
Greater Wellington Water

June/July 2007

Water Supply

June/July 2007

Water Supply

Review of operations for the period ended 31 July 2007

1. Items of note

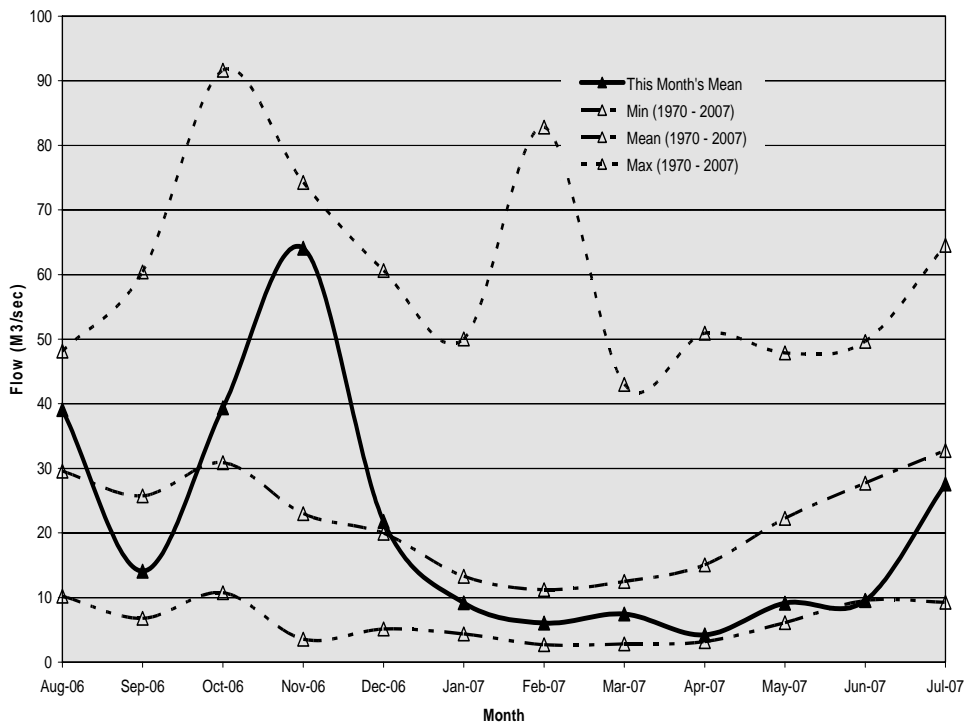
- The transfer of laboratory services from Greater Wellington Regional Council (GWRC) to ELS was completed as planned at the beginning of July. The majority of the equipment from the GWRC laboratory has either been sold or disposed of.
- Unfortunately one of the apprentices had to be dismissed because of absenteeism. This was the last step in a process worked through over several months.

2. Supply situation

There were no supply issues for the period.

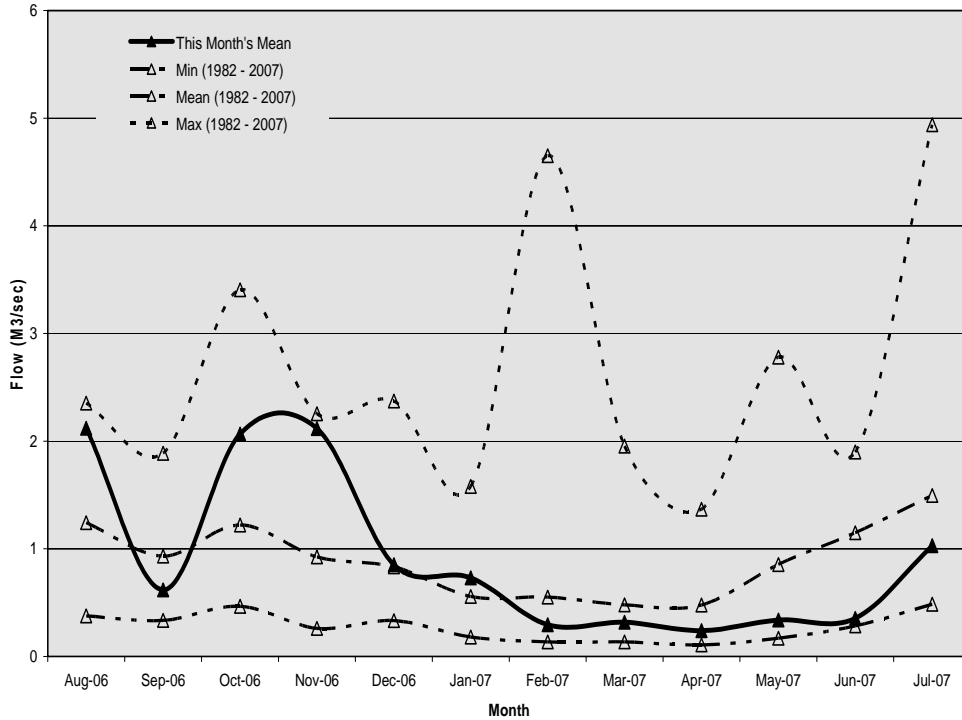
Hutt River flows

The monthly flow in the Hutt River for June was at the minimum. For July, the monthly flow was below average.



