Water Supply, Parks and Forests June 2008

Parks Review of operations for the period ended 30 June 2008

1. Manager's comments

The period has seen the end of the 2007/08 financial year. While there were many highlights for me during the year, the one thing that really sticks in my mind is the dedication Parks' staff have shown toward their jobs, the parks and Greater Wellington Regional Council (GWRC). This year brought an extremely long and busy summer, and a substantial increase in visitation (up 25 percent on last year). During all of that Parks' staff worked tirelessly to ensure the parks were clean and tidy, and that visitors enjoyed their experience. They ran events, planting days, managed campers, and dealt with vandalism and behaviour issues all in an extremely professional manner. Therefore, to them I have to say a huge thank you.

2. Environmental planning and implementation

2.1 Policy and planning

The draft Concessions Guidelines were released for public comment in early July. Advertisements asking for submissions on the guidelines were placed in *The Dominion Post* on 2 and 5 July, and on the GWRC web site. Submissions are open until 11 August.

Hearings for both the Kapiti Pony Club lease and the reserving of Waitangirua Farm will be held at the beginning of this Parks, Forests and Utilities Committee meeting. Copies of the submissions for both issues were sent to all Councillors prior to this meeting. Summaries of the submissions and reports containing officer's recommendations are provided at this Committee meeting.

Officers have undertaken a review of the existing forests and parks bylaws to determine their level of appropriateness, whether the issues are relevant and if bylaws are the best way to address those issues. A paper will need to be put to the next Committee meeting.

2.2 Environmental planning

The Mainland Island Restoration Operation (MIRO) group has released 14 robins into the Gollans Stream area of East Harbour Regional Park. A small ceremony was held before the birds were carried over the Muritai Track and released into the mainland island area on Sunday, 22 June. The event was attended by GWRC officers, Department of Conservation (DoC) Poneke Area Manager, Forest and Bird members and MIRO volunteers. All birds had blood samples taken to check whether they had any diseases of concern.

This is part of the DoC translocation protocol. DNA sexing of the birds has revealed that the sex ratio is 1:1, i.e., 7 males/7 females, which is a great start for the successful establishment of a robin population. MIRO plans to catch another 26 birds before the end of the breeding season, so another two releases are likely. All birds are colour banded and a sign requesting information about any sightings of the birds is being currently being planned.

2.3 Monitoring

Hinau fruitfall plots have been remeasured in Wainuiomata Catchment. These plots provide a good indication of fruit damaged by possums and rodents and the level of damage can be related to the number of pest animals present. No possum damage was found, which can be related to the low number of possums in the area. Only 7 percent rodent damage was also found, which is surprisingly low considering the high numbers of rats detected in the area in the rat tunnels.

Two photo-points in Belmont were remeasured in early July. These photopoints were established in 2002 to provide some visual measurement of the response of the native seedlings to goat control in Korokoro Valley. It can be seen in the photos below that there has been an improvement in the growth of palatable species that were being eaten out prior to goat control.



Possum monitoring has been completed in two areas in Belmont Regional Park, where bait station networks have been maintained to provide ongoing possum control. The results are 4 percent residual trap catch (RTC) in the treated area of Korokoro Valley and 2.7 percent RTC in Dry Creek. It is great to see these results, as our target is to keep possum numbers below 5 percent RTC to prevent damage to the native ecosystem. The monitoring result for the untreated section of Korokoro Valley was 13.4 percent. An extension of the treatment area in Korokoro Valley is being planned for next year.

2.4 Pest control

Goat control operations in the Akatarawa and Pakuratahi Forests, and the plantation forestry section of Battle Hill Farm Forest Park resulted in a total of 132 goats and 1 pig culled. Many areas on GWRC managed lands now have low goat numbers after consistent hunting effort, e.g., the current water collection areas and Kaitoke Regional Park. The two forest areas of Akatarawa and Pakuratahi Forests still require extra hunting effort to get numbers to low levels.

A Contractor has controlled gorse in the Lakes Block as part of the Landscape Restoration Plan for the area. A gorse exclusion zone was proposed in the plan to keep gorse back from the cliff edges, where vegetation is unlikely to grow to a height that would shade out the gorse.

