

Flood Protection Manager's report for period ending 20 April 2007

1. Manager's comments

1.1 General

The major focus of the department over the last month has been to progress the planning for our Scheme works. The annual meetings for seven of the 9 major schemes in the Wairarapa have been held with all approving the proposed works programme and only one not wanting to increase rates in line with the construction cost increases. Meetings were also held to discuss the proposed rating review for the Lower Valley Development Scheme and we are now close to finalising the classification. The support for the proposed Kopuaranga Scheme was lower than expected and options for a reduced scheme are now being considered. Work is also progressing on the preparation of the Waiwhetu Floodplain Management Plan with the majority of the technical studies expected to be completed by 30 June 2007. There is still a significant amount of work required to complete this project. We are currently preparing a detail programme for the undertaking of the remainder of the work.

The capital works and maintenance programmes are progressing well with no major issues arising since the last report. All of these works are expected to be completed on programme and within budget except for the Whirinaki Crescent stopbank. Approval of the revised programme and budget for Whirinaki Crescent is being sought from the Landcare Committee following recommendations from the Hutt Advisory Committee and Upper Hutt City Council.

We did not receive any satisfactory applicants for the Strategy and Technical Support team leader position made vacant when Phil Purves left. We are now reviewing the job description for the role and will re-advertise the position. We will also approach the major employment agencies to see whether they have any suitable candidates. In the interim Sharyn Westlake is acting team leader and the work is being allocated within the wider department.

2. Kapiti floodplain management [Kees Nauta]

2.1 Friends of the Waikanae River

A planting plan is currently being prepared for the Waikanae River, focussing on the stretch of the river from Otaihanga Domain to Kebbels Bend. A walkover with members of the FOTWR along with GW and KCDC Officers was conducted to look at the proposed sites and discuss any issues. Thirteen sites that meet the criteria of being suitable for environmental restoration while not restricting flood flow have been surveyed and logged on GIS. The plan, as well as identifying the sites, will recommend a pre planting weed control regime along with the numbers and species of native plants that will be required to carry out the restoration work. This will be tied back into a propagation programme for the nursery and will make things easier for the FOTWR to plan for each years work.

John Bissell has also taken part in several walkovers with the FOTWR to enable him to get familiar with the river and any issues regarding it.

2.2 Waikanae River Environmental Strategy

Work has started on the review of the Waikanae River Environmental Strategy. Information from the meeting held in 29 November 2006 has been collated and is being integrated into a draft document.

2.3 Review of the Friends Groups

A review of the friends groups has been started as per the requirements of the Environmental Strategy. The review will look at how things are going and whether any improvements can be made to how the groups operate along with the level of support they receive from Greater Wellington.

2.4 Friends of the Otaki River

John Bissell attended a working bee in the nursery with the FOTOR and also took part in a site visit to look at future planting sites and to discuss issues regarding the Friends restoration work. John also took part in a site visit with Geoff Skene to look at the work the Friends have done and to discuss their funding.

2.5 Chrystalls Extended Stopbank

Submissions on the Notice of Requirement (NOR) and resource consent applications closed on the 30 March 2007. Seven submissions were received.

Three unconditional submissions in support were received from Wellington Fish and Game, Mike Tracey and Friends of the Otaki River. A further four submissions in support were received from OnTrack, Telstra Clear, Ashford Park Stud and Fletcher Concrete and Infrastructure Ltd that have requested conditions. Fletcher Concrete and Infrastructure submission requested the removal of the designation as soon as practicable after Flood Protection secured ownership of the underlying land and an appropriate plan change is implemented. The three other submissions have requested conditions relating to protecting existing property and assets potentially affected by the proposed works.

Flood Protection are in agreement with the suggested conditions and have requested Kapiti Coast District Council and Greater Wellington incorporate the requested conditions into their recommendation on the NOR and decision on the resource consents respectively. It is anticipated this will avoid the need for a formal hearing of the applications.

