
Water Supply, Parks and Forests

July 2008

Parks

Review of operations for the period ended 31 July 2008

1. **Manager's comments**

The cold wet weather has kept many park visitors indoors but storm damage has taken up time for park staff in the Eastern Sector where the unusual winds caused more tree falls than normal. Despite the weather, there have still been plenty of plantings and events happening, so some people are out and about.

The Policy team is now back up to full capacity with the new Policy Advisor, Sharon Thurlow, starting work in August.

The Parks' Environmental team was pleased to be acknowledged recently for their work in caring for Greater Wellington Regional Council's (GWRC) indigenous vegetation. The team's achievements were mentioned by the New Zealand Plant Conservation Network when GWRC was given the award for a council that has made an outstanding contribution to native plant conservation.

2. **Environmental planning and implementation**

2.1 **Policy and planning**

Submissions on the draft Concessions Guidelines closed on 11 August. Sixteen submissions were received and Hearings for the Concessions review will be held at this Committee meeting. Copies of the submissions were sent to Councillors prior to this meeting. A report to the Committee on any changes to the draft Concession Guidelines will then be made to the 23 October Committee meeting.

A paper regarding the reserve classification of Waitangirua Farm will be considered at this Committee meeting. Papers on the Kapiti Pony Club lease and the Bylaws Review will be provided at the next Committee meeting.

Officers have prepared submissions on a SPARC Outdoor Recreation Review Discussion Document and on Kapiti Coast District Council Dog Bylaws Review. The dunes are designated an *off the leash area* under their bylaws. This is consistent with the Queen Elizabeth Park Management Plan.

Heritage consultants have been contracted to complete a scoping plan for a heritage study of Lake Wairarapa.

2.2 **Monitoring**

Officers have established new bird monitoring lines in Tunnel Gully in Pakuratahi Forest and in Akatarawa Forest. Bird monitoring is currently occurring in all of the parks and forests, except for these two. Volunteers will complete the spring surveys in Tunnel Gully, while GWRC staff will be completing the work in Akatarawa Forest.

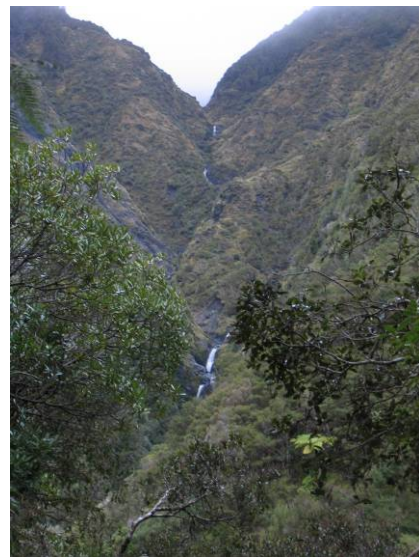
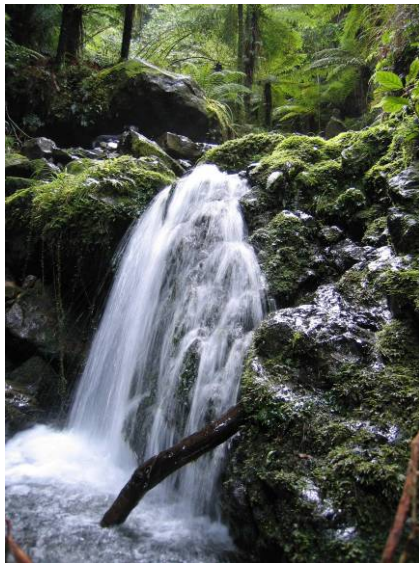
Rodent monitoring recently completed in East Harbour Regional Park has thankfully shown a drop in rodent numbers. The tracking rate has fallen from

22 percent to 14 percent in the mainland island area. Outside the mainland island rat numbers have stayed much the same, at 44 percent (42 percent previously). This is good news for the recently released robins, which hopefully are beginning to find mates and prepare to nest for spring. Ideally rats should be below 5 percent but less than 10 percent is still good.

Rata trees are being rephotographed in Akatarawa Forest, as part of the rata health monitoring programme. These photos are compared over time using digital analysis to determine if there have been any changes in the composition of the canopy of these trees. When rata trees become unhealthy through possum browse, the foliage becomes thinner and this trend can be picked up through the use of this technique.

2.3 Pest control

Goat control operations have recently been completed in Kaitoke Regional Park (17 goats and 14 pigs culled) and Wainuiomata/Orongorongo Water Collection Area (16 goats and 4 pigs). The photos below show some of the sights the goat hunters get to see as they move through the native bush in our parks and forests. The waterfall is in Kaitoke Regional Park, while the right-hand picture shows Ryan's Stream in the Orongorongo Catchment.



A contractor has been hired to burn the older slash at Lake Domain, in preparation for the planting at Lake Wairarapa on 7 September.

2.4 Wainuiomata Mainland Island

A new rodent bait formulation marketed as *Ratabate*, where the toxin is presented in a paste rather than a solid block, was used when the stations were last filled in mid-July. Preliminary field trials of *Ratabate* in Bay of Plenty found a clear preference by rats for this bait over *Ditrac*, the bait we normally use in the Mainland Island. The bait is still secured inside the bait stations by being loaded into paper bags and the paper bags being threaded onto the wires inside the stations.

Possibly as a result of the use of *Ratabate*, rodent monitoring completed in August has shown a fall in rat numbers. This decrease (from 43 percent to 28 percent tracking rate) is heartening but these levels need to fall to below 10 percent (ideally below 5 percent) to lessen the impact of rats on the breeding of native birds. Outside the Mainland Island the rat numbers are still high (98 percent).

The data collected from the last check of the possum traps shows that the numbers of possums being caught in the traps are relatively constant - low numbers of animals that are moving into the area from outside, in search of new territories.

3. Western sector

3.1 General

We are just emerging from a very wet winter period. Fortunately the weather has not thrown any extreme events at us to date, just fairly constant and dismal days, so visitation is down but maintenance work continues apace.

However, one weather event that did affect us was a combination of king tides and westerly swells that affected large parts of the coastline of Queen Elizabeth Park. The footbridge access at Wainui Stream was affected and we are currently working to repair this.

The farmland in two of our parks, Belmont and Battle Hill, is currently closed for lambing but this does not prevent members of the public from having access to alternative areas within each park.

