Greater Wellington Water

April 2004

Operations Group

April 2004

Operations Group Review of Operations for the Period Ended 30 April 2004

1. Items of Note

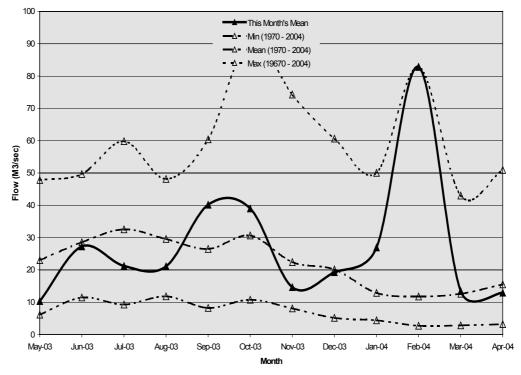
- Lake 2 has been drained and inspected. Apart from some minor repairs needed to the tower structure the inspections revealed no significant deterioration. There are a couple of million litres of sediment on the lake floor that we would like to remove and we are presently investigating disposal options.
- The detection of higher than normal (>10/100 litres) *Cryptosporidium* concentrations in raw water samples from Wainuiomata triggered the first, notification, stage of the Incident Management System (IMS). Subsequent analysis results indicate that concentrations have returned to normal.
- We have lost a second variable speed wellfield pump at Waterloo, which has led to difficulties in controlling flow and pH at the treatment plant.

2. Supply Situation

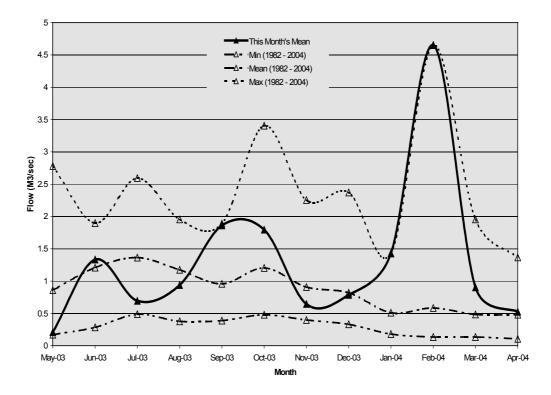
The Stuart Macaskill Lake 1 is full. There have been no issues with supply for the period.

Hutt River Flows

The mean monthly flows in the Hutt River for the period was a little below average.



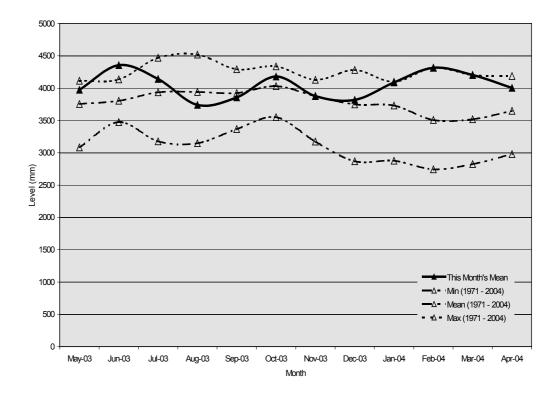
Wainuiomata River Flows



The mean monthly flow in the Wainuiomata River was average.

Aquifer Levels

The water level in the Waiwhetu aquifer was a little below the maximum.



3. Treatment Plants

3.1 Wainuiomata

3.1.1 Quality

There are no quality issues to report.

3.1.2 Health and Safety

There are no health and safety issues to report.

3.1.3 Operations and Maintenance

• Much of the annual "shutdown" maintenance was completed during the period.

3.1.4 Plant Tours

There were two tours during the period - one for IPENZ and the other for Opus water treatment students.

3.1.5 Projects

- The PLC replacement is now essentially complete, with only minor outstanding items to be tidied up.
- Upgrading the Wainuiomata River intake is still on hold because of poor weather.
- The replacement inlet colour meter has been ordered.

3.2 Waterloo and Gear Island Water Treatment Plants

- 3.2.1 Quality
 - There have been some pH control problems since losing the second variable speed pump and operator call-outs have been high for the period.
 - A number of treated water samples have been shown to contain low counts of coliforms. Whilst the presence of small numbers of coliforms (not to be confused with faecal or thermotolerant coliforms) is not a threat in itself, it is an unusual occurrence and is being investigated. Each of the reservoirs and aeration chambers have been drained, inspected and disinfected but to date the source of the coliforms has not been located. The investigations continue.