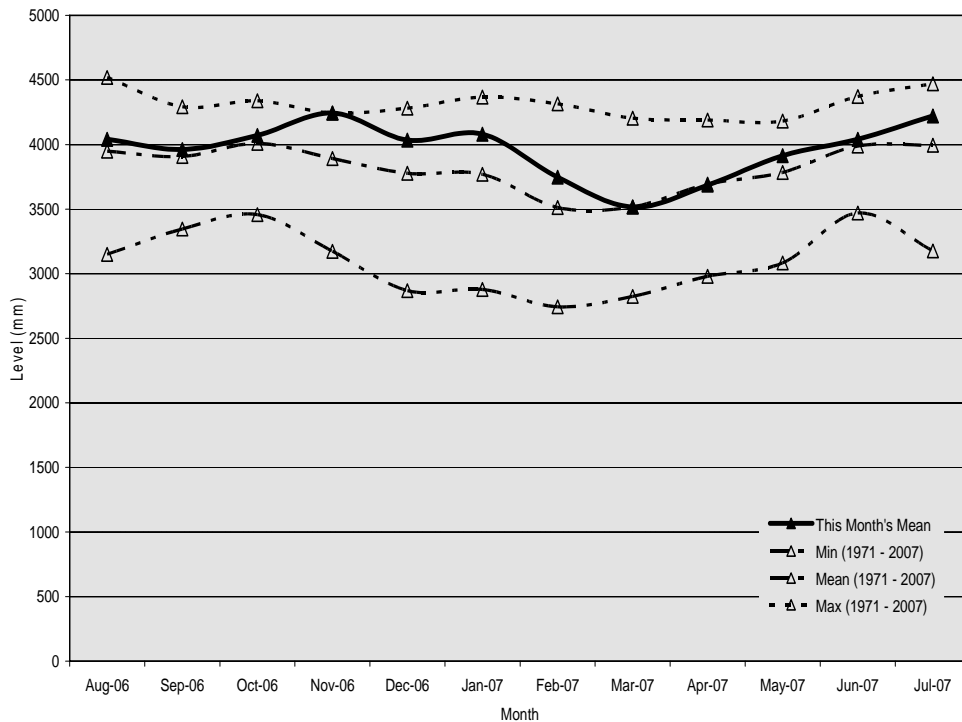
Wainuiomata River flows

The monthly flow in the Wainuiomata River in June was near the minimum. For July, the monthly flow was below average.



Aquifer levels

The water level in the Waiwhetu aquifer in June was above average. For July, the water level was above average.



3. Treatment plants

3.1 Te Marua

3.1.1 Quality

- There were no transgressions for the period but there were two Improvement Opportunity Forms (IOFs), one as a result of the fluoride dosing system being shut down for maintenance and the other for low treated water pH (<7.4 pH).

3.1.2 Health and safety

- There were no accidents or incidents during the period.

3.1.3 Environmental

- There was one transgression for the period where a small amount of hydrated lime dust was emitted from the lime room vents.

3.1.4 Operations and maintenance

- A major electrical storm on 21 June 2007 caused minor disruption to treatment plant operations. The plant was offline for 55 minutes.
- The main underground cable supplying power to the Kaitoke weir was damaged by Biosecurity staff members installing a public warning notice. Staff members were contacted and reminded of the need to be aware of underground services.

3.2 Wainuiomata

3.2.1 Quality

- There were no IOFs or transgressions for the period.

3.2.2 Health and safety

- There were no accidents or incidents during the period.

3.2.3 Environmental

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

3.2.4 Operations and maintenance

- Work being completed on the inlet channel for the filter loading optimisation project.
- Physical work continued on the filter to waste project.
- A lime transfer pump failed and required replacing.
- Work commenced on the waste water recovery centrate to sewer project.

- Modifications and repairs were carried out on the dissolved air flotation saturators.

3.3 Waterloo and Gear Island Water Treatment Plants

3.3.1 Quality

- There were no IOFs or transgressions for the period.
- The new quality compliance structure commenced during this period.

3.3.2 Health and safety

- There were no accidents or incidents for the period.
- A rodent problem was identified at Gear Island and a pest control contractor has been engaged.

3.3.3 Environmental

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

3.3.4 Operations and maintenance

- Dual stream operational research and investigations continued during the period.
- Cleaning of the water treatment reservoir commenced.
- An upgrade of all the lighting around the plant was completed.
- Pump performance equipment was trialled on Wellington Pump No. 2.
- Annual vibration analysis testing was carried out during the period.

4. Distribution

4.1 Health and safety

- There was one minor accident during the period, where a staff member strained/sprained their arm.

4.2 Environmental

- There were no environmental issues during the period to report.

4.3 Operations and maintenance

- The Gracefield Reservoir was drained and isolated for Hutt City Council to commence strengthening work.
- Work continued at the Randwick valve chamber. The tunnel entrance was filled in with sand and blocked off. The chamber lids were cleaned out, joints resealed, water tested and the lifting eyes cleaned up.

- The 1,050 mm pipe was shutdown at Tunnel Grove for scouring. The leaking insertions on the 900 mm butterfly valve were repaired, new pipework installed and the valve plugged. The 1,050 pipeline was recharged and the new pipework tested.
- The existing electromagnetic flow meter at Thorndon was excavated. Concrete was boxed and poured, and the new valve chamber steel lined.
- The pipework for the Kingsley control valve was completed and changes were made to the reservoir pipework.
- The OK pipeline from Thorndon Pumping Station to the rail overbridge to Johnsonville was recharged and flushed for recommissioning.
- Annual scour valve exercising for the Wainuiomata East area, annual checks and servicing on the Wainuiomata Reservoir to Orongorongo air valves and six monthly readings on the private supplies were all completed.

4.4 Pipeline leaks

- There were three leaks during the period:
 - Repairs were carried out on the Plimmerton No. 2 branch line.
 - Repairs were carried out on the Pinehaven branch line at 5 Wyndham Road.
 - The 1,050 pipeline at Randwick had to be excavated to repair a leak. This leak cannot be repaired at present, as Wainuiomata is offline.

