
Water Supply, Parks and Forests

March 2008

Parks

Review of operations for the period ended 31 March 2008

1. **Manager's comments**

The development of the Recreation Strategy is progressing well. I am currently working with Greater Wellington Regional Council's (GWRC) Executive Management Team to define the scope and purpose of the review, and to ensure that its development is integrated with Open Space projects begin run as part of the Wellington Regional Strategy.

Since daylight saving has ended there has been a noticeable change in weather, with more rain and lower temperatures. This has been welcome, as it provides some breathing space for the rangers after a long hectic summer. We now have less fire danger and algal bloom concerns, the parks are looking greener and visitor numbers are declining. Fortunately the summer was very productive and the rain has not affected our work programme now it has arrived. We are now able to enter our autumn and winter maintenance phase with a focus on the amenity areas now that we do not have the huge number of visitors of summer.

With the Wairarapa Wetlands Park firmly on our agenda, we are spending time getting our heads around the issues and steps that need to be taken in this area in time for Councillor deliberations on the LTCCP later in the year.

2. **Environmental planning and implementation**

2.1 **Policy and planning**

The closing date for submissions on the reserving of Waitangirua Farm is 25 April. Officers will summarise any objections to the classification of Waitangirua Farm as a recreation reserve. These will be provided to Councillors prior to holding Hearings.

The Kapiti Pony Club lease proposal at Queen Elizabeth Park was advertised at the beginning of April. The closing date for any objections to the lease proposal is 1 May.

A workshop on the review of the Concessions Policy for the parks and forests was held on 27 March. A draft policy for consultation will be tabled at the June Committee meeting.

The Parks Department has a new policy and planning advisor, Sonia Chisholm. Sonia comes to GWRC after working in a number of planning roles in New Zealand and England.

2.2 **Monitoring**

Officers in the Parks' environmental team have been reviewing the monitoring work that is completed on GWRC lands to determine the effectiveness of the

methods used and whether the monitoring programme is providing the information required.

Tawa fruit-fall plots have been assessed in the Wainuiomata/Orongorongo Water Collection Area. Levels of fruit predation are not high - 3 percent of fruit for possum damage and 4 percent for rats. In East Harbour Regional Park the percentage of fruit damaged has fallen since rodent numbers have fallen in the mainland island (from 11.1 percent damaged in 2007 to 0.9 percent in 2008).

2.3 Pest control



No major pest animal control operations have been completed during the past month.

The weed team has started work on alders at Lake Wairarapa. Information about the costs and effectiveness of various control techniques for alder is needed to determine the best strategy to control this infestation.

The weed team has felled a number of trees on the side of the small lake at Lake Domain, which has opened up an attractive view of that wetland.



The team has also started work on the alder on the delta that is forming where the Tauherenikau River meets Lake Wairarapa.

2.4 Wainuiomata Mainland Island

The "Roar" is currently under way in the Wainuiomata/Orongorongo Water Collection area. To date two deer have been shot in Wainuiomata.

Monitoring staff members keep out of the area while the balloted hunters are in the catchment but some tawa fruit fall plot remeasurements were completed during gaps in the sessions. Damage to the tawa fruit was low and no real differences were seen between inside the Mainland Island and outside it in the non-treatment area.

3. Western sector

3.1 Events

We have been hosting a number of significant events over the period. These include the Porirua Grand Traverse, a multi-sport event that utilises Battle Hill, Akatarawas, Belmont and Whitireia parks.

We also hosted *Outstanding in the Field*, a rural careers day for secondary school students held at Battle Hill Farm Forest Park. This is the second time this event has been held at the park and the venue has proved ideal. The woolshed, yards and grounds are fully utilised for demonstrations of different farm activities that can offer employment opportunities for school leavers.

A walking event called *Farm to Coast* that linked Battle Hill with Whareroa Farm and Queen Elizabeth Park was well attended. The walk takes about eight hours to complete and demonstrates the future opportunities for linking these areas via the Akatarawa Forest.

Battle Hill also saw over 100 mums and babies participate in a buggy walk. This is just one of a series of walks held over the Region in conjunction with Sport Wellington.



Battle Hill continues to be the focus for school visits, as well as organised events such as the buggy walk. Continued fine weather helped encourage use of the park.

It was pleasing to get feedback from children who visited the park, with cards and posters thanking Rangers Andy Marriott, Dean Scott and Hugo Van der Werff for their time facilitating the visits.

At Belmont Regional Park about 150 people walked up to Belmont Trig as part of a nationally organised *Summits for Ed* day. This event aimed to honour the life of Sir Edmund Hillary and was enthusiastically embraced by members of the public.

