
Water Supply, Parks and Forests

August/September 2008

Parks

Review of operations for the period ended 30 September 2008

1. **Manager's comments**

The end of this period brought the change to daylight saving. From now until it finishes, visitation in the parks will increase dramatically, as opening hours are extended and people take the opportunity after work to enjoy our parks more, whether for an after work run, mountain bike or dog walk.

With increasingly high expectations about the environmental management of our parks and, more specifically, riparian zones, we are working towards developing sustainable land management plans for all our parks in the Western Sector.

2. **Environmental planning and implementation**

2.1 **Policy and planning**

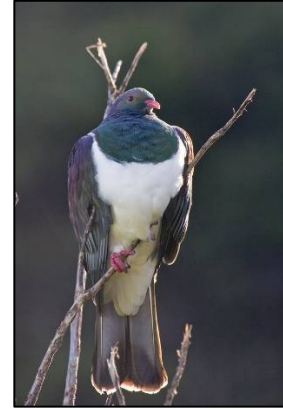
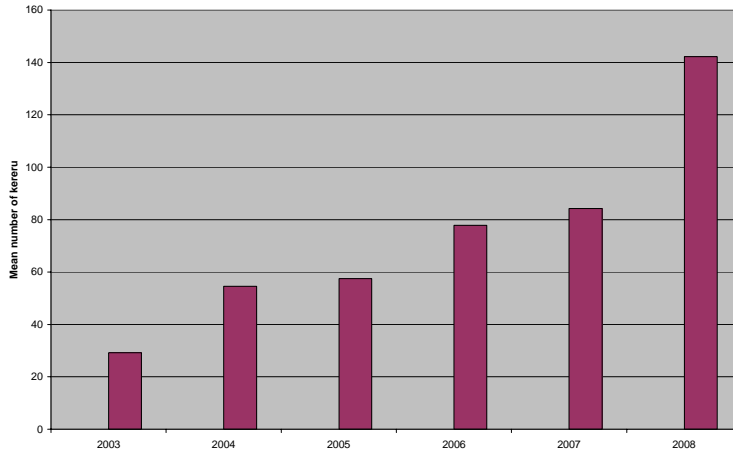
Hearings for the Concessions Guidelines were completed at the last Committee meeting on 11 September. Final changes to the draft have been made and a report requesting the approval of the final guidelines will be made at this Committee meeting.

A number of concessions are currently being processed by planning staff. These include: two summer festivals in Queen Elizabeth Park, filming in Battle Hill Farm Forest Park, tours in Kaitoke Regional Park, a mountain bike event in Belmont Regional Park, and a trail run in Akatarawa Forest. Officers are also assessing an application from the Tramways Museum to add a small building to one side of their museum, in order house old photos, act as a ticket booth for the museum and where visitors can have a cup of coffee.

The scoping plan for a heritage study of Lake Wairarapa has been completed. It is intended that a full heritage plan will now be produced over the coming months. An archaeological survey of Lake Domain has also been finalised.

2.2 **Monitoring**

Bird counts have been completed for the first time in Akatarawa Forest. This means that we will now have bird counts being undertaken in all our parks and forests. The most common birds recorded were tomtit, silvereye and grey warbler, but rare kakariki were also recorded. The annual kereru count in Kaitoke Regional Park campground has finished. A fantastic increase in numbers have been seen – a 70 percent increase on last year's figures. The improvement in kereru numbers recorded in the park is evidence that the pest control operations are of benefit to the birdlife. Kereru nest in the forests surrounding the campground. Kaitoke Regional Park has had a number of 1080 operations completed within its boundaries in the past 10 years, as the western (interior) forest is cared for under the Parks' environmental programme, while the front faces are part of the Tb programme.



Mean number of kereru recorded at Kaitoke campground from 2003 to 2008

2.3 Pest control

Bait fills of the bait station networks in Korokoro and Dry Creek in Belmont Regional Park, and Cannon Point in Akatarawa Forest have been completed as part of the ongoing possum control operations in the park.



Professional goat control contractors culled 35 goats in Korokoro and Dry Creek during September.

The “weed team” has continued work on the climbing asparagus in the northern block of East Harbour Regional Park. They have also completed a resurvey of Dry Creek for pest plants.

2.4 Wainuiomata Mainland Island

A bait station fill was completed in September. A new formulation of bait (*Ratabate*, which also contains diphacinone) was placed in the bait stations during the last fill. There appears to be a good uptake of this new bait, with over 50 percent of the bait being taken. Whether this is because the rats prefer this new bait, or the fact that uptake is higher at this time of year, is unclear. It will be interesting to see if this bait-take equates to decreased rat numbers. The next rodent monitor is programmed for November. The bait stations were refilled with the new bait during the September fill.

3. Western sector

3.1 General

Queen Elizabeth Park continues to provide us with challenges in terms of development proposals or requests to utilise park lands. The Kapiti Pony Club, Tramways and more recently requests to utilise land as part of the double tracking of the rail line to Waikanae are examples of the types of requests that are being dealt with by GWRC Parks’ staff.

It is pleasing to note that, as the warmer spring weather has arrived, Battle Hill is a popular destination for family groups. On any fine weekend there is normally good numbers of people out experiencing the farm environment. The Ranger has done very good work of recent encouraging groups out to visit while juggling the responsibilities of having a working farm in his backyard.

3.2 Events

ACC held a corporate planting day at Battle Hill Farm Forest Park on a sunny Friday that went extremely well, with 25 staff planting over 200 native trees and shrubs in four hours.

Also at Battle Hill, filming for a movie disrupted farm activities for two days while they filmed around the woolshed and front paddocks.

Two *Eventing Wellington* equestrian events were hosted at Queen Elizabeth Park. Both events enjoyed fabulous weather and were well attended.