3.2.2 Health and Safety

There are no accidents or incidents to report.

3.2.3 Operations and Maintenance

- Refurbishment of the emergency mobile generators is complete.
- Naenae Pump No. 2 has been replaced by a reconditioned pump.
- New seals have been fitted to one of the Gear Island chemical boost pumps and are being assessed for adequacy.

3.2.4 Plant Tours

There were no tours during the period.

3.2.5 Projects

- Waterloo aeration trials are in progress.
- The Penrose Street variable speed panel has been refurbished.
- The Waterloo fluoride panel refurbishment is in progress.
- The trial of a chlorine gas flow meter at Gear Island has proved successful and we can now trend chlorine demand and detect faults that can give rise to low chlorine residuals.
- The Gear Island inlet electromagnetic flow meter has been repaired and reinstalled.

3.3 Te Marua

3.3.1 Quality

There are no quality issues to report.

3.3.2 Health and Safety

There are no accidents or incidents to report.

3.3.3 Operations

- A high flow exercise was carried out, during which we proved that the treatment plant could produce over 130 ML per day. Some constraints to producing higher flows have been identified and are presently being removed.
- Some Plateau residents were concerned when the siphon from lake 2 ceased to work after we drained the lake. A new siphon has been installed from lake 1 and is now fully operational

3.3.4 Plant Tours

There were no tours for the period.

3.3.5 Projects

- Supply and installation of CO₂ gas flow meters and control valves will commence in May.
- Trials are progressing to compare two brands of ultra violet absorption/ colour meters.
- Work has commenced on the preparation of an up-to-date control philosophy for the plant.

4. Distribution

4.1 Quality

There are no quality issues to report.

4.2 Health and Safety

There was one minor incident, where an employee suffered a sprain/strain.

4.3 Operations

- All scheduled maintenance activities were carried out as planned:
- Pump alignment issues at Haywards Pumping Station have been cleared
- There were two pipeline leaks repaired during the period.

4.4 Projects

- Repairing the damaged paint work on the main to the Te Marua Water Treatment Plant has been delayed because of bad weather.
- The installation of pressure transmitters is ongoing.
- The provision of safe access to valve chambers on the 1,050 mm main is progressing.

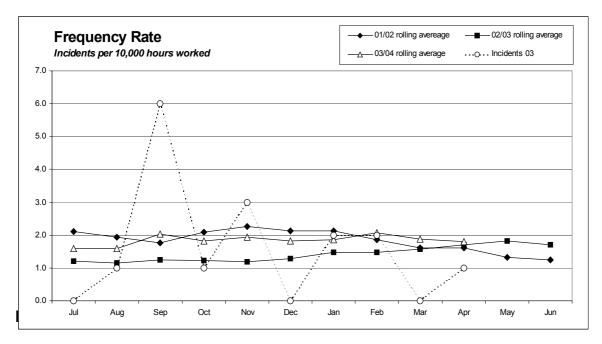
Utility Services Division Health and Safety Data July 2003 to June 2004 - Total Injuries