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)													Sep - Slipped off pipe
Hours worked	2473	2495	2535	2444	3399	2473	1650	2363	2620	2386	4111	2715	Feb - Strained back / bruised head / sprained shoulder and lower back
Employee numbers	16	16	15	15	15	15	17	17	17	17	17	17	May - Rope burn on hand
Incidents	0	0	1	0	0	0	0	3	0	0	1	0	
Days lost	0	0	0	0	0	0	0	3	0	0	0	0	
Incidence rate (number of incidents per 100 workers)	0	0	7	0	0	0	0	18	0	0	6	0	
Frequency rate (incidents per 10,000 hours exposure)	0	0	4	0	0	0	0	13	0	0	2	0	
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0	0	0	0	13	0	0	0	0	
DISTRIBUTION													Jul - Cut hand / Slipped and fell against ute
Hours worked	1423	1541	1573	1491	2034	1507	784	1356	1578	1336	2577	1485	Aug - Hit head on ute door
Employee numbers	10	10	10	10	10	10	11	11	11	11	11	10	Oct - Sawdust blew into eyes
Incidents	2	1	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)	20	10	0	0	0	0	0	0	0	0	0	0	
Frequency rate (incidents per 10,000 hours exposure)	14	6	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	
ENGINEERING CONSULTANCY													Aug - Hit head on bookshelf
Hours worked	1531	1656	1652	1624	2521	1648	760	1320	1740	1428	2099	1382	
Employee numbers	10	12	12	12	12	12	12	12	12	11	11	10	
Incidents	0	1	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	8	0	0	0	0	0	0	0	0	0	0	
Frequency rate (incidents per 10,000 hours exposure)	0	6	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	
SUPPORT													Nov - Should bruised by door blowing in wind
Hours worked	1035	1059	1122	1046	1572	1057	671	992	986	895	1452	1012	
Employee numbers	7	7	7	7	7	7	7	7	7	7	7	7	
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	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	785	1120	770	
Employee numbers	7	6	6	6	6	6	6	6	6	6	6	6	
Incidents	0	0	0	0	0	1	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	17	0	0	0	0	0	0	
Frequency rate (incidents per 10,000 hours exposure)	0	0	0	0	0	12	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	
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	672	1080	716	
Employee numbers	5	5	5	5	5	5	5	5	5	5	5	5	
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	Jul - Slipped and strained leg
Hours worked	466	492	421	386	526	308	245	369	390	400	664	441	Jul - Tripped on vine and hurt knee and back
Employee numbers	3	3	3	3	3	3	3	3	3	3	3	3	
Incidents	2	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)	67	0	0	0	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	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	

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	7901	13102	8520
Employee numbers	58	59	58	0	58	58	61	61	61	61	61	60
Injuries	4	2	1	0	0	1	0	3	0	0	1	0
Days lost	0	0	0	0	0	0	0	3	0	0	0	0
Frequency rate (incidents per 10,000 hours exposure)	5	2	1	0	0	0	0	4	0	0	1	0
Severity rate (days lost to injury per 10,000 hours worked)	0	0	0	0	0	0	0	4	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

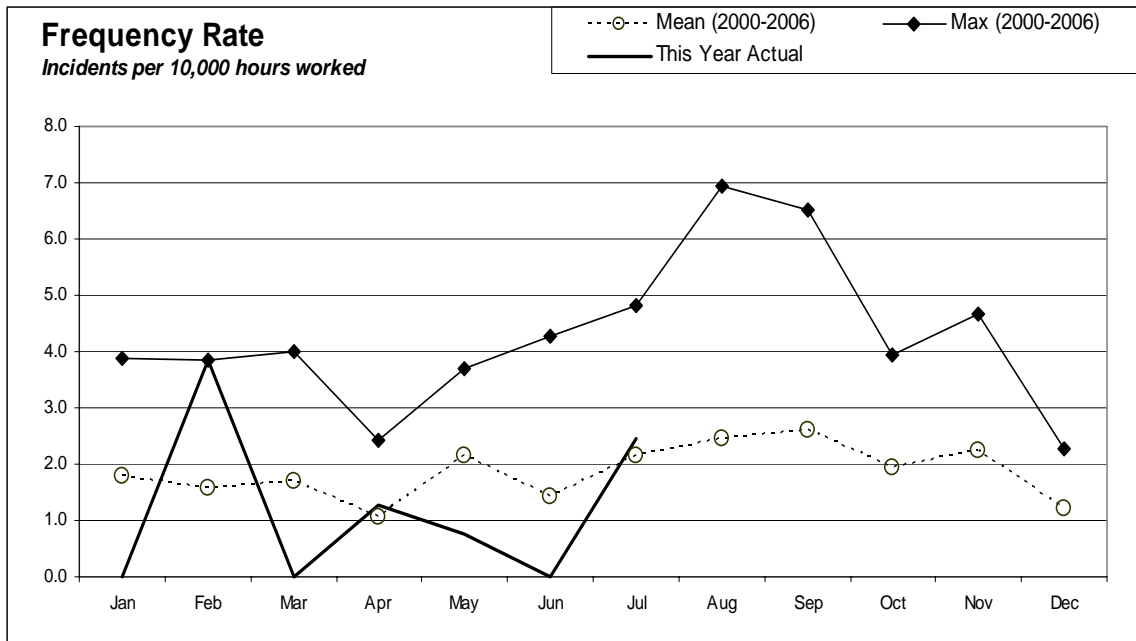
Water Supply and Forestry Health and Safety Data from July 2007 - Total Injuries

