
Water Supply and Parks

January/February 2009

Parks

Review of operations for the period ended 28 February 2009

1. Manager's comments

1.1 General

All our western sector parks contain a farming component and it is important that we demonstrate that we are committed to environmental sustainability practices with our farming and land management operations. For this reason, developing sustainable land management plans for all our western sector parks, to guide our future land management practices. Currently Peter Handford Consultants is developing a plan for Battle Hill Farm Forest Park. We will use this plan as a model before moving on to Queen Elizabeth Park, Belmont Regional Parks and Whitireia Park when appropriate.

The sustainable land management plans are absolutely essential tools to help direct us forward with how these park properties are managed into the future, with particular regard to management of farming operations. The plans need to link directly with the GWRC themes of total catchment management and biodiversity policy.

It is interesting to see how the plans are progressing and it would be useful to brief Councillors at an upcoming Committee meeting about this work.

1.2 Parks Network Strategy

Information for development of the first draft of the Parks' Network Strategy is to begin in mid-March. A telephone questionnaire has been developed to survey 1,000 random respondents. The same questionnaire is being modified and mailed to clubs, interest groups and Friends of the parks to request their outlook on the future of the regional parks. These groups will also be invited to night meetings, which will be held in late April. The meetings will provide an opportunity to obtain information about the parks and the Park Network Strategy project. Four meeting dates are proposed as follows and invitations to Councillors to attend will be sent closer to the time:

- Greytown Town Hall Monday, 20 April
- Belmont Memorial Hall Wednesday, 22 April
- Pukerua Bay School Hall Tuesday, 28 April
- Committee Room, The Regional Council Centre Thursday, 30 April

Officers are also organising meetings with relevant Government agencies to obtain their feedback about how they see the future of the regional parks.

We anticipate this "data collection" phase will be completed by June, with the feedback and information gathered during a literature review to be presented through a series of workshops in July/August 2009.

2. Policy and Planning

Submissions on the drafts of the *Battle Hill Farm Forest Park Management Plan* and the *Parks, Forests and Reserves Bylaw* close on 2 March.

Two submissions on the draft Bylaw have been received. The changes sought by those submissions and other editorial alterations are outlined in Report No. 09.143 provided to this Committee.

Forty-three submissions were received for the draft *Battle Hill Farm Forest Park Management Plan*. The Hearing date has been set for 16 April at a venue yet to be determined. At least 20 submitters wish to be heard. Councillors will receive a copy of the submissions and summary documents prior to the Hearing day.

Parks' planners have provided feedback for a wider Greater Wellington Regional Council (GWRC) submission to Hutt City Council's *Making Tracks – A comprehensive ten year plan for managing and developing the Hutt City Council's track network, including a review of the 1998 Walkways Review*.

3. Environmental planning and implementation

3.1. Monitoring

The remeasurement of the seven permanent forest plots in the Akatarawa Forest was completed by monitoring staff in late February. Eight species of orchid were recorded in one plot (*Earina mucronata*, *E. autumnalis*, *Drymoanthus adversus*, *Ichthyostomum pygmaeum*, *Winika cunninghamii*, *Thelymitra sp.*, *Adenochilus gracilis* and two unidentified species.) Analysis of the data collected from these plots will be completed in the coming months.

The GWRC forests in the current and future water collection areas, and Kaitoke and East Harbour Regional Parks were recently surveyed for introduced insects and fungi (using both aerial and ground survey methods). These forests are close to Wellington Airport and the port, and are at risk from organisms entering the Region via these pathways.

The result of a January monitor of possum numbers in the forest in East Harbour Regional Park was 2.7 percent residual trap catch (RTC). This low figure shows that Mainland Island Restoration Operation (MIRO) volunteers are continuing to do an excellent job in managing to keep possums below the 5 percent RTC threshold.

3.2. Pest control operations

An extension of the Korokoro Valley possum control operation is almost completed.

Bait stations were recently refilled as programmed in the current Korokoro control area, as well as in Dry Creek, Speedy's Reserve and the East Harbour Regional Park mainland island site.



Some results of the aerial alder control trial at Lake Wairarapa have been seen from the air. Ground assessments still need to be completed but, from the aerial photographs, it appears that the chemical *Garlon* has been more effective in controlling alder than *Roundup*. The photograph at left is taken of alder in Lake Domain Reserve - on the right is a *Garlon*

sprayed area, while *Roundup* was used on the area on the lower left of the photograph.

3.3. Wainuiomata Mainland Island

A February rodent/mustelid monitor showed rats to be at 1 percent tracking rate in the Mainland Island and at 88 percent outside in the non-treatment area. A barbecue was held after the last day of monitoring to thank the volunteers for their efforts.

4. Western sector

Staff have been busy this period assisting with Regional Outdoors Programme events, as well as dealing with events organised by clubs. In addition to Regional Outdoor Programme events, we have hosted a number of horse riding events at Battle Hill Farm Forest Park, Queen Elizabeth Park and Belmont Regional Park. An orienteering club event was also held at Belmont Regional Park based on Waitangirua Farm.



