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

Manager's comments

1.1 General

Excellent progress is being made on all of the major works programmes as detailed below. The good weather over the last month has allowed the physical works to progress well and they are now all on or ahead of schedule. Work on the repair of the Hikunui spillway is progressing well with the new stopbank almost complete.

Preparatory design and consents work for the Kapiti capital projects have also progressed well with a number of major milestones reached. Risks still exist on the Waitohu Stopbank and Chrystalls extended stopbank but progress with landowner negotiations and planning applications means we are confident of achieving the June 2008 completion date.

Work has started on the Waingawa scheme review with cross section surveys completed and gravel and hydraulic analysis underway.

2. Kapiti floodplain management [Kees Nauta]

2.1 Friends of the Waikanae River

An on site meeting was held with John Topliff of the Friends group and Mike Urlich of Biosecurity on 7 February 2007 to look at weed control and planting options for the Weggery sand dunes area. Weed control has commenced and the first stage of the dunes is to be planted this winter (500 plants). Weed control will be continued over the remainder of the dune area with the objective being to plant that out in 2008. Following this site meeting a walkover of the lower reaches of the north bank was undertaken to discuss issues and enable John Bissell to get familiar with the area.

A Friends executive committee meeting was held on 20 February. John Bissell attended and took the opportunity to inform the committee of progress on the Waikanae River planting plan and to discuss any issues regarding this. A site meeting involving staff from Greater Wellington and KCDC along with representatives of the Friends will be held in early March to go over each proposed planting site, map it and discuss any issues.

2.2 Friends of the Otaki River

John Bissell attended a tour of the Otaki River from Chrystalls Bend to the coast with representatives of the Friends Executive to gain familiarity with the area and discuss any issues. It was an informal visit and a chance to meet a number of people who John will be working closely with in the future.

John also attended an executive committee meeting of the Otaki Friends on 21 February, and introduced himself to those he hadn't met on the tour.

2.3 Greater Otaki Project

John attended a workshop hosted by KCDC on the Greater Otaki project on 21 February. Progress is being made and another update meeting is scheduled for April 2007.

2.4 Otaki Lakes project

John Bissell and Graeme Campbell attended a public meeting hosted by KCDC to inform the community on progress on the Otaki Lakes project. It was an informal meeting and a chance for people to ask questions and have input into the initial design options. Graeme also fielded a number of questions regarding the Chrystalls stop bank project.

2.5 Chrystalls extended stopbank

The designation document was formally lodged with KCDC on 15 February, an application for a Resource Consent was also sent to Environmental Regulation, GWRC on 15 February. The application has been advertised and the submission period closes on 30 March.

We intend to commence final design of the western section of the stopbank located on land currently owned by GWRC. We are also investigating sources of suitable materials for the stopbank construction. This will enable us to decide whether it will be beneficial to commence stockpiling suitable materials on site prior to the onset of winter. The bulk of the works will commence later in the year after the Resource Consents and Designation have been granted and land negotiations have been concluded.

2.6 South Waitohu stopbank

A partial Otaki Porirua Trust Board meeting occurred in late November 2006. At this meeting, the Board agreed in principle with the proposed stopbank but the form of agreement, which would allow Council access to construct and maintain the proposed stopbank still requires further discussion. We are in the process of arranging a meeting between Board members and Greater Wellington Councillors to progress this agreement.

3. Hutt River floodplain management [Daya Atapattu]

3.1 Ava to Ewen project

The Ava to Ewen project is currently on programme, under budget and is scheduled for completion by 2010.

Dixon & Dunlop Ltd is making good progress with the Ava Rail stopbank reconstruction contract. The contractor is currently forming the stopbank below the Ava Rail Bridge using materials excavated from the river berm capped with a thick layer of impermeable clay material supplied from local quarries. Rock supply from the Takaka quarry is on programme and about 2000 tonnes of rock are now on site.