PRODUCTION (+ 4 OPS ADMIN)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Hours worked	2675												
Employee numbers	16												
Incidents	0												
Days lost	0												
Incidence rate (number of incidents per 100 workers)	0												
Frequency rate (incidents per 10,000 hours exposure)	0												
Severity rate (days lost to injury per 10,000 hours worked)	0												
DISTRIBUTION	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul - Sprained arm
Hours worked	1770												
Employee numbers	9												
Incidents	1												
Days lost	0												
Incidence rate (number of incidents per 100 workers)	11												
Frequency rate (incidents per 10,000 hours exposure)	6												
Severity rate (days lost to injury per 10,000 hours worked)	0												
ENGINEERING CONSULTANCY	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Hours worked	1396												
Employee numbers	9												
Incidents	0												
Days lost	0												
Incidence rate (number of incidents per 100 workers)	0												
Frequency rate (incidents per 10,000 hours exposure)	0												
Severity rate (days lost to injury per 10,000 hours worked)	0												
SUPPORT	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Hours worked	992												
Employee numbers	7												
Incidents	0												
Days lost	0												
Incidence rate (number of incidents per 100 workers)	0												
Frequency rate (incidents per 10,000 hours exposure)	0												
Severity rate (days lost to injury per 10,000 hours worked)	0												

LABORATORY	Jul	Aug	Sep	Oct	Nov0	Dec	Jan	Feb	Mar	Apr	May	Jun	
Hours worked	306												
Employee numbers	1												
Incidents	0												
Days lost	0												
Incidence rate (number of incidents per 100 workers)	0												
Frequency rate (incidents per 10,000 hours exposure)	0												
Severity rate (days lost to injury per 10,000 hours worked)	0												
STRATEGY AND ASSET	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Hours worked	716												
Employee numbers	5												
Incidents	0												
Days lost	0												
Incidence rate (number of incidents per 100 workers)	0												
Frequency rate (incidents per 10,000 hours exposure)	0												
Severity rate (days lost to injury per 10,000 hours worked)	0												
FORESTRY	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul - Motor vehicle accident
Hours worked	324												
Employee numbers	3												
Incidents	1												
Days lost	0												
Incidence rate (number of incidents per 100 workers)	33												
Frequency rate (incidents per 10,000 hours exposure)	31												
Severity rate (days lost to injury per 10,000 hours worked)	0												

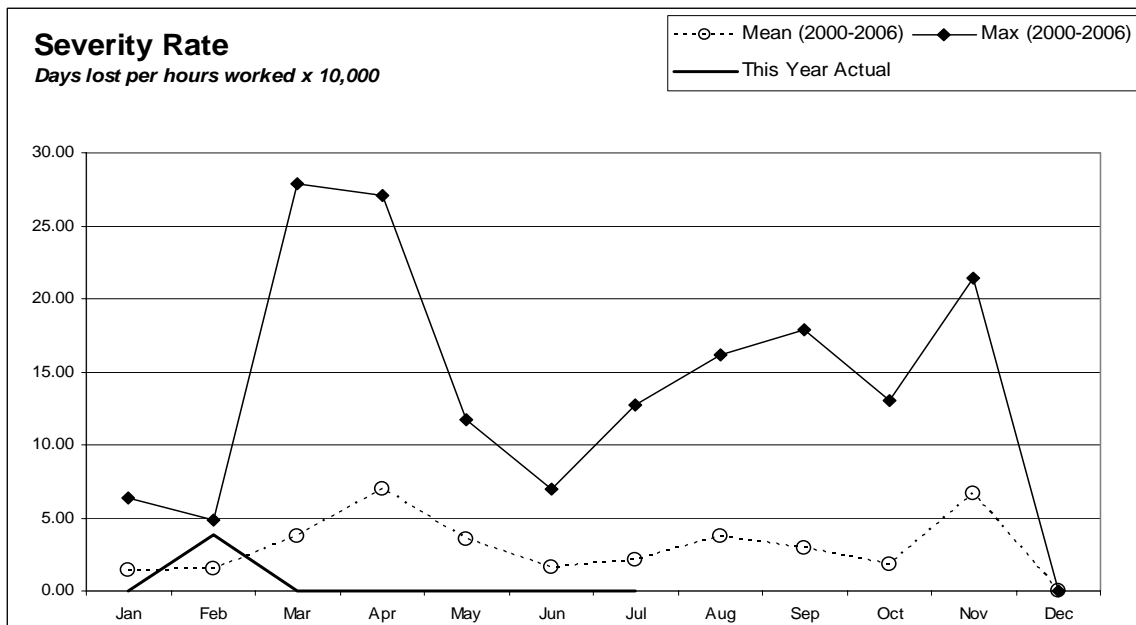
Water Supply and Forestry Combined	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Hours worked	8178											
Employee numbers	53											
Injuries	2											
Days lost	0											
Frequency rate (incidents per 10,000 hours exposure)	2											
Severity rate (days lost to injury per 10,000 hours worked)	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