Equestrian event at Queen Elizabeth Park, one of a number of horse events held at our parks over the period



The weather across all our parks has been generally warm and conducive to good use of all areas.

Wellington Korean Church group picnic at Queen Elizabeth Park

Our maintenance teams have been concentrating on the upgrade of the section of track from Stratton Street to Korokoro Dam, with replacement of steps now making the track a little easier to negotiate.

We have a number of challenges ahead of us maintaining structures, particularly at Queen Elizabeth Park, with two bridges over the Whareroa Stream requiring repairs and the main steps down to the Whareroa Beach requiring erosion repair work. The bridge work is presently being priced, while the steps are being altered as part of a dune restoration project.

At Queen Elizabeth Park we are also carrying out work on the water supply system, repairing the main bore and investigating the options to hook the potable supply to the water mains at Raumati. Once this work is complete, we will have a far more reliable and quality assured supply of water for the park, as well as being much less expensive to maintain into the future.

At Belmont Regional Park fencing work on Waitangirua Farm and building maintenance work is progressing. We have funding this year to carry out work on farm buildings, fences and farm domestic dwellings. This work is largely being carried out by contractors and being supervised by our staff.

4. Eastern sector

The long dry weather spell has meant continued awareness on water quality and algae bloom, and continued high demand for the parks. This has seen the best of summer extend from Christmas and school holidays all the way through without a break to Waitangi Day weekend. This has put pressure on staff members who have continued to do credit to themselves and the organisation, with excellent feedback throughout.

Regional Outdoors Programme events have dominated during January with Rangers leading many of them. These have included the fully booked *Giant Rata Journey* at East Harbour; Lighthouse and Lakes in East Harbour (again fully booked); Kev the Kiwi buggy walks in both Tunnel Gully and Wainuiomata, with record numbers of attendees; and Rangoa Maori medicine and two *Beginners' Guide to the Rainforest* events at Kaitoke Regional Park.

We have been well supported in these events by other agencies, including MIRO, which led the *Giant Rata Journey*. This event was aimed at showcasing the work that MIRO carries out within the park and hopefully picks up a few more volunteers along the way. Other organisations included the Fell Museum, gliding club and Upper and Lower Hutt City Councils. The terrific feedback from participants on the events is amazing.



The descendants of Mary Jane Bennett, New Zealand's first and only woman lighthouse keeper, celebrated the 150th anniversary of her employment at the country's first purpose-built lighthouse at Pencarrow Head.

The Bennett family gather to commemorate 150 years

Over 170 people came from all over New Zealand and as far as Australia. The meeting culminated in the unveiling of a small plaque in memory of one of the Bennett's children who died at the site. The newly installed historical interpretation sign certainly added to the occasion.

Other regional park events included groups from the Indonesian Embassy, Lions' Club and Upper Hutt Cosmopolitan Club booking the barbecue buildings at Kaitoke Regional Park for their functions; and a mountain bike orienteering event held in the Akatarawa Forest with 100 cyclists. Of course, we continued to have regular 4WD and motorcycle events in Akatarawa Forest, with some 145 vehicles involved.

The Wainuiomata Catchment walking tours continue, with a tour on 25 January seeing 30 people take part on a very hot day. A tramping tour was also held during the month, with 25 trampers. Trampers commented on the great bush and were very thankful to the three guides. One trumper was a reporter and followed up with a article on the popular Kev the Kiwi event in the Wainuiomata Recreation Area.

Kids and parents follow Kev the Kiwi

Nearly 300 parents and children from Wainuiomata and beyond congregated at the Wainuiomata Waterworks Recreation Area on a hot Thursday morning to join Kev the Wandering Kiwi for a stroll along the Gums Loop Track. The walk was one of four being explored by the not-so-nocturnal bird around the Hutt Valley over the school holidays as part of Greater Wellington and Hutt City Council's Leisure Active programme. The benign weather meant many families stayed for picnicking and spot prizes afterwards. *Jamie Adams* was there.



Kaitoke Regional Park has been very busy, with large numbers camping continuing right through to Waitangi Day weekend this year. A total of \$22,800 was received from campers in January, as part of our best year ever. We have also experienced a large number of *Lord of the Rings* tours because of several cruise ships visiting Wellington during this period.

Current low river levels have increased security issues in the forest, with motorcycles crossing the Hutt River and accessing under the Totara Park Bridge and then gaining access to the Akatarawa Forest.

Security and motorcycles is a continuing issue in many of our parks and a constant frustration. While we continue to make efforts to improve security and gate systems, we have difficulty in resolving this problem.



The Orange Hut toilet is now installed and was connected to the drainage system during February.

Final installation of the new Orange Hut toilet facility

Marketing and Design

Review of operations for the period ended 28 February 2009

1. **Manager's comments**

Recent weeks have highlighted how susceptible GWRC Water Supply and Parks are to the vagaries of the weather. With the February rain we will be significantly underspent on our water conservation advertising budget, although last year with the "big dry" we spent extra. Moreover there may well be a significant change in public perceptions of the risk of water shortages. We plan to commission a research project during autumn to see what effect the wet summer has had on these perceptions and people's awareness of water restrictions across the Region.