Event or special visits to our parks have included plantings by both community and corporate groups, and mountain bike and orienteering events. Of special note is the opening of the Te Araroa Walkway section on the Kapiti Coast, part of which traverses Queen Elizabeth Park between Raumati and Paekakariki.

We are progressing sustainable land use planning for a number of our parks where farming is a major component. Belmont, Battle Hill, Queen Elizabeth and Whitireia Parks all have a farming component. By gathering base data on each property and compiling a sustainable land use plan for each area, we will be better able to respond to environmental concerns, while planning farming operations for the future of each area.

3.2 Events

Staff from the Office of the Ombudsmen came out to Battle Hill for a morning's planting and managed to plant 700 trees in and around the campground. This was a great effort considering the weather was poor.

The Hutt Vintage Car Club started their winter run from Battle Hill, with 30 classic car owners meeting at 1 pm and taking their cars for a round trip to Paraparaumu and back to Lower Hutt.

Outstanding in The Field organisers; an event held around the country to promote farming as a career, held a teachers' only day in the woolshed. Around 18 teachers came to learn and hear what the organisations that sponsor the event (such as Meat and Wool, Fonterra and the Dairy Research Institute) are looking for in potential employees.



At Queen Elizabeth Park we hosted a number of community and corporate plantings this period. The rain has been wonderful for the plants but not so good for all our volunteers. We have had only one pleasant day weather wise for planting. Even though volunteer numbers have been low, we are still getting our plants into the ground. We are quickly approaching the 15,000 mark.

Also at Queen Elizabeth Park the Kapiti section of our national track, Te Araroa Walkway, celebrated its grand opening this period. Our section started on the Waikanae River and ended in Paekakariki, a 22 km walk. Approximately 3.5 km follows the coastal track through Queen Elizabeth Park. As the walkers approached the southern entrance to the park they were treated to sausage sizzle hosted by GWRC and members of the Friends of the Queen Elizabeth Park. About 100 people started out about 9 am. We ended up preparing sausages for over 50 people. Quite a good number made it the whole 22 km.



The Hutt Valley Orienteering Club held a foot event at Belmont Regional Park in the upper Korokoro Valley above the Stratton Street entrance.

Planting activities were carried out in the lower Korokoro Valley near Cornish Street. Members of the Korokoro Environmental Group and Conservation Corps spent at sunny day planting a site between the walking track and the stream.

A mountain bike skills course was run over two days at the Stratton Street entrance. This activity has been moved from the former venue at the Makara Peak Mountain Bike Park, because the Belmont Regional Park venue offers more suitable opportunities for teaching bike handling skills to new riders. The woolshed classroom proved ideal as a base for the theory part of the course.

3.3 Ranging

At Battle Hill the Ranger has been busy working through various pony clubs and Battle Hill Eventing for horse events for the upcoming equestrian year. The horse eventing calendar runs from 25 October 2008 to 9 May 2009 and will consist of 40 plus eventing days.

Lambing started on Sunday, 10 August, with a set of twins born in the pipeline paddock. The reason for the closure from 11 August to 23 October is mainly to prevent mis-mothering of the lambs. This is when the lamb thinks that you are his/her mum and decides to follow you and when it works out or you have managed to chase it away it is too late or too far for mum to find it. Unfortunately this is one of the downsides to Romneys/Perendales. If the lamb is not in the same spot where she left it, then the one bleating calling for mum is not hers because she left hers next to that tree or stone. This normally happens in the first week of life but can happen for up to a month. Something else that they do is they will follow the ute or the quad and end up being lost that way as well, so we do try to restrict our vehicle movements in the lambing paddocks. The access to the forest is open at this time, as well as the Bush Reserve walk up to the Summit and the return trip has to be back through the Bush Reserve.

Other ranging work carried out included:

- A vehicle was trespassed this period.
- Analysis and documenting of revegetation sites.
- Induction manual was prepared for Queen Elizabeth Park.

At Belmont Regional Park fencing materials were delivered to Hill Road in July for a new grazing boundary fence to be constructed on the Kilmister Block. It is planned to commence fence construction in October, once the weather improves and after lambing is finished.

The Ranger has continued liaison with the mountain bike community to improve trail opportunities and address health and safety issues in the park. Voluntary work to upgrade and maintain existing trails has continued. New trails continue to be established in Belmont Pine Forest at the end of Stratton Street. Volunteers have been constructing an intermediate level downhill trail to reduce the impacts of downhill riding on the two way Danzig Track.

The Ranger showed four high school students around the park as part of a programme run on World Ranger Day held at the end of July.

The Ranger has placed the *Lambing Closure* signs around the entrances to Waitangirua Farm. The closure runs for nine weeks and the farm reopens to the public at Labour Weekend.

3.4 Park and asset maintenance

This period has seen a major cleanup in the Battle Hill sheep and cattle yards, with an excavator grading the yards and remetalling and compacting the worst areas. A new 150 mm diameter stormwater drain has been installed in the sheep yards to help remove the surface water from the downpipes of the Pauatahanui Pony Club building and run into a new barrel sump installed in the Dell.

A new larger diameter culvert pipe has been installed to replace the 90 mm drainage sump soil pipe that had blocked up and was contributing to flooding

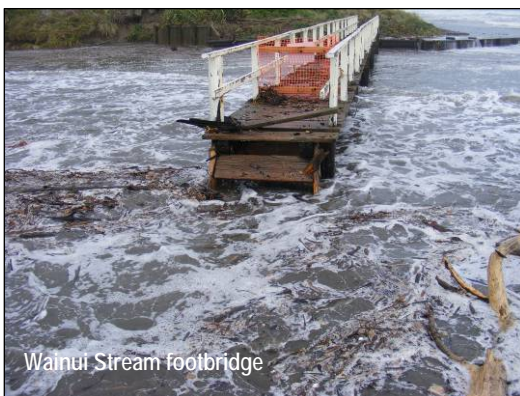
in the woolshed yards during periods of heavy rain. A new culvert pipe was also installed under the main road from the woolshed yards to the Airstrip. This was to replace the existing 225 mm concrete pipe that had blocked, causing major flooding and damage to the main road, again during heavy periods of rain.



A contractor has been tidying up Swampy Gully at the spoil tip site and the road has been given a scrape and metal as well.

During the northerly storms we have had damage to tracks and fences from trees blowing over. In Tunnel Gully three macrocarpa blew over in two days and cleaned up a short section of fence. Another macrocarpa on the side of the main road to the hay paddock got blown in two and in the Bush Reserve two trees side by side fell into the river creating a potential flood risk, as well as taking out the side of the main track. Quick work by the horticulture team in cleaning up the trees has reduced the likelihood of future track damage.