May - 1



Lost days

0

Engineering Services

June/July 2007

Engineering Services

Review of operations for the period ended 31 July 2007

1. Asset management

- Key projects and their status are as follows:
 - Installation of the three monitoring wells on the Petone Foreshore has been completed. Arrangements are being made to install the instrumentation to monitor water level and conductivity to check for saltwater intrusion.
 - Construction of a portable powdered activated carbon plant to combat taste and odour problems has been completed and will be programmed and commissioned in October.
 - Installation of the effluent pipe from the Wainuiomata Water Treatment Plant centrifuge to the Wainuiomata sewer in Hine Road is under way and on schedule.
 - Installation of the filter to waste pipework at Wainuiomata Water Treatment Plant has been completed and is now ready for commissioning.
 - A new control valve has been installed in the Tunnel Grove valve chamber. Walkways and electrical control equipment are to be installed soon.
 - A bypass pipeline for the Pukerua Bay Reservoir is programmed for installation in August/September 2007. The bypass will provide emergency water supply to Pukerua Bay in the event of failure. The bypass will also allow an inlet standpipe to be installed in the reservoir to protect against water loss in the event of supply pipe failure.
 - Randwick Pumping Station is being decommissioned. Pipework has been modified and a new access installed into the Randwick valve chamber. This work is nearing completion.
 - The housing for an actuator on the Silverstream line valve has been fabricated and will be installed on-site to allow fitting of the actuator, power supply and controls. The actuator will protect from water loss if the pipeline ruptures in seismic activity.
 - New pumps have been manufactured at KSB Ajax Pumps (NZ) Ltd's expense to replace the previously rejected pumps at the new Karori Pumping Station. The replacement pumps have been dispatched from China and are expected at the end of August. KSB Ajax Pumps has manufactured and is currently testing new mounting stools in Australia. The old Kelburn pumpsets are continuing to supply water

in the interim. The existing Karori Pumping Station will be decommissioned following successful commissioning of the new pumps.

- New air valves are to be installed on both Wainuiomata water mains to protect the pipes from damage because of pressure surge.
- A cross connection is to be installed between the Wainuiomata water main and Hutt City Council reticulation system to provide an emergency supply if the Wainuiomata Reservoir is out of action.
- Construction of a new pumping station building at Grenada funded by Wellington City Council (WCC) is largely complete. A final inspection of the electrical equipment is imminent. Construction of a new reservoir above Grenada to be supplied by the pumping station has been delayed but a rising main to it is under construction. Since GWRC will take over ownership of the pumping station and the rising main on completion, the standard of the work is being carefully monitored.

2. New water sources

- Stage 2 studies of the potential to take water from the Upper Hutt aquifer are progressing well. Two 300 m diameter exploration wells have been drilled and tested. The first produced a flow of 4 million litres per day (MLD) and the second 3 MLD. These flows are a little less than hoped for. Following a detailed analysis of these results a decision will be made on whether drilling a third exploration well is warranted.
- 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 to allow more water to be abstracted in low flow conditions. Fish passage surveys in the upper reaches of the river have been completed, a draft report on algae issues received, and a survey of macroinvertebrates conducted. Possible changes to the *Regional Freshwater Plan* are being investigated to facilitate the taking of more water whilst providing greater assurance that ecological values will be safeguarded, particularly downstream of Birchville.

3. Quality assurance

- Our records indicate that compliance with the new *Drinking-Water Standards for New Zealand 2005* is being achieved at all four water treatment plants.
- A comprehensive dossier of information has been provided to Hutt Valley District Health Board staff members to enable them to grade the three zones in the bulk distribution system. The target is to achieve an “a1” grading, the highest available. This is important because a

downstream reticulation zone cannot be given a higher grading than the bulk zone supplying it. Information to enable the grading of the Gear Island Water Treatment Plant is also being collected. It is expected that the previous B grading can be lifted to A1.

- The Health Select Committee recommendations for changes to the *Health (Drinking Water) Amendment Bill* have been released. A number of changes are recommended, but none impacts directly on Greater Wellington Water (GWW). The proposed date for compliance with the main aspects of the legislation, including the preparation of Public Health Risk Management Plans, is 1 July 2009 for large water suppliers such as GWW.

4. Environmental

- The sealing of the scour pipes for the Wainuiomata Lower Dam and filling of the reservoir to create the wetland behind the dam has been programmed for September/October, after the trout spawning season.
- Power factor correction equipment is to be installed at the Waterloo Water Treatment Plant this financial year.
- The three sentinel wells along the Petone Foreshore have been completed and instruments to provide an early warning of saline intrusion into the Waiwhetu aquifer will be installed in August. This work is being undertaken jointly with the Environmental Monitoring and Investigations Department, and will reduce the risk of contamination of the aquifer from sea water.
- A consultant is preparing an application for consent to pump groundwater from trench excavations. This follows a situation at Hutt Park when GWRC Environment Division stopped trenching work because the flow of water being pumped from the excavation exceeded the permitted use rule in the GWRC *Regional Freshwater Plan* for pumping from groundwater.
- A project to reduce the volume of lime waste at Wainuiomata Water Treatment Plant is planned. Reuse of waste lime was investigated but found to be impractical because of the high percentage of impurities in the waste.
- Although not yet confirmed in writing, we have received verbal advice of full compliance with all resource consents for the 2006/7 financial year.

5. Catchment management

- A further catchment tour on 15 June attracted only 8 participants, no doubt because of the time of the year.

- The professional hunters undertook a further hunt for pigs and while they were in the area checked out the Judas goats. At this stage their written report has not been received.

Marketing and Design

May 2007

Marketing and Design

Review of operations for the period ended 31 July 2007

1. Items of note

- Water Supply Annual Report. A draft content list was researched and circulated to senior water supply managers for comment. Following that feedback, content text was written, and will be circulated for a manager feedback shortly. The process of rounding up and analysing the water supply data needed to furnish the report is well advanced. The report is due to be published at the end of September.
- Wellington Water Management Plan. We have received and incorporated customer comments on the draft brief for water use behaviour and attitude research. The revised brief has been reviewed by GWRC Water Supply senior managers and will be sent to three providers for comment shortly. The aim of the project is to identify behaviour and attitudes about water use and conservation, and the level of ownership of water-efficient products. The research will strengthen the Technical Report and identify public support for various aspects of demand management. We provided an update on water conservation and demand management matters to the June meeting of Wellington City Council's Environmental Reference Group.
- Water Supply Service Level Agreement. We are continuing to work on further refinements to the agreement with Capacity, to satisfy customer concerns about some site-specific targets for level of service.
- Water History Update. Various image related and style matters were ironed out. The document will receive a final proof read and be printed as soon it receives internal sign-off.
- Treatment Plant Visits and Presentations. There were four treatment plant visits during June and July, involving some 54 people.
- Media. We made one media release during the reporting period, noting award winning construction work by the Contractor on our Wainuiomata Lower Dam lowering project.