The weather has meant several event cancellations during the Regional Outdoors Programme and has had some effect on the attendance levels. However, people continue to be very enthusiastic about the programme and many are taking up the opportunity to explore new parks. Also, once again, clubs and care groups are commenting that they have attracted new members through their involvement in running events.

It is interesting to note the level of community interest in the Regional Parks Network Strategy. Recent meetings with various groups have proved excellent opportunities to clarify its purpose and allay concerns. We are very optimistic at this stage that there will be some useful contributions from a wide range of organisations, park user groups, special interest and sector representatives, e.g., Grey Power and disability reference groups, as well as the general public survey.

2. **Water Supply**

2.1 **Water supply**

2.1.1 **Water restriction communications**

Following customer agreement with our new hierarchy of water supply and demand trigger conditions, all city councils have publicised their annual "base" water use restrictions more actively and planned to use patrols to enhance public awareness of the restrictions if tougher supply conditions arose. They also agreed to approach commercial water users for voluntary savings if a ban on use of unattended watering (sprinklers, etc.) was needed.

Positive outcomes have included improved alignment of "base" watering restriction times between the four territorial authorities, more publicity of base restrictions and tweaking trigger conditions and responses to allow for a more gradual increase in restrictions than would be likely during a very dry summer.

We will review water supply and conservation for the summer period with our customers in the coming period to confirm improvements to the water restriction level and communications plan.

2.1.2 Water conservation

Summer campaign

Once again we targeted water used for gardening and made only minor changes to existing creative material. A programme of print and radio advertising, and associated publicity, started on 17 January. The campaign was as planned to run until the end of February but a combination of relatively low demand for water and a damp February resulted in our trimming this activity back to only three weeks. Once again, a competition helped move people from our print advertising to GWRC's *Be the Difference* web site, although this year we offered 10 prizes of water wise watering equipment rather than one grand prize to try and boost entry levels.

January was drier than "normal" and by early February the signs of a relatively tough summer were evident. However, from 8 February we had six consecutive days with rainfall. In all, some rain fell on 14 days during February; the longest stretch without rainfall was just four days and the total for the month (at Kelburn) was 2.7 times the February average. This has led to an underspend on our summer water conservation budget. We will almost certainly have lost some of public awareness gains made last summer, that in some years water shortage is an issue for Wellington. This assumption will be tested as part of a planned assessment of public awareness of summer water conservation communications.

Water efficient fittings promotion

We have broad agreement with a product manufacturer to develop a mutually beneficial promotion offering regional households a specific water-efficient fitting at a significant discount. However, there is very limited scope to promote such an offer within the current territorial authority and GWRC policy frameworks. We are investigating how other councils around the country have managed such relationships, with the aim of developing a more streamlined approach to non-exclusive partnering opportunities, so that we can more readily encourage people to adopt water efficient technologies.

2.1.3 Regional Water Strategy

Officers are assisting an external consultant to develop the proposed Regional Water Strategy, which will incorporate the Wellington Water Management Plan. A draft of the Regional Water Strategy (dated 23 January) was reviewed and commented on during the reporting period.

Following a Councillor workshop on the Regional Water Strategy on 12 February, officers are carrying out "desk" research of socioeconomic profiles within the greater Wellington metropolitan area and how other councils have considered the effects of water meters on lower income households. This will help assess potential hardship from introducing universal metering with usage-based pricing, although this is just one of several options to ensure demand and supply are more in balance.

2.1.4 The case for water demand management in New Zealand

The New Zealand Water and Waste Association is developing a publication to

promote the generic case for water demand management. This will assist council officers across New Zealand to raise the profile of demand management as an alternative to more traditional methods of water management. A draft of this document was reviewed and commented on during the reporting period.

2.1.5 Water conservation research

As noted earlier, we intend to commission a minor research project to identify aspects of public awareness in relation to the awareness of watering restrictions and garden water use advice, as well as perceptions of the risks of water shortages. The research brief will be developed during March.

We have also had discussions with the Ministry for the Environment about assisting them with planned research around water use and conservation. The Ministry conducted baseline research into environmental behaviours, including water use and conservation, in late 2007. They have since considered the results of research we conducted in 2007 (*Researching Public Opinion on Water Supply for Greater Wellington* (UMR, December 2007)) and have requested that we collaborate with them to develop the questionnaire for their follow-up survey later this year.

2.1.6 World Water Day

World Water Day is to take place on Sunday, 22 March 2009. The theme of this year's World Water Day is *Shared Water - Shared Opportunities*. At the time of writing, a World Water Day event had been organised by Wellington City Council (WCC) on the waterfront near Te Papa and the Circa Theatre. The event will consist of displays by WCC, GWRC, Capacity and Government Departments. A "speakers' corner" is to allow people a forum to convey their thoughts and feelings about water, with a time limit of five minutes per person. As the Dragonboat Festival is on at the same time as World Water Day, the foot traffic past the displays is hoped to be significant.

2.1.7 Stuart Macaskill Lakes' lookout

Located just south of the Te Marua Water Treatment Plant, the Stuart Macaskill Lakes' lookout features commanding views of the storage lakes and surrounding countryside. It was built for the various school groups that visit our water treatment plant so that, when part of the group needs to wait their turn for a tour and eat lunch, they can learn more about our water supply and associated issues.