The final design of the western section of the stopbank located on land currently owned by GWRC is well advanced. We are presently attempting to drain the nearby Chrystalls Lagoon in order to kill off the algae infestation and remove the silt that has washed into it from the Otaki River. Our intention is to remove and dry out the silt so that it can be used for the stopbank construction. We have also arranged for the removal of large pine trees on the western section of the stopbank alignment in preparation for construction

2.6 South Waitohu stopbank

Councillor Turver and Flood Protection staff met with the Otaki Porirua Trust Board Executive on 22 March 2007 to progress agreement for construction of the stopbank. The outcome was that the Board Executive will recommend to the Full Board on 19 April "that the Board support in principle, GWRC going for resource consent for the construction of the stopbank". We are optimistic that the recommendation will pass into resolution.

2.7 Waitohu Stream

The renewal of our existing resource consent for regular maintenance work in the Waitohu Stream is progressing well with a draft resource consent application sent to affected parties on the 5 April 2007. We have requested comments back to us by the 27 April 2007. Once we have received these, and made any necessary adjustments we will lodge the application with Environmental Regulation.

2.7.1 Gravel Extraction

The current application includes for extraction of up to 2500m³ per annum which remains unchanged. However, the quantity will be reviewed inline with bed level surveys undertaken in 2007 and subsequently at 5 yearly intervals. This proposed change in gravel extraction from the Waitohu Stream will bring it into line with the extraction policies for the Hutt, Waikanae and Otaki Rivers.

2.7.2 Timeframe

The current application has a three year term and we are proposing to extend this to 35 years. The extension is sought for the following reasons:

- Completion of the Waitohu Stream Study in 2006. The study and summary document sets out the management regime for the stream for the foreseeable future. The summary document was discussed and agreed with the community during 2004-2005 and is now being implemented.
- The effects on the environment from the proposed works are minor and well documented over the previous resource consents. There are no significant changes proposed to the nature of the existing works.

2.7.3 Notification

Flood Protection anticipates that the current resource consent will be a limited notified application. This differs from the 2004 application which was non-notified and required written approvals, from all affected parties before it was lodged.

3. Hutt River floodplain management [Daya Atapattu]

3.1 Ava to Ewen project

Good progress has been made with the Ava Rail stopbank reconstruction contract. By the end of March 2007, the contractor had placed about 15,000 m³ of fill materials in forming the stopbank. The contractor has also commenced placing rock in the river bed under the Ava Rail Bridge to form the bank edge protection. Rock supply from Takaka is continuing and by April 2007, about 2400 tonnes will have been supplied to site. The project is on track for completion by June 2008.

Civil works for the Opahu Stream pump station are now complete and electrical works are progressing. Commissioning of the pump station is expected in May 2007.

The contractor has now completed most of the maintenance works in the Alicetown stopbank. The remaining works, including the sealing of penstocks and grassing of disturbed areas will be completed by early May 2007.

Detailed design of the Strand Park stopbank reconstruction is complete and the tender documents are being prepared. Construction of this section is scheduled to commence in 2008/09.

3.2 Boulcott/Hutt stopbank

MWH NZ Ltd is now progressing with Stage 2 of the Boulcott/Hutt stopbank feasibility study. A site walkover of the two golf courses to discuss issues relating to each of the three alignments being considered was completed on 23 March 2007. Representatives from the two golf clubs and the golf course architect participated in this walkover. Limited topographic surveys along each stopbank alignment have commenced. Survey information will be used to refine the cost estimates and to provide accurate stopbank height information to adjacent property owners and the golf clubs.

3.3 Whirinaki Crescent stopbank

On 1 March 2007, the HRAC endorsed a revised programme for implementing the Whirinaki Crescent stopbank reconstruction project. Stage 1 construction has now commenced. The projects costs have increased and Report 07.234 of this Order Paper provides details.

3.4 Maoribank Riverbed stabilisation

Investigations on the cause of the degradation trend in the Maoribank reach of the Hutt River are underway. A walkover of the site with specialist consultants is scheduled for 26 April 2007.

3.5 Wet extraction of Hutt River gravel

Hutt River gravel extraction is progressing with a target of removing about 60,000 m³ by the end of June 2007. About 26,000 m³ had been extracted by the end of March 2007.