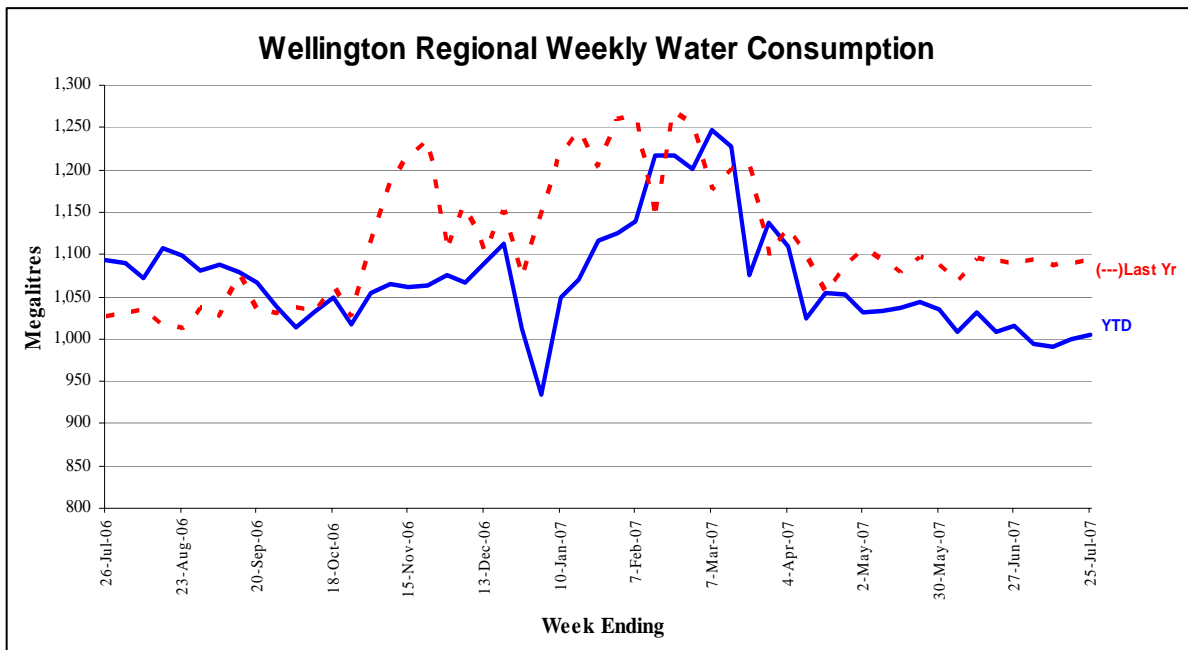
2. Water usage

The volumes of water supplied during June and July were typical for the time of year. June 2007's daily supply average of 144.7 ML was very close to those for four of the previous five years (2001-2006), of between 144.4 ML and 145.4 ML. The only exception, June 2006, saw higher demand – averaging 155.3ML – because of a major leak. Likewise, daily supply during July 2007 averaged 142.5ML, while the range of July averages for the last five years excluding 2006 was 143.7ML to 145.7ML.

Supply during July 2006 averaged 155.6ML, again because of a major leak. Setting aside 2006, these results are encouraging given the steadily increasing supply population estimates over recent years.

For the metering year (April 2007 to March 2008), supply for the 17 weeks to 25 July was 17,474 ML, 1,073 ML or 5.8 percent less than for the same period a year ago. Most of this improvement (904 ML or 84 percent) relates to Wellington, where the previous year figure was inflated by a major leak, although all four customers are currently using less water year-on-year. Comparing the first 17 weeks of the 2007/8 metering year with the equivalent period from two years ago shows the current year 101 ML lower.

Water sold over the last 12 months



Water sold during the metering year to date (April 2007 to March 2008)



Forests Department

May 2007

Forests Department Review of operations for the period ended 31 July 2007

1. Metro Forests

1.1 Log Harvest Contract

Both crews are now based in Valley View for the balance of the winter. Now they are set up it is possible for them to produce good volumes. Unfortunately the lack of capacity at the wharf and an over supply to the domestic mills has prevented us from taking advantage of the available production. At the end of July the crews were put on to 80 percent of standard production.

The oversupply in the domestic market has arisen from those harvesting operations which either put all their production into export or upped production to take advantage of the export price spike being unable to cease or reduce harvesting as export prices retreated and diverting all available production to the export market. It is anticipated that as these operations wind down demand from domestic mills will return to normal.

Log 6 is based at Parry's Bush and Log 36 at Kilometre Paddock, both about 8.5 km from the Totara Park entrance.

Production for June was 6,172 tonnes for revenue of \$219,336 and July 6,042 tonnes for \$161,364. Prices for export logs fell a further \$10 to \$15 in July on the back of an oversupply in Korea, increased shipping costs, and the effect of the New Zealand and United States dollar exchange rates.

