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# Water Supply

July 2002

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# Operations Group

## July 2002

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## Operations Group Review of Operations for the Period Ended 31 July 2002

### 1. Items of Note

- A routine period during which the treatment plants continued to operate satisfactorily. However, concern is expressed at the effect that the utilisation of the new polymer at Wainuiomata is having on the performance of the filters. This has resulted in reduced filter run times and investigations are in-hand to optimise the operation.

### 2. Water Quality

A total of 278 samples from trunk mains were tested for coliform organisms. None of these samples tested positive.

A total of 51 samples of treated water from treatment plants were tested for faecal coliforms. None of these samples tested positive.

Secchi disc water clarity in the north lake at Te Marua varied between 2.7 m and 3.4 m, and in the south lake between 3.5 m and 4.2 m. These are considered satisfactory.

The dominant phytoplankton were as follows:

- North lake: *Staurastrum*, *Mougeotia*, *Ankistrodesmum*
- South lake: *Cosmarium*, *Ankistrodesmum*, *Staurastrum*,

*Cosmarium* and *Staurastrum* produce a grassy smell when abundant. *Mougeotia* is also a filter clogging algae. *Ankistrodesmum* produces a grassy musty smell when abundant.

Dissolved oxygen (10.9-12.4 mg/L) was satisfactory.

pH values were satisfactory (7.2-7.8).

*Giardia* and *Cryptosporidium* results were as follows:

Te Marua Water Treatment Plant Intake (BW02)

- |         |                             |
|---------|-----------------------------|
| 9 July  | ) No <i>Giardia</i>         |
|         | ) No <i>Cryptosporidium</i> |
| 16 July | ) No <i>Giardia</i>         |
|         | ) No <i>Cryptosporidium</i> |
| 23 July | ) No <i>Giardia</i>         |

30 July ) No *Cryptosporidium*  
          ) No *Giardia*  
          ) No *Cryptosporidium*

#### Wainuiomata Water Treatment Plant (BW21)

8 July ) Low *Giardia*  
          ) Low *Cryptosporidium*

17 July ) Low *Giardia*  
          ) Low *Cryptosporidium*

23 July ) No *Giardia*  
          ) No *Cryptosporidium*

29 July ) Low *Giardia*  
          ) Low *Cryptosporidium*

#### Guidelines Criteria

0-10 oocysts per 100 litres = low  
10-50 oocysts per 100 litres = medium  
>50 oocysts per 100 litres = high

### 3. Supply Situation

The bi-monthly seasonal forecast for July/August 2002 issued by the Meteorological Service is as follows:

For Wellington

**Rain:** Near normal

**Wind:** Near normal in July, northwest winds increasing in August

**Temperature:** Reducing closer to normal after a mild start to winter

**Sunshine:** Near normal

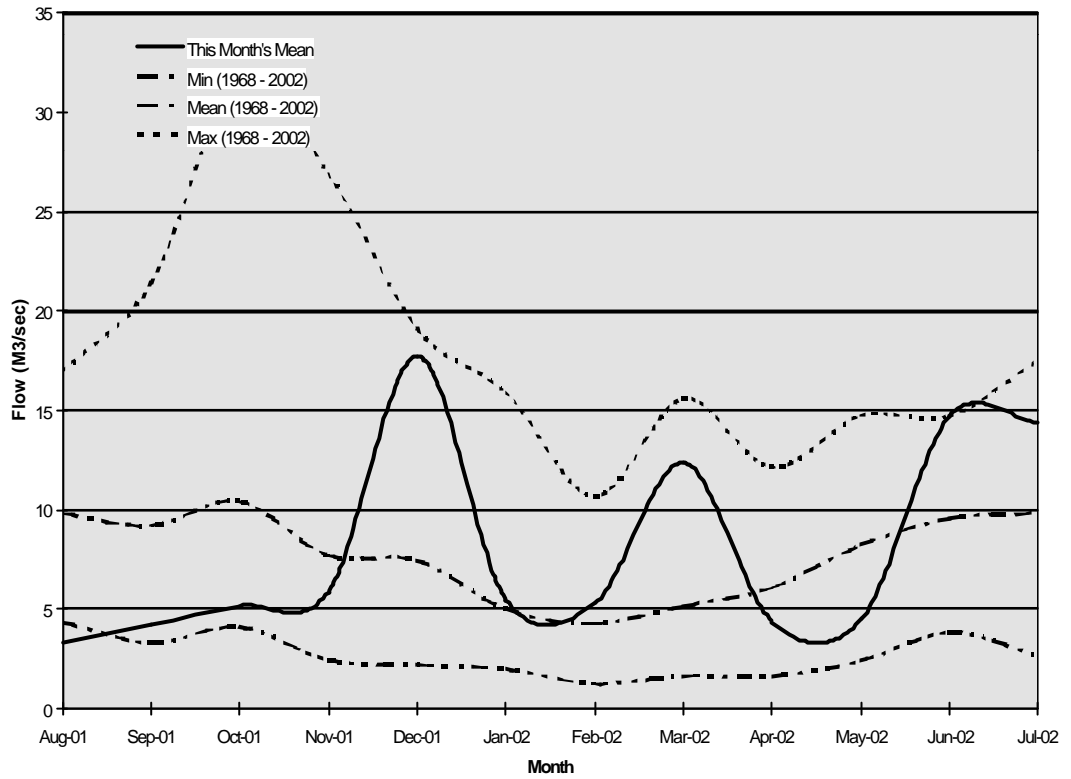
**Confidence:** Moderate

The main weather pattern should continue to be passing cold fronts, each bringing a period of showers. Between these fronts there are usually 2 or 3 dry days. A few of these fronts may be followed by vigorous south-to-east changes, bringing a day or two of sleet and snow to the mountains.