2.5 Wainuiomata Mainland Island

An intensive hunt for pigs was completed by professional hunters in June. They culled 24 pigs and 1 goat. Pigs have been very difficult to control in the Mainland Island, as they are attracted to the area from surrounding land because of the extra food present in the area, e.g., hinau fruit. This hunt will have made an impact on their numbers.

3. Western sector

3.1 General

Our highlights this period includes Arbor Day plantings completed at both Battle Hill and Queen Elizabeth Parks.

3.2 Events

Battle Hill has continued to attract groups for camping and events over the period. Scouts from around the Region gathered to celebrate 100 years of scouting in New Zealand. Over 350 scouts and their families attended. Paramoana School from Porirua held their annual cross country event, with over 400 children and parents crowding out the Dell and airstrip area for the event.

Hutt Valley Orienteering also held an event despite awful weather on the day, with over 50 members turning up.

At Queen Elizabeth Park community and corporate plantings of spinifex at the remnant bush and northern wetland were carried out.

3.3 Ranging

The Battle Hill Ranger has been working closely with the Battle Hill Eventing Committee to formalise procedures for running events in the park, resulting in reduced impacts on the park environment and other users.

At Belmont Regional Park the Ranger continues to respond to security concerns at a number of park entrance points. Trail bikes illegally gaining access to Waitangirua Farm are a problem presently, with gates and fences being cut or removed.

The Queen Elizabeth Park Ranger has facilitated Victoria University masters students who will be carrying out an ecology project looking at Queen Elizabeth Park. The idea is that the students will come up with restoration ideas for the entire park from an ecological perspective.

Staff have been working with the GWRC Land Management Department to assess grazing practices at Whitireia Park. This will assist long-term management of grazing at the park and provide a benchmark for the current Park Board to assess grazing on the property.

3.4 Park and asset maintenance

At Belmont Regional Park gorse spraying and fencing at Waitangirua Farm, along with track metalling, formed the basis of work carried out over the period. Staff remetalled a section of the Sweetacres Reserve track off Hill Road. Staff members have also prepared a small area of the Korokoro Valley for planting work by clearing blackberry and weeds from the site. We have also completed work on buildings at Waitangirua Farm, including a septic tank replacement and a new roof installed on a domestic dwelling.

At Queen Elizabeth Park we continue work looking at ways to improve the water reticulation system in the park to better meet drinking water standards. Options include hooking into the water mains at Raumati and discontinuing use of the bore at MacKay's Crossing.

Also at Queen Elizabeth Park staff have continued with pampas removal at the Paekakariki end.

Bollarding and metalling of the coastal car park at the Paekakariki end has been completed.

At Whitireia Park contractors have completed road seal repairs and potholing, part of GWRC's annual commitment to maintenance within the park.

4. Eastern sector

4.1 General

With winter looming (or here) and the end of the financial year, this is always a busy time trying to get projects finished. We have managed to achieve a lot this year in the parks and the feedback we have had has been fantastic.

On the downside, vandalism continues to be an ongoing issue. The culprits appear to be getting violent and vindictive, returning to the scene and threatening staff. We continue to try different ways to reduce cost and time needed to rectify these matters and have talked to the Police, put out media for the public to call the Police if they see anything, and are trialling other measures.

4.2 Events



Planting has continued at Kaitoke Regional Park, with 42 children from Plateau School attending Arbor Day and 20 members of the Botanical Society planting in the Te Marua bush extension.

A further five trees were also planted in the Celebrate Life Totara Grove.

The final public walking tour of the Wainuiomata Water Catchment for this season was held on 15 June. Around 30 people attended and feedback was again excellent. Dates for the coming season have been set.

The community group MIRO has been active with its possum trapping work in the East Harbour Regional Park, while a group of 12 volunteers took part in three planting on the Mackenzie Track. MIRO has been trapping possums in the park for many years and GWRC has intensified rodent control in a centralised area, which will provide new territory for the birds in the future.

