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# Utilities and Services Group

## July/August 2010

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## Parks

### Review of operations for the period ended 31 August 2010

#### 1. **Manager's comments**

##### 1.1 **40,000 plants planted at Queen Elizabeth Park this year!**

Officers are looking forward to a well earned break from planting after almost 40,000 plants have been planted in the past year. Alongside the recent 10 year anniversary planting (celebrating 10 years of GWRC's Take Care Programme) where over 10,000 plants were planted in half a day, other community and corporate events such as the Honda tree programme and Arbor Days has meant nearly 40,000 plants have been planted this year. It has been a mammoth effort by the Parks staff to get all this done this year.

##### 1.2 **Whitireia Park Sustainable Land Management Plan**

The Sustainable Park Management Plan for Whitireia Park is nearing completion. It will be going to the Whitireia Park Board for adoption in late September.

The timing for the implementation of the plan, if adopted by the Board, will largely depend on the amount of funding made available largely from this Council. Currently, GWRC has \$120,000 budgeted for the 2010/11 financial year. This amount is made up of \$75,000 which is the normal annual allocation (presuming GWRC is granted a management and control interest in the Park in the financial year), plus \$40,000 that is a carry forward for the Park in 2009/10.

Even though the Board is yet to approve the plan, there is some urgency surrounding getting the gorse control and some fencing work completed. The gorse control work need to be undertaken by November at the latest to make the control effective. If it is left until next spraying season, the job will be much bigger and more expensive. Perimeter fencing also needs to be undertaken to secure grazing stock.

In lieu of the Board approving the plan, officers are seeking prior approval from Council to spend \$70,000 of the Park's 2010/11 budget on these works. That would leave \$50,000 for non urgent restoration work, or to provide other park services should GWRC be granted a management and control interest in the Park.

##### 1.3 **Battle Hill Sustainable Land Management Plan**

At the last Committee meeting Councillor's commented that they wished to see the Battle Hill Farm Forest Park Sustainable Land Management Plan along with a cost estimate of the works required to implement the plan. The plan's Executive Summary and Action Plan are attached. (Attachment 2).

While the main focus of the plan was on the farmland, all land based activities were integrated into the plan, so that the plan has been developed for the whole park, rather than the farmland alone, e.g. existing programmes for the native bush remnant and Swampy Gully wetland have been incorporated into the plan. The Plantation Forestry section of Battle Hill Farm Forest Park has also been

included in the plan, but this area is managed under the Plantation Forestry Operating Plan.

The best soils in Battle Hill Farm Forest Park for agricultural use are located on the flats that are now part of the Transmission Gully designation. At the time of the plan development, it was unclear about whether or not Transmission Gully would be built. One of the recommendations from the Sustainable Land Management Plan was to improve the pasture and drainage on the flats to increase farm production. There were also a number of actions related to Transmission Gully, such as developing stands of vegetation to shield the road from the rest of the park and to help minimise erosion caused by the highway construction. In the estimated costs shown below, those actions related to Transmission Gully have been separated out, as the priority for implementing those actions will not be determined until there is more clarity about the timing of the motorway construction.

The total estimated cost of implementing the Battle Hill Farm Forest Park sustainable land use management plan is estimated to be in the vicinity of \$500,000 in total over the course of several years. If the actions related to Transmission Gully are removed for the time being, the total cost is around \$400,000. There are some funds within the Battle Hill Farm Forest Park budget that can be used to contribute to implementing the plan (approximately \$10,000 p.a.), as these funds are currently used for land management.

It was intended that the Parks Department complete all four Sustainable Land Management Plans for farmed areas (Battle Hill, Belmont, Queen Elizabeth Park and Whitireia) and provide full costs for all of the farmed parks to the coming LTCCP for consideration by Council. A similar plan will also be produced for the newly acquired Baring Head block. The implementation of the Battle Hill Farm Forest Park plan is potentially a lower priority than that for the other parks because of the unknowns related to the Transmission Gully project.

#### **1.4 Renewal of the Waitangirua Farm lease**

When GWRC jointly purchased Waitangirua Farm in 2006, a license arrangement was entered into with Landcorp Farming Limited (Landcorp), for Landcorp to continue to graze the property while Council considered the future of the Block. The license area includes 926 ha in the acquired Waitangirua Farm Block, along with an additional 1067 ha from areas in the existing Dry Creek, Kilmister and Takapu Blocks.

The license arrangement was for a five year period with Landcorp being given a “right of first refusal” after the period expired if Council decided that it wanted grazing to continue. This provision was put in the license so that if Council, wished to change the land management regime for the farmed areas, it could do so.

It is the officers’ view that a change in the management regime for the farmed areas within the park is not desirable at this point. The total area of the farm license is approximately 2000ha. To convert the farmed area to another land use (i.e. converting to a different stock type, retirement of large areas for

regeneration or conversion to plantation forestry) would require a substantial capital investment. The current \$100,000 p.a. license revenue would be lost. Retaining the open hill top character of the park still remains as a key driver for retaining the current farming operation as it provides a low cost/ revenue generating land management tool. No doubt there are some improvements that can be made to the existing farm management regime. To deal with such issues, the Sustainable Land Management Plan for Belmont Regional Park is being prepared, and future implications of that plan will need to be considered prior to changing farming practices or areas. It is unlikely that all work outlined in the plan would take place over the term of the license. The future of the western part of the farm that will be impacted by the Transmission Gully motorway also need to be debated.

The five year lease is due to expire in June 2011, and Officers would like to commence negotiations with Landcorp regarding them extending their license for another five years. If the Committee agrees that the current land management arrangement should continue, officers will begin those negotiations.