The northwest winds have been strong at times early in winter and are expected to take a rest in late July, but should return during August.

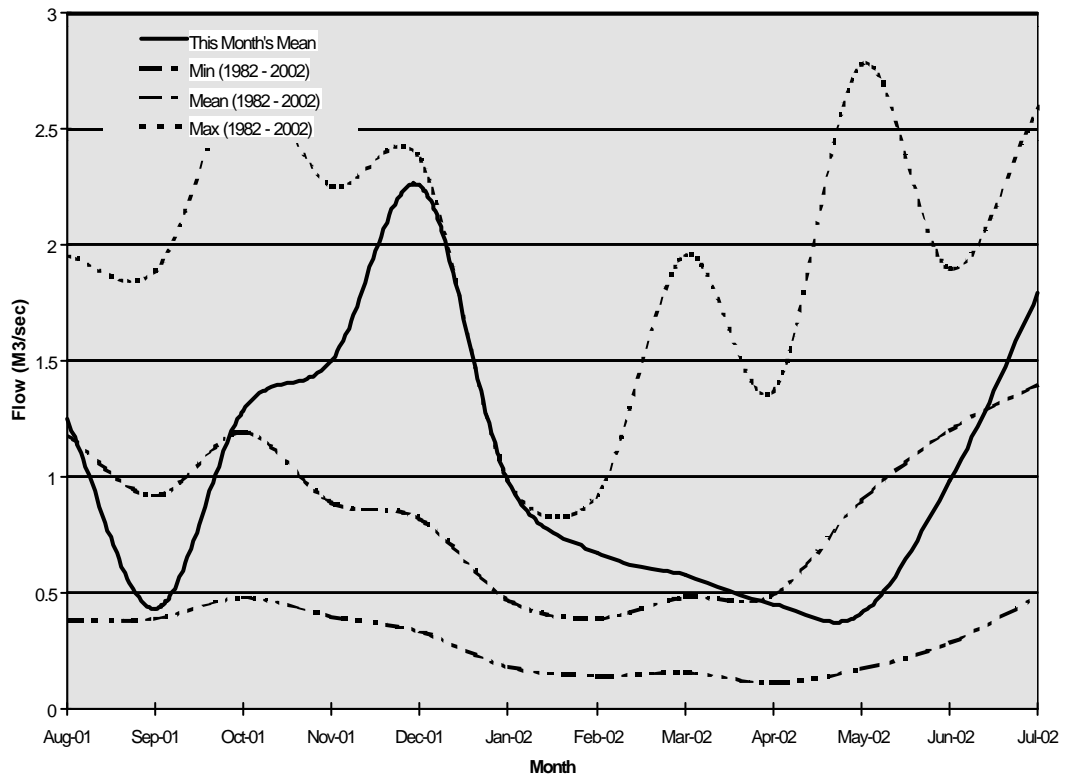
## Hutt River Flows

The mean monthly flow in the Hutt River during July was well above average.