The woolshed ramp has had a major clean by a specialist contractor using a commercial water blaster to clean the green algae off and apply an environmentally friendly agent that is activated when it rains to dissolve the remaining stubborn snot.



With the combination of king tides and heavy rains during this period, there was a great deal of damage to the coastal areas of Queen Elizabeth Park. Particularly badly hit was the footbridge over the mouth to the Wainui Stream. After having the structure inspected and determined to be sound we decided to add an additional 15 m to the length of the bridge.

Waitangirua Farm fence asset maintenance/replacement projects are continuing at Belmont Regional Park. Contractors and farm staff are making progress on the key priorities.

The landscape team has installed new box culverts on the Mill Workers Track from Rahui Grove to Cornish Street.

Significant storms have resulted in a number of fallen trees in the park. These have been cleared from walking and mountain bike tracks.

The Ranger has replaced a rail fence adjacent to the Stratton Street woolshed classroom. The previous fence was removed when hazardous pine trees in the area were felled.

The Ranger has carried out bollard and fence reconstruction at the Oakleigh Street and Hill Road entrances. This infrastructure had been damaged by vehicle collision.

4. Eastern sector

4.1 General

One of the joys of working for the Parks Department is the ability to be out in the environment and seeing others doing the same. Typically this is harder in winter but this year has been diabolical. Usually we can expect a few crisp fine weeks but even half days of sunshine have been few and far between. This has resulted in very wet and muddy tracks and roads, and access issues, not to mention that some of the work we had planned to do would make more of a mess.

Along with the work we have had to defer for finer days, we have had the strong winds for which Wellington is renowned. This wind has created havoc on a number of tracks and provided plenty of work clearing trees in the rain. As you will see from a photo in this report, some of these trees are huge.

One of the advantages of doing maintenance work with our staff rather than contractors is the ability for us to reprioritise and deal with these types of situations and other emergencies, rather than waiting in line for contractors.

In summary, despite it being winter, it has still been a busy time for Parks. Here's hoping for more fine weather.

4.2 Events

Planting has continued at Kaitoke Regional Park, with two corporate plantings involving around 40 people planting approximately 900 plants. A further two trees were also planted in the Celebrate Life Totara Grove.

Four wheel drive and motorcycle events continue in the Akatarawa Forest, although minimal, mainly because of weather conditions.

World Ranger Day was celebrated in conjunction with Wellington City Council and DoC on 31 July. Invitations were sent to all colleges and a total of 21 students from throughout the region took part, enjoying a day of learning about the role of a park ranger and a tour of a park in their area. Unfortunately the weather was wet and cold on the day but did not seem to deter the students too much. Feedback survey sheets have been distributed to the students and will be used to assess if we continue this format next year.

4.3 Ranging

Motorbikes in the Wainuiomata Recreation Area have been an issue on at least three occasions during this period. One motorbike came up to the Lower Dam and mini-bikes were caught in the triangle paddock and their owners were asked to leave.

The Police continue to assist us with the apprehension of the offending persons involved in threatening our staff and also vandalising gates, bollards and fences, etc., in the Tunnel Gully reserve. We look forward to a positive outcome.

Illegal access by motorcycle riders in Pakuratahi Forest has reduced significantly but, with the school holidays only recently finished, there are still a few young boys transgressing the rules.

4.4 Park and asset maintenance

With the site office being shifted in June, work has commenced on refitting it as a base for the Mainland Island work, along with completing remedial maintenance.



The severe storms during July caused a lot of wind-thrown trees and there were significant impacts on road surfaces because of excessive rain. Four eucalyptus trees were removed from Tunnel Gully alone. For safety and access reasons, several of the parks were closed for two days but are now open again, with all main access roads restored to good condition.

Public recreational areas have also been checked and any hazards have been removed. We are addressing other issues in the remote forests as time allows.

Because of the amount of rain, snow and storms over the past months, many hours have been spent in the parks clearing drains, cutting trees from the access roads and off fences.

There were two significant snowfalls during July and more in early August, resulting in the closure of the Orongorongo access road. These snowfalls also caused closure and delays in the Rimutaka Hill Road.



The Wainuiomata/Orongorongo Ranger assisted a local community group with the planting of three specimen trees adjacent to the Hine Road entrance. The planting was a mark of respect to remember Bill McCabe, a local who has been a major contributor to many local groups and committees, etc., including Rural Fire and as President of the Rimutaka Forest Park Trust.

We are currently working with an Akatarawa landowner regarding installation of some signage on the walkway through their land to identify lambing in progress and the recent loss of lambs incurred because of private dog owners accessing through their property.

Periodic maintenance throughout the roading network in the Akatarawa and Pakuratahi Forests continues. With prison crews still unavailable, potholing, water table and run-off maintenance, and regular of the culverts have been carried out by GWRC staff throughout the Akatarawa and Pakuratahi Forests.

An area was identified in Tunnel Gully that was causing concern for fish passage. This has now been rectified by GWRC staff.



The new eel interpretation sign

An eel interpretation sign has now been installed at Pakuratahi Forks to educate park users about our native eels.

New Lakes Block map/information panels are currently being designed with the assistance of the Marketing and Design Department. It is hoped installation will commence in September.

The Dillon Street and Ngaumatau Track directional signs have been reinstalled following a tagging incident during June.

Improvement work has started on a substandard section of Mackenzie Track in Butterfly Creek Valley. Materials have been flown into the area to make handrails where structures have a large drop.

A rabbit control operation in Kaitoke Regional Park campground has been advertised and will commence once the weather becomes more favourable.

In preparation for a Honda supplied tree planting project in Kaitoke, a section of the triangle grass area has been ripped up to assist with the planting. Children from the five local primary schools will be assisting with the project on 5 September.

Marketing and Design

Review of operations for the period ended 31 July 2008

1. **Manager's comments**

We believe there is plenty of scope to work more closely with our city council customers on decision making around potential water restrictions over the peak summer period. A meeting at the end of August drew an initially positive response to some proposed water restriction levels and an aligned communication plan.

Raising public awareness of the Wellington metropolitan area's potential for water shortages is not easy, especially in light of the winter we seem to be emerging from. However, we will take another step up in the coming financial year by repeating last year's mulch campaign, a more streamlined approach over summer and very probably a campaign in autumn to target indoor water use.