PRODUCTION (+ 4 OPS ADMIN)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Hours worked	3,516		2,520	2,336	2,287	3,434	1,667	2,365	2,496	2,203	0	0 Aug = Achilles tendon/foot sprain
Employee numbers	18	18	18	18	15	16	16	16	16	16	0	0 Sep = cut finger pulling out nail
Incidents	0	1	1	0	0	0	0	1	0	0	0	0 Nov = Graze/minor bruising on hip after knocking steel pipe support
Days lost	0	0	0	0	0	0	0	0	0	0	0	0 Feb = Superficial injury to nose
Incidence rate (number of incidents per 100 workers)	0	6	6	0	7	0	0	6	0	0	0	0
Frequency rate (incidents per 10,000 hours exposure)	0	4	4	0	4	0	0	4	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	0
DISTRIBUTION	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun Jan = Hit in eye with rust splatter - <i>1 day lost</i>
Hours worked	1,760	1,389	1,277	1,362	1,285	1,581	697	1,167	1,177	1,003	0	0 Feb = Bruised Achilles tendon
Employee numbers	8	8	8	8	9	8	8	8	8	8	0	0
Incidents	0	0	0	0	0	0	1	1	0	1	0	0
Days lost	0	0	0	0	0	0	1	0	0	4	0	0
Incidence rate (number of incidents per 100 workers)	0	0	0	0	0	0	13	13	0	13	0	0
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	0	0	0	14	9	0	10	0	0
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0	0	0	14	0	0	35	0	0
ENGINEERING CONSULTANCY	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Hours worked	2,388		1,764	1,739	1,629	2,396	968	1,736	1,816	1,480	0	0
Employee numbers	12	12	12	12	12	12	12	12	12	12	0	0
Incidents	0	0	1	0	1	0	0	0	0	0	0	0
Days lost	0	0	0	0	0	0	0	0	0	0	0	0
Incidence rate (number of incidents per 100 workers)	0	0	8	0	8	0	0	0	0	0	0	0
Frequency rate (incidents per 10,000 hours exposure)	0	0	6	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	0	0	0
UTILITY SERVICES SUPPORT	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun Sep = Strained knee and shoulder
Hours worked	1,572		1,060	1,072	836	1,276	496	776	804	867	ý 0	0 Nov = Cut finger
Employee numbers	. 8	. 8	. 8	8	7	, 7	7	7	7	7	0	0
Incidents	0	0	0	0	0	0	0	0	0	0	0	0
Days lost	0	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	0
Frequency rate (incidents per 10,000 hours exposure)	0	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	0
LABORATORY	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun Sep = Strained knee - 2 days lost
Hours worked	1,558		1,149	1,040	1,003	1,523	809	1,079	1,218	940	ý 0	
Employee numbers	7	, 7	7	, 7	7	7	7	7	6	6	0	0 Sep = Bruised knee and finger
Incidents	0	0	3	1	1	0	1	0	0	0	0	0 Oct = Cut finger
Days lost	0	0	2	0	0	0	0	0	0	0	0	0 Nov = Burnt hand and finger
Incidence rate (number of incidents per 100 workers)	0	0	43	14	14	0	14	0	0	0	0	0 Jan = Bruised finger (shut in car door)
Frequency rate (incidents per 10,000 hours exposure)	0	0	26	10	10	0	12	0	0	0	0	
Severity rate (days lost to injury per 10,000 hours worked)	0	0	17	0	0	0	0	0	0	0	0	0
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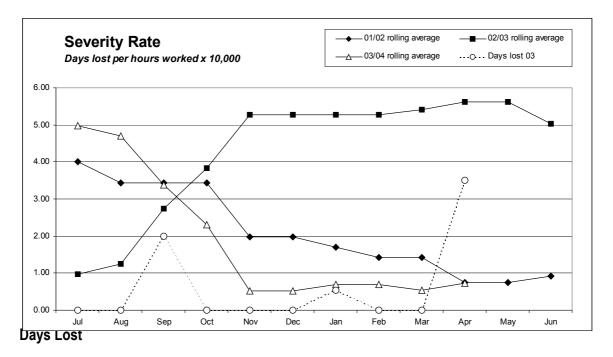
STRATEGY AND ASSET	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Hours worked	992	792	804	740	572	792	256	420	628	552	0	0	
Employee numbers	5	5	5	5	5	5	5	5	5	5	0	0	
Incidents	0	0	0	0	0	0	0	0	0	0	0	0	
Days lost	0	0	0	0	0	0	0	0	0	0	0	0	
Incidence rate (number of incidents per 100 workers)	0	0	0	0	0	0	0	0	0	0	0	0	
Frequency rate (incidents per 10,000 hours exposure)	0	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	0	
FORESTRY	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Sep = Fractured skull
Hours worked	944	637	649	509	408	647	270	473	482	363	0	0	
Employee numbers	3	3	3	3	3	3	3	3	3	3	0	0	
Incidents	^	•		•	-	-							
Incluents	0	0	1	0	0	0	0	0	0	0	0	0	
Days lost	0	0	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
Days lost Incidence rate (number of incidents per 100 workers)	0 0 0	0 0 0	1 0 33	-	0 0 0	0 0 0	0 0 0	-		0 0 0	0 0 0	0 0 0	
Days lost	0 0 0	0 0 0 0	•	0	•	0 0 0 0	0 0 0 0	0	0	-	0 0 0 0	0 0 0 0	