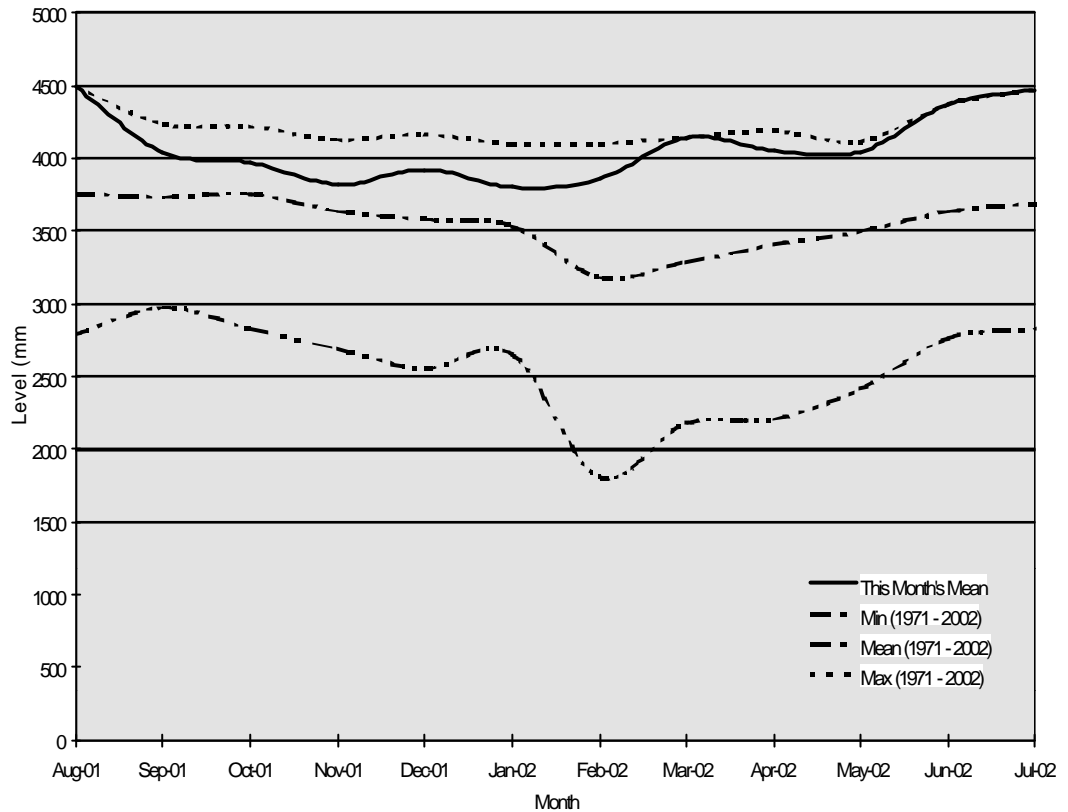
## Wainuiomata River Flows

Flows in the Wainuiomata River were above average during July.



## Aquifer Levels

The water level in the Waiwhetu aquifer was near maximum during July.



### 4. Production

#### 4.1 Wainuiomata

##### 4.1.1 Quality

There are no quality issues to report.

##### 4.1.2 Safety

There are no accidents or incidents to report.

##### 4.1.3 Operations

➤ The poly powder plant was commissioned.

##### 4.1.4 Plant Tours

8 July 2002  
31 July 2002

Weltec  
Two Massey University tours

## 4.2 Waterloo Water Treatment Plant

### 4.2.1 Quality

There are no quality issues to report.

### 4.2.2 Safety

There are no accidents or incidents to report.

### 4.2.3 Operations

There are no items to report.

### 4.2.4 Plant Tours

There were no tours during the period.

## 4.3 Gear Island

### 4.3.1 Quality

There are no quality issues to report.

### 4.3.2 Safety

There are no accidents or incidents to report.

### 4.3.3 Operations

There are no items to report.

### 4.3.4 Plant Tours

There were no tours during the period.

### 4.3.5 Projects

#### ➤ Capital Works

- ◆ Seismic strengthening of the reservoir is ongoing.

#### ➤ Operational Projects

- ◆ A fire alarm system was installed.

## 4.4 Te Marua

### 4.4.1 Quality

There are no quality transgressions to report.

### 4.4.2 Safety

There are no accidents or incidents to report.

### 4.4.3 Operations

Date	Problem	Cause
1 July 2002	Filter No. 2 turbidity alarm	Turbidity increase after backwash
3 July 2002	Rapid mix pH alarm	Instrument calibration
4 July 2002	High inlet colour	False alarm, restricted flow through instrument.
4 July 2002	Filter No. 2 turbidity alarm	Turbidity increase after backwash
6 July 2002	High treated water colour	Auto cleaning cycle took longer than usual
12 July 2002	High treated water colour	Auto cleaning cycle took longer than usual
14 July 2002	High inlet colour	Increasing river colour
14 July 2002	Filter No. 2 turbidity alarm	Turbidity increase after backwash
16 July 2002	Lake No. 1 high underdrain turbidity	Heavy rain caused underdrain turbidity to increase
20 July 2002	Filter No. 2 turbidity alarm	Turbidity increase after backwash
24 July 2002	High inlet colour	False alarm, restricted flow through instrument.
25 July 2002	Low streaming current alarm	Flow change through plant
27 July 2002	Filter No. 1 turbidity alarm (during backwash)	Fluctuation in valve position feed back signal
28 July 2002	Filter No. 1 turbidity alarm (during backwash)	Fluctuation in valve position feed back signal
29 July 2002	Filter No 1 turbidity alarm (during backwash)	Fluctuation in valve position feed back signal
31 July 2002	Low streaming current alarm	Flow change through plant

### 4.4.4 Plant Tours

10 July Wellington Polytechnic - 21

### 4.4.5 General

#### ➤ New Filter Outlet Control Valves

The installation of these valves has been completed. Valve position feedback transmitters were not supplied as requested and this has delayed commissioning by approximately six weeks.

The commissioning of these valves with accurate position feedback is essential to reliable filter flow control and compliance with the Drinking-Water Standards for New Zealand). Problems in this area with the existing valves have resulted in an increase in call-outs during July.

#### ➤ Lake Storage



During July lake water was used on four separate occasions, totalling nine days. The new Kaitoke abstraction consent has greatly improved lake recovery.

➤ Security Shutdown

Work has begun on a security shutdown system.

## 5. Distribution

### 5.1 Health and Safety

There are no accidents or incidents to report.

