

Flood Protection Manager's report for period ending 2 February 2007

1. Manager's comments

1.1 General

The period has been particularly busy for the Flood Protection Department with good progress being made on a number of capital projects. The major milestone was the appointment of Dixon Dunlop as construction contractor for the Ava Rail Bridge section of the Ava to Ewen upgrade. This \$3.0M project will be completed over the next 18 months. Good progress has also been made on the Waiwhetu FMP, Boulcott Stopbank upgrade, Chrystalls Extended Stopbank Designation application and the LWVDS Flood repairs.

The maintenance programme is progressing to programme although the wetter than usual summer has meant that weed growth in the drainage schemes has been stronger than usual meaning some additional clearing may be required later in the year.

1.2 Staffing

Phil Purves has resigned from the Flood Protection Department to take up a position in Dunedin with the Otago Regional Council and we wish him well with the move. Phil has been with the Council for 15 years primarily in an advisory role regarding flood risk within the region and will be sorely missed. Phil's last day will be 7 March 2007 and a function will be organised in the Committee room to give everybody an opportunity to farewell him. We will be advertising for a new Strategic Planning Team Leader shortly.

John Bissell has now started as Environmental Planner for the Flood Protection group based in the Wellington Office. John will take over the projects previously managed by Kim Wall. In December Graham Burnett started in the Wairarapa office assisting Mike Longworth with the management of the Upper Ruamahanga River Schmes.

2. Waikanae River floodplain management [Graeme Campbell]

2.1 Friends of the Waikanae River

The Waikanae Environmental Strategy workshop was held on 29 November 2006. Approximately 40 people attended the workshop with a good representation from all of the major groups who have an interest in the Waikanae River. The outcomes from the workshop are currently being written up for reporting back to the individual groups.

A meeting was held with representatives of the Friends on 30 January 2007 to finalise a plan showing the areas available for planting in the coming 2-5 years. John Bissell, Flood Protections new Environmental Planner, will now work with the group to set up an action plan for preparing these areas for planting in the future.

3. Otaki River floodplain management [Graeme Campbell]

3.1 Friends of the Otaki River

The "Highway to Sea" walkway was officially opened by Cr Turver and the KCDC Mayor Alan Milne on 3 December 2006. Over 100 people attended the opening and many more walked the track during the day. The track has proved very popular with the local community over the summer with a high level of usage. Work over the coming months will

include developing a planning programme to further enhance the area and the installation of permanent signs.

3.2 Chrystalls extended stopbank

The draft designation document was sent out for final consultation on 15 December 2006. Comments have been received from the directly affected parties as well as GW and KCDC consents officers. The comments are now being incorporated into the document and it should be formally lodged with KCDC at the beginning of February 2007.

Negotiations are proceeding for access to the land required to construct the stopbank. We are currently preparing an easement agreement with Campbell Andrews to construct the stopbank on his land and LINZ is continuing to prepare the necessary documentation for the sale of their land to GW. There is still some way to go before either of these negotiations will be completed however.

3.3 South Waitohu stopbank

There is no further progress to report on this project. We are currently trying to set up a meeting between GW Officers, Councillors and Trust Boards members to progress access matters.

4. Hutt River floodplain management [Daya Atapattu]

4.1 Ava to Ewen project

Construction works on the new Ava Rail Bridge stopbank and waterway upgrade contract commenced on 18 December 2006. This \$3 million contract was awarded to local contractor, Dixon & Dunlop Ltd, on 11 December 2006. The contract includes the reconstruction of about a 500 metre length of stopbank from Whites Line West to a location near Randwick Crescent, improvement of the Ava Rail Bridge waterway and rocklining. The contract also includes preparation works for establishing an inanga habitat in the remaining section of the old Opahu Stream channel. This is an 18 month project to be completed by June 2008.