The Opahu Pump station contractor has installed the pumps and is currently working on the control building and electrical works. The pump station site excluding the control building and the pump structure was handed over to the stopbank contractor on 1 March to complete the stopbank works.

The Alicetown stopbank contractor has now completed minor reshaping of the stopbank and the reinstatement of damaged areas.

3.2 Boulcott/Hutt stopbank

We now propose to carry out further investigations on three alignment options to provide the information required by the Hutt River Advisory Committee (HRAC) to make a recommendation on a preferred stopbank alignment for the Boulcott/Hutt stopbank. On 1 March 2006, the HRAC endorsed the process and programme for this next stage of the study.

The process includes the refinement of the design and cost estimates, assessment of environmental and economic effects and consultation with the stakeholders and the community. The process also includes presentations to Hutt City Council to provide an opportunity for HCC to participate in the decision making process. The programme is for the HRAC to recommend an alignment to the Landcare Committee in early September 2007.

3.3 Whirinaki Crescent stopbank

On 1 March, the HRAC considered the revised costs and a programme for implementing the Whirinaki Crescent stopbank reconstruction project. The HRAC noted that the increased project costs would result in an increased contribution from Upper Hutt ratepayers and requested officers to obtain Upper Hutt City Council endorsement before seeking GWRC approval of the revised budget. We are now in contact with UHCC officers to obtain the required endorsement.

3.4 Wet extraction of Hutt River gravel

Hutt River gravel extraction is progressing with the target of removing about $60,000 \text{ m}^3$ by the end of June 2007. About 16,000 m³ had been extracted by the end of February 2007.

4 Western Operations [Jeff Evans]

All the programmed works in the western operations area are proceeding well. The settled weather and low river levels have allowed us to finish most of the planned construction works in the larger rivers. Gravel extraction is currently being undertaken on the Hutt, Waikanae and Otaki Rivers and staff have been kept busy ensuring the extraction contractors work within the consent conditions on each river system.

4.1 Hutt River

Stopbank maintenance is under way in the Upper Hutt area. Illegally planted trees are being removed and the areas are being stumped and re-instated. This work involves a lot of public consultation and lengthy discussions with adjoining land owners. The drainage channels have also been machine cleared in the Upper Hutt area.

New timber bollards have been installed on the Taita Berms and access track maintenance has been undertaken in the RWA area.

2,000 tonne of rock rip rap for maintenance work has been sourced and purchased from a local quarry at a very favourable rate and delivery is currently underway.

4.2 Hutt River Trail

Normal maintenance and sign repair has been carried out over the last period. The trail has received good visitor numbers over the last few months due to the fine weather and in many places the car parks are reaching capacity, with swimmers, picnickers and walkers all enjoying the river environment.

4.3 Hutt River ranging services

Ranging services have included the usual public enquiries. These have once again increased due to the toxic algae blooms in the area and there is a large numbers of public asking for information on what is happening.

There have been two very successful summer programme events over the last period. The "Great Gravel Grab" which was held on both the Hutt River and on the Otaki River, had large public turn outs and received good press for both Flood Protection and the Council.

4.4 Watercourses

A stream run is underway in the Porirua Stream and maintenance is being undertaken on both the Seton Nossiter and Stebbings Dams. An area of failed protection works in Glenside has been repaired. The works were part of the 1978 scheme under taken in the area and remain our responsibility.

4.5 Waikanae River

Rock groyne repairs have been carried out in a number of areas and the low level weir above Kebbells Corner has been topped up. Some areas of old willows on the berms have been removed and the Friends group will replant theses areas with native trees.

4.6 Otaki River

A short section of rock wall has been repaired on Chrystalls bend. A dumper and digger was used to retrieve washed out rock from downstream to save costs on this repair. Beach spraying to remove excess vegetation and stop islands building up on the gravel beaches is in progress and release cutting has been done on the Friends groups plantings.

4.7 Isolated works

As we have previously advised the Committee, we have been approached by a number of residents in Maymorn Road, whose properties are suffering from severe lateral erosion. We are approaching a consultant to assess the current situation and propose a number of design solutions for this lateral erosion.