A barbecue was hosted at Queen Elizabeth Park to thank all the volunteers that have helped during our planting season. We had 30 people turn out on what was a typical planting day this winter - pouring rain.

A number of community and corporate plantings have been held at Queen Elizabeth Park this period. The rain has been wonderful for plants but not so good for all volunteers! Weather wise, we have only had one pleasant day for planting. Even though volunteer numbers have been low, we are still getting our plants into the ground and 15,000 plants have been successfully planted this year!

At Belmont Regional Park the *Take Action* team has used the Woolshed Classroom at Stratton Street, providing environmental education activities for multiple school groups.

3.3 Ranging

Talks and walks with school and play centre groups started at Battle Hill Farm Forest Park at the end of September. We are doing one a week at the moment. At this time of the year we have five orphaned lambs that can be fed by the children.

Wellington Brownies held a fun day in the park on a wet Sunday. Over 100 under 12s had to complete a six stage circuit event that involved making and flying your own kite, sack races and having to listen to Parks' staff try and blow a shepherd's whistle.

Staff have been working on a campground/picnic area concept plan for Battle Hill to give some direction for the future and help to define and separate the camping areas from picnic areas.

The Belmont Regional Park Ranger has continued liaison with the mountain bike community. Voluntary work to upgrade and maintain the Danzig Track in Belmont Pine Forest has been under way during August and September.

Volunteers have continued to construct an intermediate-level downhill trail to reduce the impacts of downhill riding on the two-way Danzig Track. This work is important preparation for a PNP Cycling Club race booked to be held in early November. The Ranger also met with a web designer who is developing a New Zealand mountain bike tracks web site. Discussions focused on tracks available for mountain biking with in Belmont Regional Park.

3.4 Park and asset maintenance



Wainui Stream bridge extension

Our carpentry team has done a stellar job on the new addition to the Wainui Stream Bridge at Queen Elizabeth Park. It was decided to increase the length of the bridge to avoid immediate erosion issues in the future.

Three large pohutukawa trees have been transplanted from an obscure corner of the park to the front of the restored barn. The MacKay's Crossing

entrance to the park is really looking great.



Transplanting of pohutukawa trees



Fenced asset maintenance/replacement projects are continuing at Waitangirua Farm. Contractors and farm staff are making progress on the key priorities. Additional rails have been added to a fence in the Cannon's Creek Lakes Block in Belmont Regional Park, to limit motorcycle access at this point.

The Woolshed classroom at Stratton Street has been given a spring clean and the floor has been polished.

4. Eastern sector

4.1 Events

East Harbour's *Nighttime Madness* running event was held again this year and attracted around 350 participants. Around 60 people from the Hutt Valley Orienteering Club attended a recreational event at Kaitoke Regional Park during September. The East Harbour Ranger also gave an information talk and presentation on the life of a ranger to around 50 people at a recent Lions Club meeting.

During this period we had an environmental planting in the Hydro Valley. This valley is the headwaters for the Whakatikei River and the river was identified as the most promising site for a new water supply for the Wellington Region. The planting exercise was a joint venture with ARAC and our Environmental team). The area that was planted was one that has historically attracted the motorised fraternity, being a swampy type area and, as you can imagine, they caused significant disturbance to the area in the past. The planting went well, everyone thoroughly enjoyed the day, and the exercise helped to emphasise to ARAC members the need to treat sensitive areas with respect.

Celebrate Life plantings continue in Totara Grove at Kaitoke, with a further three trees planted during this period.

The triangle paddock in the Wainuiomata Recreation area now has 1,500 new native trees planted on the strip adjacent to the Wainuiomata River with assistance from four Wainuiomata primary schools (involving 150 children). Everyone enjoyed a barbecue sausage and drink on the completion of the planting.



4.2 Ranging

Warmer and better weather has seen a slight increase in visitor numbers at Kaitoke Regional Park. Unfortunately this has corresponded with a rise in vandalism and non-compliant activity, with patrolling being increased as a result. Vandalism at Kaitoke has included graffiti on signs, flaxes stolen from Keith Spry Lookout, toilet roll holders being smashed and trail bikers riding at Bengé Flat.

4.3 Park and asset maintenance



The cleanup of wind thrown trees and debris from the period of stormy weather during August has continued throughout the Akatarawa and Pakuratahi Forests, including a large wind thrown rimu that was removed from the Mt Climie access road and donated to the local iwi for carving.

In East Harbour Regional Park another section of the Mackenzie Track in the Butterfly Creek valley has recently been upgraded.



Following upgrade of MacKenzie Track

The tracks team has done a great job realigning the track, thereby cutting out the old staircase at the top end of the valley. This now provides a far more manageable grade and takes foot traffic away from the creek side, lessening the environmental impact.

The construction team has been at the Mackenzie Track site upgrading the last of the bridge structures. These structures complement the track work and certainly add quality to this iconic walk.

Signage has been upgraded on all Kaitoke Regional Park barbecues to reflect new charges, along with new camp fees' signage at the information kiosk.



New bollards installed at Te Marua

Bollarding of the grass area at Te Marua has been completed.

The Kaitoke large facility building and weir toilets have been water blasted in preparation for the summer.

Marketing and Design

Review of operations for the period ended 30 September 2008

1. **Manager's comments**

Looking back over the period it is good to see evidence of growing support in Government, non-Government agencies and the commercial sector for working together on policy and practices that will encourage more sustainable use of water. Getting more consistency around water restrictions and communicating common messages will be a very useful first step in increasing awareness among residents of what they need to do (or refrain from doing) over summer.

