local Government New Zealand at the request of the Select Committee. Four meetings with senior territorial authority staff and local body politicians are proposed for early April.

5. Environmental

- Good progress has been made on the rehabilitation and lowering of the Wainuiomata Lower Dam spillway, which will provide an opportunity for the development of a wetland upstream.
- A larger culvert at Sinclair Creek, just upstream of the Wainuiomata Intake has been completed, removing a barrier to fish moving upstream.
- Power factor correction equipment has been installed at the Gear Island and Wainuiomata Water Treatment Plants and the Ngauranga Pumping Station. This equipment will improve electrical efficiency and reduce energy use. A similar installation is planned for Waterloo Water Treatment Plant.
- A Contract has been awarded for drilling three sentinel wells along the Petone Foreshore, to be equipped with instruments that will provide early warning of saline intrusion into the Waiwhetu aquifer. This work is

being undertaken jointly with the Environmental Regulation Department and will lessen the risk of contamination of the aquifer.

- A minor contravention of the Resource Management Act was brought to our notice by the Environmental Regulation Department. Pumping from a trench excavation at Randwick whilst carrying out pipework modifications is construed as being a water “take” and the flow allowed by the permitted use rules was exceeded. The work was stopped and resource consent applied for. A submission has been made making a case that the “take” was in fact a “diversion” which would be within the Regional Freshwater Plan rules.

3. Catchment management

- Two catchment tours were held in February, with a total of 120 participants. The weather played its part and both days were enjoyed by all.
- The catchment has been busy, with Contractors associated with the Lower Dam, Sinclair Creek culvert and the radio repeater, together with the return of the grader to complete the reshaping of the Orongorongo road.
- The ballot for the annual hunt, which commenced on 31 March, was held on 21 February. All of the potential 400 hunter days were allocated.
- We were able to take advantage of some free time of the contract feller used by the logging crews to remove a number of potentially hazardous trees along the bank of the Wainuiomata River adjacent to the water treatment plant access road. There was concern that if any of these trees were windthrown it would be likely to take out the power supply to the plant.

4. Projects

4.1 Engineering Services

- Wainuiomata Lower Dam

The Wainuiomata Lower Dam spillway is being lowered in preparation to form a wetland behind the dam. The plunge pool floor and walls have been relined and the spillway crest cut down to the proposed level. The Contract to lower the spillway is expected to be completed mid-April.

- Sinclair Creek Culvert, Wainuiomata

A new culvert has been installed on Sinclair Creek to facilitate access to the water collection area and the Orongorongo radio repeater station in wet weather.

- Sentinel Wells, Petone Foreshore
A Contract has been awarded to Richardson Drilling Company Ltd for the installation of three monitoring wells on the Petone Foreshore. The Contractor has started drilling the first well at McEwan Park. The wells will monitor water level and conductivity to check for saltwater intrusion.
- Te Marua Road reseal
A section of the Te Marua Water Treatment Plant access road has been resealed. Some minor resealing is still to be completed.
- Wainuiomata Water Treatment Plant filter to waste
Installation of a filter to waste facility at Wainuiomata Water Treatment Plant is being designed. Valves and actuators have been ordered.
- Wainuiomata centrate pipeline
Detailed design of the centrate pipeline is progressing. The pipeline will allow the centrate from the water treatment plant centrifuge to be discharged to Hutt City Council's sewer in Hine Road.
- Future water source pipelines
A summary report of the water distribution system upgrades required for the future water source was prepared.
- Wainuiomata Water Treatment Plant outlet control valve
Installation of a new control valve in the Tunnel Grove valve chamber has been arranged for April 2007.
- Pukerua Bay bypass pipeline
Installation of a bypass pipeline around the Pukerua Bay Reservoir has been reprogrammed for April 2007.
- Karori Pumping Station replacement
New pumps are being manufactured to replace the rejected Kelburn pumps. KSB Ajax Pumps is also investigating the vibration issue. The replacement pumps are expected in September 2007. The old Kelburn pumpsets are continuing to supply water in the interim.
- Existing Karori Pumping Station decommissioning
Planning is under way for the decommissioning of the existing Karori Pumping Station. Arrangements are being made to relocate the electrical transformer currently housed in the pumping station. This work has been postponed until after the full commissioning of the new pumping station.
- Point Howard Pumping Station
The new pumping station has been commissioned and is operating satisfactorily. Minor finishing off details are being attended to.