The lookout has been constructed using leftover items of water supply infrastructure. Various bits of pipes have been transformed into picnic tables, seats and viewports. The Stuart Macaskill rock was moved from its position adjacent to the road to a more prominent position. There are also two interpretation panels detailing the history and construction of the lakes and highlighting the geographical features of the area. The new Stuart Macaskill Lookout is due to be officially opened today after this Committee meeting. We plan to issue a media release to publicise this new feature of the area to encourage schools to book tours and members of the public to visit it.

2.1.8 Treatment plant visits

Four treatment plant tours took place during February.

2.1.9 Water treatment plant educational resources

Unfortunately the contractor that we employed to write the water educational resources is no longer available. We are currently investigating options for hiring a replacement

2.2 Parks

2.2.1 Regional Parks' network strategy

There has been significant time and effort spent on developing the questionnaire for the telephone survey to be conducted as part of the public consultation prior to developing the draft Regional Parks Network Strategy. This has involved taking the issues raised during the qualitative stage of the research and framing questions around the priorities the public believe we should attach to the planning and future development of parks. The survey is scheduled to be under way in the next few weeks.

A paper was prepared for GWRC's Disability Reference Group and elicited useful comments. We will be consulting with each city or district's disability reference group as part of the process.

2.2.2 Signs

Queen Elizabeth Park

The illustrator and graphic designer have been engaged to work on the interpretation signage for the geological trail near the MacKay's Crossing entrance of Queen Elizabeth Park. Site planning and development of the text is continuing, with the project expected to be completed by June.

Funding for this project has come from the New Zealand Transport Agency, formerly known as Transit New Zealand, as part of the State Highway 1 realignment project.

Wairarapa Moana

A signage plan proposal for the Wairarapa Moana system is being developed. This includes Lake Wairarapa, Lake Onoke and associated reserves and wetlands. The plan will recommend some short-term developments and medium-term priorities to clarify how people get to the main areas and explain the history, significance and issues surrounding the lake, wetlands and wider catchment.

3. Events

3.1 Regional Outdoors Programme 2009

So far 12,848 people have attended the Regional Outdoors Programme events, with 10,550 of this number at the *Anything Vintage Festival*, *Bike the Trail* and the *Mt Lowry Challenge*. A total of 2,298 people have attended GWRC organised events. We have had 81 percent occupancy on the booked walks so

far, compared to 76 percent for the last report. At the time of preparing this report we have had to cancel three events because of bad weather. Around 34 percent of people attending the events so far have never been to that particular park before.

Once again, the Gravel Grabs have been very popular, with 236 cars at the Hutt event and 175 cars and 10 trucks at the Otaki event a week later. Of our new events, over 100 people attended the Farm Day at Battle Hill and the Stopbank Soiree was very informative and appreciated by all those attending. The Celebrate Darwin's Birthday event saw 34 participants turning up to hear keynote speaker and plant scientist Professor Phil Garnock-Jones, geologist Tony Edwards, ornithologist Ian Armitage and join GWRC's own horticulturist Rob Craven on a dune ecology walk.

Bookings are looking good for the remainder of the programme. To keep up the momentum and generate further publicity, we have issued media releases for Darwin's 200th birthday, the Farm Day at Battle Hill, Discover Henley Lake, Old Coach Road History Trail and the Battle Hill Guided History Walk. Two stories have also featured on the GWRC web site.

3.2 Buggy walks

Ninety-two parents and children attended the February walk in drizzly weather at Kaitoke Regional Park, while 117 came along to a fine Thursday at Queen Elizabeth Park in early March.

3.3 Restoration day

We are meeting regularly with staff from GWRC's Environment Division and the Department of Conservation to organise this annual event. The theme this year is *Hills to Sea - Total Catchment Management*. The event is being held at Te Wananga o Aotearoa in Porirua on Saturday, 9 May. All the environmental restoration groups in the Region are invited to send representatives to this very popular day to celebrate the work of the volunteers and share knowledge useful to them in their projects.

3.4 Visitor monitoring - Pakuratahi and Akatarawa Forests

Despite variable weather and staff recruitment challenges, the final survey work was completed in March. We are now under way with the analysis and will report the findings to the May meeting of the Committee.

4. Community liaison

Four park community groups held meetings during the period. The main items of discussion were:

Friends of Belmont Regional Park

- GWRC's strategic review of regional parks (Murray Waititi spoke to this item)
- Kelson Heights subdivision Hearings

- Upcoming events and winter planting.

Friends of Queen Elizabeth Park

- The Revegetation Committee report reviewing existing plantings in the park; park history study
- Proposals for the cycle pathway
- GWRC's strategic review of parks

Friends of Maara Roa

- The 2009 winter planting programme
- Staff also attended a Councillor field trip to the restoration area organised by Friends of Maara Roa convenor, Sylvia Jenkin.

