

# Catchment Management Group Quarterly and Year End Review

## Flood Protection

30 June 2011

Wayne O'Donnell  
General Manager



## **General Manager's report**

### **Department summary**

#### **Flood Protection (Graeme Campbell)**

The key projects that were progressed during the year include:

- Appointment of the contractor for the Boulcott/Hutt Stopbank
- Lodging a consent application for a change in conditions for Wairarapa river works
- Completion of Stage 1 of the Tobin Stopbank
- Completing the Bridge Road protection work

Overall progress for the year on the capital work programme and the maintenance works programme was excellent.

The investigations works were delayed due to a lack of resources and the need to urgently complete other work. Three projects, in particular, required more time input than anticipated but have now been progressed to a point where they can proceed with minimal impact on the forward work programme. The three projects were the Waiwhetu cleanup funding agreement, the Tawaha/Whaka Stream drainage issue and the Wainuiomata flood hazard assessment.

Flood Protection now has a full complement of staff and investigations work for the 2011/12 year is expected to progress as programmed.

#### **Floodplain Management Plan Implementation**

##### **Hutt**

The Boulcott/Hutt stopbank project reached a major milestone with the completion of the planning and design phase and the appointment of a construction contractor in 2010/11. The planning approvals for the project were confirmed in November 2010, following an extended RMA process. The land entry agreement between GW and the Boulcott Farm Heritage Golf Club was completed and a contractor was appointed in May 2011. The stopbank and golf course preparatory works could not commence in October 2010 as originally planned because of the delays to the RMA process. The tendering process for the stopbank works and the land entry negotiations were progressed in parallel to minimise delays. The Stopbank contractor has now commenced site establishment. Separate contractors will be appointed for golf course preparatory and mitigation works. Current estimates are that the total project can be completed within the \$11.4 million budget provided in the 2009-2019 LTP.

### **Ebdentown Rock Lining, Upper Hutt**

The timing for this project was dependent on NZTA funding under the River Works Agreement (RWA) due to expire in December 2011. NZTA have advised that they do not wish enter in to a new agreement as proposed by GW. Officers will continue to work with NZTA to reach an agreement acceptable to both parties. It has been proposed to reschedule Ebdentown works to 2014/15 and alternative works are being considered, should NZTA not agree to the works.

### **Bridge Road Edge Protections, Upper Hutt**

The project was completed on time and within budget. The supply of rock rip rap for the work was tendered out. Flood Protection operational staff completed the construction using hired machinery. These works are designed to reduce the erosion risk to a part of Bridge Road and some residential properties along Bridge Road.

### **Otaki**

#### **Chrystalls Extended Stopbank Land**

Land negotiations with LINZ are progressing but taking more time than expected. A valuation is yet to be agreed with LINZ. Land transfer could occur in 2011/12, subject to Council approval. Additional funding may be required to purchase all required land but the aim would be that any purchase would be cost neutral to the budget with rental income balancing the debt servicing costs.

#### **Lower Waitohu Project**

This project includes the South Waitohu stopbank to alleviate flooding in the area as well as works in the Lower Waitohu. Options investigations were completed and outcomes were presented to the June Economic Wellbeing Committee. Officers will work with KCDC on a joint programme to consider measures to reduce stormwater and Waitohu Stream flooding. Officers will seek Economic Wellbeing Committee approval of a consultation strategy with the affected land owners and the wider community.

### **Wairarapa**

#### **Lower Wairarapa Valley Development Scheme**

The development work programme for 2010/11 has been completed on time and within budget. The most significant work was the completion of the first stage of shifting the Tobin stopbank.

### **Operations Delivery Activities – Colin Munn**

#### **Western Rivers & Watercourses**

Good progress has been made with all work programmes with only a few minor flood events.

All Hutt River works have been completed as planned. Over the last quarter, maintenance rock rip rap was delivered to various sites along the river and rock lines and rock groynes have been topped

up as required. Maintenance works continued on the flood gates within the river system including an extensive refit of the Trentham Memorial Park flood gates.