4 Western Operations [Jeff Evans]

All the western operations budgets and works programmes are running to schedule. The settled weather over the last few months has allowed us to complete most of the major programmed works on our river systems and it has also given us the opportunity to help progress some of the outstanding capex works in both Wellington and Kapiti.

Operations staff have been busy re-building and raising a section of stopbank behind Whirinaki Crescent in Upper Hutt and prep work has been done for the Chrystall's extended stopbank in Otaki. Chrystall's lagoon has been drained and the accumulated silts dug out will be used to soil the new stopbank batters.

4.1 Hutt River

Tree removal from the Upper Hutt stopbanks has been done in Totara Park and Whakatiki. This has been done as part of the audit programme to remove trees from stopbank. The gabion fence at Elbow Park has been repaired and a number of lengths of support wire have been replaced.

4.2 Hutt River Trail

Over the last period the river trail carriageway has been weed sprayed and overhanging vegetation has been cut back as required.

There have been a number of events held over the period, two raft races were held in the upper reaches and Trentham Harriers held their annual fun run. The bike trail was also a great success with over a thousand competitors turning out. A buggy walk was also held at Poets Park in Upper Hutt.

4.3 Hutt River ranging services

Ranging has included the usual patrols, enforcement duties and public relations. We have also been installing the new river trail signs in conjunction with Rotary. Volunteers from the Hutt Rotary have also been helping with the re-vegetation plot maintenance on the Belmont berms. Asset maintenance and vandalism repairs have also been carried out over the last period.

4.4 Watercourses

A number of wind blown trees have been removed from both the Waiwhetu and Waitohu streams and a minor survey was completed on the Waitohu gravel analysis.

Dam maintenance has been undertaken on both Stebbings and Seton Nossiter Dams and stream runs have been undertaken in Porirua and Takapu Streams.

4.5 Waikanae River

Gravel extraction is currently underway on the Waikanae River. 7,000 cubic metres have been extracted to date using both wet and dry extraction methods.

Beach recontouring has also been undertaken to stop further erosion at Blake's bend below Jim Cooke Park and willows have been replanted in the area. A number of rock groynes have been repaired and extended and the second river weir has been topped up.

4.6 Otaki River

Beach recontouring is now complete on the Otaki River. A number of eroding bank edges have had gravel pushed back into them to rebuild the berm and hold the river alignment and willows have been re-planted. The Wallace-Lutz debris fences have been repaired and the area has also been replanted.

The growth on the gravel beaches has also been sprayed to stop islands forming in the channel and keep the gravel mobile so it moves down stream.

Gravel extraction has now been stopped on the Otaki River for this financial year, as Winstones have now reached their annual limit of 40,000 cubic metres as per our consent requirements.

4.7 Gravel extraction

Gravel extraction figures to the end of March 2007 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 | 8,134 | 33,663 | 49,154 |
| | River | Horokiwi | 13,499 | 25,440 | 60,680 |

| | | | | | |
|----------|----------------------|--------------------------|--------|---------|---------|
| Otaki | River | Winstones | 13,736 | 40,929 | 41,442 |
| Waikanae | Above Greenaway Road | Various | 2,250 | 2,250 | 9,210 |
| | Below Greenaway Road | Gary Holland Earthmoving | 5,360 | 5,360 | 5,040 |
| TOTALS | | | 42,979 | 107,912 | 165,526 |

5 Wairarapa Operations [Mike Longworth]

5.1 Wairarapa River Schemes

5.1.1 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 75% complete with the expectation that it will be complete by the year end, subject to reasonable weather conditions. 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.

5.1.2 Flood Damage Repairs

The flood damage repairs are now approximately 90% completed. Of the major work;

- Shelton and Guscott and repairs to slumping in the Pukio area are now completed.
- Repairs to the Hikinui sill are 60% complete, and laying of the reinforce grass matt is in progress, and will be completed by end of April subject to weather. The removal of the existing sill and installation of the debris barrier will be done summer 2008. Funds will be carried forward to next financial year for this work.
- The extension of the Reno mattresses at the Oporua spillway has been completed. Planting of natives in the wetland created at Oporua will be carried out during this winter.