Utility Services Division Combined	Jul	12 Month Average		12 Month Average		12 Month Average		12 Month Average		12 Month Average	Dec	12 Month Average	Jan	12 Month Average	Feb	12 Month Average	Mar	12 Month Average		12 Month Average	May	12 Month Average	Jun	12 Month Average
Hours worked	12,730	8,686	9,111	8,710	9,223	8,779	8,798	8,808	8,019	8,811	11,648	9,117	5,162	8,825	8,016	8,802	8,620	8,774	7,408	8,708		-		-
Employee numbers	61	58	61	59	61	59	61	59	58	59	58	59	58	59	58	59	57	59	57	59				
Injuries	0	1	1	1	6	2	1	2	3	2	0	2	2	2	2	2	0	2	1	1				
Days lost	0	4	0	4	2	3	0	2	0	0	0	0	1	1	0	1	0	0	4	1				
Frequency rate (incidents per 10,000 hours exposure)	0	2	1	2	7	2	1	2	4	2	0	2	4	2	2	2	0	2	1	2				
Severity rate (days lost to injury per 10,000 hours worked)	0	5	0	5	2	3	0	2	0	1	0	1	2	1	0	1	0	1	5	1				

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



Two incidents in January 2004 Two incidents in February 2004 One incident in April 2004



1 day lost in January 2004

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Strategy and Asset Group

April 2004

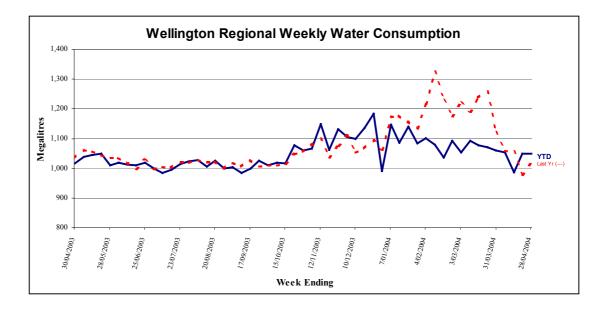
Strategy and Asset Group Review of Operations for the Period Ended 30 April 2004

1. Items of Note

- Water consumption for the period and the month of May has been relatively normal and lower than the previous year because of more average rainfall compared with the dry autumn last year.
- The House of Representatives is now considering the Wellington Regional Council (Water Board Functions) Bill. It is expected that the Bill will be referred to a Select Committee.
- The review of the lower Wainuiomata Dam has been completed. A decommissioning proposal is outlined in a Committee report.
- The Ministry of Health consultation on reviewing the *Drinking-Water Standards for New Zealand* is continuing. There now seems to be a better tie-in between the Ministry of Health's work on the Drinking-Water Standards and the Ministry for the Environment's work on classification of raw water supplies.
- The water levy for 2004/5 has been sent to the Policy, Finance and Strategy Committee for consideration. A separate report to the Utility Services Committee considers the 2004/5 charges for private supplies.
- The Council's insurance company is paying for repairs to the road access bridge to the Wainuiomata Water Treatment Plant. The bridge was damaged in the February storms and the centre pier requires some remedial work.

2. Sales Volume

Water Sold Over the Last 12 Months





3. Asset Management

- The Capital Works budget for 2003/4 is \$5.111 million. Forecast expenditure up to 30 June 2004 is \$3.914 million. Progress on the major projects is as follows:
 - Kaitoke weir improvements Deferred until next summer.
 - Wainuiomata Catchment northern boundary fence stage 2 (budget \$100,000). The work nearing completion..
 - Modification to the Orongorongo intake (budget \$55,000). The work is substantially complete but final touches have been deferred until next summer.
 - Replacement of control equipment at Wainuiomata Water Treatment Plant (budget \$100,000). The new controller is in place and working.
 - Relocation of the Pukerua Bay branch onto the new Paremata Bridge (budget \$400,000). This work is close to completion. Transit New Zealand has agreed to fund 35.5 percent of the cost of this work, less than the normal 50 percent share because Greater Wellington Water (GWW) has elected to shift the existing main off the old bridge to reduce its vulnerability to seismic damage.
 - Replacement of the OK main between the Wainuiomata Tunnel and the water treatment plant (budget \$1,250,000). This work is complete and the access road has been resealed.
 - Relocation of the Karori Pumping Station (budget \$600,000). Following lengthy discussions with Wellington City Council