At this point the main issues that will be points for negotiation with Landcorp will be:

- Public access through the farm during lambing
- Effects Transmission Gully might have during the course of the lease
- Possible impacts of the Sustainable Farm Management Plan on farming operations
- Any changes resulting from the Parks Network Plan.

## **2. Environmental Management**

### **2.1 Pest control**

Preparations have been under way for delivering the pest control operations for this financial year. The Wainuiomata/Orongorongo Water Collection Area 1080 possum control operation is planned for May 2011. The timing of the operation will assist the survival of robins planned to be released into the Mainland Island in June 2011, as the rats will be at low numbers throughout the wider catchment area. A possum monitor of the water collection area is to be completed in September 2010. Ground control operations in Belmont Regional Park, Cannon's Point in Akatarawa Forest and in East Harbour Regional Park are continuing. A possum monitor completed recently in Korokoro Bush showed that the possum control is working – the result was 0 percent!

Officers have met with Department of Conservation (DoC) staff to discuss pest plant control at Lake Wairarapa and have agreed to co-ordinate work to maximise outcomes. It is planned to work on a number of projects together, including ground pest plant control work in J K Donald Reserve and at Pounui Lagoon. Research on a spray trial of the eastern lake shore will also involve officers from both agencies.

### **2.2 Monitoring**

Monitoring of rodents has been carried out during August in the Queen Elizabeth Park (QEP) dunes, Battle Hill bush, and in East Harbour Regional

Park. Results at QEP and Battle Hill mostly followed recent trends. At QEP the tracking rates were 0 percent for rats and 75 percent for mice. At Battle Hill the rat tracking rate was 10 percent - only a small increase from the 5 percent tracking recorded in the February and May monitors. Mouse tracking at Battle Hill on the other hand has shot up to 80 percent, up from 10 percent tracking in May.

The results for the Mainland Island Restoration Organisation (MIRO) mainland island in East Harbour Regional Park have shown a great improvement in the effectiveness of rat control, since the work to strengthen the bait station network was completed in June. The rodent monitoring results show that rats are tracking at 4 percent inside (well below the 10 percent target) and at 38 percent outside the area.

### **2.3 Raumati South Wetland planting**

Four more planting days were held at Raumati South Wetland in QEP during late July and August. Two of the plantings involved the two local schools - Raumati South Primary School and Te Ra Waldorf School. Around 300 plants were planted and protectors placed around plants by 60 children from Te Ra Waldorf School, while 180 children from Raumati South Primary School planted around 1,200 plants. The third planting was another successful community effort with about 25 local residents planting 600 plants and the most recent planting was completed by 20 six and seven-year old Keas (Scouts). Only 90 plants were planted on that occasion but the children had lots of fun in the process. At each of the plantings, staff talked to the children about the objectives of the project, the significance of wetlands in general and the value of their contribution to the restoration of this particular wetland. Hopefully this will help to develop a new generation of environmentally aware citizens.

### **2.4 Wainuiomata Mainland Island**

#### **2.4.1 Wainui hinau fruit-fall monitoring**

Monitoring of hinau fruit-fall plots was completed in early August. Heavy flowering of hinau trees in the catchment last summer did not result in heavy fruiting as expected, with far fewer fresh fruit being found in the plots this year compared to 2009.

The mean percentage of hinau fruit in each fruit-fall plot that had been damaged by rodents was significantly higher in the control area than in the mainland island this year. Twenty-four percent of fruit in control area plots showed signs of rodent damage compared to 8 percent of fruit in mainland island plots (see graph on page 9). These results suggest that our ongoing rodent control is succeeding in reducing levels of rodent damage to fallen hinau fruit in the mainland island. The percentage of rodent damaged fruit has dropped slightly in both areas since last year.

The mean percentage of fruit in each plot that had been damaged by possums was significantly higher in the mainland island than in the control area this year. A total of 3.4 percent of fruit in mainland island plots showed signs of possum damage compared to 1.2 percent of fruit in control area plots (see

graph on page 9). No possum damaged fruit were found in either the mainland island or control area plots in 2009, suggesting that levels of possum damage to fallen hinau fruit have increased catchment-wide over the past year, and have increased at a greater rate inside the mainland island than in the nearby control area.

This year we also came across a number of plots in both the mainland island and control area that had been heavily disturbed by pig tracking and rooting. Judging by the number of pig scats that were seen that were full of hinau kernels, pigs could also be having an important impact on hinau fruit in the catchment. Unfortunately, it is not really possible to quantify the impacts of pigs on hinau fruit using our current fruit-fall plot method, because any fruit consumed by pigs tends to be carried away from the fruit-fall plots and, therefore, cannot be counted. On the other hand, whereas rodents and possums often chew into hinau kernels to consume the embryo inside, most hinau kernels eaten by pigs seem to pass through pigs' digestive tracts whole and may still be viable when they come out the other end. If this is the case, pigs might not have the same impacts as rodents and possums on the germination rates of the hinau fruit they consume.

### **3. Western and Eastern Sectors**

#### **3.1 General**

We welcomed two new members of staff to the Parks team during August. Joel Revill commenced as Ranger, Western Sector on 2 August. Joel was formerly a member of our Weed Team. John Tibble commenced as Mobile Ranger, Western Sector and will reside at Queen Elizabeth Park. John comes from a background of farming and social services, and has just finished working with the Wairarapa District Health Board.