- Proposed Greater Wellington Regional Council/Wellington City Council/Capital and Coast District Health Board Reservoir

The Capital and Coast District Health Board is pursuing capital funding options with the Ministry of Health following concerns raised by the Capital Quake emergency management exercise. We are waiting for a response from the Capital and Coast District Health Board.

- Seismic protection

Installation details are being finalised for an actuator on the Silverstream line valve.

4.2 Work carried out for Water Supply

- Engineering Services has continued to provide support for smaller projects arising from the operation and maintenance of the water supply system.

4.3 Work carried out for Parks

- Engineering Services is project managing the refurbishment of the Queen Elizabeth Park barn. The Contract for refurbishing the barn has been awarded and work has started on-site.

4.4 Work carried out for Flood Protection

- Engineering Services is providing most of the draughting services for Flood Protection.

4.5 Work carried out for Harbours

- Engineering Services is project managing the upgrade of the Beacon Hill Signal Station. A decision has been made to replace the existing building on an adjacent site.

4.6 Work carried out for Wellington City Council

Engineering Services is undertaking a number of projects for Capacity:

- Pipeline replacements in Ngaio and Wadestown
- Water main renewals in Newlands
- Replacing the Alexandra Road Pumping Station rising main
- Replacement of the Rajkot Terrace Pumping Station pumpsets

Marketing and Design

February, March 2007

Marketing and Design

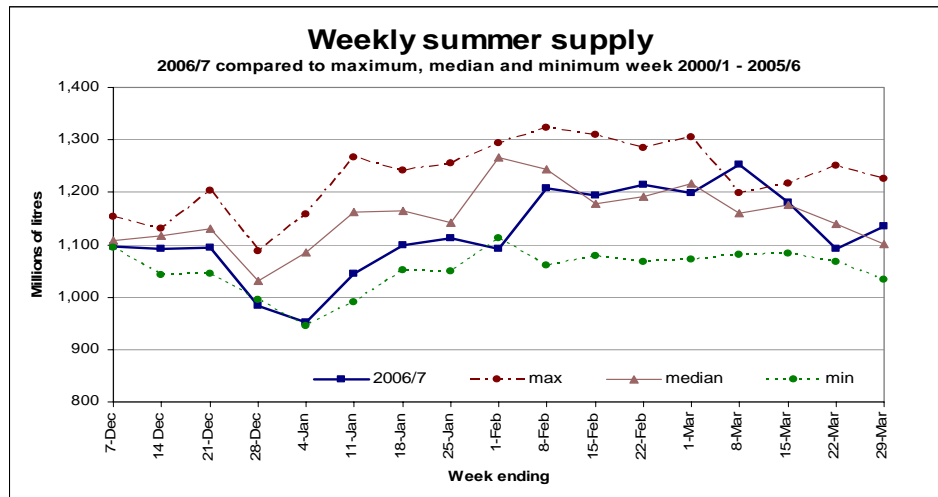
Review of operations for the period ended 31 March 2007

