

# Flood Protection Manager's report for period ending 10 November 2006

## 1. Manager's comments

### 1.1 General

This is my first Flood Protection managers report since taking up the position on 1 November 2006. My primary task since taking over has been to familiarise myself with all of the staff in the Flood protection department and to begin the implementation of the new structure for the department. To this end I have appointed the following staff as acting team leaders;

Western Operations	Jeff Evans
Western FMP's	Daya Atapattu
Wairarapa Operations	Mike Longworth
Assets and Investigations	John Eyles
Strategy and Technical Support	Phil Purves

The positions are acting until I have had time to finalise the new job descriptions, and the permanent appointments can be made.

### 1.2 Staffing

Kim Wall has resigned as Environmental Planner to take up a position up in Hamilton. We farewell Kim with regret but wish her well her in her new job. We have advertised for a new Environmental Planner in career steps and once we have reviewed the internal applicants will decide whether we need to advertise externally.

Kees Nauta has been appointed to the position of Area Engineer, Kapiti and will take up the position on 4 December 2006. Kees is an experienced engineer working initially on the Kapiti Coast, then England and most recently for Wellington City Council. Kees's engineering and project management experience will be a great addition to the Department though he will require some training in the 'art' of river engineering as most of his experience has been with roading and stormwater.

Graeme Burnett has been appointed to the position of Northern Area Engineer for the Ruamahanga. Graeme comes to us from Masterton District Council and started on 20 Nov 2006.

## 2. Waikanae River floodplain management [Graeme Campbell]

### 2.1 Jim Cooke Park

The final tidy up works are now underway and should be completed by 30 November 2006. Works outstanding included clearing and levelling of the work and stockpile areas, sowing of grass seed, and the construction and reinstatement of walking tracks. All work is expected to be completed within budget.

## **2.2 Friends of the Waikanae River**

The Friends finished this years planting season with a planting day for Paraparaumu College students on the south bank of the Waikanae River. The school had grown 600 plants in their Trees for Survival programme and managed to get all of these in before the end of the wet weather. The Friends have also assisted Flood Protection with the mulching of plants on the south bank as part of the Jim Cooke Park job.

A workshop reviewing the Waikanae Environmental Strategy and setting an agreed plan for implementation over the next 5 years is programmed for 29 November 2006. Planning for the workshop is well underway with a good turnout confirmed for the day which is to be held at the Waikanae Christian Holiday Camp.

## **3. Otaki River floodplain management [Graeme Campbell]**

### **3.1 Friends of the Otaki River**

The annual Otaki River walkover was held on Thursday 21st of September and the AGM on 11 October 2006. The same executive committee was re-elected and confirmation of the Chairman, Secretary and Treasurer will be made at the next meeting of the executive.

The Friends are getting prepared for the opening of the “Highway to Sea” section of the Otaki River Walkway, to be held on Sunday the 3<sup>rd</sup> of December. The Friends have developed the entrance way to the walkway off SH1 and have held working bees to plant trees and spread metal. Greater Wellington has contributed to the upgrade of the track and the installation of temporary signage, while the Otaki Community Board has supported the Friends efforts through contribution to planting. Permanent signs will be installed next year.

### **3.2 Chrystalls extended stopbank**

Good progress has been made on the land negotiations with this project. The progress over the next few weeks will be critical to finalising these arrangements and paving the way for the lodging of the consent and designation documentation. We had intended lodging the consent documents in early November but have decided to hold off until the land negotiations have progressed to a point where we have more certainty about the exact stopbank alignment and footprint that suits the respective landowners.

A draft designation application has been prepared and will be ready to be lodged within two weeks. If the negotiations become protracted for any reason we may have to lodge the documents without the final sign off from all of the directly affected parties.

### **3.3 South Waitohu stopbank**

We still have not made any progress with the Porirua Otaki Trust Board regarding a form of agreement for access to construct and maintain the proposed South Waitohu Stopbank. It would appear that it will be at least another month before we have any further indication from the Board about their preferences regarding the proposal and the land access agreements. If we have not heard from the Board by mid December construction will be delayed beyond the summer 2007.