Chris Wootton resigned from his position as Park Ranger, Belmont Regional Park, effective December 2010. Steve Edwards has been seconded as the Principal Ranger, Eastern Sector role for a period of six months, allowing our current Principal Ranger, Eastern Sector to focus on the Western Sector.

#### **3.2 Akatarawa and Pakuratahi Forests**

We have now removed approximately 50 trees from the Tunnel Gully reserve, consuming a lot of our time and resources. It is suspected that an airborne fungus is responsible for the dying trees. The spread of the fungus appears to have increased and is now affecting larger areas of the eucalypts than initially thought.

Because of the extended wet period we have been experiencing, the roads in the Akatarawa Forest have suffered. This is mainly apparent in areas where very little metal is on the ground. We will commence upgrade work as soon as we get into the drier months in summer.

A vehicle sighted by our staff in Akatarawa and Kaitoke was identified as removing supplejack and other plants from our forests. The perpetrators were have been warned and Parks' officers have been alerted to this vehicle and will be endeavouring to discourage any further theft from these areas.

### **3.3 Battle Hill Farm Forest Park**

During this period staff at Battle Hill hosted the Onslow School camp and Orienteering Day. The weather was fine but cold, however, more than 100 students enjoyed the event and the park.

We are currently in the process of upgrading the septic tank and pipes connected to the toilet in the Dell area at Battle Hill. This toilet has had a history of blockages forcing closures. This area is used regularly by the pony clubs on event days and is the main access to the jumping area. We hope to have this completed by the end of August.

Over this period the Maintenance team has been doing annual maintenance on the woolshed, where doors and windows have been repaired and replaced, and the installation of tree protectors and mulching in the Swampy Gully area has been completed for the year.

A contractor has metalled the horse/ pedestrian gateways at Battle Hill in preparation for the busy summer season.

### **3.4 Belmont Regional Park**

A most successful planting was held with Korokoro School at Stratton Street, which was ably facilitated by Take Action, with Parks providing the trees and support to help get the job done. The school has continued the riparian plantings alongside the upper Korokoro Stream, a “hands on” practical continuation of their involvement in the Take Action programme run by GWRC.

Other successful events held over the period included the Xterra Trail running event which attracted a large turnout at Stratton Street and utilised our facilities and tracks in the area. Another smaller event was a mountain bike orienteering event, again held at Stratton Street.

We are finally beginning to see the end of winter approaching with days being noticeably longer, but not much warmer or drier yet! What has been observed this month are large (up to 20) flocks of kereru or New Zealand wood pigeon feeding lustily on plantings of tree lucerne at our various park entrances. One tree was literally sagging under the weight of the combined flock of pigeons at our Kaitangata (Kelson) entrance. The profusion of these birds is a testament to the ongoing environmental work carried out throughout much of Belmont Regional Park and beyond by GWRC, in particular the possum control work that has had an amazing impact on restoring native bird numbers throughout the Region.

Another sighting reported to Parks’ officers was of a flock of New Zealand falcon at the Stratton Street entrance to Belmont Regional Park. Although not officially verified, this sighting is encouraging in that New Zealand falcons appear to be well established and breeding in the Korokoro Valley. To observe not only one but a number of these birds would have been impossible only a short number of years ago.

Parks' staff have been working with Transpower to determine siting and access to a significant line upgrade through Belmont Regional Park. The Haywards to Benmore line is being "reconducted" to allow a greater power carrying capacity. This has necessitated a temporary bypass line to be constructed through the park from Belmont Trig to Dry Creek. Parks' officers are working with Transpower to minimise environmental impacts and impacts on public access and farm operations during the period of this significant project.

Parks' staff have also been working with Hutt City Council officers to respond to issues raised over the Oakleigh Street car park and subdivision of the old Otonga School site. Staff have identified a number of minor improvements that can be made to the area in terms of roading and walking track access. GWRC Parks will improve the walking access track below the new subdivision, while Hutt City Council will make some improvements to the road leading out of the new subdivision. This will improve the attractiveness of the area to the public.

### **3.5 East Harbour Regional Park**

The bait fill on Wainuiomata's mainland island has been completed with assistance from Kaumatua Tramping Club and MIRO and our Park Ranger, East Harbour continue with their possums and mustelid control lines.

MIRO also conducted two planting days at Parangarahu Lakes Plot 4 involving 800 plants, and 200 mixed natives in Plots 1 and 2.

The Baring Head houses are now under management review and assessment of the land is under way. Our Park Ranger, East Harbour has attended several meetings with interest groups during this period and Councillors paid a visit to the area during July.

Sign maintenance has continued, with a damaged sign at Lowry Trig removed, and a replacement ready for installation. Our construction crew has been covering several signs at East Harbour with perspex to protect from vandalism. Stoat trapping signs have also been installed on the Nikau Track in Wainuiomata.

As part of bringing the Mackenzie Track to standard in East Harbour, five 3 m boardwalks have been constructed and are ready to be flown in to the Butterfly Creek valley for installation this spring. Fencing at Lakes Block has continued with 600 m of 8 wire stock fence installed during this period. Previously we have been experiencing stock gaining access along the coast from farms adjacent to the block. Hutt City Council contributed to the costs of materials.

### **3.6 Kaitoke Regional Park**

Periods of heavy rainfall and extreme winds throughout July and much of August have been supplemented with some hard frosts, and in Kaitoke Regional Park this has resulted in some pipework freezing and splitting.

Community workers have been busy with scrub and drain clearing, and some painting work. The park is looking great and their efforts have been appreciated, as it has enabled the maintenance crews to focus on other work.