The design solutions will not be straight forward as the river channel at this location is very confined leaving little room for the construction of any works. Two earlier attempts to stabilise the erosion using planting have failed, and a more substantial work is required. The situation is further complicated by a new housing development on the opposite river terrace. Any proposed protection work must be carefully designed so as not to adversely affect these properties.

4.8 Gravel extraction

Gravel extraction figures to the end of January 2007 are set out below.

			Year 2006/07 (cubic metres)		Year 2005/06 (cubic metres)
River	Area	Contractor	Period	Year	Full Year
Hutt	Estuary	Winstones	3,283	25,529	49,154
	River	Horokiwi	3,532	11,941	60,680
Otaki	River	Winstones	4,592	27,193	41,442
Waikanae	Above Greenaway Road	Various	0	0	9,210
	Below Greenaway Road	Gary Holland Earthmoving	0	0	5,040
		TOTALS	11,407	64,663	165,526

5 Wairarapa Operations [Mike Longworth]

5.1 Study of Private Stopbanks and Other Structures around Lake Wairarapa

5.1.1 Background

Over July 2006 Lake Wairarapa reached a record level of 12.22m. There was a significant period of very high lake levels which caused a number of private stopbank failures resulting in considerable distress for the affected farmers. Councillors and Council staff visited a number of the affected farmers during the flooding and in discussions with the farmers undertook to look at what, if any, assistance the Council could offer. This study presents an opportunity to formulate a consistent policy for handling the issue of stopbanks and other structures which are currently outside the responsibility of the Lower Wairarapa Valley Development Scheme. Anecdotally these stopbanks are of varying standards of both workmanship and level of protection provided, but they do contribute significantly to the productive capacity of the farms involved.

5.1.2 Proposed Investigation

All property owners on the margins of Lake Wairarapa will be contacted to ascertain what issues are important to them in terms of lake flooding. Those properties that have private stopbanks and culverts/floodgates draining to the lake will be visited and an assessment made of the structures. The assessment will include the existing structural condition, level of protection provided, what if any work and cost is required to meet an agreed service level and ongoing maintenance required.

Once the assessment phase of the study is complete, options for the ongoing involvement of the Regional Council with these private structures will be developed and reported to Council. These options may range from no involvement to incorporating them into the LWVD Scheme, or some intermediate level of support. The result of this work and the Council's response will then be presented to the landowners.

5.1.3 Proposed Timeframe

The study is proposed to be carried out in three stages:

- Stage 1 Information gathering and assessment of existing structures by the 27 April.
- Stage 2 Develop options for Council involvement with these private structures by the end of June and report to Council by August.
- Stage 3 Present to and consult with the landowners on the Council endorsed option for the ongoing involvement of the Council with private stopbanks and culverts/floodgates.

6.2 Wairarapa River Schemes

6.2.1 Annual Works Programmes

The annual works programmes for the northern Wairarapa rivers are now largely complete and for the LWVD scheme the annual works programme is approximately 60% complete with the expectation that it will be complete by the year end. The northern river hands have been assisting with work in the lower valley, and will continue to do so until the southern work is complete.

6.2.2 Flood Damage Repairs

The flood damage repairs are now approximately 70% completed. Of the major work;

- Shelton and Guscott is largely completed with only some channel alignment to complete.
- Repairs to slumping in the Pukio area are now largely completed.
- Repairs to the Hikinui sill have commenced and are expected to be completed by the middle of April 2007.
- The extension of the Reno mattresses at Oporua will commence on 8 March 2007.

6.2.3 Drainage Schemes

The maintenance spraying of the drains is now largely complete. The north branch of the Longbush drain has now had the deferred maintenance carried out after the resolution of some issues with the landowner.

The pumped drainage schemes of Te Hopai, Moonmoot and Papatahi have adopted rate increases for the coming year.