## **4. Hutt River floodplain management [Daya Atapattu]**

### **4.1 Ava to Ewen project**

All GWRC works, the culvert extension, outlet structure, outlet channel and stopbank works, included in the Opahu pump station contract are now substantially complete. The contractor, Juno Civil is now progressing with the concreting of the pump station superstructure. The contractor expects to install pumps in December 2006. The pumpstation is expected to be commissioned in January/February 2007.

The final tidy up works on the Alicetown stopbank contract are underway based on a list of works prepared by the Engineer. We expect these works to be completed by December 2006. We have also started discussions with Hutt City Council about handing over some the environmental planting works for them to maintain.

Opus International Consultants have now completed the detailed design for the Ava Rail and Strand Park stopbanks. We are currently reviewing the draft design report. This design took more time than expected because of the complex issues under the rail bridge.

Tender documents for the next major contract, the 'Ava rail left stopbank reconstruction and waterway upgrade' were completed and tenders have been invited from 4 pre-qualified contractors. Tenders close on 22 November 2006.

### **4.2 Boulcott/Hutt stopbank**

Consultation with directly affected and adjacent property owners on options for the stopbank are now substantially complete. However, we expect discussions with the two golf clubs to continue for another 2 to 3 months before final agreement is reached. In the meantime, we will seek the Advisory Committee approval to further refine the favoured alignment in consultation with the two golf clubs and the adjacent property owners. This refinement is necessary to complete negotiations with the two golf clubs and to better assess project costs before making a recommendation to the Council.

### **4.3 Whirinaki Crescent stopbank**

Construction works on this project are now likely to be delayed beyond summer 2007. Land purchase negotiations for this project are taking longer than originally expected to finalise.

The Wellington Golf Club (WGC) has received a zone change approval to proceed with a reduced 'wine glass' sub division. WGC have now asked us to investigate a flood wall option that would encompass the new sub-division before entering into an agreement to provide the required land. We expect to complete these investigations by December 2006. St. Josephs, Home of Compassion has signed the agreement and we are now in the final stages in getting the sign off from the Silverstream College.

### **4.4 Wet extraction of Hutt River gravel**

Resource consents, to allow wet gravel extraction from the Hutt River, were granted on 27 October 2006. We have now completed preparing the 'extraction plans' in consultation with key stakeholders and the contractor. Extraction in the Belmont reach will commence as soon the river levels fall to an acceptable level.

## 5. Planning and development services [Phillip Purves]

The following table summarises the number of formal, written requests attended to during July and August 2006:

	Sept / Oct 2006	YTD
Requests brought forward	10	4
Additional requests received	26	61
Responses provided	18	47
Outstanding requests	18	18

## 6. Investigations

### 6.1 Waiwhetu Stream floodplain management study [John Eyles]

At the last WSAC meeting on 7 September, the Committee requested that officers prepare and lodge an application to the Ministry for the Environment's contaminated sites remediation fund for the clean up of contaminated sediments in the lower Waiwhetu Stream. The application was lodged on November 13 and seeks \$5.9M or 100% of the clean up costs. We now await the results of the application.

Phase 2 of the project, which will examine non structural options available for the Waiwhetu catchment, is underway. The investigation of the viability of source control (measures to reduce or delay peak flows into the Waiwhetu and Awamutu streams) remains the top priority at this stage. Other investigations remaining for Phase 2 include: culvert outlet investigations, site development and planning controls, valuation of floodway easements, flood proofing properties, bridge and general waterway improvements, upper catchment protection and flood warning and evacuation measures. Phase 2 also includes continuing the successful consultation strategy from Phase 1 and writing the floodplain management plan.

An internal funding and scheduling workshop was held on 3 November and was attended by councillors Buchanan, Evans, Glensor, Greig, Laidlaw and Shields. Scenarios for 6 and 10 year implementative timeframes were discussed. Implementation over 6 years is not recommended due to uncertainties associated with achieving resource consents, final design and resolving property issues to secure the floodway. The Finance Division is currently modelling the rating impacts of a 10 year work programme assuming the project is loan funded with repayments over a 20 year period. The last Waiwhetu Stream Advisory Committee meeting for 2006 was held on 14 November and the committee accepted that the 10 year programme was the most sensible.

The community consultation programme is continuing. A successful public meeting was held on 7 October at Gracefield School to update local residents about the progress of the study. About 50 residents attended the meeting and, on the whole, the attendees showed a good level of support for the project.