1. Items of note

- Draft Wellington Water Management Plan. Feedback was received from Capacity on the peer review conclusions, on behalf of Wellington and Hutt City Councils. We will now review all feedback and develop a proposal for steps to complete the technical report. Research was carried out and a report written summarising currently held research and information about public attitudes towards water supply augmentation and demand management. This report will form part of the new source options assessment process. A draft discussion paper was written for new research relating to public attitudes about supply augmentation and demand management issues, and circulated internally for comment. A report on water use records for metered households in Wellington was received from Capacity, reviewed and returned with comments for their consideration.
- Water Conservation Behaviour Change. We have been working with the Sustainability Trust on a proposal to test the effectiveness of a personal behaviour change model in relation to water conservation within GWRC's wholesale water supply area. The Sustainability Trust would manage the project, which would involve working with individual households to identify their water use behaviours and needs, then designing a conservation plan tailored to those circumstances. Actual water use before, during and after the intervention would be measured and compared with a control group. The theory is that personalised intervention is more likely to lead to sustained behaviour change and personal endorsement of actions to others, thus spreading water conservation uptake by "ripple" effect rather than solely from councils. The proposal's viability rests on the Sustainability Trust obtaining funding from the Ministry for Environment's Sustainable Management Fund. The project as proposed would run for two years from July 2007. The Sustainability Trust has also brought Wellington City Council and Victoria University on board as partners. Applications for funding closed at the end of February, with a decision expected at the end of April. If the Ministry for the Environment approves funding, details of the project will be developed further.
- Water Supply Service Level Agreement. We received and reviewed feedback on the draft agreement from Porirua and Upper Hutt City Councils, via Capacity, at the end of February. The feedback did not raise major issues, but did require some further investigation and re-writing of clauses. We met with Capacity in March to agree the next steps, which were being progressed at month-end.
- Water supply for the billing year (April 2006 to March 2007) was 56,739 ML. This is the second highest April-March total during the

seven billing years this century (behind April 2005 to March 2006), although the 2006/07 billing year was inflated by a substantial leak in Wellington (believed to have been present between late January and September 2006). Average daily supply for February to March 2007 was less than three of the eight equivalent periods since February to March 2000, while the peak day was lower than all but one of the last eight summers. Given a 40 day period of very low rainfall and fine weather between late January and mid March 2007, the modest supply peak was very pleasing.

- The following graph - showing weekly water supply since 1 December relative to the maximum, median and minimum value for the equivalent weeks during the previous six years - illustrates the relatively modest level of water use this summer.



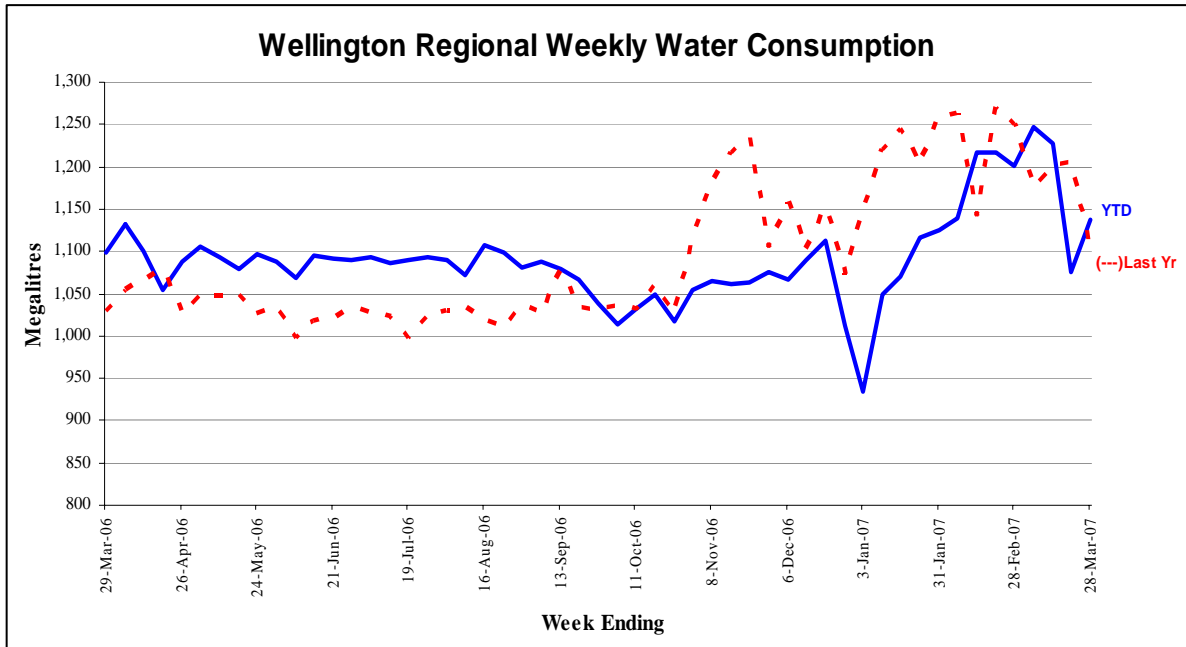
- The peak supply day for the summer period was 191 ML and occurred on 4 March. Normally the peak day is in January or February.
- Media Releases. Two releases were arranged during February: for the start of the water conservation campaign (16 February) and to mark the commissioning of the new Point Howard Pumping Station (21 February).
- Treatment Plant Visits. Three visits were hosted, involving some 80 visitors.
- Water History Update. The booklet took a back seat to other projects during February, with only minor progress to finalising the introduction and foreword.