Recent weeks have seen a significant focus on working with other agencies, various clubs or other audiences who already or potentially support our efforts to promote the values and benefits of the parks and encourage people to visit and get involved in them. Examples include Sport Wellington Region, the city councils, New Zealand Recreation Association members, Kapiti's Nature Coast tourism operator network and the various parks' Friends groups. We are looking forward to working with several of these groups next summer on the Regional Outdoors Programme.

2. **Water Supply**

2.1 **Water restriction communication review**

Following last summer, we have discussed the idea of a formal review of the restriction notification process with our city council customers, with the aim of streamlining communications between GWRC, our customers and Capacity. At the time of writing a meeting is planned for 28 August, with some further action expected to follow as a result.

Also in light of summer 2007/08 and the significant pressure placed on our water supply, we have reviewed our water restriction trigger guidelines. A revised schedule of water restriction triggers and associated actions was drafted and circulated among GWRC Water Supply staff for comment. Feedback identified the need for the stage of summer to have a greater bearing on restriction triggers. This has been incorporated into a second draft, which is being reviewed internally (as at 25 August), prior to discussion with our customers. The draft includes proposals for several new water shortage response measures, which will need support from our customers to implement.

2.2 **Water conservation promotion**

A report on public recall of our water conservation related advertising and communications over last spring and summer has been received.

Ninety percent of people could recall advertising of the watering restrictions imposed, notably the sprinkler and fixed irrigation system ban. Those anticipating a moderate or high risk of a water shortage occurring in Wellington over the coming year rose from 25 percent last December to 68 percent in May this year. Perception of risk appears to be closely linked to motivation to change behaviour and we intend to use this heightened awareness of risk to support behaviour change during the coming summer.

Recall for advertising of garden water conservation actions during last summer registered 60 percent. The spring garden mulching campaign, run for the first time last November, achieved 34 percent recall. This last result is still positive, as the advertising was used for the first time last year and questioning about the campaign was conducted 5-6 months after the advertising occurred. This work is helping to guide activity for the coming summer.

A good deal of time has gone into developing a proposal for water conservation advertising for the 2008/09 financial year. Broadly, we propose to continue our main activity from 2007/08: to focus on garden water use during spring and summer. However, we are also developing a joint promotion with our four customers and a commercial partner, following their initial expressions of interest, which would target a significant component of all-year 'base' demand. We will provide more detail once a fleshed-out proposal has been considered by the partner company.

2.3 Water Demand Management Workshop

A steering group, including New Zealand Water and Waste Association, Local Government New Zealand, Ministry for the Environment and consulting researcher Beacon Pathway, has started a national overview of water demand management measures. As part of this, they are considering how to support engagement with communities across New Zealand about demand management.

The steering group elected to invite a wider range of participants with appropriate expertise to a Wellington workshop in August. Marketing and engineering representatives from Water Supply attended. Various key messages, tasks and target audiences were identified during the workshop. This is an ongoing project and we anticipate officers continuing to contribute over the coming months.

2.4 Regional Water Strategy

Officers are working with an external consultant to restart progress on the Wellington Water Management Plan as a central plank to the Regional Water Strategy and help shape the wider strategy.

2.5 Treatment plant visits

As at 25 August, two tours were booked to be hosted during the reporting period, with some 30 visitors.

The Ministry of Economic Development sent a film crew out to Wainuiomata Water Treatment Plant to film the Wainuiomata River intake and the plant

processes. They also filmed a control room technician remotely accessing the water treatment plant control room systems. The Ministry is launching a digital strategy at the end of August and is putting video clips on its web site to show how technology has improved people's lives at work.

Development of the water treatment plant education resources has made some progress but is now on hold as planned because of parental leave. Work is scheduled to recommence in November.

The Stuart Macaskill Lakes' observation and picnic area construction plan will be finalised by the middle of September, and the facility in place for summer. The main usage is expected from the tour groups to the water treatment plant.

2.6 Possible billboard sites

Recently we requested proposals from three billboard companies regarding possible use of GWRC pumping stations and/or the Waterloo Water Treatment Plant for advertising billboards. Proposals were received from two firms during August and these are currently being assessed.

3. Parks

3.1 Signs

During the period, further updates were made to the East Harbour Regional Park Lakes Block information panels.

3.2 Advertising and publicity

We have taken advantage of several free or low cost opportunities to promote the regional parks to the recreation industry, specific audiences and the wider public:

- Nominations were submitted for two New Zealand Recreation Awards - Outstanding Community Recreation Programme (Regional Outdoors Programme 2008) and Outstanding Project (Battle Hill Heritage Trail). Just preparing the nominations is a useful exercise in reviewing processes and considering how we might improve next time. These awards are presented at the New Zealand Recreation Awards' national conference on Wednesday, 17 September.
- An abstract regarding the findings from our parks research was submitted to organisers of the Healthy Eating Healthy Action Conference to be held at Te Papa in November. Should it be accepted, we intend that a presentation would focus on the health benefits of recreating in parks.
- An advertisement for the Battle Hill Heritage Trail has been placed in the *Starters & Strategies* magazine - a publication that is distributed free to primary, intermediate and Years 9 and 10 teachers around New Zealand. While teachers may book in for an introductory talk with the park ranger, their experience at Battle Hill will essentially be self-guided.
- East Harbour Regional Park is the feature article in *Our Region* in

September. While East Harbour occupies a prominent location and many people have heard of or visited locations such as Butterfly Creek or the Pencarrow Lighthouses, there is relatively low awareness of its status as a regional park. Its high quality natural environment, much improved tracks and easy access to public transport mean that there is plenty of scope to improve visitation from around the Region. We have worked with Corporate Communications to develop and refine the information, photos and map for the feature.

4. Events

4.1 Regional Outdoors Programme 2009

Planning is under way for the Regional Outdoors Programme, with some new events as well as culling some of the smaller less popular walks.

This summer will see a redesign of the brochure to fit in with the new *Our Region* format and we expect to have to prune information as part of this. We will aim for a higher profile for the GWRC web site where we have no limits with information and may promote additional events run by external providers.

4.2 Buggy walks

The August buggy walk at Whitby was extremely well attended with 160 participants there on the day. We expect the September buggy walk at Karori Sanctuary to be popular also, given its central location and discounted admittance fee.

Planning is under way for the annual “feature” buggy walk at the Botanic Gardens, of which GWRC is a supporting sponsor. This is an opportunity to secure higher profile media coverage and attract a new “crop” of prospective buggy walkers. Last year around 250 people attended this event during quite inclement weather, so a fine day should bring many more.

