

Flood Protection Manager's report for period ending 10 March 2006

1. Manager's comments

1.1 General

Most of our work areas are showing good progress, with the summer weather allowing our construction programme to proceed in a satisfactory manner. Areas that continue to require a sustained focus are:

- **Chrystalls Extended** – The land access requirements for this project are more complex than expected, and so we are preparing for a longer design and consent process than originally anticipated. This will involve further investigation of alignments and sufficiently detailed design information to potentially allow formal designation of the preferred route.
- **Hutt/Boulcott stopbank feasibility study** - Daya Atapattu is making good progress with the appointment of our key consultants and getting the project underway. This project is a major HRFMP initiative and will continue to require intensive staff time and input.
- **Resource Consent application for extraction of Hutt River gravel in water** - Discussions are continuing with the main stakeholders as part of preparing of our resource consent application. A key issue, which has arisen through the consultation process, is the opportunity to improve the habitat diversity in the Hutt River by enhancing the pool/riffle meander pattern through carrying out the gravel extraction. We are intending to lodge the consent application by the end of April 2006.
- **Waiwhetu investigation** – work is progressing well on this project. The Waiwhetu Stream Advisory Committee will receive substantial updates on options to remediate contaminated sediments, concepts for flood protection designs and consultation carried out so far, at its next meeting.

1.2 Staffing

On Tuesday 21 February, I (Sharyn Westlake) was given the role of Acting Manager in Flood Protection, allowing Geoff Dick to focus on his Catchment Management role and the Divisional review. Geoff will still retain direct responsibility for the Waiwhetu Stream and Hutt River Advisory Committees and continue to provide support on a number of ongoing projects when required.

Caroline Ammundsen finished with Council on 3 March 2006 to complete her Masters thesis at Victoria University. Caroline worked for the department over the last 18 months, working part-time over the academic year and full-time over the Christmas university vacations. Caroline assisted Kim Wall with the highly successful Summer Programme (“Great Gravel Grab” and “Rip-Rap Trash Extravaganza”), environmental enhancement projects and development of the flood protection web site.

2. Waikanae River floodplain management [Graeme Campbell]

2.1 Jim Cooke Park

The construction of the Jim Cooke Park realignment works is progressing well. The work is currently within budget and on programme. All of the groynes have been constructed and the berm improvement works between the groynes on the north bank are substantially completed. The contractor is currently delivering the rock for the construction of the toe rock line on the south bank.

2.2 Friends of the Waikanae River

The Friends of the Waikanae River have enlisted the support of a consultant who has been busy recording the work of the Friends on the Waikanae River. Restoration projects undertaken by key members John Topliff, John McLachlan and Dave Blomfield have been video recorded to ensure their vision, the knowledge they have built up and a record of their achievements isn't lost. The DVD's of this material will be used by the group for publicity, records and future planning. The consultant has also been analysing how much time is spent by members doing planting and maintenance so the group has a good idea of what they need to commit to in the future.

Staff have completed a review of our progress implementing the Waikanae River Environmental Strategy as a precursor to developing an action plan for the next 5 years. A preliminary meeting with key partners is being planned for early April to discuss where to from here. Key partners include the Friends Group, GW and KCDC.

2.3 Otaihanga house raising

Work on the bund around 21 Makora Rd is now substantially complete. The work that remains is the sowing of grass on the bund and the replacement of the fences at the downstream end of the property. The work at 21 Makora is approximately \$4,000 over budget but this over expenditure will be able to be covered within the overall budget as the other two houses raised as part of this project were completed under budget.

3. Otaki River floodplain management [Graeme Campbell]

3.1 Friends of the Otaki River

The Friends of the Otaki River are looking for a member to take on the role of secretary after Lenore Winterburn, who was secretary for the last 6 years, resigned. The group continues to have regular working bees at the nursery, and have a good number of plants ready for planting this coming winter.