4.3 Park and asset maintenance



When we restored the Rimutaka Incline bridges 7-8 years ago to their original specifications, we pursued the possibility of installing a handrail on the Truss Bridge. Unfortunately it was felt by the Historic Places Trust and some members of the rail fraternity that a handrail would not be in keeping with the historic visual aspects of the bridge. Since then, it has become obvious that

there was a safety risk, as we had several users who had close calls on the bridge.

After discussions with the Rail Trust and Historic Places Trust we have now installed a barrier to control this risk. This has been made from macrocarpa, which should weather and be sympathetic to the historic nature of the bridge.

Significant proportions of the roading network have been graded and metalled, including car parks in the Kaitoke Regional Park and both the Tunnel Gully Reserve and main entrance to the Rimutaka Incline. This has greatly improved the standard of the roads, which formerly were prone to potholes and corrugations.

Over 100 m of track at East Harbour Regional Park was upgraded between Butterfly Creek and the Gollans Stream bridge near the iconic picnic destination. The work complements the surrounding environment and helps to limit erosion in this well used but flood-prone area.

The Cheviot Road track at Lowry Bay is currently receiving a major upgrade. The steep top section of the track has now been realigned but the public will continue to use the old section of track until work is fully complete. The realignment utilises a recently discovered old pack track and then heads back to the main route at a more acceptable grade. There are stunning views of the harbour along the way and numerous interpretation and education opportunities. This track, along with the Howard Road track and a proposed link to the Ngaumatau Track, will provide this corner of the park with a highly scenic one hour circuit walk. It will be accessible from at least four road ends and will be graded to meet most fitness levels.

Maintenance was carried out on the Maymorn and Pakuratahi Tunnels in the Pakuratahi Forest during June. This maintenance related to water control, not only in the tunnels but also the approaches and exits.



The camping registration kiosk at Kaitoke Regional Park has now been completed.

More than 250 bollards were installed in the Wainuiomata Recreation Area in an effort to deter vandalism. The previous bollards had fallen into disrepair and were well due for replacement. The new bollards were rammed in using heavy fencing equipment, as well as being dug in by hand.

Work on the Wainuiomata northern boundary fence line is now complete, allowing 4WD access to the entire fence line in dry weather conditions.

Last year's *Lakes Block Restoration Plan* at East Harbour Regional Park identified six small areas to be fenced off and planted out as a seed source for the more exposed parts of the block. Fencing work on the second of these plots was completed at the end of June. The Forest and Bird/MIRO nursery at Eastbourne is providing a range of eco-sourced plants for the project and members have had two planting days stocking plot 1 with over 1,000 plants. A planting day for plot 2 is arranged for later in July.

Boundary survey work at two potentially important park entranceways was completed during June. The Gardiner Grove park entrance boundary basically needed defining in order to plan for future fence construction work and general refurbishment. The other surveyed area was the finger of GWRC land north of the Wainuiomata golf course. This is originally mooted as a potential access way from the Coast Road into Gollans Valley. Now that the definitive boundary has been established there is the opportunity to plan for a possible east to west tramping route, as identified in the park management plan.

The Wainuiomata site office, used as an environmental education centre, has now been relocated to its new site near the Ranger's house. Landscaping, small alterations and improvements will be carried out on the building by Upper Hutt ranging staff.

Now that the old site office has been moved to its new home near the historic Lower Dam, planning is under way to create picnic, short walking and possibly kayaking opportunities in the area.

Marketing and Design Review of operations for the period ended 30 June 2008

1. Manager's comments

Wellington City Council (WCC) has recently approved their officers' recommendation to develop a draft water demand management strategy, ahead of the development of the Regional Water Strategy. This would draw from the draft Wellington Water Management Plan and the lessons learned from the 1995 WCC water conservation campaign to address both summer "peak" demand and year round water use. It will include possibilities such as water meters, dual flush toilets and high efficiency washing machines, etc. As they report happened in 1995, residents of Wellington City would benefit from a reduction in their share of the water levy should they reduce demand.

WCC has also indicated that they would like to work with us on more intensive measures to reduce summer time peak demand, e.g., a *Waterwise* web site, brochures, working with garden centres and promoting water restrictions. We will be following this up in the next month.