4.3 Planting days

During this period we have had four corporate planting groups at Queen Elizabeth Park and Battle Hill Farm Forest Park.

Enquiries for plantings started slowly but picked up as winter progressed (with some additional help with our press release being picked up by *The Wellingtonian*). There are three more planting days booked for later in September.

We are assisting with the planning and running of the Conservation Week planting at Lake Wairarapa Domain on 7 September. The event is also an opportunity for the public to learn more about the concept plan for the area and to get feedback.

5. Landscape planning

We are working with ranger staff on a concept plan for vehicle circulation and parking spaces in the Battle Hill Farm Forest Park front paddocks. Part of this

process will involve consultation with affected community groups that use the area for camping. It is also well used for casual picnics and swimming. We want to ensure the informal character of the area is retained, while minimising the impact of increased visitation.

Discussions are under way to further enhance the visitor experience at the MacKays Crossing entrance to Queen Elizabeth Park. Key aspects include:

- Redesigning the entry/exit arrangement to allow two way traffic and reducing the gradient into the park. This may involve moving the park gates.
- Investigating methods to increase summer water levels in the peat wetlands between the railway embankment and the ranger's office.

Following a meeting with the rangers we have recommended that the location of gates into Belmont Regional Park at Hill Road be moved about 20 m to discourage parallel parking (disrupts access somewhat) by visitors.

6. Community liaison

Staff attended the Nature Coast networking evening, where representatives from the Department of Conservation spoke about their work on the Kapiti Coast. Nature Coast also presented their newly created television commercial. Other meetings included the Hutt River Trail Operations meeting, two regular meetings of Parks' Friends groups, a Wellington Regional Strategy Open Space workshop, the Regional Cycle Forum and a discussion with ARAC about a heritage paper developed by one of their members.

During the period the Annual General Meetings of both the Friends of Queen Elizabeth and Belmont Regional Parks were held. Murray Kennedy made a short presentation to both groups outlining the current LTCCP issues.

The guest speaker at the Belmont Annual General Meeting was Dr David Wratt from NIWA discussing the Impact of climate change on parks. The Queen Elizabeth Park guest speaker is Dr Karen Palmer who discussed her research findings on the Whareroa Stream and its tributaries

7. Staff

Applications for the fixed term Events Advisor role closed on 29 August.

We are reviewing the applications and expect to appoint a candidate in time to include a short handover period.

8. Water usage

Charts detailing water sales for the year are on page 16.

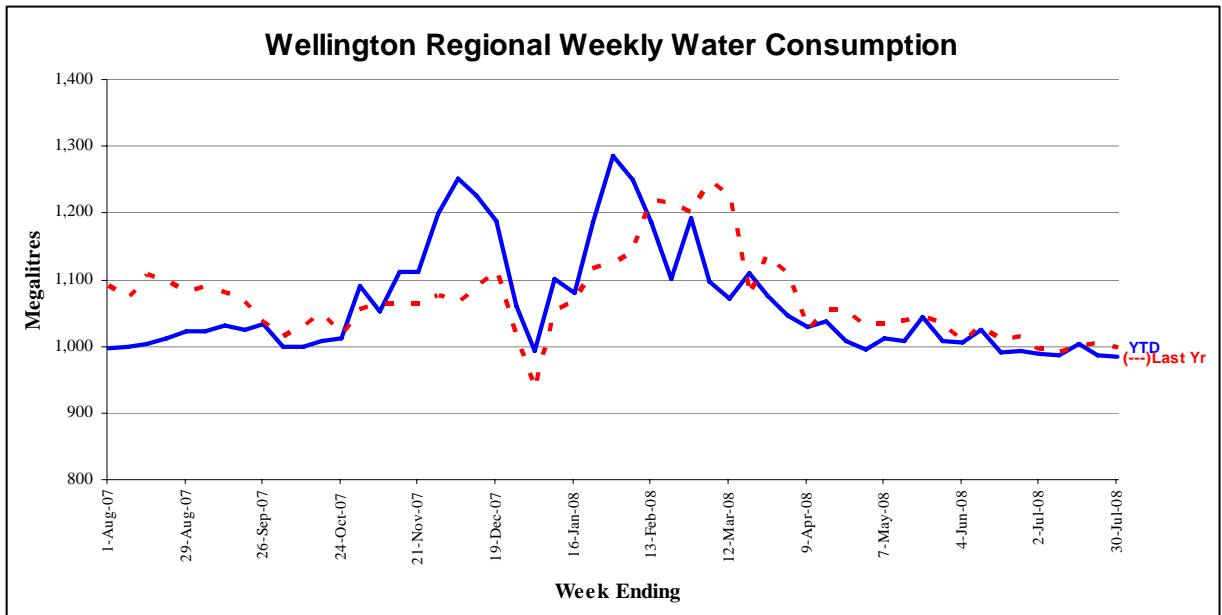


Figure 1 - Water sold over the last 12 months

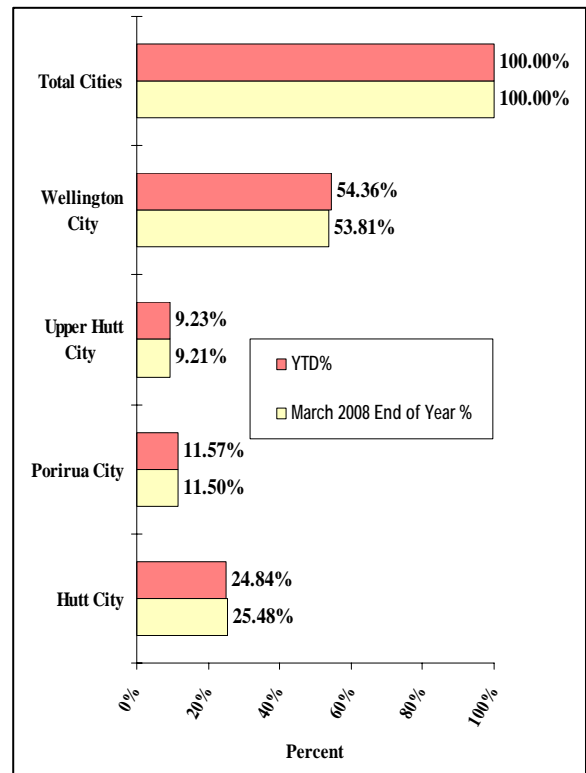
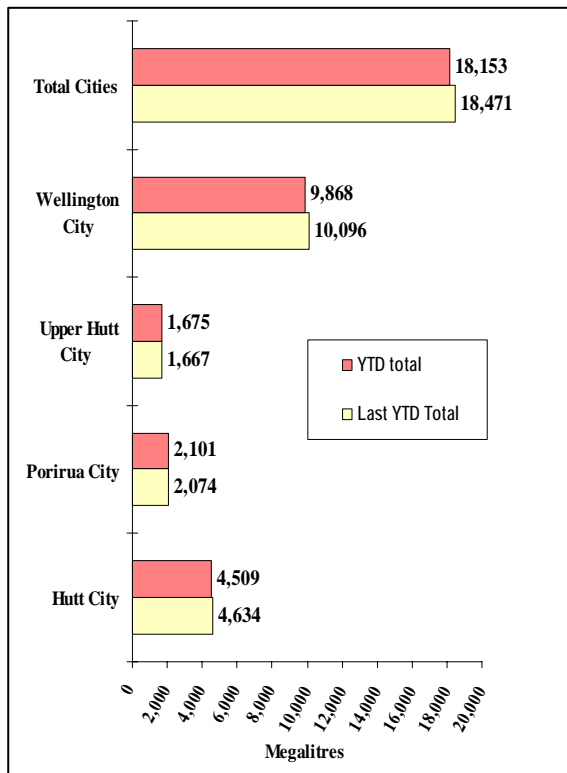