### 5.2 Repairs/Maintenance

- Carried out the regular two monthly scour valve exercise on the Hutt line from Te Marua to Karori.

### 5.3 Porirua Low Level

- Installed a new control valve, pipework and valve chamber on the inlet to No. 1 Reservoir.
- Installed valve control equipment and connected it to the telemetry system.

### 5.4 Wainuiomata Reserve

- Carried out servicing on all air valves within the reserve.
- Excavated and raised various air valve chambers.
- Excavated and repaired the leaking 200 mm raw water service valve.

### 5.5 Paremata Bridge Project

- There was ongoing work with the bridge contractors.

## 5.6 Hutt Motorway Cable Ducting

- Worked with UnitedNetworks and Alstom installing new cabling from Thorndon to Petone.

## 5.7 New Wainuiomata Depot for Distribution Section

- Started work on refurbishing the existing workshop and clearing an area for a compound.

## 6. Health and Safety : Total Injury/Illness/Incident Record

- Production

There are no accidents or incidents to report.

- Distribution

There are no accidents or incidents to report.

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# Strategy and Asset Group

## July 2002

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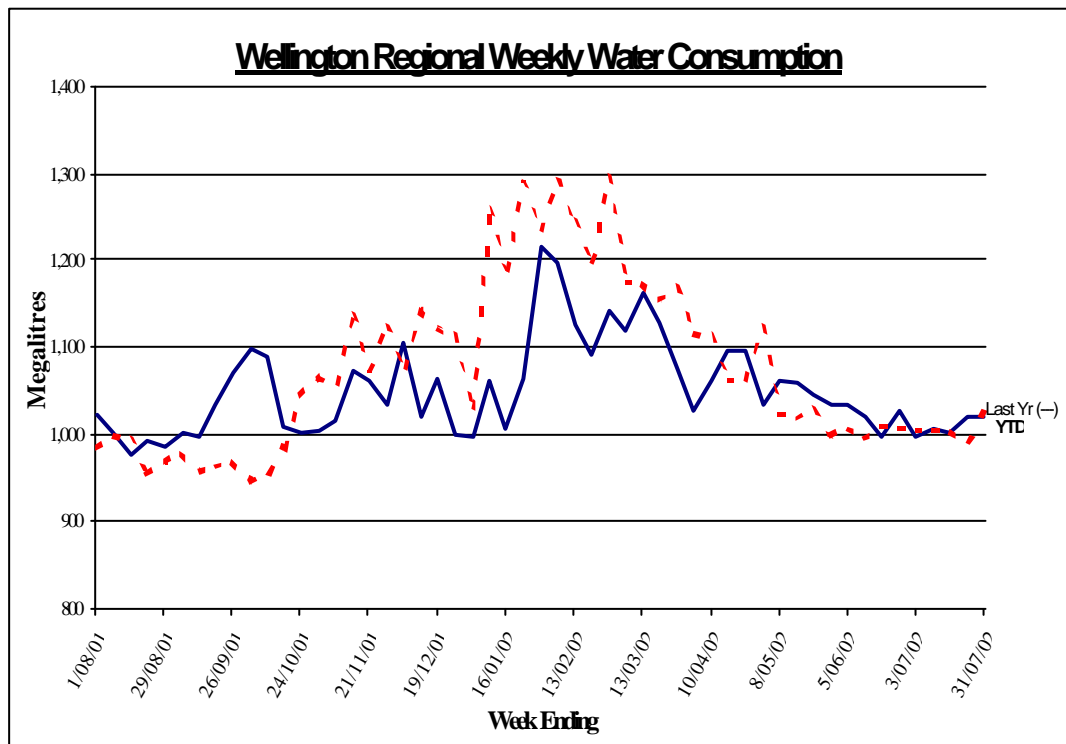
## Strategy and Asset Group Review of Operations for the Period Ended 31 July 2002