Table 1 – Log 36 - Puketiro 1.01 - Output by Grade – Blowfly- June 2007

Grade	Tonnes	%
Pruned	192.39	14.69
Part pruned	0	0
S Grade	312.54	23.87
L Grade	0	0
R Grade	86.54	6.61
K Sawlog	324.89	24.81
Roundwood	0	0
K Rough	220.82	16.86
Dom Rough	43.04	3.29
Pulp	99.04	7.56
O/S Pulp	0	0
Export pulp	30.08	2.3
Total	1,309.34	

Revenue for June totalled \$40,638.45 at an average of \$31.04 per tonne

Table 2 –Log 6 - Valley View - Output by Grade – Parry's Bush

Grade	June 2007	
	Tonnes	%
S Grade	2,164.14	44.51
L Grade	0	0
R Grade	398.85	8.20
K Sawlog	1,910.54	39.29
Roundwood	0	0
K Rough	0	0
Dom Rough	137.74	2.83
Pulp	251.29	5.17
O/S Pulp	0	0
Export pulp	0	0
Total	4,862.56	

Revenue for May was \$178,697.59 at an average of \$36.54 per tonne.

Table 3 – Log 36 Valley View 12.01- Output by Grade – Kilometre Paddock

Grade	July 2007	
	Tonnes	%
S Grade	1,320.64	40.81
L Grade	0	0
R Grade	438.38	13.55
K Sawlog	508.64	15.72
Roundwood	0	0
K Rough	487.56	15.07
Dom Rough	0	0
Pulp	481.02	14.86
O/S Pulp	0	0
Export pulp	0	0
Total	3,236.24	

Revenue for July was \$80,512.90 at an average of \$24.88 per tonne

Table 4 – Log 6 Valley View 4.01- Output by Grade – Parry's Bush

Grade	July 2007	
	Tonnes	%
S Grade	767.09	27.34
L Grade	236.62	8.34
R Grade	555.44	19.79
K Sawlog	1,108.18	39.49
Roundwood	0	0
K Rough	0	0
Dom Rough	13.04	0.46
Pulp	125.74	4.48
O/S Pulp	0	0
Export pulp	0	0
Total	2,806.11	

Revenue for May was \$80,851.47 at an average of \$29.50 per tonne

Total revenue for June was \$219,336.04 for 6,171.9 tonnes at an average of \$35.37 per tonne
Total revenue for July was \$161,364.36 for 6,045.35 tonnes at an average of \$27.03 per tonne

As at 1 August there were 42 loads sitting on the skids awaiting transport. This backlog has since been cleared

1.2 Silviculture Contract

The Silvicultural Contractor has managed to employ some more staff and in the past two months has completed a further 21.8 ha plus an additional 2.6 ha which was outside their Contract. The Contractor now has a block of 4.4 ha in Pakuratahi and 25 ha of a 36 ha block in Whakatikei to complete.

This season's planting began in mid-June and to the end of July 104,000 seedlings have been planted.

1.3 Plantation Forestry operations

Visits by consultants for both the new water source and the wind farm proposal have eased over the past couple of months. RES has indicated that they anticipate increased activity leading up to Christmas and are in the throes of appointing a company "guide" to conduct the consultants to the various sites. We will ensure the guide is familiar with the area and capable of traversing the country.

We are actively seeking a part time harvesting crew, preferably with a forwarder to assist the two present crews. The past three years have shown that a two crew harvesting operation can only safely harvest around 65,000 tonnes per annum (66,463 tonnes in the June year past) and if we are to achieve the budgeted 70,000 tonnes some assistance is required. It will not be easy to find a crew as they will need other work to fill the balance of their year. The desire for a forwarder operation further complicates the issue.

Both the extension to the road into Parry's Bush and the road into Kilometre were remetalled after about three weeks use. Both now have sufficient metal but the grades at Parry's Bush along with shading and a hairpin corner combine to prevent the road drying enough for trucks to consistently climb out unassisted. During the wet weather trucks still have to be towed with a logging skidder and a period of relatively fine weather will be necessary so the road can be reshaped and "sealed" with fines before trucks can be expected to climb out of the skid under their own power.

The access into Kilometre Paddock is relatively flat and while it is also wet the trucks have no difficulty coming out loaded without assistance. A new skid is being prepared at Kilometre and, with the road extension also being relatively flat, no difficulties are anticipated.

It is hoped to carryout an inspection at Blow Fly this month to identify the

road line to the next skid so resource consents to cross the Wainui Stream can be obtained and the culvert installed in readiness for the return of Log 36 in late spring.

The grading of Puketiro Road is yet to be done.

For some time we have been concerned over a growing mob of feral cattle in Puketiro. We had received comments that the logger and others had been “stood up”, particularly by the bulls in the mob. We have permitted the grazers from both Battle Hill and Fernhill (neighbouring property) to endeavour to remove the cattle with very limited success. With the increase in activity arising from the wind farm activities, it was decided to use the services of the professional cullers used in the water catchments to reduce the numbers. The cullers were successful in culling four cattle and they located a further five that had been culled by someone else. The Fernhill grazer had been successful in herding a mob through into Fernhill and into their cattle yards. The mob was ear tagged but broke out of the yards before they could be trucked away. The boundary fence is definitely not “feral cattle proof”, so we may receive further visits.

Fernhill, the property to the south of Puketiro, has been sold to the New Zealand Superannuation Fund. I have made contact with their agent in Auckland and we will meet when he is next in Wellington.

1.4 Forest Access

Maungakotukutuku access remains the only significant problem, with the only access requiring two crossings of the Maungakotukutuku Stream between the end of the public road and our boundary.

Recently I was contacted by a neighbour adjacent to the Mangaroa block. He had earlier intimated that he may have been able to assist us with access out of the block at harvest time. He has purchased the adjacent block and is prepared to negotiate an access agreement when harvesting falls due. This offer is very fortuitous as our current access is barely 3 m wide and meets the public road at right angles. It would not be possible for a loaded truck and trailer to turn from the present access onto the public road. We had been looking for other accesses or land purchases but if this offer can be confirmed this will no longer be necessary.