## 6.2 Pauatahanui Stream flood hazard assessment [John Eyles]

A joint study with Porirua City Council (PCC) and Transit NZ to identify flooding hazards from the Pauatahanui Stream was completed and reported to the committee in June this year. The study identified that the flooding risks could be significantly reduced by a programme of works to remove overgrown willow trees, gravel deposits and similar obstructions.

The maintenance of the Pauatahanui stream is the responsibility of the landowners as no community scheme as been established and maintenance is not provided for in the Watercourses Agreement between GW or PCC.

A meeting (hosted by PCC and GW) was held on 9 November and attended by some of the landowners on the Pauatahanui Stream. The purpose of the meeting was to advise local property owners of their maintenance obligations. While fiery at times, there was good support for the proposed approach of land owners working together to make a joint consent application to maintain the stream themselves. All present wanted to 'get started' and a further meeting is planned before Christmas to keep the momentum going.

This Council can contribute from the isolated works budget by:

1. Providing planning advice/ and assistance with the preparation of resource consents to remove vegetation and other obstructions
2. Funding an engineer to identify what vegetation/obstructions need to be removed from the stream channel and how to do it
3. Providing a limited subsidy (up to 30%) of the actual cost of clearing works, from the funding available in the Isolated Works budget

We will continue to work with PCC, and other partners, to develop an integrated "whole of catchment approach" for managing the Pauatahanui stream.

## 6.3 Waitohu Stream Study [Phil Wallace]

Staff held a productive meeting with Kapiti Coast District Council staff to progress the recommendations in the Waitohu Stream Study Summary Report in early October. Since then, electronic copies of the latest flood hazard maps have been forwarded to KCDC. It is likely that stormwater studies KCDC has instigated will have implications for how Greater Wellington addresses the flood hazard in the Convent Road/Bennetts Road area, and further meetings are required to explore the issues in more detail.

## 7. Western Operations [Jeff Evans]

The works programmes for both Wellington and Kapiti are running to schedule. Over the last few months staff have been kept busy with the willow and native planting programmes. Both the Waikanae and Otaki friends groups have had successful planting days. On the Hutt River a number of school groups have been involved with planting out new areas of river berm. The annual Waikanae and Otaki friends groups walkovers where held over the last month, producing some interesting discussions and some helpful ideas.

### 7.1.1 Hutt River Trail

The Hutt River trail had steady usage throughout the period, with the usual walkers, runners, cyclists and dog owners.

### 7.1.2 Hutt River ranging services

The Hutt River ranging service continued to be busy despite the wet and wild weather of September and October. There was considerable vehicle damage done to the Hutt River berms in the Taita and River Road areas. Repairs have been made and staff have continuing to monitor these areas.

### 7.1.3 Watercourses

Flood damage works and an extensive willow planting programme have now been completed on the urban part Wainuiomata River. Much of this work was done as a result of the 15 year flood event on the 7<sup>th</sup> July, which caused extensive damage to willow lines throughout the river system.

### 7.1.4 Waikanae River

There has been some channel realignment work done below Jim Cooke Park. Silt was removed from a 600m length of berm to maintain channel capacity.

### 7.1.5 Otaki River

Rock rip rap has been ordered for a new rock lining for upper Taylor's and the site has been cleared and metalled in preparation for access for the rock delivery trucks. A number of debris fences will also be repaired as part of this job.

## 7.2 Operations support [Jacky Cox]

### 7.2.1 Asset management

The production of the Department's new base asset management plans has slowed temporarily due to other work commitments taking priority. The aim is to produce a base document that reflects the common asset management policies and procedures for both the Wairarapa and western rivers, in line with the new Catchment Management Division's responsibilities. We hope to have this task completed by the new year.

John Eyles and Mike Longworth are participating in an organisational review of asset management information needs on behalf of the Catchment Management Division. This project aims to provide a consistent asset management information system across Council. The completion date for the review is the end of the first quarter 2007.

### 7.2.2 Waiwhetu Stream

After meeting with Teri Puketapu and Hutt City Council, we have now removed or thinned the ngaio trees on the right bank of the Waiwhetu Stream. Over the next two years Hutt City Council will progressively low prune the remaining trees.