Staff completed a number of additional projects including the River Trail realignment behind the Royal Wellington Golf Club. This follows securing access easements from the Club for the trail.

The Otaki works programme included extensive tree clearing work on the southern stopbanks below the SH1 Bridge, rock groyne improvements and a rock return at Tracey's. Willow rejuvenation works have been undertaken to encourage re-growth of the booth willows which have started to die back. Vegetation on the gravel beaches has also been sprayed to reduce the gravel aggregation that would otherwise occur.

The Waikanae works programme was also completed as planned. Track maintenance has been undertaken on the southern bank and a number of large pine trees and dangerous poplars were removed. Maintenance work was undertaken on the Otaihanga stopbank to fill low lying areas. The downstream section was also cleared of scrub to enable the condition to be assessed for further maintenance work.

Stream maintenance runs were undertaken in the Mangaone Stream, Waiwhetu Stream, Hulls Creek, Stebbings Stream, Porirua Stream, Kenepuru Stream, Takapu Stream, Pinehaven Stream, Mangapouri, Stream, Waitohu Stream and Taupo Stream. Drain clearing was carried out on the Mangaone, Rangiuru and Mangapouri Drains. Dam maintenance has been carried out on both the Stebbings and Seton Nossiter Dams and mouth cuts were undertaken on both the Waimeha Stream and the Korokoro Stream mouths.

The Hutt River trail continued to have high visitor numbers throughout the year and the Summer Event programmes on both the Hutt and Otaki rivers once again proved to be very popular. Staff have also assisted the Otaki Friends Group with contractor management, nursery planting and work associated with the enhancement of the Otaki Estuary.

### **Wairarapa River Schemes**

The work programmes in the Wairarapa Rivers for 2010/11 year have been completed. The damage to edge protection work caused by the floods last September has been repaired by reallocating work priorities and using flood damage reserves totalling \$310,000. These floods also caused damage which resulted in bringing forward the need for the Tobin stopbank work in the Pukio area of the Lower Valley Scheme.

### **Drainage Schemes**

All works were undertaken as programmed and there was no major unplanned work required. The scheme committees have agreed to significant rate increases in 2010/11 and beyond to repay the funding deficits and build up adequate reserves for unplanned maintenance items. Scheme improvements progress will be developed further in the 2011/12 year.

## **Gravel Extraction**

Overall, gravel extraction volumes are well down on previous years. This is a direct result of the downturn in the construction industry, which is not expected to improve in the short term. The river maintenance programme has been adjusted to compensate for the reduction in income.

Wairarapa gravel extraction returns for 2009/10 were 200,000cum compared to 220,000cum for the previous year. The returns for 2010/11 are expected to be similar to 2009/10.

In the western part of the region extraction volumes totalled 80,000m<sup>3</sup> against a total budgeted figure of 180,000m<sup>3</sup>.

Commercial negotiations with Winstone Aggregates at the Hutt River mouth have been agreed in principle subject to the confirmation of resource consent conditions. There is likely to be a decrease in this revenue stream beyond June 2011 as a result of the new agreement.

The Otaki riverbed survey has been completed and analysis of the data is underway. Initial results indicate that the sustainable extraction rate will increase from 40,000m<sup>3</sup> to 50,000m<sup>3</sup> per annum.

## **Resource Management Consent Applications**

Three significant resource consent applications have been lodged;

- Hutt River wet gravel extraction
- Hutt River mouth gravel extraction
- Wairarapa Global Consent variation of Conditions

A short term resource consent to permit wet gravel extraction from the Hutt River was lodged in April 2011. Written approvals have been received from the Department of Conservation and Fish and Game New Zealand and we expect to receive written approval from Iwi shortly. A decision on notification has not yet been made by the consenting authority.

The Hutt River mouth gravel extraction consent has been prepared and lodged. Consultation with interested parties is in its final stages and a set of proposed conditions have been drafted and circulated to submitters for consideration. Meetings have been held with submitters and we believe all concerns can be resolved through consent conditions. We anticipate that a formal hearing will not be required.

