



Report 08.721
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Committee Parks, Forests and Utilities
Author Murray Kennedy, Divisional Manager,
Water Supply, Parks and Forests

Divisional report for period ended 30 September 2008

1. Divisional performance

1.1 Parks

Even though this report covers the end of winter and the first month of spring, there has been considerable operational activity within our parks. Extending the footbridge at the Wainui Stream in Queen Elizabeth Park will continue to allow access at times of high tide and reasonable flows within the stream. Moving three pohutukawa trees at Queen Elizabeth Park to near the tram barn site has made an instant change to the landscaping, and created a much more effective use of the trees from this perspective.

One of the threads coming through the report from the Manager, Parks is the amount of volunteer work that has taken place during the period.

Drafting of the next version of the Battle Hill Farm Forest Park Management Plan has started and it is expected it will go to the Council shortly prior to public consultation.

1.2 Marketing and Design

A separate report includes our second Parks' annual report, which is valuable document for communicating with the various stakeholders.

An annual report for Water Supply is nearing completion and will come to the next Committee meeting for approval.

Water sales for the period were down compared with the same period last year and this would largely seem to be caused by a particularly wet September, compared with a drier September last year. It is also noticeable that the aquifer level and river flows were at a monthly maximum or near maxima for August 2008.

1.3 Forestry

While the cash surpluses for the month were disappointing, this is a reflection of the types of logs that were harvested from upper slopes.

Export returns are expected to increase for October because of a lower exchange rate and lower shipping costs.

The downside is whether we can place adequate quantities with local sawmills because of a softening of the domestic market.

As each skid site in the forest is used, there is an amount of timber that is not merchantable. These are either off-cuts, misshapen logs or there are other defects. While it is not a high percentage of our total sales, the tonnage is still significant on an annual basis. At the end of the period a brief is being prepared to engage a consultant to see if we can find an effective use for this timber. Because of its potentially low value, cartage costs would have to be kept to a minimum.

1.4 Water Supply

It is pleasing to report that the savings in coagulant chemicals from introducing the feed forward system at the Te Marua Water Treatment Plant are near the upper end of the predicted range. Feed forward control was added to the Wainuiomata Water Treatment Plant at an earlier date and showed a similar level of savings.

Repairs to the failed seal at the tower of Stuart Macaskill Lake 1 is of slight concern. Time is running out to have the work completed so the lake can be refilled before Christmas. Also the cost of the project has risen because of the difficulties encountered and the inclement weather. Further information on the costing will be presented at the half year capital works review.

1.5 Development and Strategy

Responses from our city customers about the water supply development strategy are taking some time, with only two of the four city customers responding so far. On the other hand it is an important decision for metropolitan water supply and it is essential the city councils give the issue appropriate consideration. In the meantime investigation work on the short-term projects is continuing.

A meeting held in South Wairarapa regarding a possible wind energy development at Stoney Creek was well received by the local community. Although it is very early in the process, a communication system will be set up to keep the community informed as Meridian Energy progresses their investigations.

A separate report considers hydro-power generation at Wainuiomata Water Treatment Plant using water sourced from the Orongorongo River.

2. Strategic

2.1 Restructuring

Restructuring within the Water Supply Department of the division is nearly completed and an expanded Water Supply Department now includes water collection, treatment and distribution, systems control, engineering services and capital works projects, other than the more significant developments. A Development and Strategy Department has been set up for the major water supply projects, renewable energy projects and strategic issues.

2.2 Hydro-energy developments

Over the last 15 years there has been at least two reviews as to whether hydro-electric developments should be undertaken. These were principally centred on the Wainuiomata Water Treatment Plant using water from the Orongorongo River. On both occasions it was decided not to proceed, either because of the uncertainty of power prices or very low power prices. Energy development was not seen as a core business, given that at the time the Wainuiomata Water Treatment Plant was not performing to the capability it was thought it could achieve. Since then, the Wainuiomata Water Treatment Plant has been fine tuned and it now has an A1 grading, the highest possible. It consistently runs to a very high standard.