### 7.2.3 Native plant trial

We have completed the fourth measure up of a five year trial to assess the performance of native plants as bank edge protection. The trial is being done in conjunction with the Wellington Botanical Society. We are currently analysing the data.

## 7.2.4 Gravel extraction

Gravel extraction figures to the end of October 2006 are set out below.

River	Area	Contractor	Period Year 2006/07 (cubic metres)		Year 2005/06 (cubic metres)
			Period	Year to Date	Full Year
Hutt	Estuary	Winstones	8,134	15,288	49,154
	River	Horokiwi	0	0	60,680
Otaki	River	Winstones	3,708	18,447	41,442
Waikanae	Above Greenaway Road	Various	0	0	9,210
	Below Greenaway Road	Gary Holland Earthmoving	0	0	5,040
<b>TOTALS</b>			<b>11,842</b>	<b>33,735</b>	<b>165,526</b>

## 8. Wairarapa Operations [Mike Longworth]

### 8.1.1 Waiohine Bridge Replacement

The new bridge over the Waiohine River will be opened with a ceremony on Monday 27 November 2006. The ceremony will include a blessing from iwi representatives and short speeches from the Minister of Transport Safety, Hon Harry Duynhoven, and representatives from Transit New Zealand and Greater Wellington Regional Council.

### 8.1.2 Kopuaranga River Enhancement Project

The work to develop a scheme on the Kopuaranga River is close to completion. Members of the project sub-committee are meeting on 8 November to consider a number of potential rating classifications including an option to reduce the length of the scheme. If the scheme is to be reduced in size there would be a number of negatives to the community. One of the rating options has taken account of the willow clearing work carried out earlier this year.

Funding the proposed scheme has been based on a 20 year loan. Funding on loans of significantly less than 20 years will more than likely make the scheme too expensive in the view of the committee. Because the scheme is based on clearing the river of willows rather than building stopbanks the loan term will need some discussion with the councils finance section as there is a reluctance to fund this type of work over anything more than 3 years. Once the committee are satisfied with the scheme proposal a public meeting will be held, probably within the next three weeks.

### 8.1.3 Restrictions on Waihenga Bridge during Floods

Transit will be closing Waihenga bridge when the gauge reading reaches 4.5 m at Waihenga due to concerns over the bridge safety. Jenkin's Dip starts to operate when the gauge reads 4.4m. This may result in the bypass bridge over Jenkin's Dip only being in operation for a short period before the road is closed.

#### 8.1.4 Lower Valley Scheme flood damage repairs

Progress with flood damage work has been moderate due to continuing wet weather conditions. The first phase of Guscott's, the Oporua repairs and about 30% of repairs to stopbank slumping in the Pukio area have been done. Investigation and design work for the Hikunui Sill repairs is progressing.

#### 8.1.5 Wairarapa Drainages Schemes

The main Wairarapa Valley has 15 drainage schemes, 5 of which are pumped outfall schemes and 10 are gravity outfall schemes. The extreme rainfall during July/August tested some schemes to their physical limit. Schemes which experienced some difficulty due to the wet conditions were;

- Battersea Drainage Scheme (Gravity) - Road drains and culverts overflowing involving pumping around some houses by the Fire Brigade.
- Pouawha Drainage Scheme (Pump) - During the height of rainfall event in July a fire developed in the pump-shed switch-board which resulted in a pump stoppage and a \$30,000 repair bill.
- Te Hopai Scheme (Pump) - High lake levels held the flood-gates closed which prevented the pumped floodwater from entering Lake Wairarapa. This caused re-circulation of pumped flood-water which resulted in a power bill for the 2 month period totalling \$21,900, exceeding the budgeted annual power use for this year of \$9,500.

Overall the other schemes coped well with the high rainfall volumes, the most notable fact being that all the pump drainage schemes have experienced higher than usual power costs.

The Te Hopai Drainage Scheme is to have a meeting with its members on the 21 November 2006, to discuss a substantial rate increase to cover the high power usage costs and deferred maintenance expenditure experienced over the last 3 years.

#### 8.1.6 Proposed Wairarapa Combined District Plan

Flood Protection staff from both the Wellington and Masterton Offices spent some time reviewing the flood hazard maps and wording in the Proposed Wairarapa Combined District Plan. This work has been used in the Council's submission on the Proposed Plan.

**Graeme Campbell**  
Manager, Flood Protection