### 1. Items of Note

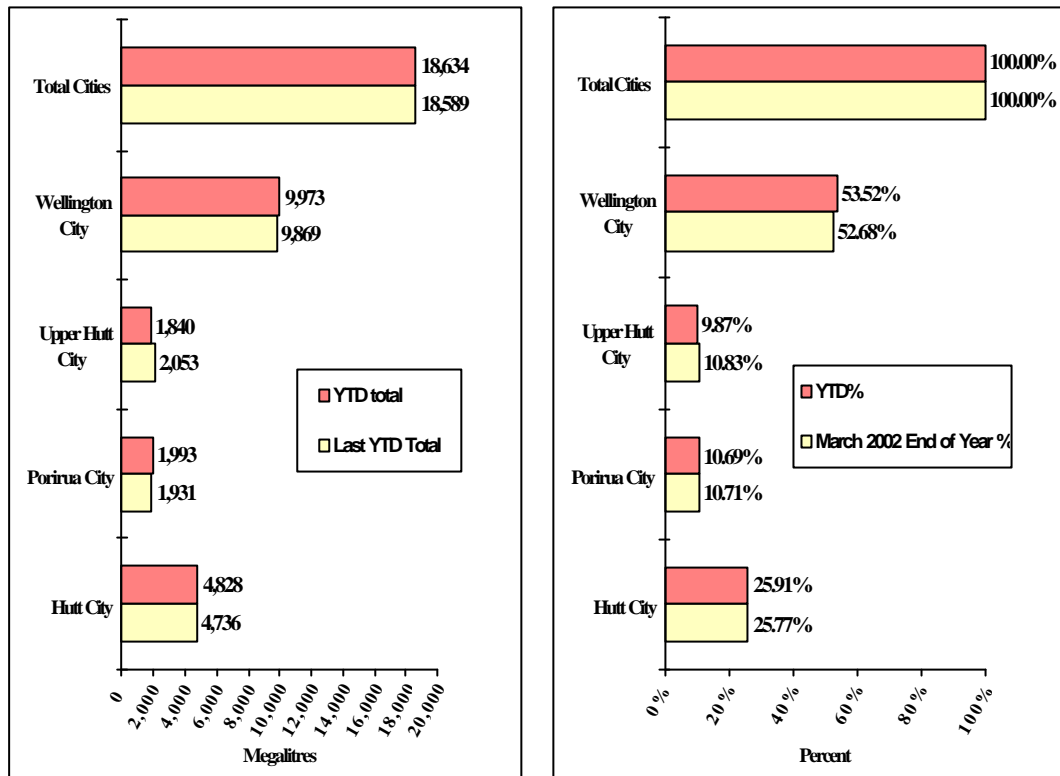
- Contract details for a three year electricity contract have now been finalised with Genesis Power. The contract was previously approved in principle by the Policy and Finance Committee. The Council's legal advisor has checked the documents and it is expected they will be signed in August.
- The system optimiser project has been entered in this year's Energy Efficiency and Conservation Authority Awards under the innovation section.
- A customer meeting is being scheduled for August to obtain the customers' input into a number of strategic projects.
- Water sales volumes are normal for this time of year with relatively minor fluctuations from week to week, depending on weather conditions and a number of other factors. For example, a weekend stadium event results in more visitors using hotels, motels and private accommodation.

### 2. Sales Volume

#### Water Sold Over the Last 12 Months



### Water Sold from 1 April 2002 to 31 July 2002



### 3. Asset Management

- Depreciation of Wholesale Water infrastructure assets has been run up to 29 June and reported to the Finance Department. The value of capital works to be added to the asset register has been agreed and the detailed capitalisation process in the Hansen asset management system is well advanced. The write-off of approximately \$300,000 worth of assets replaced over the last three years will also occur. This sum is the difference between the book value and the scrap value.
- A review of the June 1998 Asset Management Plan has been commenced but current updating is limited to financial forward planning. Priority is being given to addressing items on the improvement programme contained in the 1998 Asset Management Plan and good progress is being made.
- The final full year expenditure on Capital Works for 2001/2 is \$3,515,000 against a budget of \$3,905,000. Savings have resulted from good tender prices, the indefinite deferral of some projects, and delays to other projects. The most substantial project, lining of the Rahui Reservoir supply main (part of the old Orongorongo/Karori pipeline) is substantially complete but testing and commissioning difficulties have arisen, which will delay the resumption of an unfluoridated supply to Petone until late August. New pumps have been delivered for the Johnsonville Pumping Station and a new switchboard manufactured. These will be installed in August.

- The capital works budget for 2002/3 is \$2,752,000. The major items are an upgrade of the Orongorongo intake, the first stage of fencing the northern boundary of the Wainuiomata/Orongorongo Catchment, upgrading the control system at Wainuiomata Water Treatment Plant, upgrading the standby generator at Waterloo Water Treatment Plant and replacing equipment at Karori Pumping Station.
- Final plans for the transfer of Karori Reservoir land to the Wellington City Council have been received and approved. Following final administrative clearance, the land will be formally transferred the Wellington City Council.
- Issues associated with the Council's application to take water from the Moera aquifer are being worked through with IBM, whose fire protection system may be affected by the proposal.
- A detailed condition assessment of older pipelines has shown that the steel main between the Orongorongo Tunnel and the Wainuiomata Water Treatment Plant will have to be replaced quite soon. A condition assessment of the 1884 vintage cast iron main through Wainuiomata will be undertaken next financial year.
- Draft documents for the relocation of the branch main to the Plimmerton Reservoir, which will be affected by new State Highway 1 roading work at Plimmerton, have been submitted to Transit New Zealand's consultant. Transit New Zealand has agreed to pay 100 percent of the cost of this work, as the main is on the Plimmerton Reserve rather than the highway itself. Duplication of the Paremata Bridge, which has recently started, will require a temporary diversion of the Pukerua Bay main in the early stages of the construction. On completion of the new bridge the main will be transferred to it, providing enhanced seismic security for the Paremata Harbour crossing. The normal 50/50 cost sharing arrangement will apply to this work.
- A major development of the area of land above Porirua City known as the Aotea Block is in the planning stages. The proposal will have a significant effect on the branch main to the Porirua Reservoir. The developer will meet all costs of relocation or protection work.
- Transit New Zealand has received funding for the upgrading of State Highway 2 near Te Marua. This work will require relocation of some drainage works adjacent to the Stuart Macaskill Lakes, at Transit New Zealand's cost.
- A consultant's report assessing the risk and recovery time associated with seismically induced failure of the Kaitoke/Karori pipeline where it traverses the side of a steep potentially unstable gully at Haywards indicates that relocating this main may be warranted. The relocation would ideally be closely linked with the proposed realignment of State Highway 58 and the likely timing of this work is currently being established.