About 15,000 tonnes of rock required for the Ava Rail contract will be supplied from the Fernbrae Quarry in Takaka. Didymo was recently detected in the Takaka River and there was concern that rock from the Takaka Quarry could potentially spread Didymo in to the North Island. Biosecurity New Zealand, through Tasman District Council has assessed and found that the risk of spreading Didymo to the North Island on rock supplied from Fernbrae quarry to be negligible.

All GWRC works included in the Opahu Stream pump station contract are now substantially complete. The contractor is now progressing with the construction of the control house. The pump station is scheduled for completion by March 2008.

Works on the Alicetown stopbank are now substantially complete. Reinstating damaged areas of the stopbank and grassing will be completed by March 2006.

Opus International Consultants Ltd is currently preparing draft tender documents for the Strand Park stopbank reconstruction contract. This work is due to commence in 2008/09.

4.2 Boulcott/Hutt stopbank

On 30 November 2006, the Hutt River Advisory Committee considered outcomes from the feasibility study and four public submissions, including one from each of the two golf clubs, and decided that further work is required before a preferred option is adopted.

We are now analysing the submissions and preparing the scope of work required to be done before recommending a preferred option to the Advisory Committee. A River Engineers workshop was held on 23 January 2007 to assist us in determining the long term sustainability of a new stopbank on the western boundary of the two golf courses.

We expect to report in more detail to the March 2007 Advisory Committee.

4.3 Whirinaki Crescent stopbank

Construction works on this project will now be implemented in two stages. Stage 1 works to be completed by June 2007 will include a flood wall and the earthen stopbank on the Wellington Golf Club boundary. Stage 2 works, to be completed in the summer 2007/08, will include the reconstruction of the remaining 700 metres of stopbank.

Land purchase negotiations with WGC are now in their final stages and we expect to reach an agreement in February 2007. We have already received proposals from Truebridge Callender Beach Ltd (TCB) to design and prepare tender documents for the floodwall included in Stage 1. We are holding the TCB appointment until the land purchase agreement with WGC is signed.

4.4 Wet extraction of Hutt River gravel

Wet extraction commenced in mid November and finished on 22 December 2006, with the reshaping of the river channel in the Belmont reach and the extraction of the Owen Street and Dog Club beaches. 5,300m³ was extracted in December, and in total, approximately 45,000m³ of gravel is available for extraction in this reach. The wet extraction operation will recommence on 15 February 2007 after closing for recreational use over the peak summer period as required by consent conditions.

5. Planning and development services [Phillip Purves]

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

	Nov / Dec 2006	YTD
Requests brought forward	18	4
Additional requests received	25	86
Responses provided	36	83
Outstanding requests	7	7

Since the Upper Hutt City Council formally received the results of the Mangaroa River Flood Hazard Assessment in late 2006, officers have been setting resource consent conditions that require the results of the study to be appropriately taken into account. This in turn has raised the interest of developers and their consultants with two of the major land

development consultants already having obtained control survey data from GWRC to assist them in meeting the UHCC requirements. The flood hazard maps will soon be provided to the UHCC in the electronic format that will be of most use to their engineering and planning officers. Property Insight (the company that in 2004 requested copies of all the Western Region's flood hazard data) has also recently asked for the Mangaroa River flood hazard data to add to its existing data base. This request will be processed on the same data licence arrangement as before.

6. Investigations

6.1 Waiwhetu Stream floodplain management study [John Eyles]

The next meeting of the Advisory Committee is on 8 February.

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 was lodged on November 13 and seeks \$5.9M or 100% of the clean up costs. A meeting was held on 20 December to present the application to Hugh Logan, CEO of MfE. Officers attending this meeting were Dave Benham, Tim Porteous, John Eyles and Dave Kelly (HCC). While Mr Logan noted the application for funding was very comprehensive, he advised that the Ministry were reviewing the way the fund is administered and that the outcome of our application would not be known until perhaps May or June 2007.

Phase 2 of the project, which examines 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. Initial results are encouraging and further work is underway to determine the potential benefits of source control within the Waiwhetu catchment.