Recently we were delighted that the Battle Hill Heritage Trail received a "Highly Commended" in the Outstanding Project Award category at the New Zealand Recreation Association national conference held in Christchurch. The judges commented that the project featured *lots of iwi consultation about a sensitive site and period of local history and good use of signage and content to tell a story and entice people up to the top of the hill for more information, a view and a good walk*. Thank you letters were sent to contributing suppliers and staff, and a press release prepared to highlight this achievement.

2. **Water Supply**

2.1 **Water restriction communication review**

We have broadly agreed with the four city councils and Capacity that pre-prepared joint notices from all five councils advising residents of changed water use restrictions would simplify the public notification process, and save time and money. To achieve this we need more consistency of restriction "rules" and we are now working with our customers to identify a set of rules that all four city councils can support.

Closely related to this is a review of our water restriction trigger guidelines. A revised schedule of water restriction triggers and associated actions was developed and circulated to our customers for comment. Again, there is general customer support for the revised trigger and response proposal but there are still a number of details that need to be agreed.

2.2 **Water conservation promotion**

2.2.1 **Spring mulching campaign**

Planning is well advanced for a repeat of last year's successful mulching promotion which leads into and reinforces our summer water conservation message.

This campaign will run during November as part of GWRC's *Be the Difference* household behaviour change programme. It uses print and radio advertising, point of sale posters, the GWRC web site and press releases to outline the

benefits to gardeners of using mulch to summer-proof their gardens. We are also working with our customers to take advantage of their communications resources to support this campaign.

To further encourage people to mulch their gardens, 12 Nursery and Garden Industry Association member retailers around the Region are offering low prices or specials on mulch during November.

2.2.2 Summer water conservation campaign

The summer campaign is planned to run during January and February 2009. It will employ the same strategy - targeting water used for gardening -- as the summer of 2008. We are reviewing our specific advertised messages in light of research conducted over the last year. A media schedule and various other details will be developed during November.

2.2.3 Water efficient fittings promotion

We are working with a product manufacturer to develop details for a joint campaign that would include a retail partner and our four customers supporting a promotion offering households a specific water efficient appliance at a significant discount to its usual retail price.

The manufacturer is preparing a detailed proposal for discussion with two potential retail partners during November. We are discussing the detail of the promotion with our customers, including how they will support it via their communications resources. It is tentatively scheduled to run between April and July 2009. We will provide more detail once the manufacturer has assessed retailer support, which is necessary to develop the proposal.

2.3 **Water conservation voluntary behaviour change – joint project investigation**

We are in discussion with consultant Sinclair Knight Merz (SKM) and Sustainability Trust about a trial project investigating the potential for voluntary water conservation behaviour change in our region. Sustainability Trust offers potential to access Central Government funding for sustainability projects, while SKM bring significant experience, including currently working with Melbourne's water companies on a similar project covering 99,000 households. A mid-October meeting with these organisations and other potential partners from the local and central government and education sectors will further explore this opportunity.

2.4 **Water Demand Management Workshop**

A steering group, including New Zealand Water and Waste Association, Local Government New Zealand, the Ministry for the Environment and consulting researcher Beacon Pathway, has started to develop a national overview of water demand management measures and consider how to support the process of engagement with communities across New Zealand about demand management. We are part of a wider group of water suppliers that has been invited to provide feedback to this process. Various key messages, tasks and

target audiences were identified during an August workshop. The steering group is currently developing details around these. This is an ongoing project and we anticipate continuing to contribute over the coming months.

2.5 Regional Water Strategy

Officers are working with an external consultant (Jane Gunn) to assist with developing the proposed Regional Water Strategy, which will incorporate the Wellington Water Management Plan.

2.6 Water Supply Annual Report 2007/8

This provides our customers and other stakeholders with a detailed record of our activities and achievements for the 2007/8 financial year. Background data and information has been collected and the report narrative drafted. The layout of the report is being revised to make key “top line” information stand out more readily. The report will be presented to the Parks, Forests and Utilities Committee in November for approval. This report satisfies one of our key performance indicators.

2.7 Treatment plant visits

As at 7 October 2008, five tours were booked to be hosted during the reporting period, with some 75 visitors.

2.8 Possible billboard sites

We are currently negotiating with an outdoor advertising company for use of a billboard at our Kaiwharawhara Pumping Station. There is already a billboard occupying this site and we hope to obtain a better return than we have received in the past.

3. Parks

3.1 Signs

Park signage will be a significant means by which GWRC gives effect to changing the name of the Lakes Block to the *Parangarahu Lakes Area* as agreed by Council. We have been developing text in consultation with the Tenth Trust. We expect to have the new information board at Burdans Gate and the five map boards in the Lakes Area itself in place by summer.

Staff also met with the Historic Places Trust to review their signage concepts for the land adjacent to the lighthouse. Given that the open spaces and views are such a feature of the Lakes Area, it is important that interpretation signs fit in well with the landscape.

3.2 Regional Parks Report

Considerable time has been focused on developing the text and sourcing photos for the *Regional Parks Report 2007-08*. This year there will be a special section on our environmental programme and how it helps deliver both improved experiences to visitors and “ecosystem services” to the wider Region. A separate paper gives more detail of the report.

3.3 Parks' publicity

As mentioned in a previous report, we also nominated the Regional Outdoors Programme for the "Best Community Programme" award. Unfortunately we were unsuccessful.

Organisers of the Healthy Eating Healthy Action conference to be held in Wellington in November accepted our abstract *Who visits Wellington's regional parks and how do they benefit?* as a presentation topic. This will focus on our research findings, especially the health benefits of recreating in parks.

We have met with Hutt City I-site to discuss our contribution to their planned "Outdoors Open Day" to be held on Sunday, 23 November. This is a good opportunity for us to promote the Lower Hutt regional parks to people who may not be aware of what is on offer in their local area.