Twitching on the Coast was an event held at Queen Elizabeth Park, an opportunity for people to become conversant with “twitching” or bird watching as it is more commonly known. Species seen included harrier, paradise duck, pukeko, chaffinch, eastern rosella, welcome swallow and pheasant - the list goes on but fun was had by all on the morning.

GWRC staff members hosted the morning section of a “whistle stop tour” for GWRC Chair Fran Wilde and Kapiti Coast Mayor Jenny Rowan. The trip was organised by Kapiti Coast District Council to familiarise the Chair with some issues on the coast. The trip started with a meeting at the Queen Elizabeth Park Ranger’s office and was well attended by interest groups such as the Tramways Museum, Printing Press Museum, Friends of Queen Elizabeth Park and Whareroa.

3.2 Ranging

We have reached agreement with Hutt City Council and developers of the old Otonga School site in Maungaraki about access into the new subdivision proposed for the old school site. The proposal involves using a legal road that goes through the existing Oakleigh Street car park into the new subdivision. A

realignment of the existing walking track has been required where it encroaches on to the old school site. This proposal is still subject to final approval through the consent process but we believe we have reached a satisfactory compromise that protects the park's values.

Inspections of all buildings on Waitangirua Farm have been completed by GWRC staff members and O'Brien Property Consultancy. There is now good agreement about who is responsible for different repair and maintenance for buildings on the property. The information we now have about the buildings can be fed into the LTCCP, giving a more accurate idea of budgeting for the future needs of the property.

3.3 Park and asset maintenance

Maintenance operations over the period have included gorse control in grazing areas at both Belmont and Whitireia parks. Preparation of fencing lines agreed between Landcorp Farming Ltd and GWRC has been carried out in the Kilmister block. The new fence lines take a practical approach to retiring steep or reverting farmland.

Staff members have started a track upgrade of the Stratton Street to Korokoro Dam walk, which involves surface improvements and replacement of eroded steps.

Staff members are preparing for a busy planting season ahead with the nursery at Queen Elizabeth Park in full swing, assisted by a wide range of volunteers each Wednesday.

4. Eastern sector

4.1 Events

The newly completed Lakes Block Circuit was officially opened by Cr Rex Kirton as part of a Regional Outdoors Programme event. The panoramic views and extensive mosaic of lush wetland vegetation provides a distinct contrast to the steep, forested headwaters of the northern block of the park. Historically, the deep swamps at the head of Lakes Kohangapiripiri and Kohangatera acted as physical barriers that prevented any round trips in the area. However, piled boardwalks allow visitors to fully experience the areas stunning wetland and maritime environment. Staff appreciated the support and interest of both Crs Kirton and Glensor who also attended the event.



The Regional Outdoors Programme has now wound down, with one of the final events being the Lighthouse and Lakes event. Again, the event was well attended and enjoyed by the 47 participants.

The Mt Climie 4WD trip, which was unable to go ahead on 2 March, was held later in the month and enjoyed by 59 participants.

A buggy walk in Kaitoke Regional Park was attended by 70 people (plus buggys!)

Several tours of Japanese exchange students have taken place in Kaitoke Regional Park, with focus on the swing bridge track.

The annual trolley derby was held at Kaitoke Regional Park. This event is a fundraiser for St Josephs Scouts and this year attracted around 200 participants.

The Wainuiomata Catchment walking tours are still fully booked and a further tour was held during March. The next tours are scheduled for May and June.

4.2 Ranging

Camping at Kaitoke is now predominantly only in weekends as the good weather comes to an end. However, good weather over the Easter period saw a record number of campers in the park.

Vandalism continues to be ongoing in the Wainuiomata recreation area.

The Rimutaka café has not yet opened following the fire in late February. As a result, the toilets remain closed. We have also fielded a number of questions over this issue.

A total of 26 permits for horse riding in the new Pakuratahi Forest/Kaitoke Hill Track casual horse riding area have been issued during this period. The new route, together with the streamlining of a simpler two key system and the ability of the users to park their vehicles and horse floats, has generated excellent feedback from the public.

4.3 Park and asset maintenance

The usual maintenance work continues, with mowing, spraying, removing debris from roads and walking tracks, clearing culverts and drains, and removing some small slips. We are starting to enter our winter maintenance phase and are cutting vegetation around our amenity areas and along tracks, and bark mulching our gardens.

A new seat was installed on the Rimutaka Trig Track, offering excellent views out over the Wairarapa.

