Flood Protection Manager's report for period ending 28 July 2006

1. Manager's comments

1.1 General

2005/06 was a productive year for the Department. Good progress was made with implementing the capital and maintenance works programmes including the flood damage repairs from the 2004 and 2005 floods. There were no major floods during 2005/06. However, extreme wet weather during June 2006 affected the tidying up works of a number of capital projects.

The Hutt River capital works are progressing well and to programme. The Alicetown stopbank construction works were completed and substantial progress was made with the Opahu Stream pumping station works. The Boulcott/Hutt stopbank feasibility study, which was brought forward by one and a half years commenced in January 2006, is progressing well. In Kapiti, construction of the Jim Cooke Park river realignment is substantially complete, however, the Chrystalls stopbank design was slowed down because of the difficulties with land negotiations. The Waiwhetu Stream investigation project is ahead of programme with Phase 1 of the project completed by June 2006, and significant advances made with the Phase 2 structural investigations.

The Wellington and Kapiti Operations teams completed their annual works programmes including the flood damage repairs and made significant contributions to environmental enhancement projects.

2006/07 started with extreme wet weather in July and floods in the Wainuiomata River. Two consecutive flood events in the Wainuiomata River, a 5 year event followed by a 15 year event caused extensive damage to the willow lines. The floods also caused lateral erosion in a number of locations. The flood damage repairs costing about \$25,000, will be included in our 2006/07 maintenance programme, and will be partly funded by Hutt City Council.

1.2 Staffing

James Flanagan is on a one month holiday travelling in the UK and China. He will be back on 29 August 2006.

One current priority is to find replacements for Garry Baker, Area Engineer, and Wayne Angus from the Mabey Road Depot team. Wayne resigned on 10 May 2006 and Garry is retiring on 29 September 2006.

2. Waikanae River floodplain management [Graeme Campbell]

2.1 Jim Cooke Park

The final tidy up works are still to be completed on this project. The wet weather has prevented any of the berm shaping and tracking being undertaken and it is likely to be October 2006 before we can now complete this work. A 2 year return period flood in June 2006 tested the works with everything working essentially as designed. The flood caused some minor damage to the berm areas as there has been insufficient time for any grass cover to establish but this will be repaired as part of the final tidy up works.

2.2 Friends of the Waikanae River

The Waikanae Friends AGM was held on 13 July 2006 with about 30 people present. The executive committee representatives from the community were re-elected with the addition of Rosemary Marryatt. The appointed representatives are yet to be confirmed.

The work on reviewing the Environmental Strategy and developing an action plan for the next 5 years is continuing. Flood Protection and KCDC staff met with John Topliff and his helpers to discuss the objectives for the south bank of the Waikanae River. The meeting was very productive with some good initiatives to be included in the overall strategy. The workshop with all interested parties to determine where to head in the next 5 years is now being planned for the first week of September 2006.

The annual walkover is planned for 20 September 2006.

The Friends have had a productive year growing on plants from their nursery and planting around 3000 natives mainly on the south bank of the Waikanae River. The group has been involved in documenting their planting progress to date, which has included a full survey of most of the south bank using GPS equipment and producing GIS overlays. This information will also contribute to the review of the Waikanae River Environmental Strategy.

3. Otaki River floodplain management [Graeme Campbell]

3.1 Friends of the Otaki River

The Friends of Otaki River are continuing with the planning for the 2006 planting season. The annual walkover is planned for 21 September 2006.

The Friends of Otaki native plant nursery is up and running, and well stocked with plants being grown on for coming planting seasons. Currently it holds nearly 1,500 plants including carex, flaxes, pittosporum, saltmarsh ribbonwoods, lacebark and kahikatea. Many of these will be planted in winter 2006 at the Otaki River Lagoon and up river at Chrystalls Bend. The Friends were successful in their application to the Otaki Community Board for a grant to help stock the nursery.

3.2 Chrystalls extended stopbank

Work is progressing on the detailed assessment of the alternative alignments for the stopbank to confirm which alignment provides the most secure, long term solution to flooding in Otaki township. A separate report is being prepared as part of this order paper.

3.3 South Waitohu stopbank

We are still awaiting a decision from the Otaki and Porirua Trust Board (OPTB) on the preferred form of agreement for the construction of the stopbank. If no decision is forth coming within the next few weeks we may have to reconsider the alternative alignment down Tasman Rd. This alignment is not the preferred option as it is more expensive and does not provide any protection to OPTB land but it could go ahead with KCDC agreement. There may also be merit in arranging for Landcare Committee members to meet with the OPTB as a way to make progress. We will investigate this option and report back to the Committee.

3.4 2006 Cross Section Survey

Work on this project is still progressing. All of the sections have been checked and overlaid with previous surveys to allow the gravel volume change calculations to be undertaken. The analysis should be completed and reported to the November 2006 Landcare Committee meeting.