In preparation for the summer months we have installed three new barbecues in the large facility building at Kaitoke Regional Park replacing our old models that were reaching the end of their useful life and were costly to maintain.

### **3.7 Queen Elizabeth Park**

QEP has held several planting events during this period. Kaitiaki Onaghery planted 5,350 spinifex along the fore dunes from Whareroa Stream north to Raumati South and another community planting was held at the Northern Wetland with a good turn out.

On 17 July we had nine volunteers do some plant propagation at the nursery and prepare the nursery for 7,050 plants that were arriving from Taupo Native Trees for the 10 Year Anniversary of 10 years of Care Groups with GWRC.

In mid-July a community planting day was held at Rainbow Court, QEP. It was a fine day, with 18 volunteers planting 929 plants (see below).

Contractors have brought in a large amount of fill material to the park to bolster up the bank so that Tramways can realign the corner turn on the tramline near Whareroa Beach. Metal has also been delivered for improving the coastal and inland tracks which have grade and water control issues.

Culverts have arrived in preparation for the replacement of the bridge along the farm race on the northern farm block at QEP. Work is expected to commence in January.

Cattle from the northern farm block were purposely let out onto the northern inland track during July. On subsequent nights cattle were let out again from the northern and southern farm blocks. We have now padlocked the gates.

### **3.8 Wainuiomata/Orongorongo Water Catchment**

Our Park Ranger, Wainuiomata/Orongorongo recently assisted our Events Advisor with an athletics event in the park. The harriers' event involved a short course road race on the road doing laps.

Planting continues, with 232 cabbage trees, flax, pittosporum, manuka and kanuka planted at the front entrance gate, Fluoride Plant and Lower Dam in Wainuiomata.

Winter maintenance continues throughout all parks, with run-offs, water tables, culverts and drains being cleared on all main tracks, and, of course, the necessary removal of wind-fallen trees. In Orongorongo the water tables were cleared along the catchment road by the mobile ranger using a small excavator.

Installation of the security gates at the Wainuiomata Ranger's house has now been completed. We installed the gates to provide the resident Ranger with some privacy and security when the recreation area is eventually extended to the Lower Dam in November 2011. Placement of the chip seal at the Wainuiomata site office has also been completed.

Black shags were seen carrying nesting material to their roost site in Wainuiomata.

Since commencement earlier this year our Park Ranger, Wainuiomata/Orongorongo has been trying to get around to meet all of our neighbours, especially those who have boundaries with the water catchment area.

Heavy rainfall and extreme winds have caused slips in the Orongorongos.

Completion of the boundary fence at Lakes Block



Corporate group from Transpower at Queen Elizabeth Park



New toilet block at Lake Wairarapa Moana



Volunteers prepare the nursery for the arrival of 7,050 plants



# Marketing and Design

## Review of operations for the period ended 31 August 2010

### 1. **Manager's comments**

Officers have co-ordinated development of the communications plan for the preliminary investigations into the water storage lake at Kaitoke, ready to publicise key points to stakeholders and the general public on and around 1 September.

The 10,000 trees planting day at Queen Elizabeth Park was undoubtedly a highlight of the period. Considerable work had been put into preparing for and promoting the event, so it was with great relief we saw that the weather was likely to co-operate. It was a real team effort with contributions from across GWRC to ensure the event was well promoted, well organised and the area was well prepared. The ceremony featured iwi representative, Tuki Takiwai, who conducted a mihi and later blessed the site, followed by John Lancashire (Friends of Queen Elizabeth Park), Cr Fran Wilde and June Rowland, a well known environmental "pioneer" from the Kapiti district.

### 2. **Water Supply**

#### 2.1 **Communications**

The process of writing the Water Supply Annual Report and checking and compiling annual data tables has kept one staff member busy during the reporting period. We will have the report designed before presenting it to the Council meeting of 28 September, for approval to publish.

#### 2.2 **Summer 2010/11 water conservation**

We have started to make arrangements for the delivery of our annual summer promotion of water-smart gardening tips. Our focus will remain on reducing peak-summer demand for water.

#### 2.3 **Assessment of water efficient showers**

Towards the end of 2009 we accepted an invitation from EECA to collaborate on their plan for a trial promotion of water-efficient showers.

Our Marketing Team was involved in the early stages of project design and retained a watching brief after EECA opted to conduct the trial promotion nationally so their offer could be delivered to the public via Master Plumbers' *Green Plumbers* network.

Water efficient showers offer considerable potential for water and energy savings on mains-pressure water systems but have received unfavourable publicity because of a perception that a reduced flow rate must result in a worse showering experience. We advocated strongly that EECA address this perception, as it would reduce the likelihood of people fitting a water-efficient shower.

As part of the project, EECA commissioned a product test by *Consumer* magazine to investigate the performance of seven "low flow" showers. Several

of the showerheads tested received favourable reviews from the test panel. We are looking into whether we can help to publicise the results, which appeared in the magazine's August 2010 issue.

### **3. Parks**

#### **3.1 Events**

##### **3.1.1 Buggy walks**

The August walk was held on 5 August on the Ara Harakeke in Porirua in fine weather, attracting around 100 people. There was some feedback that people did not enjoy walking near the highway, so this route will probably not be used in future.

The September event starts at Hikoikoi Reserve and runs along the Petone foreshore.

##### **3.1.2 Community/corporate planting days**

A total 270 people turned out to plant at 10,000 tree planting day at Queen Elizabeth Park

Staff are arranging for a corporate planting day in late August to plant up a number of left-over pre-dug holes at the site. A group of people from ANZ Bank will carry out more planting at the Stuart Macaskill Lakes Lookout on 2 September.