Next summer we would like to trial two events in partnership with our Wairarapa office and Sport Wairarapa - a visit to the Papawai Stream restoration project in Greytown and a buggy walk in Masterton - as part of the Regional Outdoors Programme. These are excellent opportunities to promote Care Group projects and foster relationships in the Wairarapa but they are not on GWRC land, as has been the case to date with the summer programme.

2. Water Supply

2.1 Wellington Supply Agreement

Capacity (Wellington and Hutt City Councils' water management unit) is representing all customer councils on this project. We provided comment to their schedule of outstanding agreement issues in mid-June and have requested an indicative timeline for discussing these matters. We have been advised that progress is unlikely to be rapid over the coming months, as Upper Hutt City Council has other commitments, including bedding down the transfer for its water supply operations to Capacity effective from 1 July 2008.

2.2 Water restriction communication review

Following last summer, when heightened water use restrictions were introduced for the first time since 1985, we believe there is scope for streamlining communications between GWRC, the four retailing councils and Capacity. With this in mind, we have raised the prospect of a review of the restriction notification process with our customers and had a positive reception. A draft agenda has been circulated.

We anticipated a joint review meeting would be conducted by mid-July but as at the time of writing are waiting for Capacity to respond with suitable dates for such a meeting. Also in light of last summer and the significant pressure placed on our water supply, we have reviewed our water restriction trigger guidelines. A revised schedule of water restriction triggers and associated actions was drafted and circulated among GWRC water supply staff for comment. Feedback is being incorporated into a second draft, which we will discuss with our customers. The draft includes a proposal for wider use of patrols - to remind residents of the watering bylaws, provide advice and enforce the bylaws if necessary. This aspect of the proposal, in particular, will need support from our customers to implement. We intend to have these measures agreed in time for the 2008/09 summer period.

2.3 Water conservation research and promotion

A researcher has assessed recall of the various strands of our water conservation advertising and communications over the spring and summer period. Sixty-nine percent of respondents thought that there is at least a moderate risk of not being able to supply all our urban water needs on any one day over the next 12 months. It was a significant lift from the 25 percent figure reported through the UMR survey in late 2007.

It appears that the sprinkler ban was a significant driver for this change in attitude. Seventy-nine percent of respondents were aware of restrictions in water use over the summer. As a result of the communications, 87 percent of respondents took action outside to save water, including following bylaws, watering by hand and watering less often.

A proposal for water conservation advertising for the 2008/09 financial year has been drafted for internal review and subsequent discussion with our customers. Broadly, we propose to continue our main activity from 2007/08: to focus on garden water use during spring and summer. However, we are also investigating a tie-in with a commercial partner or partners, which would target a significant component of all-year "base" demand. The outcomes of the water conservation advertising and communications research and the water restriction communications review will be used to refine the proposal. We will provide more detail once the proposal has been confirmed.

2.4 Water Supply Annual Report 2007/08

A full content list was prepared for management approval and subsequently finalised. Background information has been gathered and a designer approached.

The majority of work to write and compile the report will occur during August and the first part of September.

2.5 Treatment plant visits

As at 10 July four tours were booked to be hosted during the reporting period, with some 50 visitors.

We have agreed communication objectives for new interpretation at the water treatment plants and are working through a framework of how these objectives will be met through the various means of conveying information and "storytelling" such as signage on treatment facilities, staff talks, handouts or various exercises. This work will be combined with the redevelopment of the education resources.

2.6 Stuart Macaskill Lakes' lookout

Planning continues to landscape an area just south of the Te Marua Water Treatment Plant that will provide a lookout over the lakes and a picnic area for school groups before or after their visit to the plant. The plan includes use of old water pipes as "view shafts" and for climbing over and through.

3. Parks

3.1 Brochures

The Pakuratahi Forest brochure was updated and reprinted during the period. Updates to the map fortunately coincided with a request from the *Hutt Alive* magazine for material on the Rimutaka Rail Trail. This was duly provided and it was good to see an article in the most recent edition.

Sport Wellington Region has reviewed content of the *Accessible Places* brochure and made some useful suggestions. Current budget restrictions mean that we need to retain the A4 leaflet format. However, we will look to develop this publication in a DL brochure (similar to the other Parks' brochures) should this situation change.