ARAC

- The GWRC decision (since reversed) to temporarily store United Group equipment in the Orange Hut (and lock it). A Memorandum of Understanding is being prepared to clarify expectations between GWRC and ARAC, and avoid this issue happening in the future

The Hutt River Trail Operations Group includes representatives from GWRC Flood Protection and Parks, Upper Hutt and Hutt City Councils and the Hutt Valley Rotary Clubs. The development of a unified furniture style appropriate for all the authorities and for the river environment was the main item of discussion. A proposal featuring gabion basket table bases and macrocarpa tops has been well received.

Staff also attended the three monthly Active Transport Forum. We potentially play a role in this area with some of our parks and river corridor trails, e.g., Queen Elizabeth Park and the Hutt River Trail. The Walking and Cycling Journey Planner being developed for the Region will include tracks in the regional parks.

5. Water usage

Charts detailing water sales for the year are on page 15.

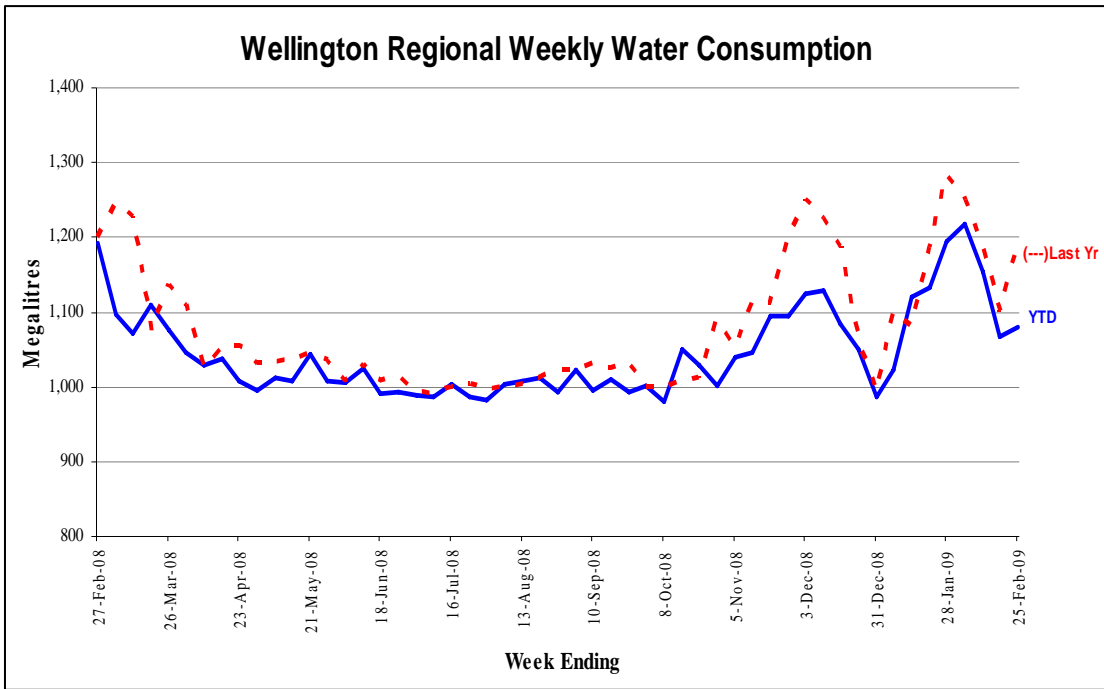


Figure 1 - Water sold over the last 12 months