(WCC) officers and the detailed investigation of six sites, a preferred site has now been identified and a detailed engineering design report prepared. A resource consent application will be submitted to WCC in July or August

- Construction of a new pumping station to house the Point Howard pumps (budget \$417,000). Land has been acquired, design is proceeding and the new pumps have been ordered.
- Consultants have been engaged to investigate the options for off-river storage at Wainuiomata. Such storage would enable this plant to continue operation when the rivers are dirty and during periods of very low river flows.
- NIWA consultants are to be commissioned to build a computer model to predict summer water demand and provide early warning of possible shortfalls. The model would use long range (three month) weather forecasts as input and is considered to be very innovative.
- Flood protection works to minimise the risk of damage to the Wainuiomata raw water main are being designed.
- Repairs to the Wainuiomata access bridge damaged in the February floods have been designed by a consultant engineer working for the insurance company. Consents have been applied for and the repair will start soon. The insurance company will meet all costs the cost of the temporary "Bailey" bridge, excluding a \$2,500 excess.
- Maunsell Ltd is working on the revision of the Wholesale Water Asset Management Plan. A separate report presents the final draft of this plan.
- A commission to revalue wholesale water assets has been awarded to Knight Frank Ltd. A draft report is expected in mid-June.

4. **Quality Assurance**

- Development of revised Drinking-Water Standards is continuing. GWW has a staff member on the Experts Committee considering the changes. A public meeting was held on 15 April and a further submission on behalf of Greater Wellington Regional Council (GWRC) was sent on 24 May. Further consultation is expected before the Standards are finalised.
- Work is continuing on a new proposal by the Ministry for the Environment to establish a National Environmental Standard for drinking water sources, and a draft is expected to be available in June. A fact sheet providing background information is now available on the Ministry for the Environment web site. The linkage between this Standard and the new Drinking-Water Standards is important but to date unclear. GWW staff will closely monitor the development of these

Standards.

• A programme of testing for aggressive (i.e., mildly corrosive) water in consultation with the customer territorial authorities has been completed. The main finding has been that the test results are very inconsistent. Ministry of Health staff have now declared that the Ministry intends to issue a country-wide declaration that any and all water supplies may be aggressive, and that it is wise practice to flush taps each morning before drinking the water.

5. Environmental

• Consultants have completed a safety review of the lower Wainuiomata Dam. A separate report explains the options available.

6. Catchment Management

- The public participation in the 'roar' went well although only nine deer, four goats and one pig were taken. This is not a large tally given the risks and effort associated with organising the event.
- Initial results from a possum trap line survey suggest around a 15 percent trap catch and thus a comprehensive 1080 operation has been planned for next winter.
- Good progress continues to be made on the boundary fence and the contract should be complete by early June.
- The Ranger detected four instances of vandalism. All damage has been reinstated.
- Work has commenced on clearing water tables on the main Wainuiomata-Orongorongo Road. When this is has been completed, selective grading will be carried out to ensure access over the winter period.

7. Marketing

- Text and image content was drafted for new water supply interpretation signs for Kaitoke Regional Park. The Landcare Division has developed new signage for the park around the theme of water relating to its activities at Kaitoke. The new water signs will complement Landcare's work.
- A divi sional communication plan was progressed. The plan links Utility Services' water activity with the Council's communication strategy adopted on 30 June 2003.
- Further communications work was undertaken for the closure of the public water tap at Gear Island on 1 May 2004. Public notices advising

of the closure were placed in *The Hutt News* and *The Dominion Post*. The tap is not needed now that Hutt City Council has opened a new facility that serves the same purpose.