Power prices have risen over the last few years and it appears that they will continue to rise, particularly with the imposition of a carbon tax when the Emissions Trading Scheme starts for stationary energy from 1 January 2010. On this basis, it was decided to review our position regarding hydro-energy developments, with the added impetus of reducing Greater Wellington Regional Council's carbon footprint - in this case indirectly through renewably sourced power - and creating a more sustainable Region.

Accordingly it is proposed that electricity generation should now be seen as a secondary core business for Water Supply but generally limited to the amount of power we require for our own needs. Water supply requires about 95 percent of GWRC's power requirements.

There is considerable similarity between hydro-power generation and our current water treatment and distribution activities, namely the collection of water at an intake structure, piping the water to gain a difference in elevation, and electrical infrastructure.

Power generation requires a generator rather than an electric motor, but there is a lot of similarity between the two, as well as a water turbine instead of a pump. Again there is a degree of similarity. Apart from possibly an impulse turbine, which is the form of hydro-generator that is likely to be used at the Wainuiomata installation, mentioned in the separate report, we have the core skills in-house to manage such a scheme.

All the various components of hydro-electric schemes on GWRC land will use

infrastructure that is already in place or will use proven technology. For example, an impulse turbine or Pelton wheel, as it is sometimes referred to, was first used in the 1870s. This is the unit that is connected to a generator.

Two of the major expenditure items will be the water turbine and the generator. Both items can be purchased from reputable manufacturers, with guarantees.

Power not required for GWRC use can be sold to an energy company through a contract.

Expenditure of a few million dollars could be required over a few years. This can be compared to the replacement value of the water supply assets of several hundred million dollars.

We have recognised that there are other hydro-generation possibilities within the system and these will be investigated over a period of time, provided the Committee is comfortable with the undertaking of power generation.

3. Financial performance for the period ended 30 September 2008

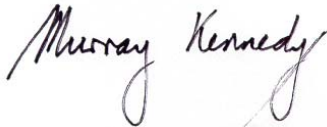
Last year Year to date Actual \$000s		Year to date Actual \$000s	This year Full year Forecast \$000s	Full year Budget \$000s
	Water Supply			
6,796	Income	6,838	27,255	27,325
(6,420)	Expenditure	(6,680)	(28,638)	(28,789)
<u>376</u>	Operating surplus (deficit)	<u>158</u>	<u>(1,383)</u>	<u>(1,464)</u>
220	Operations	264	450	350
600	Strategy and Asset	234	(419)	(400)
(503)	Support	(351)	(1,423)	(1,423)
58	Engineering Consultancy	11	9	9
1	Laboratory Services	--	--	--
<u>376</u>	Operating surplus (deficit)	<u>158</u>	<u>(1,383)</u>	<u>(1,464)</u>
	Plantation Forestry			
1,292	Income	1,052	6,836	7,436
(1,726)	Expenditure	(1,607)	(7,130)	(7,650)
<u>(434)</u>	Operating surplus (deficit)	<u>(555)</u>	<u>(294)</u>	<u>(214)</u>
	Reserve Forests			
321	Income	252	1,923	2,023
(529)	Expenditure	(532)	(2,178)	2,258
<u>(208)</u>	Operating surplus (deficit)	<u>(280)</u>	<u>(255)</u>	<u>(235)</u>
	Parks			
1,615	Income	1,619	6,466	6,466
1,458	Expenditure	1,482	7,119	7,119
<u>157</u>	Operating surplus (deficit)	<u>137</u>	<u>(653)</u>	<u>(653)</u>

4. Recommendations

That the Committee:

1. **Receives** the report.
2. **Notes** the content of the report.
3. **Approves** in principle the undertaking of hydro-power generation to reduce costs and Greater Wellington Regional Council's carbon footprint.

Report prepared by:

A handwritten signature in black ink that reads "Murray Kennedy". The signature is written in a cursive style with a large initial 'M' and 'K'.

Divisional Manager, Water Supply, Parks and Forests

Attachment 1

Parks', Marketing and Design, Forestry, Water Supply, and Development and Strategy reports for the period ending 30 September 2008