1.5 Market Trends

The dollar has now eased to the mid-70s but oversupply in Korea and continuing high shipping costs have ensured the earlier reductions in prices have continued. As mentioned above, the domestic market, which has been undersupplied for most of this calendar year, finds itself oversupplied as traders move out of export markets into domestic market in an effort to clear their stocks.

Rayonier anticipates the domestic market will recover in four to six weeks

but it may be November before the stocks in Korea are cleared. The trend in export prices can be demonstrated with the following table

Grade	July 2007 \$	June 2007 \$	March 2007 \$	December 2006 \$
A	63.21	80.00	100.56	72.88
K	63.54	76.00	97.19	71.62
KI	52.21	69.00	87.86	64.04
KX	-	66.00	54.87	40.14

2. Reserve Forests

2.1 Tauanui logging

Output by Grade

Grade	June 2007	
	Tonnes	%
S Grade	1,154.51	68.48
A Grade	163.59	9.70
R Grade	219.79	13.03
K Sawlog	62.43	3.70
Pole	86.65	5.14
K Rough	0	0
Dom Rough	0	0
Total	1,686.97	

Revenue for June was \$50,804.22 at an average of \$30.50 per tonne.

At the time this report was prepared the breakdown by grade for the July harvest was not available.

Revenue for July was \$38,944 at an average of \$27.74 per tonne.

June was another good production month, with 1,687 tonnes being produced. This brought the total harvest for the year to 12,702 tonnes.

Post-drought conditions allowed the Contractor drier than usual access and production flowed smoothly. While the export markets held, material that did not meet the domestic market grades was cleared whenever possible. The volume of timber stockpiled at the wharves finally collapsed the current export opportunity. Alternative markets were found for the export logs on the skids and the contractors were refocused on the domestic grades. Our buyers can accommodate the limited volume of lower grade material arising from the current operations. All of the July production was sold to domestic outlets.

The change to the locally based Cartage Contractor has seen much more regular uplift from the skids. As a result, the Logging Contractor is much

happier and this is reflected in the volumes harvested and carted. There are still some issues with truck scheduling which sees some product types accumulating as the available number of trucks struggle to make an extra round trip during the working day.

2.2 Access

The roads to the logging skids have held up remarkably well, with no maintenance required in the last quarter. This highlights the benefits of doing road formation work ahead of the logging operations and allowing a few months for new formations to settle. This is particularly important with the onset of winter.

Options have been explored to identify the most suitable site to cross the Tauanui River. A specialist forest roading engineer has visited the site and is currently preparing a report with recommendations.

The river has several sections that are abnormally steep in gradient as a result of past debris flows and blockages. Degradation through these stretches creates an unstable riverbed so that a simple ford crossing may not be sufficient. There are risks that a battery culvert or concrete base would be undermined through degrading and high river flows. In addition, high rainfall in the large upstream catchment has the potential to trap contractors on the wrong side of the river, leading to safety issues and the potential for stand-down payments to logging contractors.

It is anticipated that the best option may be some form of bridge.

2.3 Silviculture

Fifty-one hectares of pruning and 25 hectares of thinning were completed for the year. This is not a large area by comparison to previous years but represents the priority treatment required in the stands replanted following harvesting in Hiwinui. Typically these stands are made up of a combination of regeneration supplemented by planted seedlings to ensure coverage.

The resulting high stocking has the benefit of reducing branch size, which is good for branch removal at pruning and potential clearwood growth, but this is offset by greater hindrance in tree selection and moving through stands.

2.4 Planting

Six thousand seedlings have been planted in the cutover in Tauanui to supplement natural regeneration in the area that has been harvested since the end of last winter

2.5 Fire danger

The recent rainfall has provided the much needed relief from one of the most severe fire seasons on recent record. There were five rural vegetation fires

on the night of 6 June. Resources were stretched with some fire service appliances attending multiple incidents without returning to base. Resources were brought in from the Wellington region to assist.

Extreme winds were a major factor in these fires, the most serious of which was in a private plantation at Te Wharau. This fire started from power line arcing where a live power line was running through a mature stand.

This particular block was bounded by Juken Nissho Forest (ex-Ngaumu State Forest) and a Forest Enterprises Forest. Prompt action limited the fire and prevented it spreading in to a significant forest environment. Despite extreme wind conditions, the fire was kept on the ground and contained averting a potential disaster.

There has been considerable discussion around the Fire and Rescue Service legislation proposal.

It is considered that, if the legislation continues to move forward, it will be at least two years before a new structure will be in a position to deliver the proposed service. As a result, regional and local interests are continuing to develop rural fire management resources based on the current legislation. Some of these resources are failing through age and particularly rural fire appliances are becoming obsolete with replacement schedules not filling existing needs.

2.6 Rough Hill boundary fence

The fence line has finally been satisfactorily cleared. Mr Franks' machinery and his staff skills have not been as efficient as we would expect professional larger contract machine to be. Our concerns over excessive soil disturbance have limited the amount of tracking alongside the fence line.

The small machine had considerable difficulty handling some of the steeper rocky sections. We would not agree to the large amount of sidling tracking and further deviation from the agreed route because of the potential for land destabilisation in ground now covered with native regeneration.

Despite the agreement being based on a conventional fence, Mr Franks is pushing for a deer fence on the information that he has been provided stating that there is no difference in cost.

Now that the line has been cleared and accurately measured materials have been accurately estimated and quotations obtained for a conventional fence and a deer fence from an independent provider. Quotations for the materials required for a deer fence are 50 percent higher than a conventional fence. Erection costs were estimated to be \$4.00 per metre higher for deer fence. In addition, we believe that the ongoing maintenance costs would be higher for a deer fence. We have asked Mr Franks to provide an itemised quotation to substantiate his advice that there is no difference in cost.