3.2 KCDC Flood Hazard information plan change

Three appeals have been received on the KCDC decision to include the revised flood hazard information in the KCDC District Plan. GW staff are supporting KCDC with the process of mediation to try and resolve the appeals.

3.3 Chrystalls extended stopbank

The resolution of the land ownership issues has been the primary focus over the last 2 months and it is proving to be more complex than initially anticipated. The Crown is the major land owner affected by the works. Depending on which alignment the stopbank

follows, the works also impact on one private land owner. Negotiations are continuing with both parties but agreements to purchase are not likely to be readily forthcoming and will result in the design and consenting phase of the project being longer than anticipated. See Report 06.85.

3.4 South Waitohu stopbank

The preliminary design of the proposed stopbank has been completed and we are now preparing detailed design plans and estimates. In February, Jacky Cox and Graeme Campbell attended a meeting of the Otaki and Porirua Trust Board. The Trust Board are effectively the owners of all of the land on which the stopbank will be built. At the meeting, the purpose of the proposed stopbank was outlined and plans of the proposed stopbank alignment distributed to Trust Board members.

A number of issues were raised by the Board members and we are awaiting a formal response from the Trust Board outlining any concerns they may have with the stopbank proposal. The issues related to the design of the stopbank are expected to be straight forward to resolve. The major issue that needs to be considered will be the form of approval for the construction and maintenance of the stopbank. Traditionally GW would acquire the land or an easement over the land to secure its interest. In this instance however, purchase or easements are not likely to be an option and it is likely that some form of letter of agreement will be used. Once these issues have been resolved we will proceed with the preparation of consent documents and then the consultation with the wider community.

4. Hutt River floodplain management [Daya Atapattu]

4.1 Ava to Ewen project

The Opahu stream pumping station contract works are progressing well and to programme. By mid March 2006, Juno Civil Ltd had supplied to site 2100 tonnes of rock rip required for the works and placed about 1000 tonnes on the river bank. The 14 precast box culvert sections required for extending the existing culvert have been delivered to site. Juno is currently working on the new outlet structure and the stopbank.

Barry Foster Contracting and their sub contractor Excell, are currently forming the new foot paths, completing the stormwater upgrade and generally tidying up the new Alicetown stopbank. We expect all structural works to be completed well before the due date of 31 May 2006.

On 8 March 2006, we met with Hutt Valley High School representatives to discuss issues related to the Strand Park stopbank upgrade. We expect the detailed design for the Ava Rail and Strand Park stopbanks to be completed, and the tender documents for the Ava Rail stopbank to be ready, by June 2006.

4.2 Boulcott/Hutt stopbank

We are currently evaluating the tenders for the principal consultant for the feasibility study. We expect to make an appointment before the end of March 2006. Our programme is to commence the feasibility project in the beginning of April 2006. The Hutt River Advisory Committee considered the proposed consultation process and programme for this project at the 16 March meeting.

4.3 Whirinaki Crescent stopbank

The detailed design and resource consents for this project will now be based on upgrading the section of the stopbank along the ‘Wineglass’ land boundary. We will now start negotiating with the Wellington Golf Club to purchase the land required for upgrading this section of the existing stopbank.

On 9 and 11 March 2006 we met with some of the adjacent property owners to discuss issues related to the main stopbank upgrade.

4.4 District plan measures

Hutt City Council has now approved the plan change and it is operative from Tuesday, 14 March 2006.

Upper Hutt City Council officers are preparing the proposed plan change document. Consultation with affected landowners is scheduled for April/May 2006.

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 January and February 2006:

	Jan/Feb 2006	YTD
Requests brought forward	7	12
Additional requests received	20	86
Responses provided	21	92
Outstanding requests	6	6

6. Investigations

6.1 Waiwhetu Stream floodplain management study [John Eyles]

Preparation is underway for the next Waiwhetu Stream Advisory Committee meeting on 4 April. At this meeting, substantial updates will be given to the Committee on options to remediate contaminated sediments, concepts for flood protection designs and consultation to date.