- Water Supply Agreement. Research and drafting of wording around several matters arising from the last meeting with the customer representative. Analysis work was undertaken to identify historical peak week supply totals for individual reservoirs and each customer in total. We will need one further meeting to complete a first full revision of the draft contract. Up to this point discussions have been with an officer from WCC (now transferred to Capacity, the new joint water management venture between WCC and Hutt City Council), who is representing the interests of the four customer councils in drafting a supply agreement. Once the first revised draft is completed, further consideration of content will be needed both within GWW and among the customers. This work is continuing.
- Preparation has been carried out for a customer meeting that included an initial discussion about the recently released Auckland Water Management Plan (strategy document), a co-ordinated initiative between Watercare, Auckland Regional Council and the local network operators. The strategy document has been provided to our customers and the detailed technical report of the plan will be distributed once obtained from Watercare.
- A contribution was made to preparations for Emergency Management's display about emergency water supply that formed part of *The Earth Rocks* exhibition at Te Papa over Easter weekend.
- There were four treatment plant visits during April, involving some 100 visitors. One additional visit was arranged for later in the year.
- No media releases were made by GWW during April, although a release was drafted covering the emptying of Lake 2 at Te Marua (released early May).

8. Projects Undertaken by Engineering Consultancy for Strategy and Asset

• Orongorongo River Intake

The Contract Works for the upgrade of the Orongorongo River intake is complete. Some minor work that is reliant on low river flows will be undertaken next summer.

• Wainuiomata/Orongorongo Catchment Fence

The Contract for erection of the second stage of a deer and stock fence along the northern boundary of the water collection area is nearing completion. • Kaitoke No. 2 Tunnel Access Footbridge

The Contract to refurbish the footbridge at the Te Marua end of the No. 2 Tunnel is nearing completion.

• Wainuiomata Water Treatment Plant Outlet Control Valve

The proposal for the replacement and relocation of this control valve is being reviewed.

• Waterloo Well Pump Control Valves

Arrangements have been made to replace the first of the Waterloo well pump control valves. Initial flow and pressure tests are about to take place.

• Refurbishment of the OK Main, Petone

Negotiations are continuing with the Contractor to finalise the cost of the work.

• State Highway 1 Bridge at Paremata

The new pipeline on the new Paremata Bridge has been commissioned.

• Rerouting Te Marua to Karori Pipeline at Mangaroa

Transit New Zealand is proposing to straighten State Highway 2 south of Mangaroa Bridge. This realignment will require deviation of approximately 160 m of the Te Marua to Karori pipeline. A drawing of this deviation is being prepared.

• Rerouting Te Marua to Karori Pipeline at Haywards

The existing pipeline route from State Highway 2 to the Haywards Pumping Station is susceptible to earthquake induced landslide damage. Alternative routes for this pipeline are being assessed. Pipe supply for this project is being investigated.

• Orongorongo Pipeline Replacement

The new pipeline from the tunnel to the Wainuiomata Water Treatment Plant has been commissioned. Some minor outstanding items are being attended to.

• Karori Pumping Station

The structural design consultant has prepared a preliminary design report for building the pumping station in Northland Tunnel Road. Quotations have been invited for the supply of the pumpsets.

• Point Howard Pumping Station

The underground pumping station at Hutt Park is being replaced. Land purchase arrangements are being finalised for the proposed site alongside Seaview Road. The pumpsets have been ordered. The structural design of the building is proceeding.

• Pinehaven Pumping Station

The new pumpsets and switchboard have been installed. The pumps are about to be commissioned.

• Minor Seismic Projects

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

- The Mangaroa Bridge and associated Te Marua to Karori pipeline crossings are expected to remain serviceable after a major seismic event.
- Installing a non-return function on the Gracefield Reservoir inlet control valve is proposed.
- Wainuiomata River Intake Pipeline

The flood on 16 February 2004 caused 27 m of this pipeline to collapse into the river. The pipeline has been reinstated. Permanent riverbank protection works are being designed.

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Engineering Consultancy Group April 2004

Engineering Consultancy Group Review of Operations for the Period Ended 30 April 2004

1. Work Carried Out for the Strategy and Asset Group

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

2. Work Carried Out for the Operations Group

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

3. Work Carried Out for Wellington City Council

3.1 General

The work carried out for Wellington City Council is significantly less than in previous years. Current projects under way are detailed in the following sections.