6.3 Kopuaranga River Enhancement Project

In late January two public meetings were held to present the details of the project to the Kopuaranga community. Both meetings were in favour of a scheme on the Kopuaranga but there were some reservations expressed about aspects of the proposed scheme. Following the meetings officers have discussed the contentious aspects with those people that had expressed concerns at the meetings and have further refined the classification spreadsheet.

A final public meeting will now be held on 14 March to gauge the community's support for a scheme over the full length of the river up to Hastwell. If the community supports the scheme then a scheme advisory committee will be elected at the meeting. The committee will need to be comprised of members who will represent each area of the river.

6.4 LWVD Scheme Review

The LWVD scheme review work is now close to complete with the final committee meeting on 1 March and then, subject to the committee meeting outcome, a series of public meetings to be held in the last week of March. Following the public meetings the new classification will be recommended to the Council.

6.5 LWVD Scheme Global Consent

Work has continued on the LWVD Scheme Global Consent to the point where the AEE is now in its final form and consultation with affected parties is very nearly completed. The aim is to have it lodged as a non notified consent with the Council's Consents Department within the next four weeks.

7. Planning and development services [Sharyn Westlake]

The following table summarises the number of formal, written requests attended to during January and February 2007:

	Jan/Feb 2007	YTD
Requests brought forward	7	7
Additional requests received	25	25
Responses provided	21	21
Outstanding requests	11	11

How flood risk management is being provided throughout New Zealand is currently receiving considerable attention. This Council is involved in three areas, firstly with the MfE initiated review, secondly through input into the local government initiatives and, thirdly through our own review of the Regional Policy Statement. Item 2.1 of Part 2 of Councillor Information Bulletin Issue No 2007/05 gives a good outline of the current status of this work. Specifically the Flood Protection Department is participating in;

- 1. The Ministry for the Environment (MfE) lead Government review of current approaches to flood risk management in New Zealand is progressing. A report has been prepared as part of the review, looking at whether the existing legislative framework provides central and local government with the means to effectively carry out their flood risk management responsibilities. Our views on the issues raised in the report were submitted to MfE at the end of February 2007.
- 2. The 10-year review of the Regional Policy Statement is being lead by Environmental Policy Department. Flood Protection officers are providing on ongoing contribution to the review, to ensure that the Wellington region has sustainable river and catchment management that achieves the particular level of flood hazard protection desired by each distinct community of interest.
- 3. Input into the Local Government lead initiatives on reviewing flood risk management is being provided as requested.

Sharyn Westlake attended the 8 February 2007 meeting of the Tawa Community Board, along with Mike Oates of the Wellington City Council. The Tawa Community Board requested Officers attendance to provide an update on the proposed works for the realignment of the Porirua Stream and house relocation at Findlay Street. The Tawa Community Board is very keen for the project to proceed, however it is not on the current Flood Protection works programme due to the delays to date. Staff are currently assessing how to best proceed from this point.

8. Investigations and Assets [John Eyles]

8.1 Waiwhetu Stream floodplain management study

Work is continuing on Phase 2 of the Waiwhetu Stream study. The WSAC, at its last meeting, endorsed the approach of using source control as one method of minimising flood risks. There was also an acknowledment that it may be some time before any major structural works were completed and officers were requested to consider the option of raising the worst affected houses.

Work has commenced on the assessment of the house raising option and this will be reported along with the other Phase 2 Options in June 2007.

8.2 Asset management

The Flood Protection asset registers have been thoroughly checked in preparation for the asset revaluation due to be completed by the end of this financial year. This involved cross checking the registers with various documents (including the annual field inspection sheets, work records and contract documents), and field checking assets where the information did not exist to verify that asset's existence. Any new assets created since the registers were developed in 2002 were also added. Now that the registers are complete we are busy collating the information required for the unit rate review, the next step in the revaluation process.

An initial meeting has also been held with a possible 'peer reviewer' to ensure that we are following the correct process in terms of our asset revaluation.

Graeme Campbell Manager, Flood Protection