The application to change the conditions in the Wairarapa global consents was lodged in May 2011. The existing conditions limit the quantity of work that can be carried out each year and have proved to be inadequate for the amount of river works required to manage the upper Wairarapa Valley rivers. Numerous meetings have occurred with stakeholders to agree changes to the consent conditions. An MOU with the affected parties (DoC, Iwi, F&G and F&B) was agreed and signed off as part of agreeing to the variation. A decision on notification has not been made but we are hopeful

that the application can be non-notified given the extensive work done with stakeholders and the written approvals received from them.

### **Asset Management**

An external consultant has been engaged to assist Flood Protection staff with the development of the SAP asset management system. The consultant has produced a detailed report and action plan. The initial focus is to ensure core data within SAP PM is complete, consistent and structured in a way to support reporting. Staff are working with the consultant to improve the data and to the necessary skills and understanding to use the system effectively.

## **Investigations, Strategy and Planning – Jan van der Vliet**

### **Tawaha and Whaka Drainage**

The issue of the Tawaha drainage into the Whaka stream required considerable work by staff in the 2010/11 year. Extensive consultation with affected parties occurred and a number of options were presented to Council in May 2011. The final decision to proceed with a full upgrade of the Whaka Drain is now being implemented.

A programme of work is being developed for the detailed design work and the associated resource consent application. Construction work is planned for early 2013.

### **Waiohine Floodplain Management Plan**

Phase 1 of the FMP was reported to the Waiohine Floodplain Management Planning Advisory Committee in May.

The Waiohine River FMP has concurrently progressed into Phase 2 with two open days held in July 2011 to seek feedback from the public on the flooding issues associated with the Waiohine River leading towards options development for the mitigation of the flood risk.

### **Other investigations**

Other investigation progressed have been

- Wainuiomata River Flood Hazard Maps and Design Channel: Work has commenced on updating the flood hazard maps as recommended at the Hutt Valley Floodplain Management Sub Committee
- Waiwhetu Floodplain Management Plan: currently in Phase 2 – public consultation on possible options is continuing with small area community meetings being held.
- Pinehaven Flood Hazard Assessment is progressing in conjunction with UHCC.
- Work on the Waingawa River Scheme Review has progressed with the background technical analysis being completed and the ecology of the river reported. Current investigations involve determining the details, costs and impacts of a number of management options.
- Development of a new fixed model for the Porirua Stream.

### **Technical Advice**

For the period up to 29 June 2011 the department received a total of 480 requests from the public, local authorities and internal departments on general enquiries and resource consent applications to Greater Wellington. This is twice the number anticipated for the year.

The flood hazard awareness maps, made available through the local authorities, for the Wainuiomata River, Hutt River, Waiwhetu/Awamutu Streams and Pinehaven Stream continues to result in requests for information. The overall result is considered positive. Whilst the requests require additional work to process, more informed decisions about development on the floodplain are being made. The work has shown that need for the information to be of a high quality and recent which will affect the future investigations programme.

Major inputs have included:

- Mackays to Peka Peka and Peka Peka to Otaki Expressway development required a substantial input from the technical advice team and other members from the ISP team; this will continue into the next fiscal year.
- Continued support has been provided for the Hutt River Floodplain Management Plan District Plan Change (Upper Hutt City Council - PC15).

It is envisaged that requests for information will increase further over the next year as additional flood hazard mapping becomes available to the public and consultation exercises continue with the development of further Floodplain Management Plans in the Region. Resourcing the increased demand will be raised as part of developing the 2012-2022 LTP.