2. Water usage

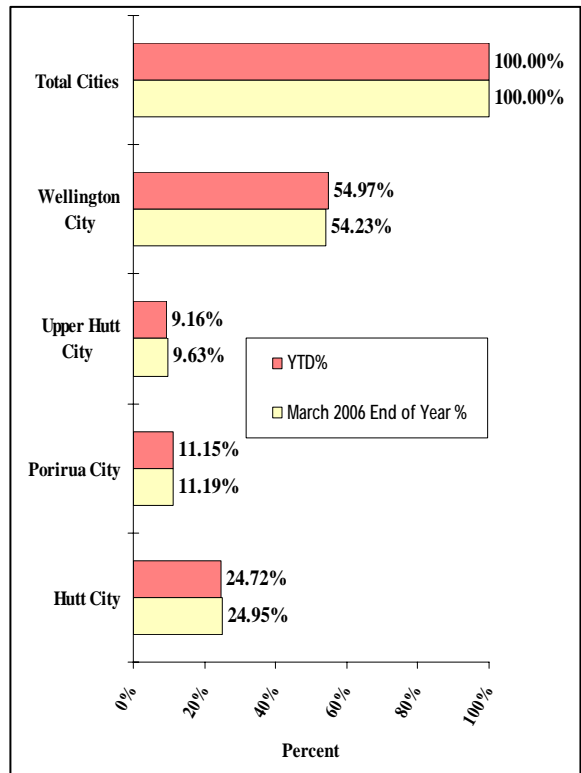
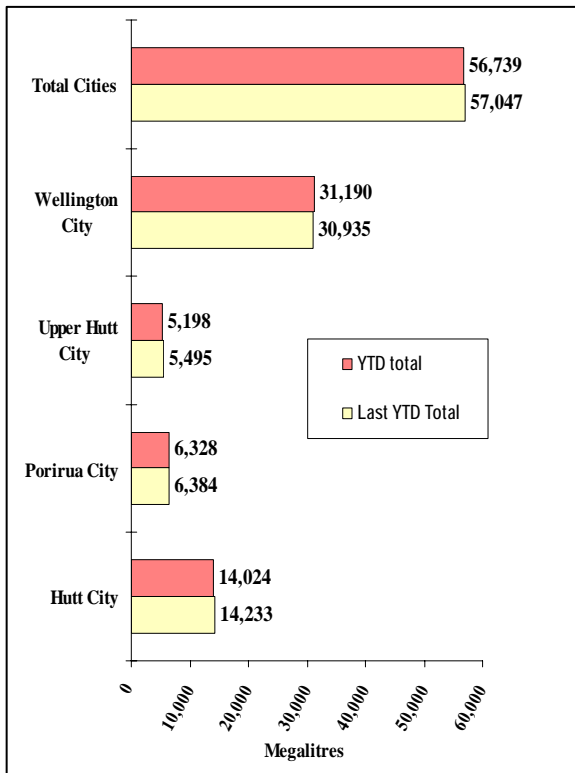
Water consumption has continued to track lower than last year since October, with substantial reductions during January, as a result of the wet weather. Total water consumption from 1 April 2006 to the end of January 2007 was slightly lower than for the previous year, completely off-setting the impact of the large water leak in the Wellington City distribution network