Work has commenced on mitigating a muddy area where walkers are impacting on vegetation on the Ridge Track in Kaitoke Regional Park,



with boardwalks made by our construction team flown into the area during March.

New signs have been installed at Kaitoke Regional Park identifying the Ranger's residence and office, publicising the camp rules and encouraging recycling.

Upgrade work continues on the surface of Kowhai Street track in East Harbour Regional Park, along with the removal of windfall trees on Moana Road route, Dillon Street Track, Ngaumatau Track and Main Ridge Track, Pakuratahi River walk and Tane's Track in Wainuiomata.

Our usual autumn road maintenance has started with repairs to the access road to the Hutt Water Collection Area in Kaitoke Regional Park and work on water tables and minor shaping in the Akatarawa Forest network.

Following the fire set in Tunnel Gully by vandals in March it was necessary to fell several burned trees. These will be replaced by young natives.

Marketing and Design

Review of operations for the period ended 31 March 2008

1. Manager's comments

The increased level of advertising and media activity around the summer water shortages should have had a significant effect on public awareness of Wellington's particular water supply situation. The upcoming combined telephone survey will repeat some of the questions asked in the UMR survey conducted prior to summer and be a useful piece of information to feed into the development of the regional water strategy.

Once again the public response to the Regional Outdoors Programme has been enthusiastic and it has been great to see two new clubs associated with Council lands coming on board. New highs in attendance levels reflect the quality of the programme, its "fit" in the overall Wellington regional events line-up, plus additional promotional support given by both Upper Hutt and Hutt City Councils.

2. Water Supply

2.1 Water Supply Strategy public opinion research

The final report has been received from the consultants and signed off.

We will provide our customers with a copy of the report on 28 April and anticipate presenting the findings to a further customer meeting tentatively timed for mid May.

2.2 Draft Wellington Water Management Plan Technical Report

A presentation on our water supply situation and key features of the Technical Report was prepared and presented to Wellington City Council's (WCC) Environmental Reference Group on 7 April.

The Technical Report was returned to the customers for "final" review and comment in February. We have received a number of further comments - from both the customers and members of WCC's Environmental Reference Group - which are being considered for inclusion. We anticipate forwarding the finalised report to the customers in early May.

2.3 Summer water conservation campaign

Advertising of a sprinkler and irrigation system ban was run throughout March, with successive weeks of advertising planned and booked as late as possible, to maximise the likelihood of the message being relevant when seen or heard. Advertising for a total hosing ban was being prepared in the week prior to 29 March, when heavy rainfall saw the planned hosing ban being abandoned and further sprinkler and irrigation ban advertising being withdrawn. The sprinkler and irrigation system ban was lifted on Wednesday, 9 April.

The intensive situation monitoring, customer liaison and handling of media bookings and enquiries continued throughout March and early April, because of concerns about the potential to drain both Stuart Macaskill Lakes before the end of the summer “dry” period. We issued two media statements during the period - one reminding of the sprinkler/irrigation ban (18 March) and the other announcing the end of the ban (9 April).

As part of the Summer Water Conservation Campaign we advertised a prize draw - with “skill” questions to encourage readership of our web based water conservation advice - for a water-efficient garden irrigation system. The draw was made in late March. A suitable system is being designed for the Lower Hutt based winner's garden. We are planning a publicity opportunity around the installation of the prize.

A research consultant has been briefed for a project to assess public recall of the various strands of our water conservation advertising and communications over the spring and summer period. A research proposal is anticipated prior to Anzac Day. This research will be conducted in conjunction with research of the Parks Department's annual community awareness and usage survey, to minimise costs. We anticipate the fieldwork being completed by the end of May, with a report received by mid-June.

2.4 Education and interpretation

Staff members have been working with colleagues in the Environmental Education team to finalise a brief to update educational resources for schools to use in conjunction with a visit to a water treatment plant.

3. Parks

3.1 Brochures

Following a request for material to take to the recent Disability Forum at Te Papa we produced an A4 *Accessible places in regional parks* brochure. This identified facilities and suggested activities at several parks that would be suitable for those with limited mobility. Following feedback we will be printing more of these brochures and distributing via I-sites, libraries and on our website.

3.2 Regional Outdoor Programme

The eighth Regional Outdoors Programme was completed on 19 April, with an estimated 14,131 taking part over 57 events in the regional parks. A separate report gives further details.

A period of review is under way with rangers, staff members and partner organisations, looking at what worked and what could be improved on for next year.