#### **3.2 Publications**

Considerable time has been spent drafting text and sourcing photographs for the 2009-2010 Parks Annual Report. This year the "feature" article will discuss sustainable land use plans and outline progress to date on development in relation to several of our parks.

#### **3.3 Community liaison**

##### **3.3.1 Friends of Queen Elizabeth Park Annual General Meeting**

The group's Annual General Meeting was held on 23 August, with around 35 people attending.

##### **3.3.2 Friends of Maara Roa**

We are supporting the Friends of Maara Roa with an event on 18 September to celebrate 10 years of their restoration project in the Cannons Creek Valley, Belmont Regional Park. The event will involve a plaque unveiling, children's activities and some tree planting, along with refreshments. Porirua City Council is also assisting with funds for advertising to further promote this milestone.

##### **3.3.3 Friends of Baring Head**

Officers attended a meeting of people interested in setting up a "Friends of Baring Head" group. The meeting agreed that a Charitable Trust be established and reviewed a draft Trust Deed. We updated the group on recent GWRC developments, including putting on hold the decision to tender for removal of

the lighthouse houses; starting to consult on the future use and management of Baring Head and adopting the management regime that applies to the Parangarahu Lakes Area in the meantime. We noted that January 2011 has been approved as a target date for a public opening and raised the possibility that there might be some members of the group interested in being involved in the event.

### 3.4 Concessions

Officers met with Film Wellington during the period. Following that meeting we are planning a tour of Belmont Regional Park to review possible film locations. We are also intending to develop a new brochure to further explain the regional parks to location scouts and encourage them to discuss projects with us as early as possible.

External organisers are planning several new events for the summer period, some of which will be included in the *Great Outdoors Summer Events* programme.

Concessions activities have included:

Name of event	Timing	Park
Athletics Wellington Road Championships	August	Wainuiomata Recreation Area

## 4. Landscape developments

Following discussions with GWRC staff and other stakeholders, project proposals are being developed for:

- Changes to the Kaitangata Crescent car park (access to Boulder Hill, Belmont Regional Park)
- Revegetation of Bridge Road, Akatarawa Forest
- Rimutaka Rail Trail distance markers (in conjunction with Department of Conservation)

Staff recently visited key areas of the Wairarapa Moana Wetlands Park with the New Zealand Transport Agency (Wellington Region) Road Safety engineer to discuss road signage options. We are currently assisting the Park Ranger, Wainuiomata/Orongorongo Water Collection Area in developing a project plan leading up to providing public access to the Lower Dam at the Wainuiomata Recreation Area. An update regarding the disabled access toilet has been given to the GWRC Disability Reference Group.

## 5. Wellington Regional Strategy/regional developments

Officers attended a meeting with Wellington City Council regarding the information sharing sub-working group. We are aiming to work with all the territorial authorities and the Department of Conservation to identify and describe the “Top 100” easy-moderate walks in the Region, to include in a web based resource.

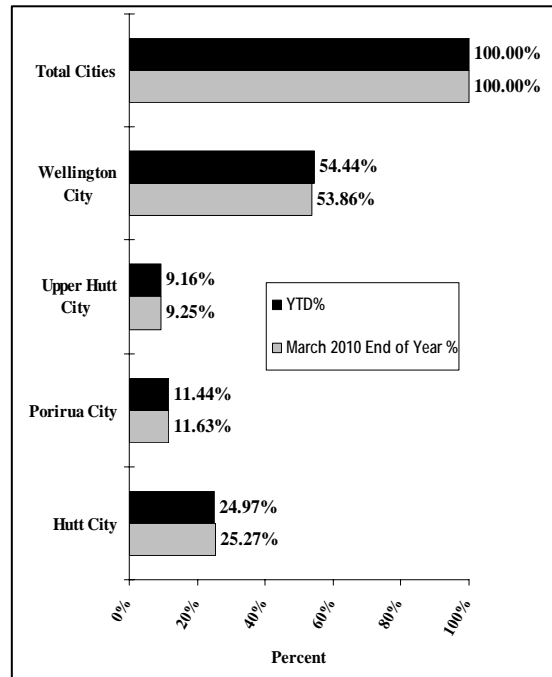
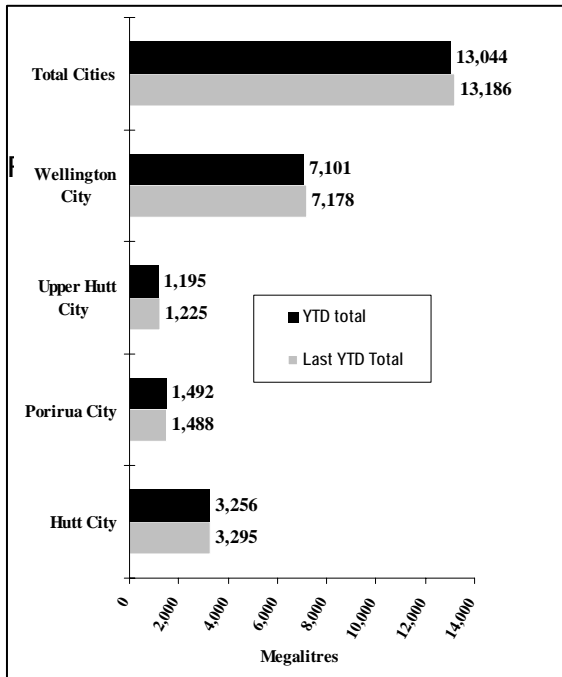
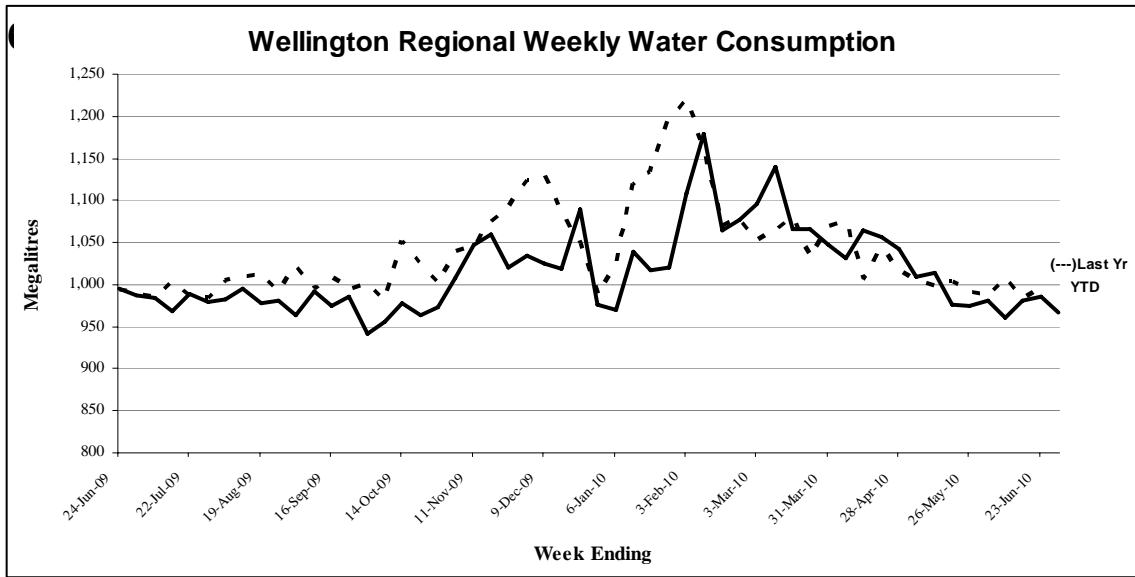