3.2 Signs

Over the next few months we will be producing information boards for the Lakes Block of East Harbour Regional Park. This job was delayed while the management plan and the Lake Block circuit were completed. Following consultation with iwi and the Historic Places Trust, the map and associated text has been updated.

We also intend to install an information kiosk at Burdans Gate, ideally to replace the old sign near the bike hire shed. Discussions are under way with Hutt City Council regarding use of this land and how we may rationalise some of the signage in the area.

The 150th anniversary of the opening of the historic Pencarrow Lighthouse, the first lighthouse in New Zealand, is on 1 January 2009. The Historic Places Trust is planning a celebration, the scope of which is still to be confirmed. As part of this, they would like to install several interpretation signs on GWRC land, telling the story of the lighthouse. They intend to identify the specific locations shortly and request our permission in due course.

3.3 Research

Results from the annual telephone survey were received from and these are covered in the separate Report No. 08.523, *Marketing and Design report 2007/08*.

4. Events

4.1 Regional Outdoors Programme 2009

Planning is under way for next summer's Regional Outdoors Programme and we have contacted several community groups regarding their plans for the season. The groups continue to be very positive about being involved, including those who are relatively new to the programme.

Last summer we received some adverse feedback from the Wairarapa that there were no Regional Outdoors Programme events there. The Regional Outdoors Programme has been developed to showcase recreational opportunities and/or special features of GWRC managed land. With no regional parks to date in the Wairarapa, events have been located on the western side of the Region.

However, in light of this feedback, we have discussed some ideas that would involve our partners and/or the Wairarapa office taking on the bulk of the organisational work. The best options look to be a buggy walk in Masterton, possibly around the Henley Lake wetlands and/or visiting the Papawai Stream restoration project.

With these factors to consider, several new events are proposed and, with the keenness of groups to hold multiple events, we are very aware of the need to keep the Regional Outdoors Programme at a manageable size. Once the schedule of events is almost confirmed in early September, we will then begin the redesign of the *Our Region* insert for distribution in December.

4.2 Buggy walks

The July Buggy walk on the Hutt River Trail was cancelled because of adverse weather conditions. The August buggy walk will be held in Whitby, while the walk for September is to be at Karori Sanctuary. This will be the first buggy walk where participants will be charged for attendance but feedback has indicated that this is acceptable on occasion. Planning is under way for the annual "feature" buggy walk to be held in the Dell at the Botanic Gardens, for which a turnout of several hundred people is expected.

4.3 Arbor Day

These events proceeded well with all participants enjoying the day, despite the cold temperatures, and very positive feedback received. Each school involved was given a totara tree in appreciation; a new gesture that went down well with everyone.

4.4 Planting days

We have had a few corporate plantings and cancelled one school planting during this period because of bad weather. Two of the three corporate groups involved fewer than 10 people. Volunteer Wellington has commented that people want to be closer to the city because of increased transport costs. There is also more "competition" in that more community groups have created links with the corporate sector and are offering alternative volunteer activities. However, we continue to promote the opportunities and encourage people to contact us.

Weekend community planting days have been ongoing on both Saturdays and Sundays, to enable those with Saturday sports commitments to attend.

Several planting mornings have been set up with the various Honda dealers, their staff and customers at some of the sites supported by the Honda TreeFund.

Our Events Advisor also supported a planting day at Hulls Creek. One of the Regional Outdoors Programme events will be based around this project and will involve the Upper Hutt Branch of Forest and Bird.

5. Community liaison

The Annual General Meetings of the Friends of Queen Elizabeth Park, Belmont Regional Park and Maara Roa will all be held in mid-July, and GWRC representatives will attend where possible.

Environmental enhancement achievements are being reported separately. The work of the Friends of Maara Roa is looking very impressive, especially given the hilly terrain and lack of vehicle access to their site.

Staff also attended a recent meeting with ARAC to discuss various issues, including the new toilet to be installed near the Orange Hut and a planting planned at the Whakatikei wetland in mid-August.