The Regional Outdoors Programme insert will be going through a redesign in order to fit with the *Our Region* publication. Planning for this will begin shortly in conjunction with the Communications team.

3.3 Buggy walks

The April Lion Foundation Buggy Walk - the last in the summer series - was a surprise success, with 190 parents and babies attending in perfect weather at Battle Hill Farm Forest Park. This was one of the highest turnouts for the monthly events since the programme began. Photos of all the walks feature on the website www.buggywalk.co.nz

The May Buggy walk is planned for the Petone Foreshore starting at Hikoikoi Park. The aim of the winter series is to have walks in a more urban setting with GWRC providing support with gear.

3.4 Corporate planting days

Corporate planting day enquiries have increased tenfold over the last year. The first planting is at Kaitoke Regional Park on 22 April, with 30 people from the Accor Hotel. This is the second time people from the Accor Hotel have come to Kaitoke and the earliest in the season a corporate planting day has been held in the parks.

We have a number of plantings confirmed with corporate groups in June and July already, mainly at Queen Elizabeth Park.

3.5 Research

We have commissioned Peter Glen Research to once again conduct our annual Parks Community Awareness and Usage Survey. This year some of the questions have been changed, removing those that were giving consistently high results and adding others that help us understand more about general activity levels in the community and levels of park usage throughout other publicly owned land as well. Some of these questions repeat what have been asked by the territorial authorities so we will be able to compare results; while others will be of interest in the Wellington Regional Strategy review of open space networks.

4. Networking

4.1 *At the Heart* regional physical activity plan

Each of the WRRIG partners is gathering information on progress with implementation of various aspects of the *At the Heart* strategy, including associated budgets. At present this is mainly a compilation of existing projects that contribute to the *At the Heart* outcomes. The GWRC contribution is substantial and ranges from provisions in the Regional Policy Statement and Regional Cycling and Walking Strategies to research into community awareness and usage of parks.

4.2 SPARC review of national and regional sport facilities

Three GWRC facilities have been identified by National and Regional Sporting Organisations as significant venues for their particular sport. Staff members are providing further details on each of these facilities to SPARC:

- Mt Climie Hang Gliding and Para Gliding launch (national)

- Battle Hill Farm Forest Park (regional – equestrian cross country)
- Queen Elizabeth Park (regional – equestrian eventing)

5. Community liaison

5.1 Volunteers

Staff members assisted with the organisation of an evening for volunteers at the rugby at Westpac Stadium initiated by Cr Fran Wilde. Those invited included many who have provided long service to their respective organisations in partnership with GWRC. This gesture was very well received by the 20 attendees, who also appreciated the opportunity to meet and chat to each other and with Crs Wilde and Laidlaw about their projects

5.2 Belmont Regional Park

The Friends of Belmont Regional Park are finalising resource consents to refurbish the toilets at the old shearers' quarters. The Friends are also growing plants and, with the support of GWRC staff members, will plant an area off Hill Road to link two bush remnants and create an ecological corridor.

5.3 Queen Elizabeth Regional Park

During the April meeting of the Friends Jonathan Kennett presented the Queen Elizabeth Park cycling concept plan where it was well received. They are also finalising details of their application to become a Charitable Trust, planning for an update of the remnant bush restoration plan, and setting dates for winter planting.