Figure 2 - Water sold during the metering year to date [August 2010]

# Water Supply

## Review of operations for the period ended 31 August 2010

### 1. Supply situation

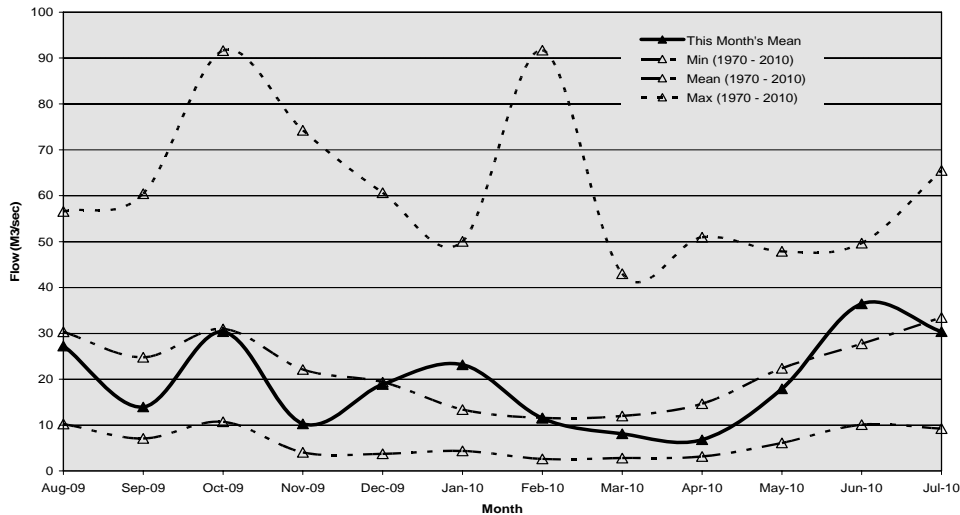
#### 1.1 General

Wainuiomata Water Treatment Plant remains shut down for the winter months. The plant was put into service between 27 and 30 July to ensure its readiness for immediate service if required. Shutdown maintenance is being carried out whilst the plant is off.

There were no other supply issues for the period.

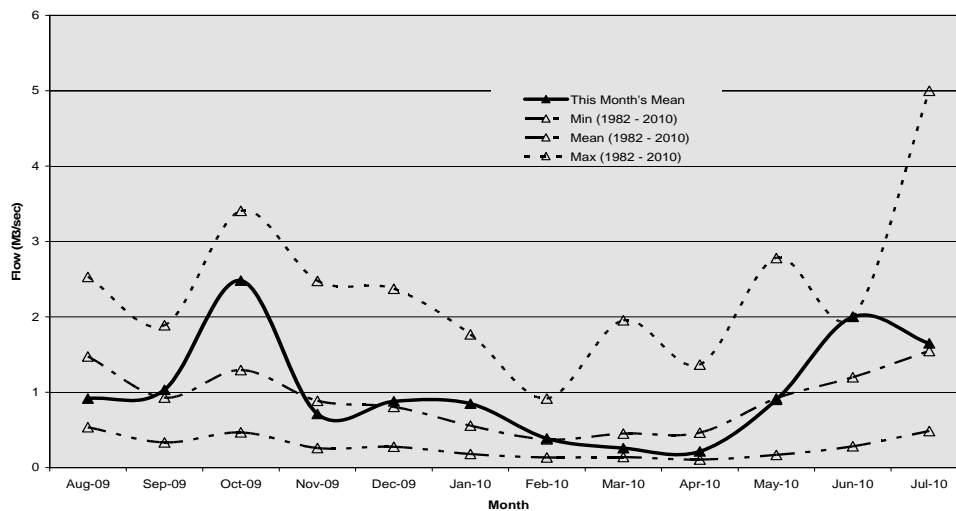
#### 1.2 Hutt River flows measured at Birchville

The mean flow in the Hutt River at Birchville was just below the mean during July.