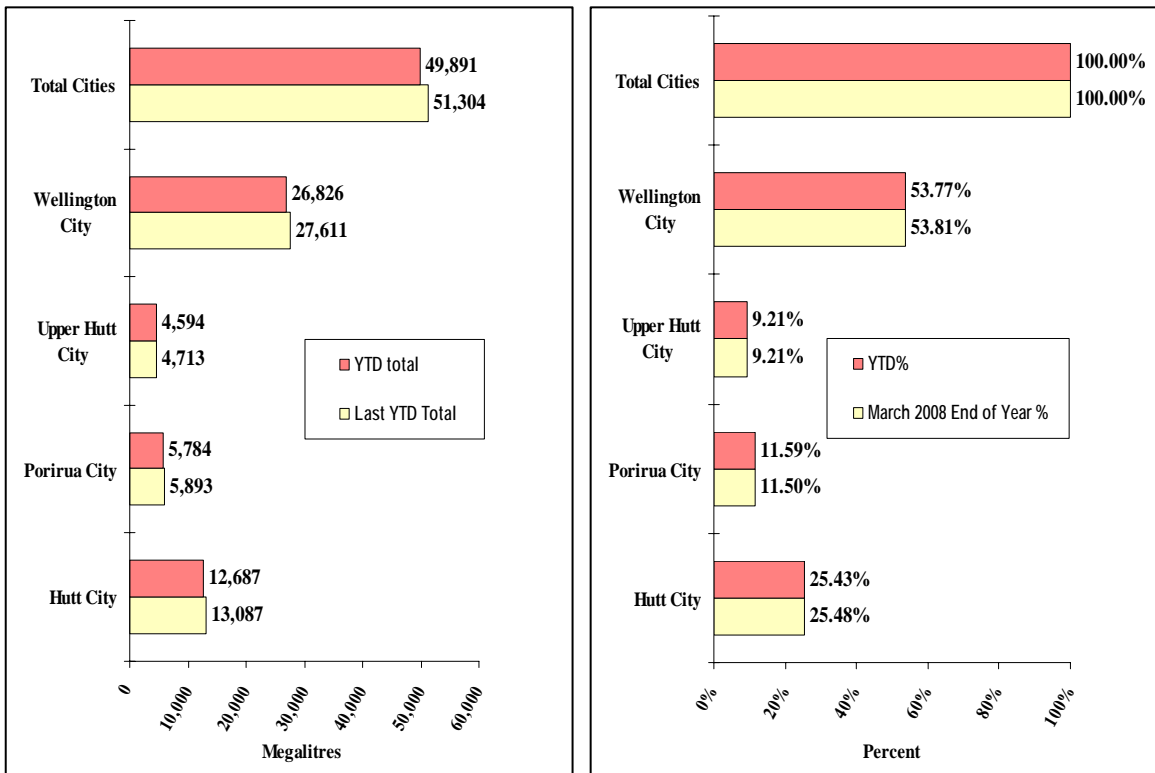


Figure 2 - Water sold during the metering year to date [April 2008 to March 2009]

Water Supply

Review of operations for the period ended 28 February 2009

1. Supply situation

1.1 General

The summer demand period barely stretched the system, with only two days exceeding 180 ML. The level in Lake 1 was at 100 percent at the beginning of January and the lowest level reached for the period was just under 60 percent on 14 February. Lake 2 remained full.

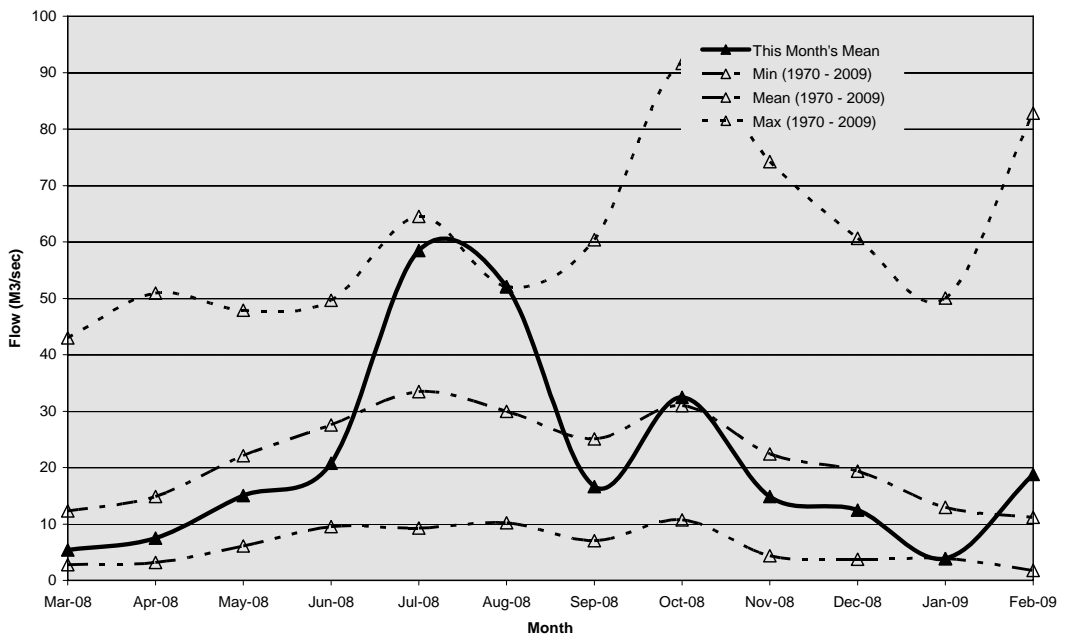
It is now highly unlikely that we will have any problems meeting demand, as the recent wet period has all but put paid to any risk of shortfall for the year.

A failed variable speed drive for a pump at Te Marua Pumping Station caused a few operational problems and slightly reduced our level of redundancy. This drive has now been repaired.

The mains power supply to the Te Marua Water Treatment Plant was been interrupted on several occasions causing significant disruptions to the process and plant operations. The cause of the supply failures is being investigated.