Figure 2 - Water sold during the metering year to date [April 2008 to March 2009]

Forestry

Review of operations for the period ended 31 July 2008

1. Plantation forests (Wellington)

1.1 Log Harvest Contract

The rain continued and, while it made working conditions somewhat unpleasant, the work continued and the trucks kept up with production. The exception was the wind on 29/30 July when the loggers started work but knocked off again at 9 am because of the danger from falling trees. I estimate that we “lost” in excess of 5 hectares of wind-thrown trees, with the majority being in the Kaitoke block where there are three large holes obvious from State Highway 2 and Airstip where there were significant losses to the south of Valley View Road. Contractors are going to recover some of the trees adjacent to Valley View Road.

The crews achieved tonnages of 2,964 at Log 6 and 2,570 at Log 36, a total of 5,534 for the first month of the new financial year. An annual total of 70,000 tonnes would require a monthly production of 5,833 tonnes per four week month.

Log 6 is still on the boundary with Boiler Gully at the northeastern edge of the Kilometre block. The move back to the 9 Kilometre is still some time away, as they appear to be able to reach more of the remaining areas of Kilometre than at first thought. This will permit Log 36 to remain in Puketiro.

The hauler crew in Blowfly (22 km) remained on the western side of the block on two skids. The second skid was only 30 metres above the original skid, so rather than set up a “load out” sized skid they moved the hauler and shovelled the logs back to the original skid for log making and loading out.

Log 36 has constructed another skid about 400 metres further up the existing track. While the skid is in place, the weather has been too wet to complete the metalling of the road. In the interim staff have moved to Drapers at the 16.5 kilometre where they are clearing the top ridge area as a ground based operation until the road to the next skid can be completed.

While export prices are still expected to rise towards Christmas, we have lost our pruned log grade because of oversupply in both China and Korea. This will only have a minor effect and, as we retain a part pruned grade as the harvesting moves higher up the block, there are fewer full pruned logs available.

Of more concern is the domestic situation. Since the last week of July we have not put logs into the local mill at Upper Hutt and the mills at Featherston and Masterton have reduced their throughput and, therefore, their log purchases.

Net revenue before roads for June was \$116,924, some \$26,329 better than June.

1.2 Silviculture Contract

The new Contracts have been awarded for the current year. Of the 13 blocks under offer, 1 block was withdrawn, one Contractor was awarded 1 block, two were awarded 2 blocks and one was awarded 8 blocks.

During July 10.0 hectares of silviculture was completed.

No invoices for planting were submitted in July. The planting crew is waiting for Log 36 to move to their next site before returning to complete planting for the season.

1.3 Plantation forestry operations

Staff have continued supervising the Contractors and have undertaken minor maintenance on the main logging roads.

Repairs to gates have been made following damage or vandalism.

All main tracks were inspected following the storm and wind-throws removed as necessary.

1.4 Forest access

Maungakotukutuku access is unchanged.

Although the roads are coping well in the wet weather, softer conditions have resulted in some slumping on corners. If not attended to, these can have a destabilising effect on loaded trailers. They were repaired by building up the slumped area to reduce the camber through the curve. The main logging route was graded to remove corrugations.

There have been no more incidents of vandalism or theft from the logging contractors since they moved their bulk diesel supply off-site.

1.5 Market trends

As stated last month, the export outlook until February is encouraging. However, the domestic outlook is still cause for concern, with supplies to one mill suspended because of arrears in payments.

2. Reserve Forests (Wairarapa)

2.1 Access maintenance

Higher than average rainfall during July (623 mm) caused several major slips and ongoing attention was required to maintain access for logging trucks. This rainfall was almost half the annual rainfall figure and resulted in extended periods of extreme run-off and ground saturation.

Multiple small slips and water table blockages were not difficult to manage.

However, a very large slip that has shown periodic instability since the mid-1980s, when it blocked the Tauanui River, flowed over the road to a height of 1.5 m. A grader was initially used to allow vehicles to move through and then

a digger was used to shift many cubic metres of very wet material that flowed from high in the neighbouring Pirinoa 8B block.

The second major slip was an unstable rock face on a section of road close to the river. This slip repeatedly encroached on the road from one side and high river flow nibbled at the outside edge of the road.

2.2 Tauanui logging

Despite wet conditions impacting on both logging and access, and a slow timber market, 1,339 tonnes were harvested during July.

Because of a combination of log type and reduced domestic market access, 817 tonnes were exported through the port of Wellington.

Fuel costs, both in harvesting and cartage, have had a major impact on net returns.

Water Supply

Review of operations for the period ended 31 July 2008

1. **Stuart Macaskill Lakes**

The design of a repair system for the failed seal at the base of the Lake 1 tower at Te Marua has been completed and construction is under way.

The repair is being given a high priority. However, wet weather has hampered progress. The present estimate for completion is the end of August.

2. **Te Marua feed forward control**

Feed forward coagulant control has been implemented at Te Marua, with an immediate improvement in the control of coagulant chemical dosing. As a result, chemical use is optimised and initial indications are that savings will be in the 10 percent to 15 percent range.