Two major contracts for professional services were let in February. The contracts are for the concept and preliminary designs for flood protection defences for the lower Waiwhetu (from the mouth to Griffins) and Awamutu Streams. The Awamutu contract (HCC responsibility) is worth around \$100k, the Waiwhetu (GWRC responsibility) about \$150k. These contracts represent substantial financial commitments by each council to identify flooding solutions in the area.

Successful consultation meetings have been held with residents groups from the Awamutu and Waiwhetu streams, representatives of local industry and the Waiwhetu Stream Working Group. A letter has been sent to Dr Kara Puketapu, seeking iwi involvement in the Waiwhetu project at a level acceptable to the runanga. Options include at Advisory

Committee level, down to consultation as a normal interested/affected party. A response is awaited from Dr Puketapu.

Investigation work is nearly complete on the possibility of interim topping up the stopbank around Riverside Drive South, which may provide an improvement in the level of service until any main flood protection scheme is implemented. If feasible, these works would raise the level of protection of the existing stopbank from about a one in five year to around a one in 20 year storm and provide an early win for the project.

6.2 Waitohu flood hazard assessment [Geoff Dick]

The Waitohu flood hazard assessment is now substantially complete and is reported separately to the Committee – Report 04.25.

6.3 Mangaroa River flood hazard assessment [Phillip Purves]

Work is continuing on the preparation of the final documents and handover of the hydraulic model from the consultants to the Council.

6.4 Pauatahanui Stream flood hazard assessment [John Eyles]

This is a joint project, with Porirua City Council (PCC) and Transit NZ, to assess the flood hazard from the Pauatahanui Stream. Consultants, Connell Wagner Ltd have been engaged to prepare a report on the condition of the stream. Their report is in the process of being finalised but says that the current flood risk could be reduced by a programme of work to remove overgrown willow trees, gravel deposits and similar obstructions.

We are awaiting a proposal from PCC on the work required and on the future management of the stream. It is likely that a contribution will be made from the isolated works budget to address the flooding risk.

6.5 Pinehaven flood study [John Eyles]

A paper was presented to the Landcare Committee meeting last November to advise the Committee of the scope of a proposed Pinehaven flood study and to seek endorsement for the study to be included in the draft 2006-2016 Flood Protection Operating Plan. Phase 1 of the study was due to commence in the 2006/2007 year with Phase 2 to follow in 2008/09.

Since last November, we have been advised that Upper Hutt City Council would like to postpone commencing the study until 2008/2009 for Phase 1 and 2010/2011 for Phase 2. We will continue to work with UHCC officers to agree the final project timing prior to the LTCCP being confirmed in June.

7. Operations

7.1 Wellington [Jeff Evans]

Hutt River

Construction of the trial toe rock lining at Elbow Park is complete. Toe rock was placed along a 260 metre length to prevent further scour to the gabion baskets protecting the bank edge. We will monitor the site after each flood event to assess how successful this work will be.

Maintenance of the flood gates on the Hutt River is almost complete. All the flood gates have been water blasted and repainted, and a number of them have had the rubber seals replaced.

A number of large trees have been removed from the face of the stop bank at Manor Park and six large poplar trees have been removed from the Hutt car park after branches had broken off in high winds and fallen on parked cars.

Investigation work is under way on the removal of existing culverts in the drainage channel system at the end of Masefield Street in Upper Hutt. The culverts restrict the capacity of the channel during a large flood event. There are some issues with services in the stop bank and we are likely to have to renegotiate a lease agreement with the adjoining land owner before the work can commence.

Hutt River Trail

Normal seasonal maintenance work was completed over the period. The trail has been cut back in places with sections of the carriageway being re-surfaced.

Hutt River ranging services

Ranging has included the usual duties such as patrols, surveillance, enforcement and public relations. Removal of abandoned vehicles and waste continued throughout the period.

We held a number of successful events on the river over the summer with the “Great Gravel Grab” attracting a huge number of people with car and trailers. The “Rip Rap” trash recycling day also had a good turn out despite the weather, and the “Bike the Trail” event had over a thousand participants turn up.