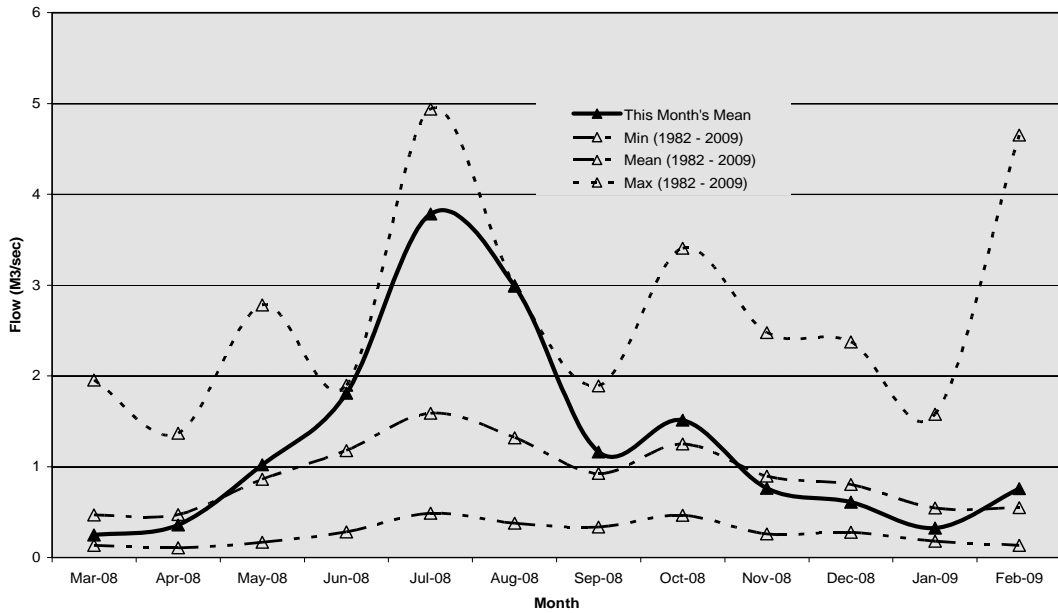
1.2 Hutt River flows

The mean flow for the Hutt River was below the average for December 2008 and was the minimum during January 2009.



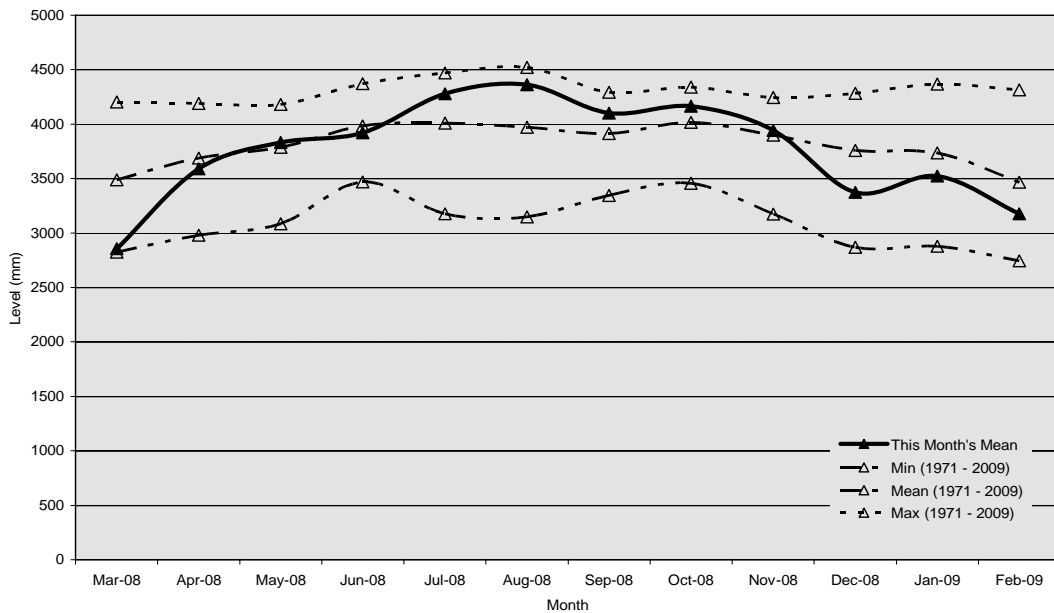
1.3 Wainuiomata River flows

During December 2008 the mean flow in the Wainuiomata River was just below average. In January 2009 the mean flow was below average.



1.4 Aquifer levels

The water level in the Waiwhetu aquifer was below average during both December 2008 and January 2009.



2. SAP asset management system

This project is still high on the priority list and progress has been made, albeit rather slow mainly because of the holiday period. A decision on the “go live” data has yet to be made.

3. Public health risk management plans

Preparation of the public health risk management plans is going well and the first plan, for Waterloo source and treatment, was submitted to the Drinking Water Assessor towards the end of February.

4. Pipelines

There were two leaks on the Porirua 450 mm diameter main that required shutdowns and the installation of new sections of pipe.

Some night work had to be carried out by Pipelines' staff members to monitor contractors installing cable ducts along State Highway 2.

New valve chambers and numerous valves have been installed as the recommissioning of the OK main continues.

Preliminary work was carried out for a new emergency pipeline from Karori No. 2 Pumping Station to the Wellington City Council 150 mm main in Raroa Crescent.

We have entered into discussions with Capacity to carry out maintenance work on the 800 mm diameter main between Thorndon to Macalister Park Reservoir.

5. ISO accreditation audit

The external auditors carried out the ISO accreditation audit in early February. As always, there are improvements to be made, especially with the fresh view of a new auditor. However, the recommendations are fairly minor and easily implemented.

6. Capital projects

There have been two potential changes to the detailed six monthly review.

There is a risk of delays to the Te Marua hypochlorite project caused by late delivery of equipment manufactured in Australia.