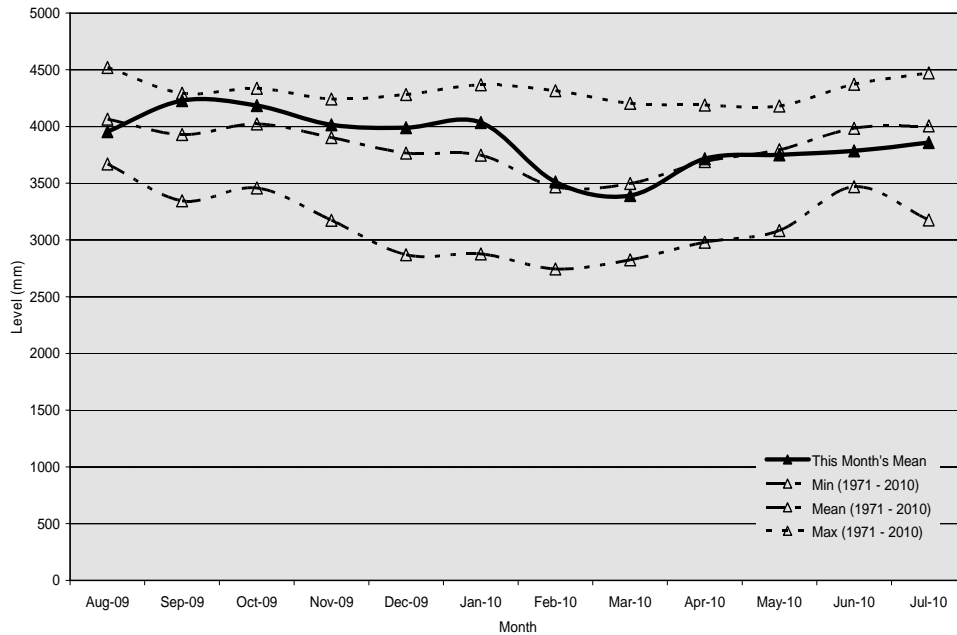
#### 1.3 Wainuiomata River flows measured at Manuka Track

The mean flow in the Wainuiomata River at Manuka Track was just above the mean during July.



## 1.4 Aquifer levels measured at McEwan Park

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



## 2. Electricity tender

The purchase of electrical energy for GWRC's major use sites was put out to tender in mid-June.

Four Tenders were received and Meridian Energy was selected as the preferred supplier.

## 3. Diesel tank at Te Marua

We received a notification from Chevron (Caltex) that they were planning to remove the underground diesel storage tank they own at Te Marua Water Treatment Plant in August because of its age.

We have successfully resisted the removal of the tank, as the diesel storage is primarily for the emergency generators and the risk of being without a back-up power supply for up to 12 months is too great.

Work has commenced on options for a replacement tank and funds will be allocated in the 2011/12 Capex budget, with the replacement planned for August 2011.

Diesel storage tanks at other water supply facilities are owned by GW.

## 4. Gear Island well

Gear Island back-up supply capacity has been reduced, as one of the three wells has been taken out of service. During a CCTV inspection of the well casings it was found that one of the casings was badly corroded and a number of small holes were present.



Initial indications from the drilling contractor are that there are significant risks with relining the well and an option may be to abandon the well. Abandoning the well would mean either constructing a new well or reducing the wellfield capacity. Investigations are under way to identify our preferred option.

## Development and Strategy

### Review of operations for the period ended 31 August 2010

#### 1. **Stuart Macaskill Lakes**

Environment Waikato is processing the building consent applications for the lakes work as agent of GWRC Environmental Regulation. The design of the rock buttresses to strengthen parts of the external embankment of both lakes has been peer reviewed and the design reports have been approved for Psubmittal as part of the consent application for the rock buttress construction.

The outline plan for upgrade of the Stuart Macaskill Lakes has been accepted by the Upper Hutt City Council.

Registration of interest for the rock buttress construction is to be advertised at the end of August, with the intention of awarding the Contract in November, subject to receipt of the building consent for this work.

Since the rock buttress contract will continue over two annual plan years, it is intended to seek delegation from the Council at the 28 September meeting for the Chief Executive to award the Contract.

#### 2. **Reduced low flow at Kaitoke weir**

Support for a consent application to reduce the low flow at Kaitoke weir for the duration of the Stuart Macaskill Lakes upgrade work has been received from Upper Hutt, Wellington and Porirua City Councils.

A presentation on the need for the consent change during the lakes upgrade was made to a Hutt City Council workshop in early August. Hutt City Operations and Compliance Committee considered the issue and is recommending to the Hutt City Council that the Council reserves its position on the application by Greater Wellington.

The consent application and supporting documents covering the assessment of environmental effects of the change have been completed. A report on the consent application is provided as a separate report to this Committee.

#### 3. **Wainuiomata mini hydro-generation**

Tenders for construction of the generator building and reservoir have been called from selected firms with appropriate experience and track record for the work. Tenders close on 2 September and the Contract is expected to be awarded, with Site possession in mid-October. We are looking for options to achieve building completion earlier than mid-April 2011 to allow the generator to be installed soon after its programmed arrival date of 28 March. This would bring forward the commissioning date and first production of electricity.