- During the month 14 pigs were shot in the Wainuiomata/Orongorongo Catchment. Some goats were caught, fitted with transmitters, and released to act as “Judas” goats.

#### 4. Quality Assurance

- Detailed plant performance data regarding compliance with the Drinking-Water Standard is being assembled and collated for the first two quarters of 2002. The performance of the Wainuiomata Water Treatment Plant has been improved by changes to the control system and the use of dry polymer flocculant to eliminate turbidity “spikes”.
- Work has begun on drafting Public Health Risk Management Plans required by the Ministry of Health. It is expected that new health legislation will make the provision and implementation of such plans mandatory. Good risk management procedures are already in place, so that significant changes to the way the plants and system are operated are not expected.
- New grading rules have been received from the Ministry of Health. Significant changes are that wholesale distribution systems such as ours will now be formally graded and non-compliance with the Drinking-Water Standards for New Zealand microbiological standards will mean a D grading rather than a C as at present. This could impact on the Wainuiomata Water Treatment Plant.
- Our sampling regime in the distribution network has been reviewed with a view to reducing costs. A reduced sampling regime is currently being discussed with Hutt Valley District Health Board officials.
- An additional detailed submission has been made to the Hutt Valley District Health Board regarding the security of the Hutt Valley aquifer. The aquifer has been shown to meet the requirements of the Drinking-Water Standards for New Zealand for security but only just. A further programme of tritium dating and chemical testing has been initiated to provide additional information. Security of the groundwater is essential to achieving compliance with the protozoa rule at Waterloo and Gear Island.

#### 5. Environmental

- A wheel wash at the entrance to the Wainuiomata/Orongorongo Catchment is to be constructed. The purpose of the wheel wash is to minimise infestation of the catchment by exotic weeds.
- Staff at the Massey University Institute of Natural Resources are working on two projects on our behalf; a desktop study of factors affecting fish numbers in the Hutt River and a study of the potential for enhancing the native fish population upstream of the Orongorongo intake.

## 6. Marketing

- A proposal from NFO Research for qualitative research regarding water conservation attitudes and garden watering activity was accepted in June. A discussion guide was developed with NFO Research during July and focus group interviews were conducted with six groups, encompassing 24 respondents with differing levels of interest in gardening. Results will be available in late August. The purpose of the research is to guide the development of our summer water conservation advertising and promotion
- Television New Zealand has refused our request for cash compensation regarding the probable overstatement of performance of our television advertising during summer 2001/2. Their offer of additional free airtime has been reaffirmed. We will consider our response to Television New Zealand once the choice of media has been made for the 2002/3 summer water conservation campaign. That choice will be guided by the outcome of the qualitative research (above).
- Work is progressing with an educational resources consultant on a review of water treatment plant tour content and handouts for a primary and intermediate school audience. The consultant has reviewed current material and interviewed several teachers who have taken students to visit a treatment plant. The Environment Division's *Take Action for Water* team has been consulted about consistency and co-ordination in presenting the two resources. Our aim is to attract more school groups to visit a water treatment plant by making it easier for teachers to recognise how the visits contribute to meeting the learning targets set out in the school curriculum. The tour content and handouts will promote learning regarding water quality, water use and conservation. Better understanding of these issues in the community will contribute to meeting our water supply goals.
- The design of a mimic board for the reception area at Wainuiomata Water Treatment Plant is progressing.
- Compilation of both "highlights" and "detailed" versions of The Water Group *Report of Business Activity* for 2001/2 is progressing. Elements of triple bottom line reporting will be incorporated into both versions. The reports will have a sustainability theme. Designers are working on the style for the "highlights" version.
- Wellington City Council has confirmed its initial advice that a resource consent would not be required for a smiley face on the Ngauranga Reservoir. The citizen who proposed the mural has been kept abreast of developments. A public consultation process is currently being designed.
- Arrangements were made for six visits to water treatment plants, involving some 110 visitors.



## 7. Projects Undertaken by Engineering Consultancy for Strategy and Asset

### ➤ Orongorongo River Intake

The extent of the proposed remedial works on Orongorongo River intake has been confirmed. Preparation of detailed drawings of the work will proceed in September 2002.

### ➤ Wainuiomata/Orongorongo Catchment Wheel Wash

Detailed drawings for construction of a vehicle wheel wash at the entrance to the catchment area have been prepared.

### ➤ *Stuart Macaskill Lakes Emergency Action Plan*

Minor amendments have been made to the *Stuart Macaskill Lakes Emergency Action Plan*.

### ➤ Fire Protection at Wainuiomata Water Treatment Plant

Alternative fire protection systems are being investigated to avoid having to regularly gain access to the sensors located on the ceiling in the filter gallery.