4. Events

4.1 Regional Outdoors Programme 2009

The Regional Outdoors Programme line-up has been confirmed, with final copy forwarded to the graphic designers. We are waiting with interest to see what they provide, as the format will be quite different to last year.

We have been working closely with the various territorial authorities to keep them informed of our plans. The city councils have been very supportive and will be promoting relevant GWRC events in their individual summer programmes. The main focus now is on finalising various event details and a promotional plan.

4.2 Buggy walks

The annual Lion Foundation "feature" buggy walk was held at the Botanic Gardens on 2 October. The fine weather contributed to a very successful day, with an estimated 800 people turning up. GWRC is a supporting sponsor of this "Push Play" event. Our involvement increases over the spring and summer, when we work with Sport Wellington to organise monthly buggy walks in the regional parks.

4.3 Planting days

The period saw the last of the corporate planting days for the season. Groups from ANZ, Opus and ACC planted at Queen Elizabeth Park and Battle Hill, with very good results. Enquiries are still being received but any further sessions over the next few months will involve releasing, mulching, potting up and similar tasks.

5. Landscape planning

Honda TreeFund

The final Honda Tree planting for the season took place at Wainuiomata on

10 September. Staff assisted with the planning and implementation of this event which was attended by around 150 school children from the local area and the local Honda dealer.

Over the last few months we have been streamlining the process by which we administer the Honda TreeFund across Greater Wellington. During the period we confirmed funding to a number of projects across GWRC land, including the Wainuiomata Lower Dam site, Te Marua entrance at Kaitoke Regional Park, planting at Taita and Whakatikei on the Hutt River, the Dricon site (Waikanae River) and Chrystalls Bend (Otaki River), the remnant bush and Whareroa Stream at Queen Elizabeth Park, Battle Hill wetland and front paddocks and Belmont Regional Park's Hill Road and Cannons Creek restoration area. Again Honda New Zealand is to be commended for making this resource available.

6. Community liaison

6.1 Lake Wairarapa

A planting at the Lake Wairarapa Domain was held on Sunday, 7 September 2008 (during Conservation Week). This joint GWRC/Department of Conservation/South Wairarapa District Council project went off very well, with 80 people attending and planting 2,000 plants. It was also an opportunity to discuss a concept plan that had been developed for the Domain.

During the period staff co-ordinated the judging of the Rata Community category of the GWRC Environmental Awards, for which there were eight entries from around the Region. The judges visited all the nominated sites and were very impressed with the various projects.

6.2 Queen Elizabeth Park

The Friends of Queen Elizabeth Park held their Annual General Meeting and were addressed by Dr Karen Palmer, who gave an illustrated presentation of her research findings on the health of the Whareroa Stream. The Friends group again elected Dr John Lancashire as its convenor. The Friends group has recently become an incorporated society and is exploring fundraising opportunities to support its ambitious programme for the park.

6.3 Akatarawa Forest

Meetings were held recently with the Akatarawa Recreation Access Committee, discussing a paper written by one of their members on heritage items in the Akatarawa Forest.

7. Water usage

Charts detailing water sales for the year are on page 13.