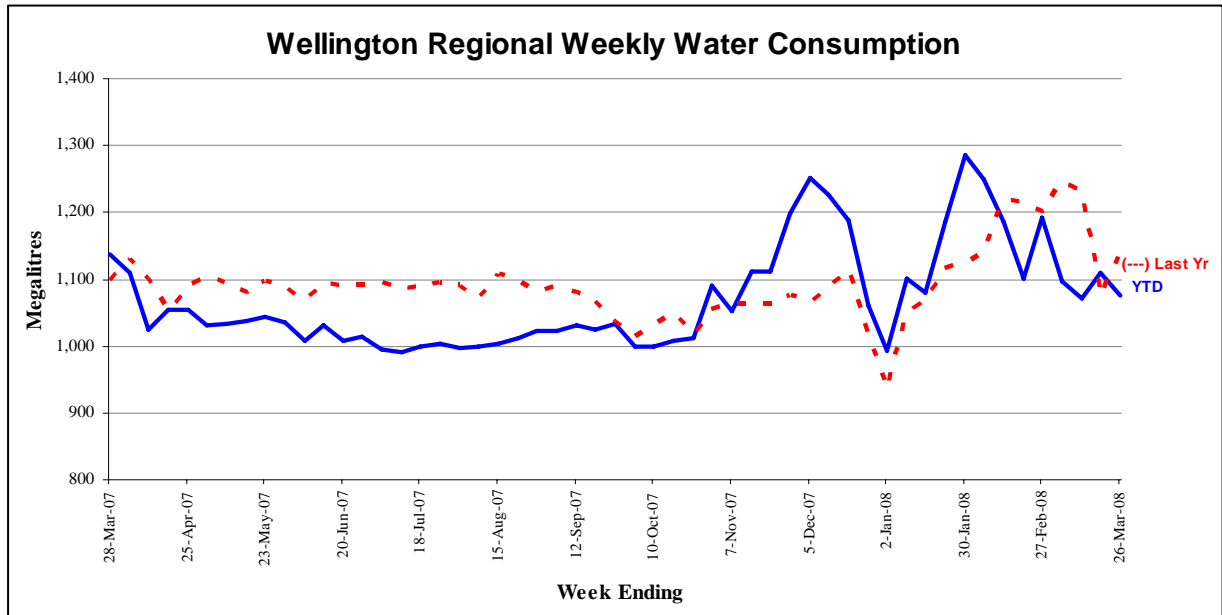
6. Staff

At the time of writing we were in the final stages of recruiting a new Landscape Architect and hoping to confirm an appointment shortly.

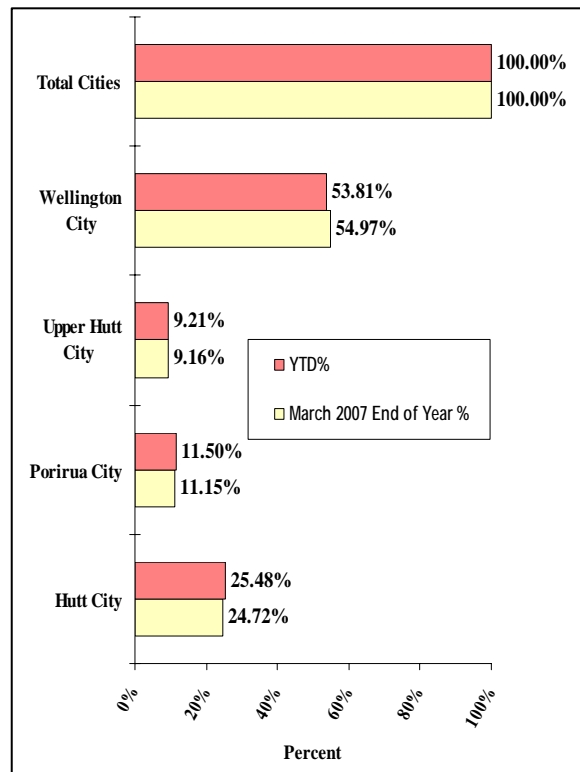
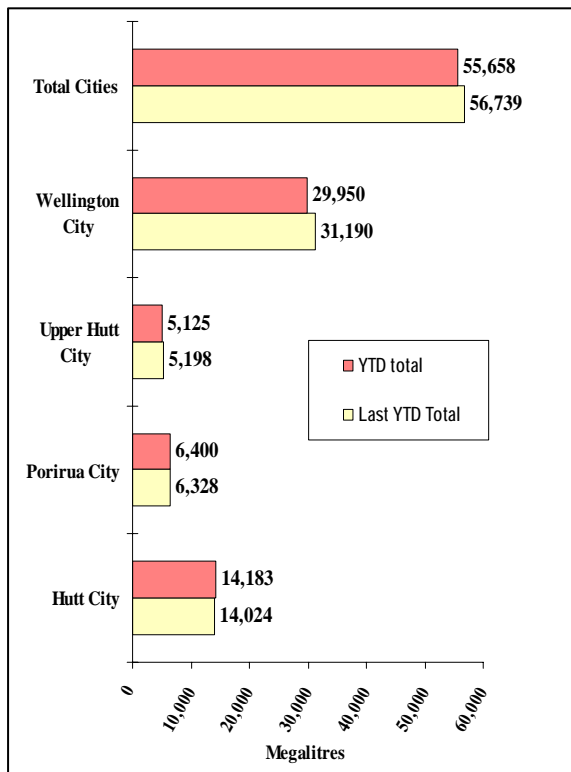
7. Water usage

Charts detailing water usage are on page 12.

Water sold over the last 12 months



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



Forestry

Review of operations for the period ended 31 March 2008

1. Plantation forests

1.1 Log harvest contract

We finally managed to move the hauler crew back to Blowfly (Puketiro area) and, while the weather has not continued quite as dry as January and February, the longer haul (24 km) has been accomplished without too many problems.