### ➤ Waterloo Water Treatment Plant Vibration and Noise

An assessment is being made to determine whether further work is required to ensure that a fatigue failure of the motor hall floor does not occur.

### ➤ Gear Island Water Treatment Plant Roof Fixings

The existing securing system for the chemical building roof trusses and the control reservoir roof does not meet current earthquake loading standards. Work is nearing completion for installing additional fixings on the trusses and roof.

### ➤ Gear Island Wellfield Scour

A detail drawing of the proposed scour on the Gear Island wellfield collector main has been prepared.

### ➤ Refurbishment of the OK Main, Petone

Slip lining of the OK main between Hutt Park and Korokoro is complete. Testing of the pipeline has identified loss of water from two sections of the pipeline.

The Contractor is identifying the location of the leaks and undertaking repairs.

➤ Paremata Bridge, State Highway 1

Transit New Zealand has awarded a Contract to construct a new bridge at Paremata. The 300 mm pipeline supplying water to Plimmerton and Pukerua Bay will be relocated onto this new bridge. Design of the pipeline for the new bridge is proceeding. A temporary diversion of the existing pipe has been designed to allow the bridge to be constructed. Bridge construction work is proceeding. Construction of the bridge is expected to take approximately 18 months.

➤ Stream Crossing and Fault Crossings

The seismic performance of the distribution pipelines at stream crossings and fault crossings is being assessed.

➤ Non-return Function at Reservoir Inlets

The installation of backflow restriction devices at the inlet to all the service reservoirs is being confirmed. The devices prevent the reservoir draining out the inlet pipe if the pipeline fails.

➤ Plimmerton No. 2 Reservoir Branch

Contract Documents have been prepared for relocating the 200 mm ductile iron branch pipeline at Plimmerton Drive. This relocation is required to facilitate the realignment of State Highway 1. Transit New Zealand will be funding this work.

➤ Johnsonville Pumping Station Switchboard and Pumpsets

Replacement of the Johnsonville Pumping Station switchboard and pumpsets is progressing. The new switchboard has been installed. Work has commenced on replacement of the pumpsets.

➤ Warwick Street Pumping Station

A report on the condition of the Warwick Street Pumping Station switchboard and pumpsets is being finalised. Replacement of the switchboard is proposed.

➤ Karori Pumping Station

A report on the condition of the Karori Pumping Station switchboard and pumpsets is being finalised. Replacement of the switchboard and the pumpsets is proposed.

A consultant has been commissioned to assess the performance of the pumping station structure in a major seismic event.

➤ Pipe Holding Down Straps in Tunnels and Tunnel Access

The construction of concrete access chambers to provide safe access into the tunnels is complete. The pipe securing straps have been installed. Poor ground conditions in Kaitoke No. 3 Tunnel have resulted in a number of holding down bars pulling out of the ground when tested. These bars are being replaced.

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Engineering Consultancy Group  
July 2002

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## Engineering Consultancy Group Review of Operations for the Period Ended 31 July 2002

### 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

Current projects underway are detailed in the following sections.

#### 3.2 Wakefield Street

Tenders were invited and received for a Contract to replace a water main in Wakefield Street from Courtenay Place to Cuba Street. Replacement of the pipeline along this busy city street will be another challenging Contract.

#### 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 Consultant has completed the design report for siting the reservoir in Carter Park and is preparing for the public consultation phase of the commission.

#### 3.4 Southern Suburbs Reservoir

Wellington City Council has confirmed a preference for the site in Mount Albert Park. This site would have a lower overall cost than the Southgate Park site. Investigations have continued into siting and operational matters.

#### 3.5 Kelburn Reservoir

This reservoir will replace two existing reservoirs that are adjacent to the Karori Wildlife Sanctuary. The Contract has been awarded and excellent progress has

been made. The south chamber of the reservoir is complete. There will be a pause in activity until the concrete and sealants in the south chamber have cured, after which the chamber will be filled, tested, disinfected and commissioned prior to the demolition of the north reservoir.

### 3.6 Onslow Reservoir

There are two reservoirs on the Onslow site. The proposal is that the rectangular western reservoir be demolished and replaced with a larger reservoir, so that the water storage deficiency in the zone can be rectified. The design consultant has prepared the resource consent application and, which is currently being assessed. The design report has also been completed. Good progress has been made on the design of modifications to the external pipework.

## 4. Miscellaneous Projects

### 4.1 Emergency Water Supply

The consultant engaged for this project has had detailed discussions with water supply staff of the five councils and has prepared a draft report. Wellington Regional Council staff members are providing technical input to the project. The final report from *Operation Phoenix*, will be taken into account in the preparation of the final report.