The budget for the Whitehead Road pumping station project may have to be revised upwards, as the job has evolved two distinct portions following a change in requirements from Capacity:

- An emergency cross connection from the Karori Pumping Station into the Kelburn reticulation zone
- The replacement of the exposed Messines Road rising main at Kaiwharawhara Stream

Number of projects	Projects completed	Year to date \$000s	Forecast \$000s	Budget \$000s	Variance %
70	25	2,193	4,581	5,007	-8.5

Development and Strategy

Review of operations for the period ended 28 February 2009

1. Water Supply Strategy

A presentation has been made to Hutt City Councillors on the multi-criteria analysis process used for selecting Whakatikei as the preferred storage dam site. A formal response has been provided to a number of questions asked at the presentation.

A further meeting of GWRC Councillors and senior staff with Hutt City Councillors to discuss water issues (particularly related to the Hutt River and Waiwhetu aquifer) is planned in March.

We are continuing to work with the external Consultant engaged to develop the Regional Water Strategy.

2. Water supply development

2.1 Stuart Macaskill Lakes

Consultants are carrying out a risk analysis of the lake embankments under the seismic loads advised by GNS Science for both the existing top water level and the proposed raised water level. Initial indications are that there may be some risk of damage to the top section of the lake lining during an earthquake, but that raising the water level will not increase that level of risk.

The Consultant has identified critical areas where it is more probable that problems could occur and has undertaken computer modelling of the lake embankment under earthquake shaking. The results of this modelling will be combined with knowledge about the past performance of the lakes and overseas' experience with similar structures to derive a quantitative assessment of the risk and identify possible mitigation measures. The final report is expected at the end of March 2009. Provision will be included for any remedial work to the lake embankments.

2.2 Kaitoke weir consent

Feedback on the scientific reports on the environmental impact of the proposed reduction in residual flow in the Hutt River at Kaitoke has been received from GWRC's Environment Division, Fish and Game New Zealand, and the Department of Conservation. A cultural impact assessment has been received from a consultant working on behalf of iwi. Response to the feedback and comments is being prepared. The response will be discussed with the key stakeholders, including Hutt City Council.

Hutt City Council has expressed concern that taking additional water at Kaitoke weir and/or developing the Upper Hutt aquifer will degrade the water quality of the Hutt River. Hutt City Council is particularly concerned about the presence of algae in the river. Its concern continues, despite continuing dialogue.

Our aim is to have addressed all the concerns identified to be in a position to submit the resource consent application for reduced residual flow by the end of this financial year. Access to the additional water could then be available for the summer of 2010, if it is necessary to meet consumption demand.

2.3 Central business district (CBD) reservoir

Preliminary work on the planned CBD reservoir has been deferred by Wellington City Council until the 2011/12 financial year. GWRC's share of the capital expenditure budget has been rescheduled in the draft 2009/19 LTCCP to match the timing advised by Wellington City Council.

The project has been included in the list of infrastructure work that could be brought forward under the Government's infrastructure initiative.

2.4 Upper Hutt aquifer

NIWA is programmed to update the hydrology dataset for the Sustainably Yield Model by the end of March. This will allow the Hutt River flows to be modelled with and without abstraction of water from the Upper Hutt aquifer, including the impact of last summer's low flow levels.

The analysis, when completed, should provide a better understanding of the relationship between the Hutt River and the Upper Hutt aquifer with different scenarios of water abstraction.

3. Water supply risk mitigation

Seismic impact modelling

GNS Science has prepared a draft report on the impact of a Wellington Fault movement on the wholesale water supply network and identified the probable locations of breaks and leaks. Water Supply Operations' staff members have provided information on the likely methodology and timeframe for repair of these breaks and leaks. We are currently working through the order of repair logic to minimise the time to reinstate a reduced water flow through to full wholesale water supply.

The exercise will provide a practical estimate of how long consumers in each of the four cities will be without wholesale water supply following the Wellington Fault movement. This will allow better planning of emergency water supply measures to be carried out.

A similar analysis will also be carried out assuming the Whakatikei dam is in place, to quantify its impact on the reinstatement of supply. It is expected that the Whakatikei dam will result in significantly faster reinstatement of the wholesale water supply (particularly to Porirua and Wellington) following movement of the Wellington Fault. Should this be the case, an economist will be commissioned to evaluate the benefit of this faster reinstatement in social and monetary terms.

4. Renewable energy

4.1 Stoney Creek wind farm

Meridian Energy's plan to erect a 30 m anemometer mast at Stoney Creek has been delayed whilst access arrangements were confirmed with the adjoining landowner. Access to the site includes a short section of neighbouring land that diverts off the paper road. Access has now been confirmed and installation of the mast is being arranged.

4.2 Puketiro wind farm

A draft replacement contract for development of the wind farm, covering the changes required by the Council, has been provided to RES New Zealand Ltd (RES). Discussions with RES are continuing. Completion of negotiations and signing of the replacement contract is taking longer than anticipated but is expected to be finalised in March.

In the meantime, RES is continuing with investigation and preliminary planning.

4.3 Wainuiomata mini-hydro

A letter is being prepared to commence discussion with interested parties on the proposal to discharge water from the Orongorongo Catchment into George Creek following mini-hydro power generation. Discharge of the water would be necessary, if it is not required for the wholesale water supply.