3.2 Rugby, Sussex and Cable Streets

Wellington City Council has approved the design report. Because these are busy streets and partly State Highway, some construction work will need to be carried out at night. Draft drawings are almost complete.

3.3 Aramoana Reservoir, Miramar

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

The floor has been completed and some wall sections are complete.

3.4 Mt Albert Reservoir

This 3.5 ML reservoir will be sited in Mount Albert Park within Berhampore Golf Course. The design report has been approved and design work is under way.

3.5 Onslow Reservoir

There are two reservoirs on the Onslow site.

The rectangular western reservoir has been demolished and a new larger reservoir of 4.5 ML capacity has been built on the same site. The structure is now complete. Filling for testing purposes was carried out. Some leaks were observed and repaired, and the reservoir chlorinated. Backfilling is

now under way.

The reservoir is now in service.

3.6 Warwick Street Pumping Station

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

The first new pumpset has been installed and preparations made for connection of pipework.

4. Miscellaneous Projects

4.1 Hutt River at Belmont

John Morrison is the Engineer to the Contract for this project. Construction work is nearing completion on the rock facing section, with landscaping and final tidying up remaining.

4.2 Kapiti Water Supply- Lindale Underpass

The Engineering Consultancy Group has been engaged to design an alternative deviation of the water main. The diversion would be down to the lower ground level and not on the bridge as originally proposed by the Consultants. The project has some urgency to fit the Contractor's programme.

Laboratory Services

April 2004

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

1. Items of Note

- April showers may be a seasonal expectation and, seemingly in keeping with this, the autumnal blues beset the financial climate of the Laboratory. The year-to-date deficit pushed out to \$97K largely under the impact of direct expenditure. There was a variety of contributing factors such as some big-item purchases being stockpiled, workstation improvements were made following ergometric assessment, workplace renovations were implemented including purchasing seismic restraints, some offshore expenditure had backlogged, software re-licensing fell due, advertising costs for new staff to name some. On the plus side some of the subcontracted work charges will be recovered in June.
- In the wake of a resignation we advertised locally for a replacement technician and received 20 quality applications. However, we will be looking long and hard to see how well we cope before deciding whether, or not, we make any appointment. We do have a casual worker currently engaged on a casual basis with whom we could develop a more expansive relationship. Personnel cost savings were not realised, despite having reduced staff numbers, as the re-allocated work was often picked up in overtime mode. Leave taking also figured in this.
- Our annual IANZ laboratory surveillance assessment has been deferred again after having to await the availability of specialist technical assessors and looking to a mutually acceptable date in May. We intend increasing the number of tests within the scope of our accreditation to include swimming pool testing, updating the *giardia/crypto* test (in anticipation of the DWSNZ 200X) and new tests using our TOC and IC analysers. Broadening our testing repertoire gives us more to offer and gaining further signatories/key technical personnel improves our cover but it don't come cheap.

2. Business Summary

2.1 Quality

There were no complaints regarding the quality of our work, or any requests for retesting, and test reports for timely.

2.2 Health and Safety

There was no incidents during the period.

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Plantation Forestry

April 2004

Plantation Forestry Department Review of Operations for the Period Ended 30 April 2004

1. Log Harvest Contract

Although the New Zealand dollar has continued to ease and even freight rates appear to have plateaued, the combination of an oversupply of domestic grades and the closure of the Korean market have kept the market tight.

After the storms in late February forest owners increased production in order to salvage as much of the merchantable wind thrown timber as possible. Had we only been competing with local growers, the local mills may have coped but the additional volumes, which came in from the Manawatu/ Wanganui area, ensured saturation. As a consequence, many of the local mills have closed for deliveries mid-week as their yards were full. We were fortunate that we ere able to move sufficient volumes to ensure that the logging crews could continue harvesting. This situation has led to an easing of domestic prices.

With the Korean market saturated, export logs were diverted to China. This market enabled all export logs to be sold but, as anticipated, the knowledge of the oversupply into Korea encouraged the Chinese to renegotiate rates down!

There are signs that pruned prices are on the increase in the Central North Island but locally only JNL is offering reasonable prices and they appear to "blow hot and cold". Rayonier introduced an export line for part pruned logs after no cost effective local market could be found.