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# Laboratory Services

## July 2002

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## Laboratory Services Department Review of Operations for the Period Ended 31 July 2002

### 1. Items of Note

- An interesting and busy period work wise as the laboratory adapted and adjusted to the subtle changes in the various departmental work plans. Financial results for this first month of the 2002/3 year will be forthcoming next period.
- Tenders for the Oxford Terrace laboratory fit-out were received, with Thermoplastic Engineering being nominated as the preferred contractor. Attention to the finer detail of the tender resulted in the specification being tweaked and amended prior to negotiating any formal engagement.
- Following our earlier application we now await the outcome of the IANZ assessment of several new analytical tests we wish to have added to the scope of our laboratory accreditation this year. Particularly significant is the Drinking-Water Standards for New Zealand 2000 referee method for *E. coli* to be operational by 2 September.
- Staff training included biennial refresher courses and certification for first aiders. Staff Review and Reward sessions were held as usual this month.

### 2. Business Summary

#### 2.1 Quality

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

#### 2.2 Health and Safety

There are no accidents or incidents to report.



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# Plantation Forestry

July 2002

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## Plantation Forestry Department Review of Operations for the Period Ended 31 July 2002

### 1. Log Harvest Contract

Volumes for July have returned to budgeted production levels with a total of 4,239 tonnes being shipped and an average return of \$34.54 per tonne. While this return is less than that achieved last month, it does include the wood from road lining through a younger block to set up a hauler pad for the eastern end of the Harris South block. The road lined trees included a large proportion of pulpwood.

This road lining operation was carried out by a ground based crew that has been brought in to prepare access to a number of skids and to complete the harvest of that part of the Harris North block which is within two tree lengths of the main track. This track is currently closed on weekdays and it is proposed to reopen it up before the school holidays.

There has been no progress on the offer we put to the Tse Family Trust for an alternative access through their land.

United Gooder, the company responsible for the maintenance and protection of the high tension lines that traverse this forest, has visited the site of the harvest. Their interest focused on the hauler site proposed for the trees under the high tension lines. There are restrictions on road construction near the base of the pylon and restrictions on where the tie-off cables for the hauler may be positioned. We have circulated the rules relating to working in the vicinity of these lines and United Gooder will inspect the set-up of the hauler before it commences pulling logs.

Two potential routes have been identified for the Blow Fly and Kaika Mako Blocks and the better of these should be constructed over the summer, with felling to commence the following summer.

There has still been no progress on the matter of permanent communications in the area.

The by-grade output for July was:

Grade	Tonnes	%
Pruned Domestic	721.19	17.01
Pruned Export	0	0
Partial Pruned	127.34	3.00
S/A Grade	217.69	5.14
L Grade	442.09	10.43
R Grade	368.76	8.70
K Sawlog	349.42	8.24
K Rough	763.60	18.01
Pulp	781.49	18.43

Grade	Tonnes	%
O/S Pulp	467.70	11.03
Xport Pulp	0	0
Other	0	0
<b>Total</b>	<b>4,239.28</b>	

## 2. Silviculture Contracts

The Contractors have continued to assist with road maintenance and “daylighting”, and thus have not spent a full month on silviculture.

A further 10 hectares of the 2001/2 Contract were completed in August. To date a total of 109.79 hectares have been completed out of a total of 119.

The majority of the tenders for the 2002/3 financial year silviculture programme were awarded to Forest Developer and Management Ltd, which has subsequently agreed to share the work with the incumbent operator, Green and Gold Forestry Contractors.

With two contractors working, they will have little difficulty completing the 2002/3 silviculture before June next.

## 3. Plantation Forestry Operations

Planting has been completed at Pakuratahi and the clear felled area at Puketiro is being planted at present. As in previous years, planting will continue while the weather is suitable and seedlings are available.

A number of blocks have been programmed to have their main access route weed sprayed to ensure access through the summer.

A draft fire plan has been prepared and this will be given to Landcare to be amalgamated into a Council-wide document.

Council is a party to a joint venture arrangement with Porirua and Wellington City Councils for the management of the Spicer Forest, which lays south of the Broken Hill Tip at Porirua. It has not been possible to date to record the agreement in a legal document, due in part to personnel changes and to difficulties with the interpretation of LATEs in the legislation. I have now made contact with the new property officer at Wellington City Council and we will endeavour to complete an agreement this time.

The lack of agreement is frustrating efforts to set up a joint harvesting and marketing proposal with an adjacent forest owners' group.

## 4. Forest Access

There is still no acceptable access to Maungakotukutuku Forest.

The continuation of the persistent rain that commenced in June has resulted in ongoing problems keeping the main harvest access road open.

There have numerous occasions where it has been necessary to assist loaded trucks over short lengths of the road but the road has remained open and passable (with assistance) on all working days.

We commissioned a roading consultant with specific expertise in metal roads to address a group of Plantation Forestry staff, Landcare rangers and contractors on the fundamentals of metal road maintenance. While this information will assist in the medium-term, the need to keep the roads open in the rain meant that we were forced to undertake maintenance in suboptimal conditions.

We have now revised the harvest plan, so for the depth of next winter we will withdraw to a block within 5 km of the front gate, which will reduce the amount of maintenance required.

## 5. Market Trends

From information received from Rayonier relating to the third quarter we are reasonably optimistic that present prices will remain relatively stable. The export prices will, of course, vary with the exchange rate. For the July month, most alterations in export prices were favourable.

We anticipate staying in the present block through this summer, so a continued supply of pruned logs should maintain the present good returns.