4. Hutt River floodplain management [Daya Atapattu]

4.1 Ava to Ewen project

The Opahu Stream pumping station works are progressing well despite delays caused by the June/July rains. The contractor has commenced concreting the foundation for the pumping station. Installation of flood gates on the new outlet structure is complete. Backfilling of the culvert and outlet structure is about 60% complete.

Most of the tidying up works in the Alicetown stopbank contract, except for reinstating damaged surfaces, is now complete. Surface reinstatement works will be completed during the maintenance period once the ground has become dry enough for machinery to operate without making a muddy mess.

The Ava Rail Bridge stopbank upgrade is the next major contract in the Ava to Ewen project. The detailed design for this project component is progressing. However, the design is taking more time than originally expected because of the complexity of the proposed works under the bridge. We are meeting 'Ontrack' officers on 14 August 2006 to obtain their approval of the proposed improvement works under the bridge. We aim to appoint a contractor for this project before Christmas 2006.

4.2 Boulcott/Hutt stopbank

The Boulcott/Hutt feasibility study is progressing well. Consultants are currently preparing the preliminary cost estimates for each alignment option. A list of attributes for the Multi Criteria Evaluation was prepared incorporating the feedback from the Round 1 consultation. A newsletter was distributed on 27 July 2006. The project team will carry out a trial evaluation on 4 August 2006 to test the evaluation methodology. The final evaluation will be followed by a report to a special meeting of the Hutt River Advisory Committee on 28 September 2006.

4.3 Whirinaki Crescent stopbank

We have now got the resource consents for the proposed Whirinaki Crescent upgrade works and are currently finalising the tender documents with the aim of calling tenders in mid September 2006. Peter O'Brien is progressing with the land purchase negotiations. Saint Patrick's College and Wellington Golf Club are currently reviewing our proposals for acquiring land for permanent and temporary works. We aim to have the land purchase agreements signed off before calling tenders for the construction works.

4.4 Wet extraction of Hutt River gravel

The resource consent application was lodged with GWRC's Consent Management Division on 28 June 2006. The submission closing date has been extended from 26 July to 2 August 2006 to allow adequate time for submissions to be made by directly notified parties. These parties include key stakeholders - DOC, Fish & Game and Iwi.

4.5 District plan measures

Consultation on the proposed Upper Hutt City Council plan change is scheduled to commence before December 2006. We are meeting with UHCC officers in August 2006 to develop a working programme.

5. Planning and development services [Phillip Purves]

The following table summarises the situation in regard to the number of formal, written requests attended to during June 2006, and provides the 2005/06 totals:

	June 2006	2005/06
Requests brought forward	1	12
Additional requests received	18	140
Responses provided	15	148
Outstanding requests	4	4

6. Investigations

6.1 Waiwhetu Stream floodplain management study [John Eyles]

Report 06.365 of this Order Paper contains the minutes from the Waiwhetu Stream Advisory Committee meeting held on 15 June.

Phase 1 of this project has been completed, and Phase 2 is underway this financial year. The next WSAC meeting has been postponed to 7 September, and a workshop arranged for the Committee on 15 August. The workshop will give the members an opportunity to explore and ask questions about the more complete aspects of this project in a less formal setting.

The community consultation programme is continuing with the next meeting due on 9 August to assess the community's views on the heights of flood protection defences and to test community acceptance of alternative methodologies for dealing with the contaminated sediments.

6.2 Waitohu Stream Study [Phil Wallace]

A detailed breakdown of the tasks required to implement the recommendations of the Waitohu Stream Study summary report is being prepared for consideration by the Landcare and Environment Committees later in the year.

6.3 Pauatahanui Stream flood hazard assessment [John Eyles]

A meeting was held with Porirua City Council on 12 July to discuss advancing the flood protection solutions within the framework of an overall integrated catchment management plan.

7. **Operations**

7.1 Wellington [Jeff Evans]

7.1.1 Hutt River

The Wellington operations works programme was completed at year end with all programmed work including flood damage works finished as per programme and to budget.

The rock delivery contract completed by John Ray Ltd from Taumaranui worked well. The rock was carted by rail to the Port of Wellington, off loaded onto trucks and delivered to site. This rock was the critical component to allow us to complete all our flood damage works.

Four new rock groynes were built on the end of the rail iron debris fences opposite Avalon and the existing groynes were tidied up and reshaped.

Willow and native planting is now underway on the Hutt River. Many of the old willow lines have been cut back and hybrid matsudana willows are being planted in their place.

Gravel extraction quantities on the Hutt River (excluding mouth) have slowed down due to high river levels and the lack of available gravel which can be extracted in the dry. We extracted $60,680 \text{ m}^3$ at year end. The wet gravel extraction consent was lodged on 28 June 2006.