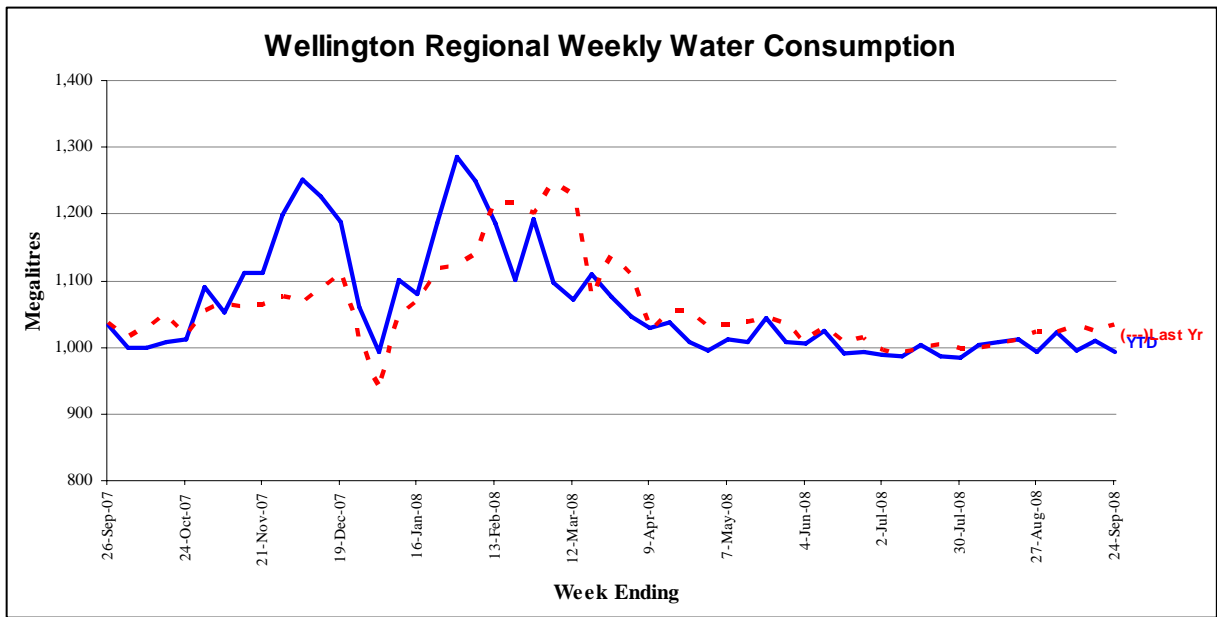


Figure 1 - Water sold over the last 12 months

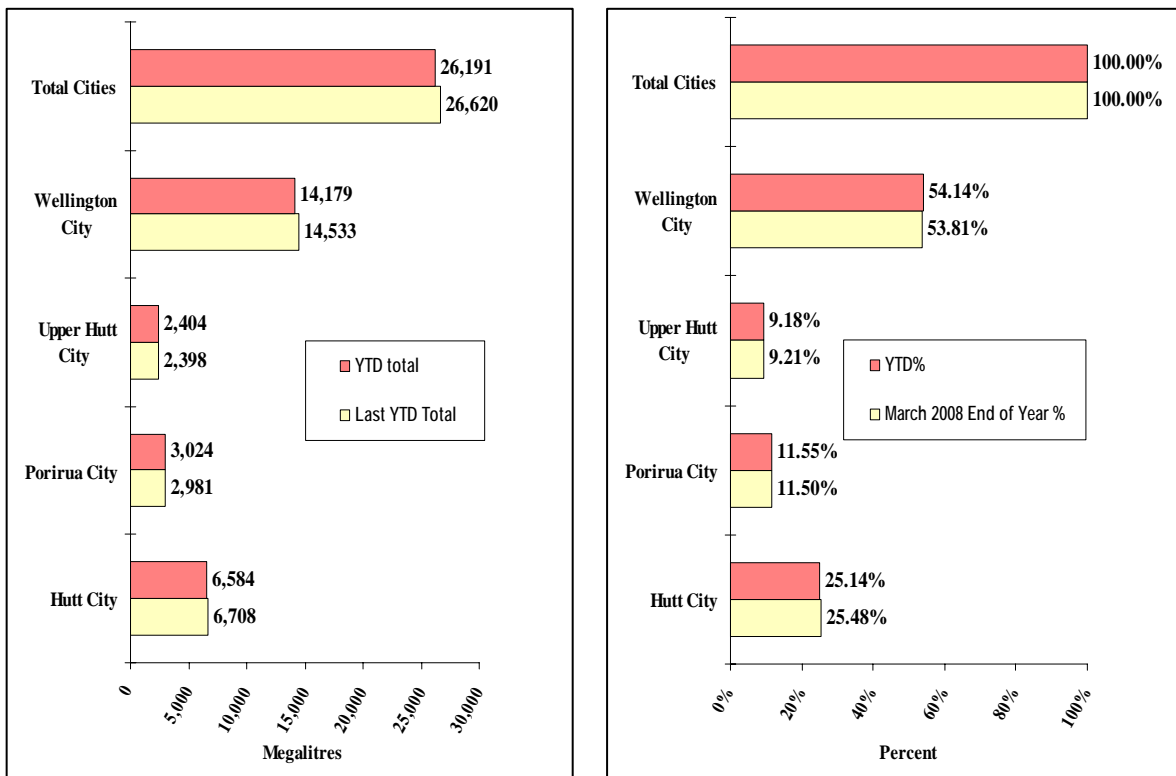


Figure 2 - Water sold during the metering year to date [April 2008 to March 2009]

Forestry

Review of operations for the period ended 30 September 2008

1. Plantation forests (Wellington)

1.1 Log Harvest Contract

These months were marked by continuing high rainfall. At least the long daylight periods assisted with drying on those days that were fine.

In last month's report the wind throw loss from the 30 July storm was estimated at 5 hectares. As I have visited other sections of the estate I have come to the conclusion that the loss would be closer to 10 hectares. The only area that was suitable for recovery was the Airstrip block in Valley View. We were able to divert Log 6 while they were moving skids and they successfully recovered 904 tonnes. This area has since been replanted.

Log 6 the ground based crew, which was working out the eastern side of the Kilometre block in the beginning of August, moved firstly to clean up the wind throw at Airstrip then back to the 9 kilometre on the western side of the block. It is estimated that they will take five to six weeks to complete this setting. This will leave about 4 hectares, which was too wet for ground based machinery. It may be possible to go back and complete it in early summer. It is still hoped to move this crew back to Pakuratahi West to complete Glider Club this summer.

Log 36 has moved back to the centre of the Blowfly block and is working their way to the top ridge. They have just commenced construction of a skid on the eastern edge of their current ridge and have a further one to construct to the north higher up the slope to reach the top of the block. This crew worked Drapers during the period, as the weather prevented completion of the access road to their new skid in Blowfly. They harvested 1,650 tonnes of mainly KI and KX grade logs from Drapers.

In August Log 6 harvested 2,705 tonnes for \$40,700 at an average stumpage of \$15.03. Forty-two percent of this was made up of K rough or pulpwood. September production was 904 tonnes out of Airstrip for \$21,840 at an average of \$24.14 per tonne and 1,184 tonnes out of Kilometre for \$28,158 at an average of \$23.77.

In August Log 36 harvested a total of 2,105.59 tonnes from Blowfly for \$33,600 at \$16.16 per tonne. In September Log 36 harvested 790 tonnes from Drapers for a return of \$12,656.28 and an average of \$16.01. Seventy-five percent of this was K rough or pulp grade logs. On their return to Blowfly they harvested a further 1,385 tonnes for a return of \$27,462 at \$19.82 per tonne.

Export prices did not show any significant improvement in August but moved up by up to \$20 per tonne in September.

While direct comparisons are difficult because of the sale unit being JAS, examples of the improvements are:

Grade	August	September	Variation
PP	96.06	99.42	+3.5%
A	70.95	83.29	+17.4%
K	71.12	74.55	+4.8%
KI	55.86	69.20	+23.9%
KX	44.77	45.77	+2.2%

Net revenue before roads for August was \$74,077, a reduction of \$42,845 from July for a similar tonnage. This reflected the poor quality of the ridgeline wood in Drapers. In September net revenue was \$90,119, this month benefiting from improved prices but the loss of one day's logging and three setting moves reduced the tonnage produced to 4,264 tonnes.