During this month we were able to arrange a crew to complete the harvest at Hukinga and to salvage some windthrow at the same time.

Production for the April period is as follows.

Output by grade at Reservoir Ridge/Clarkes Creek for April was:

Grade	Tonnes	%
Pruned Domestic	358.92	8.75
Pruned Export	0	0
Run of Bush	1264.44	30.82
S/A Grade	490.33	11.95
L Grade	-18.78	-0.46
R Grade	216.63	5.28
K Sawlog	565.30	13.78
Roundwood	0	0
K Rough	653.67	15.93
Pulp	280.64	6.84

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Grade	Tonnes	%
Xport Pulp	240.44	5.86
O/S Pulp	51.55	1.26
Total	4103.14	

Revenue was \$125,349.75 at an average of \$30.91 per tonne.

The recovery of windthrow at the Glider Club stand produced:

Grade	Tonnes	%
S/A Grade	118.16	40.15
L Grade	0	0
R Grade	11.95	4.06
K Sawlog	101.36	34.44
K Rough	45.66	15.51
Pulp	17.20	5.84
O/S Pulp	0	0
Total	294.33	

Revenue totalled \$7,603.46 at an average of \$25.83 per tonne. This is an excellent result for a block of 25 year old trees.

Hukinga

Grade	Tonnes	%
Pruned Domestic	121.69	15.14
S/A Grade	87.15	10.85
Douglas Fir	30.24	3.76
U Grade	159.38	19.84
F Grade	44.50	5.54
K Rough	243.14	30.26
Pulp	117.34	14.60
O/S Pulp	0	0
Total	803.44	

Revenue totalled \$18,714.68 at an average of \$23.29

Overall harvesting returned \$151,667.89 at an average of \$29.16 per tonne.

2. Silviculture Contracts

All silviculture is now complete. The next proposed activity will to replant

the harvested areas. This will commence as soon as the weather is suitable after 1 June. Quotations for planting and supply of seedlings remain at the same levels as last year.

3. **Plantation Forestry Operations**

We have continued to concentrate on the harvesting of as much of the windthrown trees as possible. With three crews operating, Contract supervision has taken up most of the available time.

We have now reached agreement with the Historic Places Trust over the method of harvesting the Martin block. We had initially anticipated that the harvest of windthrow in this block would require the use of the rail alignment but we now have access through Tunnel Gully and Plateau Road.

Some time has been spent reinforcing the bridge at the entrance to the Tunnel Gully Recreation Area to enable it to be used by logging trucks.

4. Forest Access

A further inspection of culverts and water tables was undertaken following the repairs after the February storms to reduce the risk of water damage over winter. We have decided to do some further remedial work on Road 7 in Puketiro, which involves cleaning and deepening water tables and installing an additional culvert. This road serves the Blow Fly and Kaika Mako blocks which, provided markets recover, will be harvested in the coming summer.

The additional roads constructed in Clarkes Creek are taking some time to settle because of the lack of drying in the air and their inherent "greenness". These roads are to access the windthrow, so it was not possible to construct them during summer.

There is still no acceptable access to Maungakotukutuku Forest. However, we have received a "flyer" from another forest owner in the area seeking to maintain access through Nikau Grove. There is a potential for us to gain access to this route through the neighbouring Kaitawa Forest, so we have responded to the flyer and now await developments.

5. Market Trends

The domestic sawlog prices are now starting to soften as supply well and truly exceeds demand. With the alternative of export on hold because of oversupply in Korea, the mills hold the upper hand. It is not unusual for mills to stop accepting wood by Wednesday, as their yards are full and they have sufficient to complete the week's milling.

When the oversupply of Korea was identified, Rayonier suggested that shipping should resume mid to late June for late July/August deliveries. To date, while prices have remained "soft", we have still been able to put logs on the port. Some other organisations have been diverted to the reclaim area at Kaiwharawhara and will face an additional transhipment cost to get the logs to ship's side. The situation was not assisted when a significant portion of the log marshalling area was taken out of use for resurfacing.

There are indications that the pruned market may be recovering. Prices in the United States have increased and the mills in the Central North Island are now offering \$130-\$140 for P1 pruned logs. As yet, these benefits have not filtered down to this area but it must happen soon.