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.

6.2 Waitohu Stream Study [Phil Wallace]

The Waitohu Stream mouth was cut on 4 December, after a storm at the end of October had resulted in the stream directly attacking dunes on the northern side. In line with guidelines, the cut was delayed until the after the whitebait season had finished and until conditions were suitable.

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]

There were a number of small floods during November and early December which hampered programmed works in the western rivers. With the more settled weather over the

last month we have had the opportunity to catch up on the outstanding works and we are now back on track.

7.1.1 Hutt River

The wet gravel extraction below Belmont is in full progress as reported in 4.4 above.

Staff have been busy completing the willow layering programme and rock returns have been built at the down stream end of both the Maoribank and Wellington Golf Club rock lines.

7.1.2 Hutt River Trail

Maintenance over the last period has included river trail vegetation cutback in many places, spraying of noxious weeds, asset repair and replacement. New berm signs have been installed and trail maps have been updated.

7.1.3 Hutt River ranging services

The usual summer ranging duties such as patrols, public relations and enforcement works have been undertaken over the last period. There has been an increase in rubbish dumping over the Christmas period, but this has been no different than any other year. Work on the river summer programme is also progressing well.

7.1.4 Watercourses

There have been two successful river mouth cuts done over the last period, one on the Waitohu and the other on the Waimeha.

Weed clearing has been undertaken in the Pukenu Drain and the Taupo Stream to remove weed growth which was blocking the channel.

Stream Clearing runs have been undertaken on the Pinehaven Stream, Stokes Valley Stream and the Te Mome Streams and a weed clearing trial using a tractor mounted weed clearing attachment from the Hawkes Bay has been undertaken in the Waiwhetu.

7.1.5 Waikanae River

The bank edges at Jim Cook Park and Kebels Corner have now been levelled soiled and regrassed. The programmed maintenance works on the Waikanae River will be undertaken over the next two months.

7.1.6 Otaki River

Flood Protection staff worked with the Friends of the Otaki River to prepare the Highway to Sea walkway for the opening on 3 Dec. The work involved mowing and cleaning sections of the walkway as well as assistance on the day.

A rock return has been added to the bottom end of the Lethbridge rock wall, below the state highway bridge. This was done to deflect the river off the eroding bank edge. The rock wall has also been repaired. Cross blading has been undertaken in a number of areas on the river to keep the channel within the correct alignment. The programmed channel works in the Otaki River are now substantially complete. Works over the next few months will focus on berm maintenance.

Long reach mowing has been under taken to remove excess growth on the stopbank below the State Highway Bridge.

7.2 Operations support [Jacky Cox]

7.2.1 Asset management

A project to revalue the department's flood protection assets is currently being scoped. This task will involve a number of staff and is due to be completed by the end of the financial year.

The third draft of the Department's new base asset management plans is due at the end of February. 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 end of the financial 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. Tenders have been called with project completion scheduled for May 2007.

7.2.2 Waiwhetu Stream

A tractor mounted sickle unit to clear aquatic weed from the stream channel was trialed on 8 December 2006. The trial was a success and we are now assessing the feasibility of using a combination of mechanical and manual clearance methods to manage the aquatic weed in the stream. We estimate that approximately 70% of the stream could be cleared by the cutting unit with the remaining 30%, where access is an issue, being manually cleared.

We have also renewed the manual clearing contract with Excell Corporation Ltd for a further 6 months until June 2007.