Watercourses

A number of stream runs have been completed including in the Mangaroa River, Collins Creek, Te Mome Stream and the Pinehaven Stream and a number of large willow trees have also been removed from the Stokes Valley Stream. Maintenance has also been undertaken on the Stebbings dam in Glenside.

7.2 Kapiti [Garry Baker]

General

A mixture of fine, windy and moist weather conditions has allowed our construction programme to continue in a satisfactory manner. Following the southerly blast some weeks ago, a large number of trees have had to be cleared from public walking tracks and small watercourses. A number of large willows, poplars and alders along the Otaki and Waikanae River banks sustained damage varying from being “topped” to “terminal”.

A slowing down of rock deliveries continues to be a concern, but the Contractor has assured us that all works will be completed on time.

Waikanae River

A meeting was held on site with Waikanae Friends of the River, to discuss options for the additional berm development made positive by this years additional \$10,000 funding. To date, 200 metres of the left bank berm below Jim Cooke Park has been cleared, with a further 100-metre length of clearance programmed for late March.

Further supplies of rock were delivered for both the Jim Cooke Park capex and January 2005 flood repair rock groynes.

The rock groynes at Maple Lane were reshaped and strengthened with an additional 259 tonnes of rock.

Otaki River

The concrete block mattresses behind the lower Chrystalls main rock wall were realigned and re-levelled.

The river channel adjacent to the Barretts' left bank debris fences was diverted into the middle of the bed, to allow the fences to be cleared, and to tighten the fence cables. At the same time, concrete block "groyne heads" were added to 8 fences, and 180 willow poles were planted.

Further clearing of weeds around the native plantings at the Chrystalls Lagoon site was carried out.

Kapiti watercourses

A blockage in the Mangapouri Stream was hand-cleared during February.

7.3 Operations support [Jacky Cox]

Isolated works

After a number of visits to residents in Maymorn Road, whose properties are suffering from severe erosion caused by the Mangaroa River, we are applying for resource consent to realign and ease the meander pattern through the affected reach while we look at a range of possible design solutions to address the erosion.

The design solution will not be straight forward as the river channel at this site 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 river terrace on the opposite bank. Any proposed protection works must be carefully designed so as not to adversely affect this property.

Asset management

The review of our base asset management plan documents has started. This task has become more complex with the need to incorporate the asset management requirements of the Wairarapa river schemes. However this is an example of where a region wide approach is appropriate, and is consistent with the new Catchment Management Division responsibilities.

We have ordered the 2006 International Infrastructure Management Manual in order to incorporate the best practice principles contained in the new edition.

A visit to Horizons Regional Council is confirmed for March 23. The purpose of the visit is to discuss an agreement to annually peer review each other's assets which will provide an independent check of our asset's condition. We will also view the operation of their 'state of the art' Asset Management System and consider its suitability for our river assets in the Wellington region.

Waiwhetu Stream

We recently had a contractor visit us from Hawkes Bay Regional Council to assess the feasibility of using a tractor mounted sickle unit to clear aquatic weed from the stream channel. The assessment visit was a success, and we are now proposing to bring the unit down by the end of the financial year. We estimate that approximately 70% of the stream could be cleared by this method with the remaining 30%, where access is an issue, being manually cleared.

Gravel extraction

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

River	Area	Contractor	Period Year 2005/06 (cubic metres)		Year 2004/05 (cubic metres)
			Period	Year	Full Year
Hutt	Estuary	Winstones	3,990	29,988	50,105
	River	Horokiwi	14,447	45,983	30,717
Otaki	River	Winstones	1,974	27,838	35,366
Waikanae	Above Greenaway Road	Various	0	0	2,790
	Below Greenaway Road	Gary Holland Earthmoving	1,100	5,200	10,828
TOTALS			21,511	109,009	129,806

Sharyn Westlake
Acting Manager, Flood Protection