Staff also met with the Forest Ranger and Kapiti cycling advocate Jan Nesbitt on-site at the northern part of the Akatarawa Forest. There is a good opportunity to create a loop mountain bike track through this piece of the forest and accessed from the Nikau Valley. Some damage is being incurred by motorbikes in the plantation forest but, as it is relatively isolated and the trees are due to be logged in 2015 anyway, it was decided to erect a barrier on the bridge in the forest and leave some area for the trail bikers to use.

6. 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 June 2008

1. Plantation forests

1.1 Log Harvest Contract

Although there has been plenty of rain this month, the roads out of where both crews are harvesting had settled by month end and trucks were able to drive out unassisted in all weathers. However, this weather has made the skid sites very muddy and the log stacks are best viewed from afar. Both crews achieved reasonable tonnages at 5,097 tonnes for the month but we were unable to achieve the budget of 70,000 tonnes for the year, finally falling short by 1,300 tonnes.

Log 6 has moved about 100 metres closer to the boundary with Boiler Gully and will likely stay there until late July when they will move back to bottom of the Kilometre block at the 9 kilometre to complete the harvest of the western side of the block. On completion of Blowfly the hauler will return to haul the steeper faces on the eastern side which were inaccessible to the ground based crew. This crew harvested 2,460 tonnes for the month and a stumpage of \$51,914.

The hauler crew in Blowfly remained on the eastern side of the block, with long haul distances onto the ridges to the north. Despite these long drags, they harvested 2,636 tonnes for a stumpage of \$38,979. With a distance of 22 kilometres to the gate at Totara Park, this harvest is very susceptible to increases in cartage rates driven by fuel cost increases. Given the predicted price increases, we have agreed to continue harvesting this block and hope the increases will more than compensate for any fuel driven cartage increases.

Export logs are being diverted from Korea to China and rising prices are predicted at least until Christmas. These predictions are for increases ranging from 20 percent to 28 percent. It is also predicted that shipping rates should begin to ease in early 2009. Current prices are based on an exchange rate of 0.76 USD to NZD.

The domestic market is very soft, with all three mills taking a week of in either June or July. The prospect for price increases is low but, should export increase to the extent suggested, domestic mills will have to pay more to receive logs.

A second company has commenced loading container with logs for export. This company is loading 40 foot containers, which we have been unable to do in the past as the port was unable to handle them. This will give a greater opportunity to mix log lengths to get better use of the available space. Twenty foot containers are full at around 14.5 tonnes.

Production for June was 5,097 tonnes for \$90,593.

1.2 Silviculture Contract

During June only 2.0 hectares of silviculture was completed.

The low completion rate was because of the Contractor's illness.

During June the annual planting commenced, with 89,600 seedlings planted. Planting will continue while the weather is suitable. Most years this allows planting into the month of September.

The 2008/9 Silviculture Tenders were invited in mid-June, with a closing date of 4 July. These are being analysed at present.

1.3 Plantation forestry operations

Staff members have been supervising the contractors and have undertaken minor maintenance on the main logging roads. A number of old tracks were reopened in Pakuratahi to provide access for silviculture.

Potential silvicultural contractors were taken around the blocks included in the current Tender.

1.4 Forest access

Maungakotukutuku access is unchanged. During the month Parks was approached about walking access through this block from the private forest to the north. Trespassers have destroyed the gate and damaged the roads to the extent that they are not suitable for walkers. In conjunction with Parks we have agreed to move the gate to the bridge in the middle of the block. While this will only keep the vehicles out of half the block, the gate can be made more secure at this point.

In two thefts of diesel it is estimated that the thieves successfully stole around 6,000 to 7,000 litres from the Contractor's skid tank. The hoses on the tank were locked and a metal shield had been fitted to the flow tap, both to no avail. The Contractor has moved the tank off-site and refuels from a smaller trailer tank.

1.5 Market trends

As stated above, the export outlook until February is encouraging. However, the domestic outlook is cause for concern.

2. Reserve Forests

2.1 Silviculture

Silviculture has progressed in Hiwinui second rotation stands as areas have reached trigger heights for treatment. Sheltered areas of advanced growth have required earlier treatment than more exposed areas within the same stands. Conversely, the more exposed higher areas are lagging behind and potentially could be left unpruned and given a one hit thinning only.