The Harvest Contractor has just taken delivery of an additional hauler. The Contractor's present hauler is a TMY45, with a 45 foot tower. The new one is a TMY70, with a 70 foot tower. As the Contractor intends to keep both haulers, this means both crews can service hauler stands and increase our options through winter when it is becoming more difficult to find stands that can be harvested with ground based equipment when the ground is extremely wet.

1.2 Silviculture Contract

The new Silvicultural Contractors are working satisfactorily. In August 23.4 hectares of silviculture were completed, with a further 31.7 hectares in September.

The Planting Contractor was able to plant a further 33,500 trees before the weather and the lack of seedlings caused an end to the planting season. In total the Contractor planted 193,650 new trees, which would equate to just over 116 hectares.

1.3 Plantation forestry operations

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

The fire equipment has been inspected and serviced in readiness for the new fire season.

Repairs to gates have been made following damage or vandalism.

1.4 Forest access

The lack of access into Maungakotukutuku remains.

With the longer days, the roads have had more opportunity to dry.

As a consequence, only routine maintenance has been required. This has consisted of the removal of corrugations, building up corners where consistent traffic has increased the camber beyond that which is acceptable for the loaded trucks, pothole repair and spreading fines to maintain traction.

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 predicted, export prices made a reasonable upward move in September and this will be followed by a further increase in export prices in October. This has to be tempered with the very flat domestic market. Our orders into both Masterton and Featherston are about 50 percent of normal and we are not supplying the mill at Upper Hutt. Should the export market “fail”, we would have great difficulty continuing to harvest at the present rate.

2. Reserve forests (Wairarapa)

2.1 Tauanui harvesting

Despite lower rainfall, the Logging Contractors struggled with wet ground conditions during August but morale and production lifted slightly in September. Some machine work improved access to the skid site and, with drier windy periods, wet clay dried out at a critical access point.

Short windblown trees at the top of the ridge were difficult to manufacture to logs meeting specification. A significant percentage of the standing timber in this area was assessed as pulp or waste.

Reduced demand from domestic sawmills has worked in our favour, in that the current area has very little sawlog grade, while export grades predominate. Demand for the export grades has been good, with improved prices being offered.

During August 896 tonnes were produced for a net stumpage of \$10.63 per tonne and for September 1,039 tonnes generated a net stumpage of \$19.24 per tonne.

2.2 Road maintenance

Scattered windfall trees and broken tops blocked the Hiwinui road and required two days with chainsaws to clear. Clearing was made more difficult by 20 plus year old trees that had fallen along the road in several places. These trees required trimming, branch removal and then cutting into sections that could be rolled clear of the road.

The crossing at Stoney Creek required digger work, where fine silty material had been deposited and was very wet because of perched and ponded areas. Drainage has now been installed and ramps of local metal constructed. Willows were lopped to help protect these areas.

2.3 Beehives

The head beekeeper from Steens has inspected the forest sites for hives. After reviewing last year's analysis, the beekeeper advises that the Hiwinui sites did produce active manuka honey. As a result, they will limit Hiwinui sites to overwintering sites but will place hives on Rough Hill. They have hives on one neighbouring property and will place others on Rough Hill where there is limited access.

2.4 Rural Fire

Preparations for this year's fire season (official start 1 October) are almost complete.

There are concerns with the way the Rural Fire District Board and the Operating Committee interrelate. Effectively governance and delivery require reconsideration as a result of an independent review carried out within the Rural Fire District last year.

Unfortunately the District Council staff members of the Operating Committee (Rural Fire Officers) were not included in the review. Therefore, their views as key delivery personnel were not considered.

Difficulties in recovering costs (and the acceptance of liabilities) have become issues of contention for three large and expensive fires in private forest operations. The longest outstanding cost recovery action was only resolved at the eleventh hour immediately prior to High Court appearances.

These situations highlight the need to have appropriate insurance, including firefighting cost recovery insurance.

On going work to produce training material for specialist incident management roles has evolved into a broader need within Emergency Management and, where appropriate, standardisation of forms. This training includes resource management documentation and tracking to facilitate cost recovery action.

Incident management procedures are often given lower priority against trying to get fires contained as quickly as practical to limit damage at early stages and within current weather conditions.

Water Supply

Review of operations for the period ended 30 September 2008

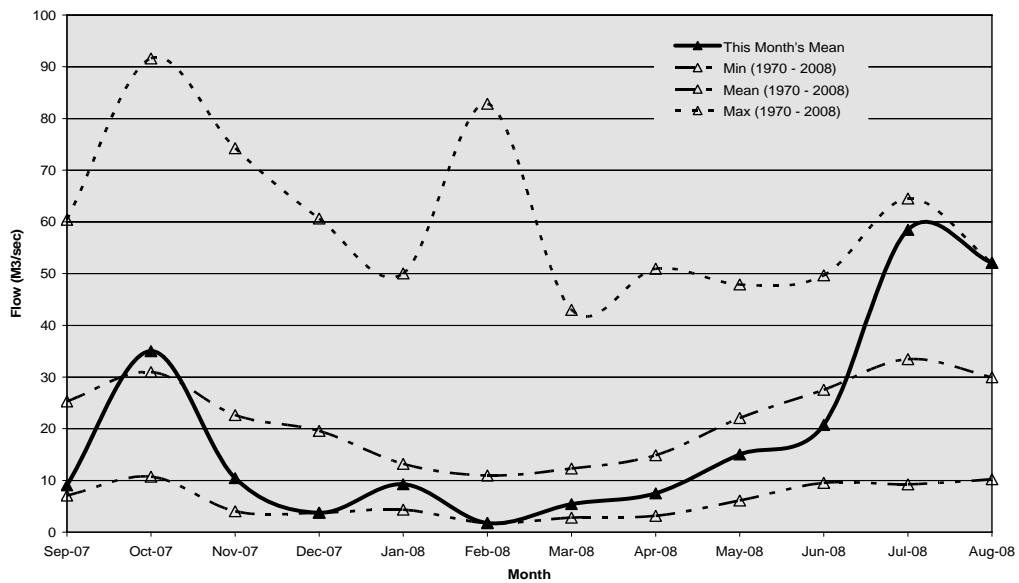
1. Supply situation

1.1 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.