3. **Stage 2 optimiser (*Aquadapt* software)**

The site acceptance testing of the expanded optimiser software, *Aquadapt*, has been carried out and we are now into the three month maintenance period. There are some minor outstanding items to be cleared by the Consultant but otherwise the new system is working very well.

The *Aquadapt* software determines treatment plant flow rates and schedules reservoir filling, via pumping stations and valve stations, to achieve the lowest overall cost solution using on-line and real time data. The system computes literally thousands of possible scenarios per second to take into account varying demand, capacity and cost information, and presents the pump schedules in a clearly readable format.

4. **Management systems**

The implementation of the health and safety management system, SafeTsmart, is about 90 percent complete. A procedural audit schedule has commenced and email notifications are up and running. Automated reports will be available next month.

The SAP asset management system project team has been finalised, with two Water Supply staff being seconded as Subject Matter Experts for the next few months. This project will run for the next 12 to 15 months.

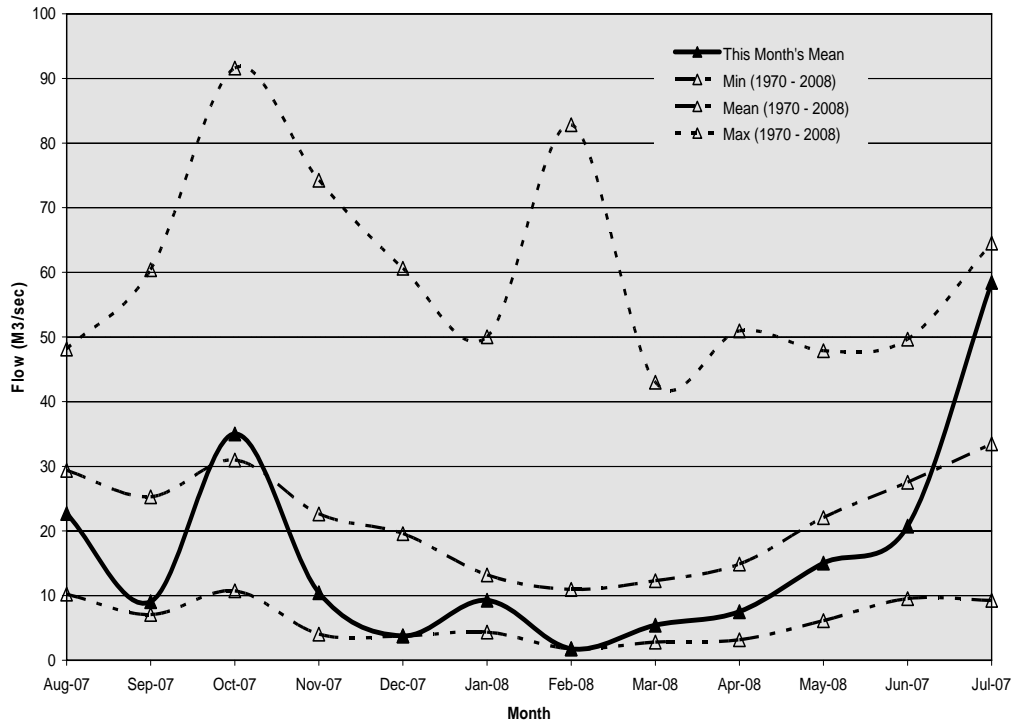
5. **Supply situation**

5.1 **General**

There were no supply issues during the period, apart from slightly higher than expected power costs at Te Marua because of the higher pumping energy required when using Lake 2 instead of Lake 1.

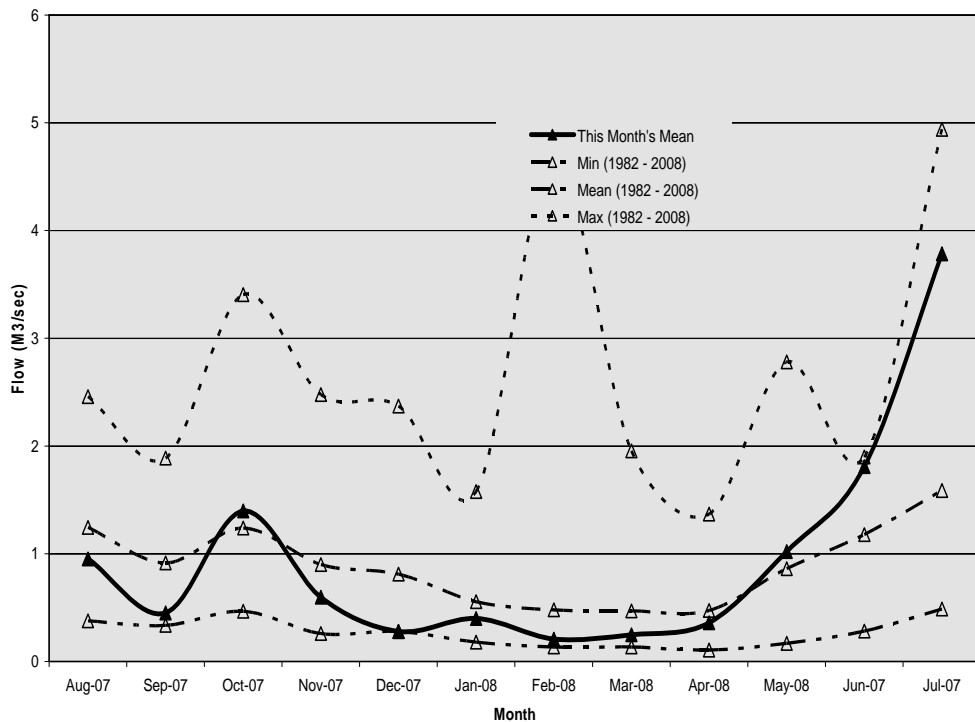
5.2 Hutt River flows

The mean flow for the Hutt River was near maximum during July.