Contract crews have been more readily available within the Wairarapa later in

the season as other silviculture work on farm properties has been postponed because of drought imposed cash flow restrictions.

In the third quarter 16.7 hectares of pruning and 9.0 hectares of thinning were completed. This brings the totals for the year to 79.2 hectares of pruning and 23.2 hectares of thinning.

2.2 Harvesting

The harvesting crew returned to Tauanui to recommence harvesting at the end of April.

During May 1,489 tonnes (1,358 cubic metres) of logs were produced. The majority of this timber was of export type grades, reflecting the predominant markets available and the wood in the area being harvested.

High logging costs because of fuel prices and the difficult area being logged, combined with the high cost of cartage, impacted significantly on the returns. As a result, the net return of \$11.18 per tonne (\$12.27 per cubic metre) was significantly lower than previous months.

For June 1,073 tonnes (990 cubic metres) were produced. A higher percentage of sawlog grades were produced. However, with one sawmill operating only four days a week and logs of a higher grade being dumped on the mill at sawlog prices by another operation, demand has been reduced.

The returns lifted to \$16.11 per tonne (\$17.46 per cubic metre).

A planned shutdown by Kiwi Lumber has further restricted volume uplift.

Difficult conditions because of terrain and weather, coupled with the soft market, has left the Logging Contractor very despondent.

A strategy to increase the higher quality sawlog component of the cut is being implemented cautiously because of market constraints.

2.3 Roading

The weather conditions have resulted in a number of slips requiring attention and ongoing clearing of water tables and culverts.

Concrete blocks for the crossing at Tauanui have been placed on-site. However, high river levels have held back the work required to install the ford crossing.

The consent was obtained once it was confirmed that neither DoC nor Fish and Game New Zealand were not, in fact, interested parties in this particular case.

Pilot tracking and drainage has been established through the Douglas dir on the north side of the Tauanui River from the crossing site to the radiata terrace. Further work is required to establish a suitable logging truck grade.

2.4 Lincoln University

Ongoing development of training material has continued for planning and intelligence functions within the Rural Fire Incident Management Group.

A major two day Rural Fire management training exercise was held in May. Regional Incident Management personnel and a National Incident Rural Fire Management team met in Martinborough.

The first day involved a refresher for more experienced participants and basic incident management training for the less experienced.

The second day was a mock incident based on the fire in South Wairarapa earlier this year. Personnel were assigned roles relevant to their anticipated roles in a regional incident. The Senior Conservation Forester was assigned the role of incident controller.

Water Supply Review of operations for the period ended 30 June 2008

1. Stuart Macaskill Lakes

The design of a repair system for the failed seal at the base of the Lake 1 tower at Te Marua has been completed and we are now finalising the construction method and cost estimates.

The repair work is being given a high priority, as we would like the lake refilled as soon as possible.

2. Te Marua feed forward control

Software changes have been made in the controller of the raw water ultraviolet instrument that will allow feed forward coagulant control to be implemented at Te Marua. This system has been in operation at Wainuiomata Water Treatment Plant for over two years and has proved to be of great benefit in terms of cost savings and improved performance of chemical processes.

3. Stage 2 optimiser

Good progress has been made by Decerto on the stage 2 system optimiser project. There were some minor issues to be sorted out after the factory acceptance tests were carried out but site commissioning is on programme and is due to commence in August.

4. Te Marua control system replacement

There have been some delays on this project that have taken up some of the available slack in the programme. However, recovery options are being investigated.

5. Tunnel grove valve

A new automated valve has been installed in the 750 mm diameter main from the Wainuiomata Water Treatment Plant. The valve is situated at Tunnel Gully and controls the flow from the Wainuiomata plant into Wellington. Moving the flow control, from the treatment plant to Tunnel Grove has increased the operating pressure in the main between the two points.

The purpose of this valve is to prevent pressure surges that can damage the cast iron main. However, a secondary benefit of reduced power use has also been achieved. The increased operating pressure in the main means that the two pumping stations that feed the Wainuiomata reservoirs are operating more efficiently.