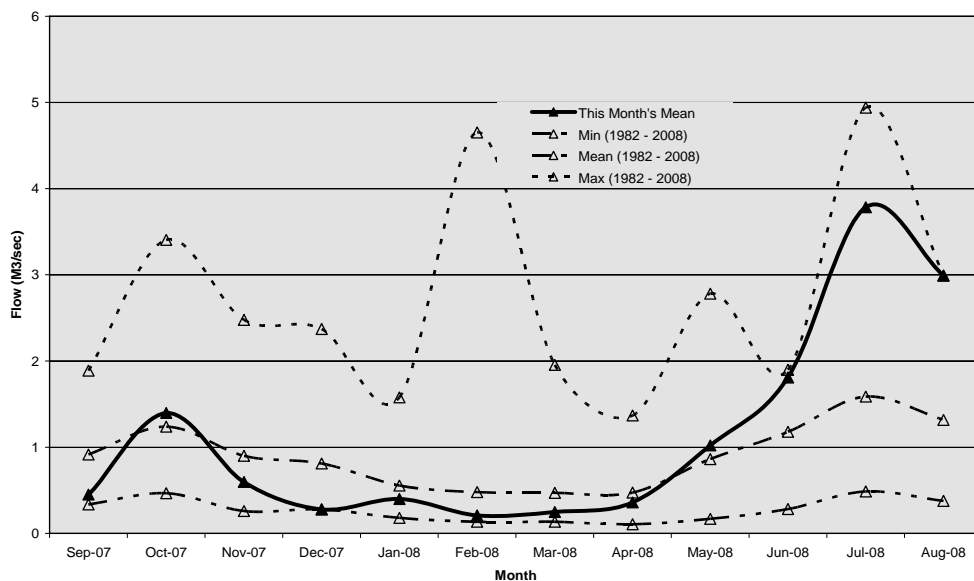
1.2 Hutt River flows

The mean flow for the Hutt River was at the maximum during August.



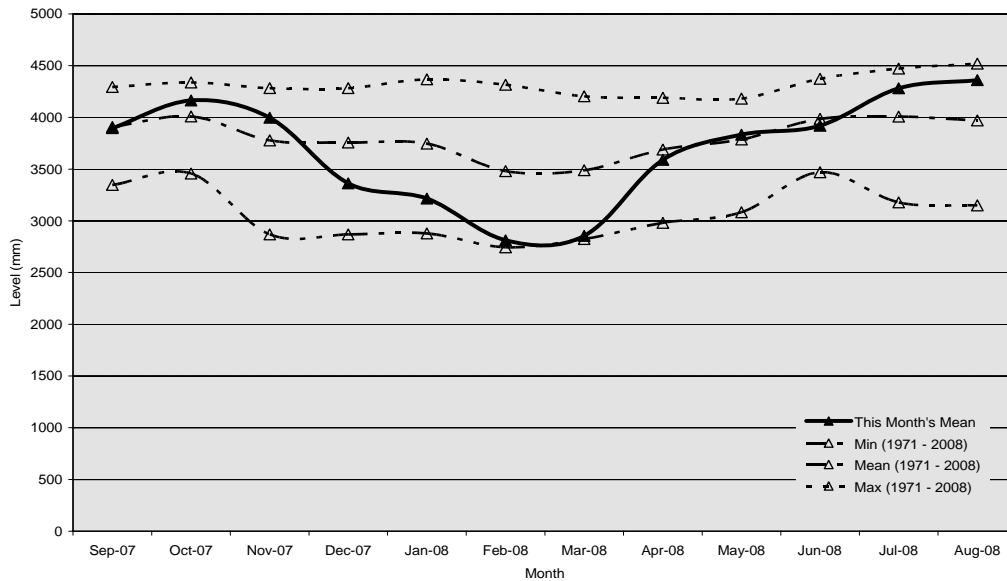
1.3 Wainuiomata River flows

During August the flow for the Wainuiomata River was at the maximum



1.4 Aquifer levels

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



2. 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.

Wet weather and complications with design and installation have hampered progress, as has the availability of specialist grouting contractors.

The present estimate for completion is late October. Although this timing is much later than expected, there is still adequate time to refill the lake before the high demand/dry weather period begins after Christmas.

The costs for the repair work have increased significantly because of the delays and additional time required to agree on an effective construction method. The current forecast for completion of the project is \$240,000, which will be funded from the equipment replacement budget of \$300,000.

3. 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. The system has now been in operation for several weeks and we are measuring savings of 14.2 percent, approximately \$25,000 per year, which is at the high end of our predicted 10 percent to 15 percent.

4. SAP asset management system

It has been a very busy period of workshops, 12 days in all, at which each department's business processes and procedures were examined, documented and analysed in order to assess the closeness of fit to the SAP standard product.

This is an important phase of the project, as it sets the framework that will be used throughout the organisation for the day-to-day performance of asset management.

5. Restructuring

The majority of positions have now been filled by existing staff and most of the remaining vacancies are being advertised externally.