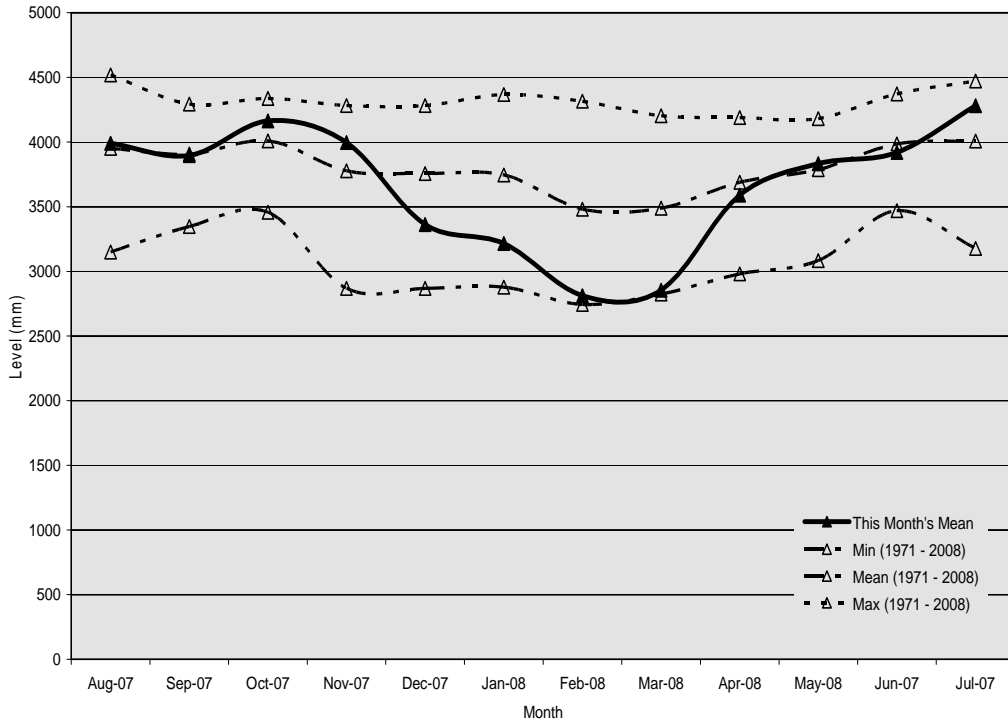
5.3 Wainuiomata River flows

During July the flow for the Wainuiomata River was above the mean.



5.4 Aquifer levels

The water level in the Waiwhetu aquifer was above the mean during July.



6. Catchment management

- One guided tour was held and enjoyed by the 27 participants who turned up out of 50 booked. The weather was not good, with wind and high rainfall.
- It has been a month of snow, rain and wind, with two trees blown down onto the perimeter fence.
- A professional pig hunt took place this month, with a total of 24 pigs culled.
- A local contractor was engaged to upgrade the track beside the perimeter fence. The emphasis was on water control and to ensure material was not permitted to accumulate on the lower wires of the fence. About half the length of the road was completed by year end. The balance will be completed in this financial year. This was the first significant maintenance of the track since it was constructed and it is hoped that a small grader can be used for regular maintenance in the future.

Engineering Services

Review of operations for the period ended 31 July 2008

1. Water asset management

- All materials have been purchased and work is progressing on the installation of the new seal for Stuart Macaskill Lake 1 tower/apron joint. A very wet July has delayed work on site, but the old seal has been prepared and the apron wall profile modified, and off-site cutting and drilling of the stainless steel anchor plates has been completed. With normal weather conditions the installation should be completed by mid-September to allow the lake to be refilled by mid-November.
- Seismic mitigation work on the Te Marua to Karori pipeline across the fault line at Te Marua is nearing completion. A line valve and branch connection has been fitted on each side of the fault line and a 300 mm diameter pipeline across the fault line will now be installed.
- The Kaitoke water supply pipeline to the Bell Road Reservoir crosses the fault line three times at the Karori Sanctuary. Options to reroute the pipeline for a single fault line crossing are currently being investigated. This pipeline will be one of the water feeds into the proposed Central Business District (CBD) reservoir.
- Replacement of defective external cladding on the Wainuiomata Water Treatment Plant has been completed.
- An emergency water supply connection for Upper Hutt has been installed at Timberlea.
- Approximately 500 m of water supply pipeline to the Porirua Low Level Reservoir is being rerouted by the Aotea Block developer to facilitate the new housing subdivision. We are monitoring the installation.
- A preliminary meeting has been held with the Consultant commissioned to carry out the revaluation of the water supply assets and asset data is being assembled. A total of \$5.6 million of new assets (including \$2.1 million of vested assets) has been added to the asset register as at 30 June 2008.

2. New water sources

- A presentation on the proposed water supply development strategy has been made to the Wellington and Hutt City Councils, and Capacity.
- The maximum practical capacity of the proposed CBD reservoir on the Prince of Wales Park is assessed as 45 million litres (ML). Wellington City Council has reviewed its water storage requirement at 17.5 ML and we understand that Capital and Coast District Health Board has confirmed a need for 20 ML. This leaves 7.5 ML for GWRC (the storage volume original envisaged). A Consultant has been commissioned to provide an

estimate of cost for this larger capacity reservoir. A meeting with the Minister of Health will be arranged to pursue the hospital funding once the funding split between the three parties has been established for this larger reservoir.

- Peer review of the draft feasibility report on raising the water level of the Stuart Macaskill Lakes is continuing. GNS Science has been approached to prepare a seismic hazard assessment of the lakes area.
- A draft of the consent application to reduce the minimum flow of the Hutt River at the Kaitoke intake is being prepared. This is planned to be ready to send to key stakeholders by the end of September, together with the assessment of environmental effects and scientific reports.
- The water treatment process concept for the Upper Hutt aquifer is being peer reviewed. A 12 month programme of *Cryptosporidium* testing to confirm the water treatment requirements is continuing. The final version of the risk assessment report and a summary report are awaited from the consultant. Numerical modelling to assess the impact of water abstraction from the Upper Hutt aquifer on the Hutt River is proceeding.
- An analysis of the impact of climate change on the water supply development strategy has been completed. The analysis showed that by 2050 climate change will reduce the yield of the water supply sources, resulting in a 6 percent reduction in the sustainable population that can be supplied. A 50 percent increase in the capacity of the new dam option and its treatment plant would be required to offset the impact of climate change.

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 *Drinking-Water Standards for New Zealand 2008*, due out in July, have still not been released. Clarification is being sought over the intended release date. These Standards will provide benefits to GWRC in the way compliance of the wholesale distribution network is determined.
- The collation of information for the grading of the Gear Island Water Treatment Plant is continuing. We are reviewing whether operational changes will be required to achieve an A grading.

4. Environmental

- The draft report on the feasibility of installing an electricity generator on the Orongorongo supply pipeline to the Wainuiomata Water Treatment Plant has been received and reviewed, and a number of questions have been passed back to the Consultant.

- Investigation of the hydro-power generating opportunities at Te Marua is under way. This work will build on the initial work carried out last financial year.