The load at each pumping station has been reduced by approximately 30 kilowatts. One pumping station operates for about 20 hours per day and the other 8 hours, translating into an annual saving of 306,000 kilowatt hours.

This is about 1.5 percent of our total power use.

From a cost perspective, the annual energy saving will be a little over \$27,000, at an average charge of 9 cents per kilowatt hour.

6. Supply situation

6.1 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.

6.2 Hutt River flows

The mean flow for the Hutt River was just below the mean during June.



6.3 Wainuiomata River flows

During June the mean flow for the Wainuiomata River was about the maximum.



6.4 Aquifer levels

The water level in the Waiwhetu aquifer was about average during June.



7. Catchment management

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

Engineering Services Review of operations for the period ended 30 June 2008

1. Water asset management

Key projects and their status are as follows:

- The design of the new seal for the tower/apron joint of Stuart Macaskill Lake 1 has been completed. Installation of the seal is expected to take up to two months, since progress will be weather dependent.
- An emergency water supply connection has been installed in Fergusson Drive, Upper Hutt, below Cruickshank Reservoir.
- The supply pipeline to the new Bradey Reservoir (a part of the Silverwood residential development in Whitby) has been commissioned and the reservoir filled with water for leak testing.
- Arrangements are being made to install line valves and a 300 mm diameter parallel branch on the Te Marua to Karori pipeline, on either side of the Wellington Fault line at Te Marua. This should allow faster reinstatement of the water supply following damage to the water supply pipeline by movement of the fault.
- A proposal has been received and accepted to revalue the water supply infrastructure assets and ensure that an up-to-date valuation is available for the 2009/19 LTCCP. The assets were last revalued in 2004.

2. New water sources

- A presentation on the proposed water supply development strategy will be made by the Parks, Forests and Utilities Committee Chair and Water Supply, Parks and Forests' staff in early August to the Strategy and Policy Committee of WCC. The WCC committee will then consider a report by WCC officers on their response to the short- and long-term options proposed by GWRC.
- Tonkin and Taylor Ltd has completed a draft feasibility report and preliminary design on increasing the water level of the Stuart Macaskill Lakes. An increase of up to 1.3 metres in water level (400 million litres) is recommended. The draft report is now being peer reviewed by Damwatch Services Ltd.
- All scientific reports on the impact of lower flows on the river habitat of the Hutt River downstream of Kaitoke weir have been completed and accepted by the peer reviewer. An Assessment of Environmental Effects is being prepared and this, together with the scientific reports, will be forwarded to Fish and Game New Zealand and the Department of Conservation for information when completed. These documents will form the basis of a resource consent application.

• The final version of the report on water treatment for the Upper Hutt aquifer and a draft summary report have been received from the Consultant. The final version of the risk assessment report is awaited from MWH New Zealand Ltd. A 12 month programme of *Cryptosporidium* testing to confirm the water treatment requirements is now under way.

3. Quality assurance

- Our records indicate that compliance with the *Drinking-Water Standards* for New Zealand 2005 has continued to be achieved at all four water treatment plants this financial year.
- The *Health (Drinking Water) Amendment Act* comes into force on 1 July 2008. This Act makes it mandatory for public health risk management plans to be prepared. Initial work on the preparation of thee plans has commenced, with completion required by July 2009.
- The Drinking-Water Standards 2008 are due to be released mid-July 2008. This will simplify compliance in the distribution network by removing the need to continuously monitor turbidity and pH of the water. Continuous monitoring of free available chlorine will remain.
- The collation of information for the grading of the Gear Island Water Treatment Plant is continuing.
- Raw water *Cryptosporidium* data for the last 12 months has been compiled and submitted to Regional Public Health to confirm the performance requirement for Te Marua and Wainuiomata Water Treatment Plants.

4. Environmental

- A draft report on the feasibility of installing an electricity generator on the Orongorongo supply pipeline to the Wainuiomata Water Treatment Plant is due from MWH New Zealand Ltd before the end of July.
- An application is being prepared for a resource consent to pump water from trench excavations where the flow rate exceeds 2.5 litres per second. This is to ensure compliance with the *Regional Freshwater Plan* for the taking of groundwater.