The drain improvements at the end of Masefield Street, Upper Hutt are still progressing. The new area available for lease has now been valued and the lease proposal has been given to the adjoining land owner for feed back and acceptance.

Four field staff was sent to the Wairarapa to help with sandbagging to repair the Hikunui floodway sill after the 6th July flood event. We also provided five thousand sand bags from emergency stocks held at the Mabey Road depot. Some of these bags were sent to South Wairarapa District Council.

7.1.2 Hutt River Trail

The contract to remove the steps from the trail at the southern end of the Taita Gorge has now been finished. We have installed a new style and re-metalled the track, the trail now has a good walking and cycling gradient. There was also a new style installed under Moonshine Bridge to stop vehicle access.

7.1.3 Hutt River ranging services

Even with the winter weather there is still steady use of the trail and river berms, with cyclists, walkers, runners and dog owners braving the weather and enjoying the environment.

On the down side there has been regular damage to the grass berms by vehicles. Any areas of grass with vehicle access has become fair game. It appears the damage is being done late at night and in the early hours of the morning.

Maidstone Intermediate held a river rubbish clean up day as a fundraising event, from Maori Bank to Moonshine and collected nearly 100 bags of rubbish.

Two school planting days have been held, Hutt Valley High School had a planting day at Belmont and Fergusson Intermediate held one at Whakatiki.

7.1.4 Watercourses

Willow clearing work has been undertaken in Hulls Creek as a result of an environmental grant to the stream care group. This work would have taken us five years to complete under from the stream maintenance budget.

A stream run has now been completed on the Waiwhetu Stream, bank edges have been trimmed back and over hanging trees removed.

7.2 Kapiti [Garry Baker]

7.2.1 General

Wet weather conditions on the Kapiti Coast over the past 6 weeks have been more of a "nuisance value", rather than cause any major hold-ups with the works programme.

7.2.2 Otaki Depot

Work on the building of the implement shed for the depot has ground to a halt, with the contractor claiming a further hold-up in supply of the steel components necessary to erect the building. The concrete floor slab is in place.

Kapiti Coast District Council has approved the boundary adjustment (by way of subdivision) between Council and Riverbank Orchards Ltd. A further meeting is planned to discuss the valuations placed on the respective parcels of land.

7.2.3 Waikanae River

Recent wet weather has delayed the reinstatement of the south bank haul round access track, following the completion of the berm development work and extraction of gravels from the left bank above Greenaway Road.

7.2.4 Otaki River

Inter-planting of "front-line" willows and poplars along both banks has commenced, with the lower Otaki section (State Highway Bridge to the mouth) completed.

Chrystalls lagoon has been partially lowered to allow a trial spraying of the exposed aquatic weed to try and clear the main water channels.

7.2.5 Kapiti watercourses

The annual stream-clearing run of all Kapiti watercourses was completed, with an additional machine-clearing run carried out on the Waimeha Stream.

7.3 Operations support [Jacky Cox]

7.3.1 Asset management

We have been busy completing year end asset management tasks including:

• The annual field inspections of all Flood Protection's infrastructural assets on the five major flood protection schemes in the western region.

- Compiling the required documentation for the annual asset management report. A report summarising the results of the asset management system will be presented to the September Landcare Committee meeting.
- Preparing for the annual reciprocal peer review undertaken with staff from the Wairarapa office. This year's review will focus on the Hutt River.
- Work is well underway to review our Department's base asset management plan. The aim is to produce a base document that reflects the common asset management policies and procedures for both the Wairarapa and Western regions, in line with the new Catchment Management Division's responsibilities.
- John Eyles and Mike Longworth are participating in an organisational review of asset management information needs on behalf of Catchment Management.
- 7.3.2 Health and safety

We have completed the annual health monitoring checks for all operational staff. These checks are a way of ensuring that our operational staff are safe from the hazards in their work place that could effect their health. This monitoring ensures that the controls in place are effective.

7.3.3 Waiwhetu Stream

After consultation with Hutt City Council, the Waiwhetu Stream Working Group and Iwi a proposal for the removal and thinning of the ngaio trees adjacent to the stream through the Te Whiti Park reach has been agreed. This work will be done by Flood Protection staff in spring.

We have also renewed the manual clearing contract with Excell Corporation Ltd for a further 6 months until December 2006.

7.3.4 Gravel extraction

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

			Period Year 2005/06 (cubic metres)		Year 2004/05 (cubic metres)
River	Area	Contractor	Period	Year	Full Year
Hutt	Estuary	Winstones	7,070	49,154	50,105
	River	Horokiwi	768	60,680	30,717
Otaki	River	Winstones	2,740	41,442	35,366
Waikanae	Above Greenaway Road	Various	5,040	9,210	2,790
	Below Greenaway Road	Gary Holland Earthmoving	0	5,040	10,828
		TOTALS	15,618	165,526	129,806