The ground based crew completed the harvest of Parry's Bush and has been setting up skids on both sides of Kilometre, ready for the return of the hauler when winter arrives.

The Wairarapa crew completed as much of the remnant stands in Reservoir Ridge that they could reach and moved to Castle Ridge on the main road. As this block abuts the main access road, it was necessary to close the road and adjacent walking track while the roadside trees were felled. This was accomplished without drama. As the payment issue which precluded restarting harvesting in the Wairarapa has been resolved, this crew will move back to Tauanui in late April.

Although I had been warned that export prices could be expected to soften in March, I was unprepared for the magnitude of the drop - up to \$10 per tonne for some grades. This, coupled with increased fuel, harvesting and cartage costs, has resulted in very depressed returns out of Blowfly.

Production for March was 4,794 tonnes for \$97,622, supplemented by the Wairarapa crew, which harvested 1,223 tonnes for \$17,441, a total of 6,017 tonnes for \$115,063

1.2 Silviculture contract

A further 7.2 ha were completed by Green Gold Forestry Contractors. They have recently supplemented their crew with another four employees, which will hopefully increase their monthly completion area.

1.3 Plantation Forestry operations

Thus far we have harvested a total of 51,768 tonnes against a pro rata target of 52,500 tonnes if we are to achieve a total harvest of 70,000 tonnes.

The recent wet weather has caused some trucks to have traction difficulties on the roads. Fines have been spread and this appears to have remedied the problem in other than two places where traction is still an issue immediately after rain.

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.

1.5 Market trends

As stated above, the fall in export returns was somewhat greater than anticipated. While some of this was straight price, some was also attributable to the M3/Japanese Agricultural Standard conversion rate. This conversion is very sensitive to the taper in the log and has the effect of reducing the return of a log with significant taper, despite the weight.

Rayonier New Zealand is predicting two months of depressed prices before things begin to recover. This assumes that fuel, shipping, and the dollar all remain at today's level.

There is some optimism that shipping prices, which have fallen off their peak, may fall further over this time as the pressure on shipping ex-China eases.

2. Reserve Forests

2.1 Tauanui logging

The payment difficulties reported earlier have been resolved and the logging crew will return to Tauanui late April.

2.2 Silviculture

Pruning has continued through second rotation stands within Hiwinui.

Two crews have been working on stands as they reach their trigger heights for each of the three lifts, bringing the total for the year to date to 62.5 ha (25 ha this quarter).

Thinning has been prohibited because of extreme fire dangers. While we had not been advised to do so by the Rural Fire authorities, most forest managers note the fire danger indices and, as the trigger points for prohibited fire seasons are reached, impose increasing restrictions on their contractors to reduce the likelihood of an accidental fire starting.

2.3 Access maintenance

In Stoney Creek the Manahau/Rough Hill/Wairangi boundary was dozed to improve access and fire protection. Similarly, overgrown little used access roads within the young crop in Hiwinui were opened up using the dozer.

2.4 Rural fire

As a result of the rainfall mid-March, the Prohibited Fire Season was reduced to Restricted (Fires by Permit only) just before Easter. This led to a number of fires over Easter from escapes from campfires that should have had permits.

The week of fire duty after Easter was heavily punctuated by advice of permit fires as landowners rushed to carry out overdue crop residue burns. One of these resulted into an escape into felled and standing willows adjacent to the Tauwharenikau River, which required a helicopter and four fire appliances to extinguish.

Fire and emergency management has continued on a regional basis as required.

The Tora Fire Party has just taken delivery of a new rural fire appliance which is based at Stoney Creek.

Water Supply

Review of operations for the period ended 31 March 2008

1. **Manager's comments**

Apart from a little rain at the beginning and end of the month, the dry weather continued throughout March, and hosing restrictions were in force between 25 February and 9 April.

Modifications were made to the Wainuiomata Water Treatment Plant, to allow the plant to run at lower flows. This work enabled the plant to remain in service during low river levels, when it otherwise would have been shut down.

A lot of work was put into revising and preparing our health and safety system to meet the requirements of the Accident Compensation Corporation's Workplace Safety Management Practices audit standards. However, this was time well spent, as it will go towards reducing GWRC's accident compensation levy.