7.2.3 Gravel extraction

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

River	Area	Contractor	Period Year 2006/07 (cubic metres)		Year 2005/06 (cubic metres)
			Period	Year	Full Year
Hutt	Estuary	Winstones	6,958	22,246	49,154
	River	Horokiwi	6,227	8,408	60,680
Otaki	River	Winstones	4,154	22,601	41,442
Waikanae	Above Greenaway Road	Various	0	0	9,210
	Below Greenaway Road	Gary Holland Earthmoving	0	0	5,040
TOTALS			17,339	53,255	165,526

8. Wairarapa Operations [Mike Longworth]

8.1.1 Wairarapa River Schemes Annual Work Programmes

The Wairarapa river scheme managers are proceeding with their annual work programmes and are on track to complete programmed works by the end of the financial year. The flood of last July and a series of smaller floods in the October November period caused varying amounts of flood damage on the schemes which is being repaired within the annual work programme budgets. The main flood damage, in the Lower Wairarapa valley Drainage Scheme in July was reported on last year.

Flood Damage Repairs

The flood damage repairs are now approximately 50% completed. Of the major work;

- Shelton and Guscott edge protection are 70% complete with the rock groynes still to be done.
- Repairs to slumping in the Pukio area are 75% completed.
- Materials for the Hikunui sill have been purchased and detailed design is being finalised with work due to commence in mid February.
- Oporua repairs have been done and the extension to the Reno mattresses will commence in two weeks time.

Drainage Schemes

The unusual weather patterns experienced over the winter, spring and early summer have highlighted some remedial work which needs to be undertaken. Maintenance work in the form of drain spraying will also be carried out earlier than normal, due to the excessive growth of waterway vegetation.

Non programmed works which were undertaken as a result of the heavy rainfall events during winter and spring, included the following;

- Te Hopai - Matthews Lagoon Drain (machine cleaning completed)
- Battersea - Greytown/Martinborough Road Drain (machine cleaning completed)
- Onoke - Main Pump Drain (machine cleaning completed)
- Longbush - North Drain (to be machine cleaned)
- Papatahi - Upland Cut-off Drain (to be machine cleaned)

Drain spraying works are currently being carried out on;

- Battersea - Wards Line & Battersea Road Drains
- Te Hopai - All Drains
- Ahikouka - Road Drain
- Taumata - All Roads Drains
- Okawa - All Drains

Prior to the onset of winter the Drains will be inspected again and a follow-up spray will be carried out if required.

The financial cost placed on the drainage scheme budget as a result of the unusual weather patterns has resulted in the scheme reserves being depleted. The reserves will be restored by the following action:

- Gravity drainage schemes which will come off of their rate holiday are, Te Whiti and East Pukio.
- The pump drainage scheme which have agreed a rate rise is Te Hopai.
- Pump drainage schemes which are yet to have meetings to propose rate rises are, Moonmoot, Papatahi and Onoke.

8.1.2 Kopuaranga River Enhancement Project

The Kopuaranga scheme development committee has now completed it's work to the point where the Kopuaranga community are being consulted on two scheme options. One is a scheme from the confluence with the Ruamahanga up to Dreyers Rock road a distance of 36km and the other is a scheme the full length of the river to Hastwell a distance of 50km. Two public meetings are being held to present the committees scheme proposals and then in February a final meeting will be held where the decision to commit to a scheme will be taken.

8.1.3 LWVD Scheme Review

A number of internal meetings have been held. It is proposed to enlarge the rating area to the 80m contour level to recognise the indirect benefit that these additional areas derive. A full review committee meeting (probably the final) will be held soon and then a series of public meetings, before recommending the new classification to the Council.

8.1.4 LWVD Scheme Global Resource Consent

The final draft of the Global Consent AEE report has been received from the consultants. There are a few details to be finalised with the affected parties, and then the application will be lodged with Consents.

8.1.5 Waingawa Scheme Review

Staff have been assembling back ground information to be used in the review. The full scope of the review is still to be determined but once this is done then the review will proceed with the involvement of the scheme advisory committee.

8.1.6 Proposed Wairarapa Combined District Plan

There were a number submissions by land owners on our proposed designations on the stop banks in the Wairarapa. Staff will work to resolve as many of these as possible before the hearings on the Proposed Plan in the middle of the year.

Graeme Campbell
Manager, Flood Protection