that was repaired in August. However, water consumption is expected to increase during February as the weather improves. Graphs detailing the sales volume information are on page 23.

Water sold over the last 12 months



Water sold from 1 April 2006 to 31 March 2007



Laboratory

February 2007

Laboratory Review of operations for the period ended 28 February 2007

1. Items of note

- Laboratory finances remained in the black for the month, contributing to a good operating surplus for the year to date. Both revenue and expenditure numbers were down on the previous months, reflecting a quieter operating period.
- Through being under-resourced, a backlog of 39 samples for phytoplankton analysis in conjunction with the water quality monitoring programme for the Stuart Macaskill Lakes were subcontracted out.
- The future of the laboratory services is under review and the process ongoing. Tender Documents were prepared in expectation of being distributed in early March to service providers having formally displayed interest.

2. Business summary

Quality

There were no requests for retesting samples and most test reports were timely. Some delays occurred with the analysis and reporting of phytoplankton and some protozoa analyses.

Forests Department

February 2007

Forests Department Review of operations for the period ended 28 February 2007

1. Metro Forests

1.1 Log harvest contract

The final arrival of summer, together with both crews on relatively short drags to the skid, meant a good production for the month of February, with Log 36 (hauler) producing 3,066 tonnes and Log 6 (ground based) producing 2,618 tonnes for a total of 5,684 tonnes.

With the improved price for logs sold over the wharf, it appears that many companies are taking this option rather than selling to their traditional local outlets. The result is very strong demand domestically with some mills being forced to work short weeks because of a lack of stock. We have taken the position of supporting our local outlets, as history indicates that the current export prices are unlikely to stay at current levels.

Both crews are due to move in March, which will produce a “blip” in production levels. Log 36 is to move from Dick’s Yard to Blowfly and Log 6 a short distance to the second spur within Longspur. With the move to Blowfly, it will be necessary to find a market for pruned logs. Unfortunately, while all other grades are in demand with good prices, pruned prices remain depressed. A further complication is that some of the trees have grown so well that they may exceed the maximum size that can be accepted by the local mills, i.e., 90 centimetres diameter.

Table 1 – Log 36 Puketiro 5.01 - Output by grade - Dick’s Yard

	February 2007	
Grade	Tonnes	%
Pruned	45.47	1.48
Part pruned	0	0
S Grade	1,365.00	44.52
L Grade	134.00	4.37
R Grade	488.46	15.93
K Sawlog	311.12	10.15
Roundwood	0	0
K Rough	531.35	17.33
Dom Rough	176.91	5.77
Pulp	13.99	0.46
O/S Pulp	0	0
Export pulp	0	0
Total	3,066.30	

Revenue for February totalled \$102,757.69 at an average of \$33.20 per tonne

Table 2 –Log 6 - Valley View - Output by Grade - Longspur

Grade	February 2007	
	Tonnes	%
S Grade	1,035.92	39.57
L Grade	0	0
R Grade	581.33	22.20
K Sawlog	413.92	15.81
Roundwood	0	0
K Rough	379.72	14.50
Dom Rough	0	0
Pulp	133.3	5.09
O/S Pulp	0	0
Export pulp	0	0
Total	2,618.18	

Revenue for February was \$105,307.63 at an average of \$40.22 per tonne.
Total revenue for February was \$208,065.32 for 5,684.48 tonnes at an average of \$36.60 per tonne

1.2 Silviculture contract

During February the Silvicultural Contractor was beset by lack of staff and mechanical breakdowns, and consequently did not undertake any silvicultural work.