Better Technical Options engineering consultants have completed an EECA sponsored level 3 energy audit. This follows an initial level 1 audit and is the culmination of about nine months work. The recommendations in the report include:

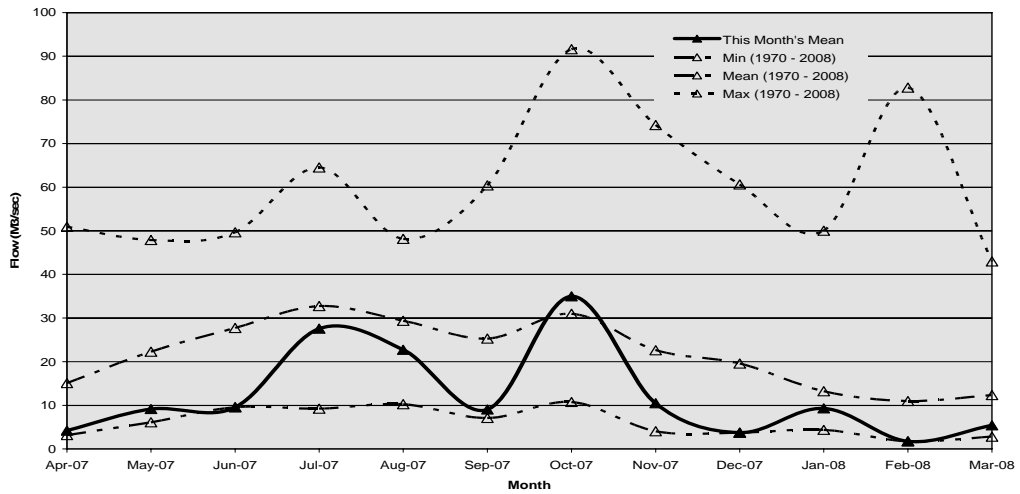
- Implementation of an energy awareness scheme for staff
- Introduction of a "switch off" policy
- Installation of automatic switching for plant lighting
- Development of a software package to predict the cost of operating major energy users under different scenarios
- Replacement of old power meters with on-line meters, so that real time energy monitoring can be implemented for large power use sites
- Checking the efficiency of the major energy using equipment
- Where light fittings are near the end of their life, replace with T8 fluorescent tubes, which have higher efficiency longer life and less toxic materials
- Investigating the cost of using the diesel generator at Wainuiomata Water Treatment Plant for "peak lopping"
- Installation of micro hydro generation facilities at suitable reservoirs
- Appoint an energy manager

Some of the recommended actions are under way. The rest will be carried out over the next financial year.

2. Supply situation

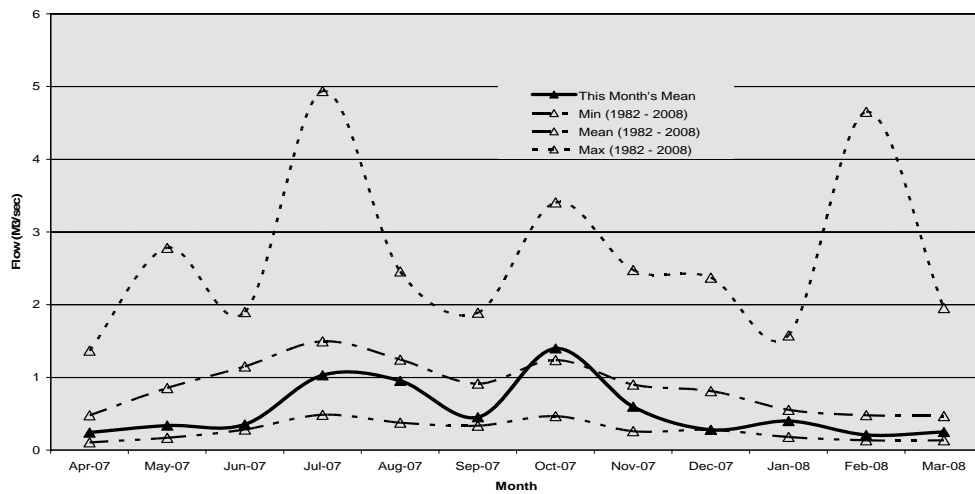
2.1 Hutt River flows

The mean flow for the Hutt River was below average during March.