An application has been made to Wellington Electricity to commence the process for connection to the local electricity grid for exporting any surplus electricity generated.

Prices received for the generator control panel are currently being evaluated.

#### **4. Security of supply standard**

MWH NZ Ltd has provided their final report on a review of Greater Wellington's security of supply standard for wholesale water (2% annual shortfall probability; 1 in 50 year shortage). MWH collected information from 15 water suppliers of similar size in 5 countries, covering run-of-river supplies, ground water and water storage reservoirs.

MWH concluded that Greater Wellington's 2% standard is a reasonable standard for security of supply when compared with these other suppliers. MWH also assessed our sustainable yield model (SYM) for modelling the security of supply as advanced and a best practice.

A planned upgrade of the SYM was approved by the Committee to be brought forward one year, due to concerns that the model was using demand data that did not include the reductions in per capita water consumption in the three years to June 2009. In addition, the ability to model changing population and water demand by each or the four cities had been identified as a necessary improvement.

The model upgrade was completed in June 2010 and has been successfully validated against previous results. Preliminary results so far indicate an improvement in the modelled security of water supply from the 3.9% annual shortfall probability (1 in 26 year shortage) reported last year. More testing of the new model is needed before we will be confident in publishing a revised security of supply percentage.

We will provide a report to the Committee, covering both the security of supply standard and the updated modelled result, after testing of the modelled security of supply is completed. It would then be appropriate to consult with our four city customers.

# Emergency Management

## Review of operations for the period ended 31 August 2010

### 1. Civil Defence Emergency Management (CDEM) Group

#### 1.1 General

Work has started on the new work programmes for 2010/2011. This year we aim to complete nine projects, namely an upgrade of the CDEM Group website, the review of the CDEM Group *Public Information and Media Management Plan*, development of a CDEM Group *Regional Rescue Strategy*, the review of the CDEM Group *Road Access Restoration Plan*, the review of the CDEM Group *Commuter Management Strategy*, the review of the CDEM Group *Recovery Plan*, the review of the CDEM Group *Public Education Strategy*, planning and delivery of *Exercises Tangaroa* (Pacific Wave) and *Phoenix VII*.

#### 1.2 The new emergency management information system (EMIS)

Implementation of the system is behind schedule and the Ministry of CDEM now anticipates the system (after testing) to be implemented towards the end of 2010 or even as far out as the first half of 2011.

User training for EMIS has been finalised and the first training sessions will be delivered towards the end of September 2010. Emergency Management staff have been registered to undergo the required training.

### 2. Civil Defence Emergency Management Group (CDEM Group) activities

- Preparing for and presenting to the 4<sup>th</sup> Australasian Natural Hazard Conference at Te Papa, 10 to 13 August 2010. The department provided a display of posters and banners as part of a trade display and also convened the *Emergency Management Planning for Local Government* workshop that was held on 13 August.
- Keeping the CDEM Group Emergency Operations Centre(s) in a state of readiness (weekly testing of communications equipment, databases, information management systems, etc.).
- Preparing for and planning to participate in a national New Zealand Police led exercise that was held on 25 and 26 August 2010.
- Tsunami evacuation planning - the working group has met on several occasions to discuss territorial authority tsunami evacuation planning, evacuation routes and signs, consistent messaging, *Exercise Tangaroa*, evacuation zone mapping and the tsunami preparedness booklet.
- Group Controllers' meeting - the three controllers have met twice in the last couple of months and have visited the National Crisis Management Centre and had discussions on emergency management issues with the national controller and his team.

- Preparing for *Get Ready* week (11 to 15 October 2010). This year's theme will concentrate on tsunami preparedness and new public education material has been developed to encourage our communities to be more aware of this hazard, and to be better prepared should our Region be exposed to such a threat.
- Preparing for *Earth Rocks* at Te Papa. This event happens every two years over Labour Weekend and gives CDEM in the Wellington Region the opportunity to interact with approximately 18,000 visitors to Te Papa, and to promote personal preparedness. All our officers, as well as staff from the territorial authorities, will be involved with this event.
- Community Preparedness survey 2010. This survey has been completed and the report revealed some interesting results. For example, during the past four survey measurements, the public's awareness and level of preparedness for a major civil defence emergency steadily grew. In 2010 68 percent of respondents considered their level of preparedness as *good or better* compared to only 56 percent in 2004. Another example revealed that the preferred choice of sourcing information is radio (>6 percent), television (13 percent), internet (11 percent), with the Yellow Pages only 3 percent. A full report of the findings is tabled at this meeting.
- *Exercise Tangaroa* (20 October 2010) is the national part of *Exercise Pacific Wave*, an international tsunami exercise. The exercise is based on a distant source tsunami and will focus on decision making about warnings, information management and evacuation of affected communities. Planning for the exercise is well under way and the Exercise General Instructions have been developed and disseminated to all the participants.
- Planning for and delivering of training and development to GWRC volunteer staff, controllers, recovery managers - 47 volunteer staff have been trained in emergency co-ordination centre functions. The Emergency Services (Police, Fire and Ambulance), health sector (District Health Boards and Regional Public Health) and lifelines services (New Zealand Transport Agency, water, and communications) have been invited to present their respective roles and responsibilities at these courses. The controller and recovery manager course took place on 3 September 2010. Attendees were subjected to manage an exercise based on a distant tsunami event.