<b>Flood Protection Financial Performance Statement Year Ended ended 30 June 2011</b>	<b>Last Year FY Actual \$000</b>	<b>Full Year Actual \$000</b>	<b>Full Year Budget \$000</b>	<b>Full Year Variance \$000</b>
Rates & Levies	12,045	12,669	12,669	-
Government Grants & Subsidies	-	-	-	-
External Revenue	1,225	1,022	1,256	(234)
Investment Revenue	386	426	464	(38)
Internal Revenue	535	92	109	(17)
<b>TOTAL INCOME</b>	<b>14,191</b>	<b>14,209</b>	<b>14,498</b>	<b>(289)</b>
<i>less:</i>				
Base Personnel Costs	2,694	2,933	2,726	(207)
Capex Project Resource Cost Credit	(403)	(402)	(387)	15
Materials,Supplies & Services	836	759	1,010	251
Travel & Transport Costs	161	179	144	(35)
Contractor & Consultants	2,881	2,371	2,464	93
Grants and Subsidies Expenditure	-	-	-	-
Internal Charges	763	694	692	(2)
<b>Total Direct Expenditure</b>	<b>6,932</b>	<b>6,534</b>	<b>6,649</b>	<b>115</b>
Financial Costs	2,600	2,455	2,560	105
Bad Debts	4	-	-	-
Corporate & Department Overheads	832	854	854	-
Depreciation	941	868	982	114
Loss(Gain) on Sale of Assets / Investments	(89)	(127)	(81)	46
<b>TOTAL EXPENDITURE</b>	<b>11,220</b>	<b>10,584</b>	<b>10,964</b>	<b>380</b>
<b>OPERATING SURPLUS/(DEFICIT)</b>	<b>2,971</b>	<b>3,625</b>	<b>3,534</b>	<b>91</b>

<b>Flood Protection Funding Statement Year Ended ended 30 June 2011</b>	<b>Last Year FY Actual \$000</b>	<b>Full Year Actual \$000</b>	<b>Full Year Budget \$000</b>	<b>Full Year Variance \$000</b>
Operating Surplus(Deficit)	2,971	3,625	3,534	91
Add Back Depreciation	941	868	982	(114)
Other Non Cash	(89)	(127)	(81)	(46)
<b>Cash Operating Surplus from Operations</b>	<b>3,823</b>	<b>4,366</b>	<b>4,435</b>	<b>(69)</b>
<i>less:</i>				
Net Asset Acquisitions	10,214	4,047	7,604	3,557
Net External Investment Movements	393	382	368	(14)
Net Asset & Investment expenditure	10,607	4,429	7,972	3,543
<b>NET OPERATING CASHFLOW BEFORE FUNDING REPAYMENTS</b>	<b>(6,784)</b>	<b>(63)</b>	<b>(3,537)</b>	<b>3,474</b>
Repaid Debt	2,639	3,048	3,098	(50)
Net Reserves (Increase) / decrease	(522)	(571)	(806)	235
<b>NET FUNDING BEFORE DEBT ADDITIONS</b>	<b>(9,945)</b>	<b>(3,682)</b>	<b>(7,441)</b>	<b>3,759</b>
Internal Debt Additions	9,820	3,557	7,440	(3,883)
External Debt Additions	-	-	-	-
Net Debt Increase / (decrease)	9,820	3,557	7,440	(3,883)
<b>NET FUNDING SURPLUS (DEFICIT)</b>	<b>(125)</b>	<b>(125)</b>	<b>(1)</b>	<b>(124)</b>

<b>Flood Protection Capital Expenditure Statement Year Ended ended 30 June 2011</b>	<b>Last Year FY Actual \$000</b>	<b>Full Year Actual \$000</b>	<b>Full Year Budget \$000</b>	<b>Full Year Variance \$000</b>
Total Asset Acquisitions	994	299	267	(32)
Capital Project Expenditure	9,348	3,871	7,440	3,569
Asset Disposal Cash Proceeds	(131)	(124)	(103)	21
<b>Net Capital Expenditure</b>	<b>10,211</b>	<b>4,046</b>	<b>7,604</b>	<b>3,558</b>
Investments Additions	393	382	368	(14)
<b>Net Capital and Investment Expenditure</b>	<b>10,604</b>	<b>4,428</b>	<b>7,972</b>	<b>3,544</b>