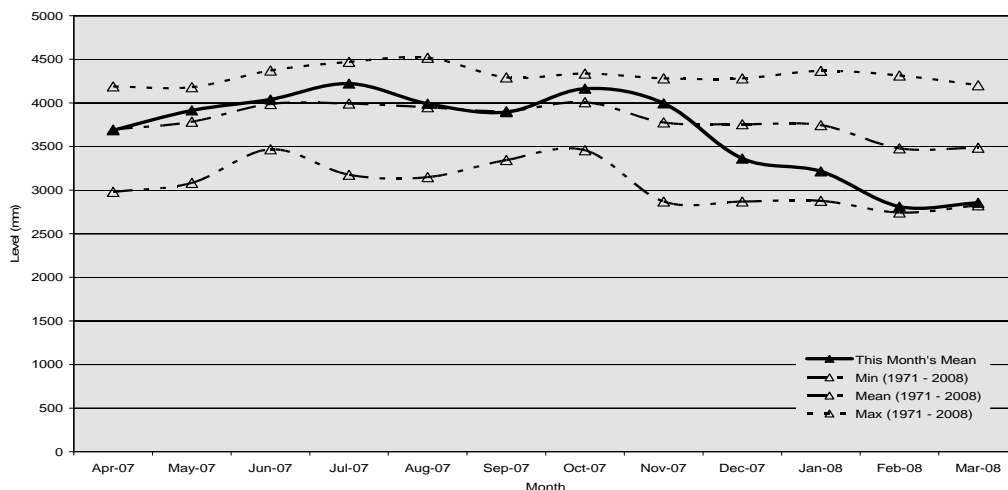
2.2 Wainuiomata River flows

The mean flow for the Wainuiomata River was below average during March.



2.3 Aquifer levels

The water level in the Waiwhetu aquifer during March was below average.



3. Catchment management

- Three “short” and two “long” guided tours were held and enjoyed by a total of 139 participants.
- As expected, the usual rate of vandalism and trespass increased over the school holiday period and during the spell of good weather.

Engineering Services

Review of operations for the period ended 31 March 2008

1. Water asset management

Key projects and their status are as follows:

- The old Karori Pumping Station has been demolished and the site levelled. The wall adjoining the annexe building (which contains monitoring equipment and flow control) is to remain and is being tidied up. The Karori Wildlife Sanctuary has been given a licence to occupy the land for car parking.
- An alternative access road to the Stuart Macaskill Lakes ring road has been formed. This route avoids crossing the Wellington Fault line and has been constructed for emergency access.
- Proposals have been received from consultants for a feasibility study of installing an electricity generator on the Orongorongo supply pipeline, close to the Wainuiomata Water Treatment Plant.
- Process and instrumentation diagrams and layout drawings have been prepared for the installation of a sodium chloride generating plant at Te Marua Water Treatment Plant.
- The computer server and software for the water supply optimiser is now in place and being configured and trialled. Final commissioning is not planned until August.
- The new Lincolnshire Reservoir and pumping station is nearing completion. The reservoir, which will supply the residential development at Grenada Village, is being constructed by the developer but will become a GWRC asset. The final pipework connection from the pumping station to the reservoir is planned towards the end of April, together with reservoir filling and a leak test. Final commissioning is expected in about two months.

2. New water sources

- The Wellington Metropolitan Water Supply Development report has been completed and is included as an attachment to a separate report to the Committee meeting. The report focuses on water source and supply development, with demand management initiatives coming under the Regional Water Strategy.
- Tonkin and Taylor Ltd has been commissioned to carry out a detailed feasibility study and preliminary design on increasing the level of the Stuart Macaskill Lakes. The report is due mid-May. However, we have required an immediate alert should something be identified that would clearly make this project not feasible or uneconomic.

- A reply has not yet been received from Capital and Coast District Health Board to the joint letter sent from GWRC and Wellington City Council requesting confirmation of commitment to joint fund a new Central Business District water reservoir. A strategy will now be developed on how to move forward with the project, with or without Capital and Coast District Health Board.
- Four revised scientific reports on the impact of lower flows on the river habitat of the Hutt River downstream of Kaitoke weir have been submitted to the peer reviewer for a second review. One report has since been signed off by the reviewer. When complete, all reports will be forwarded to Fish and Game New Zealand and the Department of Conservation for information.

3. Quality assurance

- Our records indicate that compliance with the *Drinking-Water Standards for New Zealand 2005* has continued to be achieved at all four water treatment plants this financial year.
- The collation of information for the grading of the Gear Island Water Treatment Plant is continuing and expected to be completed by the end of April.
- Raw water *Cryptosporidium* data for the last 12 months is being compiled to submit to Regional Public Health, to confirm the performance requirement for Te Marua and Wainuiomata Water Treatment Plants.

4. Environmental

- Installation of the equipment to reduce the volume of waste lime at the Wainuiomata Water Treatment Plant has been completed and commissioned.
- Investigations are continuing into the installation of sentinel wells upstream of the Waterloo wellfield, to minimise the risk of any contaminants reaching the production wells.