6. Water Supply project summary

The following is a summary of the capital works projects as at the end of September:

Total projects	52
Total budget	\$5,007,000
Total forecast (as at 1 October)	\$4,669,931
Unbudgeted project – Stuart Macaskill Lake repairs	\$240,000
Expenditure to be confirmed (three projects)	\$857,000

7. Unbudgeted projects

The Stuart Macaskill Lake 2 repair project, discussed above, is an unfunded project.

8. Expenditure to be confirmed

There are three projects that have some level of uncertainty around either forecast expenditure or timing:

- Te Marua hydro-generation. It is highly likely that this project will proceed but the forecast figure is yet to be confirmed. The budget is \$200,000.
- Ampla reporting system. The scope and timing of this project is to be confirmed by December. The project may be either deferred or the programme extended over a two year period.
- Emergency supply in Whitehead Road, Karori. This project involves agreeing the scope and possible shared costs with Wellington City Council. The budget is \$207,000.

9. Catchment management

- GNS Science has been granted a licence to install a GPS monument in the vicinity of Mt Quoin in the Hutt Catchment. It is a very small device consisting of a solar panel, battery storage box and five driven rods up to 10 m into the ground, with the above ground structure looking like a

camera tripod. This will measure movements of the earth and transmit the information directly to Avalon. This is similar to an existing structure at Mt Climie.

- High winds continued through August, which hampered the cleanup from the big July storm and brought down a lot of debris on to the roads and tracks.
- We have continued with the maintenance on the Wainuiomata Catchment fence track. A fencer has been engaged to fit an additional wire to the bottom of the fence.

Once vegetation was cleared to ensure there was no premature failure through wet vegetation against the bottom wires, there were areas where animal access could be gained under the existing bottom wire.

Development and Strategy

Review of operations for the period ended 30 September 2008

1. Water Supply Strategy

- Feedback on the wholesale water supply development strategy has been received from Wellington and Upper Hutt City Councils (WCC and UHCC). The feedback shows support for the short-term development options. UHCC identified a preference for water supply development options to be considered in conjunction with a regional water strategy. WCC agreed with Whakatikei as the preferred site but requested that all efforts should be considered to delay the need for a dam.

Porirua City Council has invited GWRC to give a presentation on the water supply development strategy to their City Services Committee in mid-October. A report on the water supply development will be considered by Hutt City Council at the end of October.

All feedback received will be incorporated into the draft 2009/19 LTCCP and 2009/10 draft annual plan.

- In parallel with consultation on the development strategy with the four city council customers, the department is providing assistance to GWRC's consultant in the development of the Regional Water Strategy paper.
- Discussions are under way with GNS Science and the Wellington Lifelines Group to identify how the security of supply benefits of the proposed Whakatikei dam can be evaluated in financial and social terms.

2. Water supply development projects

2.1 Raising water level of Stuart Macaskill Lakes

GNS Science has provided a report on expected seismic acceleration from movement of the Wellington Fault. Tonkin and Taylor Ltd is now preparing a proposal for the second stage of the feasibility study to examine the likely performance of the lake lining and embankments under this seismic load and to identify any mitigation required.

2.2 Reducing minimum water flow at Kaitoke weir

A draft of the consent application to reduce the minimum flow of the Hutt River at the Kaitoke intake is nearing completion. This will be sent to key stakeholders in October, together with the assessment of environmental effects and scientific reports. The application makes a strong case that the effects of reduced minimum flow on river system ecology at Kaitoke will be no more than minor. The application also puts forward a draft Hutt River low flow management plan which calls for GWRC to adopt a range of actions designed to protect the ecology and trout habitat to the extent practicable.

2.3 Central Business District (CBD) reservoir

WCC has identified that reassessment of their water storage needs, plus 20 million litres (ML) for Wellington Hospital and 7.5 ML for GWRC now requires a reservoir capacity of 56 ML. This is a very large reservoir and likely to be the largest that can practically be fitted on the Prince of Wales Park site. Consultants have been briefed to carry out a new cost estimate. GWRC can then discuss a cost sharing proposal with WCC.

GWRC has raised questions on a number of operational issues, which will need to be worked through. The next step to be undertaken by WCC is to obtain landowner consent from the WCC Parks and Gardens Business Unit.

2.4 Developing the Upper Hutt aquifer

The final version of the risk assessment report and summary report for the investigation are now completed. *Cryptosporidium* testing to confirm the water treatment requirements is continuing. Numerical modelling to assess the impact of water abstraction from the aquifer on the Hutt River flows is under way. The water treatment process concept for the aquifer has been peer reviewed and treatment alternatives suggested that could result in a worthwhile reduction in capital and operational costs.

3. Renewable energy

3.1 Orongorongo power generation

The final report on the investigation into power generation utilising the available head from the Orongorongo water supply to the treatment plant has been completed. This is the subject of a separate report to Committee.

3.2 Belmont Regional Park

A report was presented to Council at the end of September recommending a moratorium on wind farm development for a period of five years. The report was considered by Council but a decision on its recommendations was deferred.

3.3 Puketiro wind farm

The Council made various resolutions at the 29 September 2008 meeting on potential wind farm activities in Battle Hill Farm Forest Park which affect the contract with RES. Discussions will now take place with RES on the Puketiro wind farm contract to resolve the changes.

Contact with the Pauatahanui Futures Society is taking place through GWRC's legal advisors to determine the impact of these changes on their application for judicial review.

3.4 Stoney Creek wind farm

A presentation on the proposed wind farm in South Wairarapa was made to the local community on 24 September 2008 by representatives from GWRC and

Meridian Energy. The presentation was well attended and, on the basis of questions asked and comments made, it was also well received.

The next step is with Meridian to apply for resource consent to erect a wind monitoring tower. It was agreed that Meridian would keep the community well informed on progress and suggested that information could also be distributed via GWRC newsletters.