I am concerned that the Contractor will be unable to complete the contracted area by 30 June, so I propose to reallocate some of the work to the unsuccessful Tenderer. (Only two Tenders were received.)

To date 33.5 hectares have been completed out of a programmed 117.3 hectares.

1.3 Plantation Forestry operations

Forest visits in relation to the new water sources investigation and the wind farm proposals reduced through February but recommenced after Renewable Energy Systems (RES) received a resource consent for the erection of three 80 metre anemometer masts (now revised to two masts). Construction crews began preparations of the foundations in early March and anticipate completion is mid-April.

The roads have held up well after the grader completed reshaping in early February. No doubt a further grade will be required before the onset of winter.

We were able to obtain more millings and used these to complete sealing through Rallywoods (a requirement of our access agreement) and more recently a further supply has allowed patching of the existing sealed areas.

Some new roading in the Beech Spur, Parry's Bush and Kilometre blocks in Valley View will be required in the near future as "winter blocks" are set up to avoid the long haul into Puketiro and to base operations on high ground.

1.4 Forest access

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

1.5 Market trends

We receive forestry based newsletters which keep us up-to-date on what is going on in the industry both in New Zealand and round the world. There was an interesting comment on Russian originating logs (which compete with us into both Korea and China) in a recent edition.

The really big news for the forest products companies "down under" is the announcement by the Russian Government that it will be increasing its export tax on logs over the next two years. It will rise to 20% in July 2007 and up to a massive 80% in January 2009. Already the Finnish and Japanese forest industries have called for immediate measures to adjust to the rising Russian duty. They argue that log imports from Russia would become unprofitable in the near future.

The significant price increase that emerged in January has continued. February volumes at December prices would have produced a net return \$33,267 less than shown in this report.

2. Reserve Forests

2.1 Tauanui logging

Road extensions have progressed well in the prevailing dry conditions. Formation, water tabling and culverting have been completed. Basecourse metalling is currently under way and is due to be completed early in March. Weathered rock from within last year's formation has provided an on-site source of suitable material.

Topcourse material (old slip debris) is also available on-site and will be used as required on the steeper hill sections and as required elsewhere.

The Logging Contractor will recommence harvesting in early April.

Staff members have been exploring the options to increase the rate of harvesting without compromising the soil conservation aspects of the forest. The most suitable option appears to be to open up the area above the north ridge, as this is a separate catchment, but this requires a new road and a crossing of the Tauanui River.

2.2 Hiwinui

Silvicultural operations have been closed down because of extreme fire danger conditions within the Wairarapa.

2.3 Rough Hill

Following financial approval at the six month review and the signing of a Fencing Agreement, clearing of the agreed fence line has been commenced on the agreed Rough Hill fence line.

2.3 Fire danger

The continued dry period within the Wairarapa has seen the imposition of a total fire ban across the region. The majority of the indices that are used to assess fire danger on a daily basis have reached extreme levels.

The Drought Code which is based on days since significant rain and an indicator of difficulty of extinguishing a fire (particularly in the mop up phase) reaches extreme at a reading of 326. The current reading at Ngaumu is 610 and all other Drought Code readings within the Wairarapa are in excess of 400.

Strong winds impact dramatically on two key indices, the Initial Spread index and through the Build Up Index (fuel available). These in turn significantly influence the Fire Weather Index, which is a measure of fire intensity on a daily basis.

Currently all major forests have imposed restrictions on work (logging, chainsaws and machinery) and other activities (recreation, etc.) within the forests. Crews are held on standby.

This information is added for completeness. Formal reporting is through the Wairarapa and Rural Services Committee.