5.1.3 Drainage Schemes

The maintenance spraying and mechanical cleaning of the drains is now complete. The pumped drainage schemes of Te Hopai, Moonmoot and Papatahi have adopted rate increases for the coming year.

The drainage schemes have had a variety of issues over the last few years (e.g. July 2006 flood pump damage) and as a result have drawn down heavily over their reserves. Most schemes are now facing an increase in the scheme rates to build these reserves.

5.1.4 Annual Scheme meetings

The annual scheme meetings are being held over the period 17 April to 11 May. At the time of writing, 5 out of the 9 schemes have held their meetings which have also involved river inspections. Most of the scheme committees have been asked to adopt rate increases in line with the increase in the cost of construction. At this time one scheme committee has refused to adopt a rate increase, citing the difficult year for the farmers on that scheme. Generally

there has been a positive response from the scheme committees to the work the Council have carried out over the year.

5.2 Kopuaranga River Enhancement Project

The final public meeting to gauge the communities support for a scheme over the full length of the river up to Hastwell was held on 14 March. This meeting indicated approximately 70% support for a scheme but there was a vocal minority expressing strong opposition. As approximately 70 people attended the meeting representing in the order of 50 to 60 households out of 170 households with in the scheme boundary, the committee asked that a postal vote be held to ascertain the “true” support for the scheme. The postal vote has returned 113 votes which indicate 51% support for a scheme on the Kopuaranga River. Once the committee has considered the result of the postal vote a recommendation on whether to proceed with a scheme will be made to the Council.

5.3 LWVD Scheme Review

The LWVD scheme classification review is now close to complete. Four public meetings were held over the 12 and 13 April to present the details of the review to the community within the schemes boundary. Once the committee has considered the feed back from the meetings the new classification will be recommended to the Council.

5.4 LWVD Scheme Global Consent

Work has continued on the LWVD Scheme Global Consent to the point where the AEE has now been lodged with the Council’s consents Department. Further consultation is in progress to get sign-offs from affected parties.

5.5 Study of Private Stopbanks and Other Structures around Lake Wairarapa

The proposed study of private stopbanks and other structures around Lake Wairarapa was outlined in the March meeting report and has subsequently been costed in the order of \$26,000. This level of expenditure exceeds the available investigations budget this year and options for reducing on deferring this work are being considered.

6 Planning and development services [Sharyn Westlake]

The following table summarises the number of formal, written requests attended to during the period from 1 March - 20 April 2007:

| | March/April 2007 | YTD |
|------------------------------|------------------|-----|
| Requests brought forward | 11 | 4 |
| Additional requests received | 35 | 146 |
| Responses provided | 27 | 131 |
| Outstanding requests | 8 | 8 |

7. Investigations and Assets [John Eyles]

7.1 Waiwhetu Stream floodplain management study

An application to the Ministry for the Environment's contaminated sites remediation fund for the clean up of the contaminated sediments was lodged in November 2005 and seeks \$5.9M or 100% of estimated clean up costs. Discussion with Ministry officials is underway to try to secure a viable level of funding. Hutt City Council are also considering their position with respect to a local contribution to the clean up costs. Structural flood protection works cannot start without doing the clean up work.

Phase 2 of the project, which examines non structural options available for the Waiwhetu catchment is underway. The technical work to complete Phase 2 is due to be completed in June/July 2007. The next WSAC meeting is scheduled for 7 May.

The WSAC, at its last meeting acknowledged 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.

7.2 Pauatahanui Stream (in conjunction with Porirua City Council and Transit NZ)

The recent flooding hazard study showed this stream is heavily overgrown with willows which increases the risk of flooding. A meeting with residents was held last November to advise adjacent property owners of their maintenance obligations and how this council can help under its isolated works budget. Steve Murphy has recently started preparing individual property reports to identify stream maintenance required. He is also working on a resource consent template for individual owners to use when they wish to start work. Transit have agreed to call tenders to clean up the whole stream, probably next financial year, with individual property owners to pay their pro rata share.

We will continue to liaise with PCC in developing an integrated whole of catchment approach for managing the Pauatahanui stream.

7.3 Detention Dams study, Stebbings Dam Hydrology

The Building Act 2004 defines the responsibilities that dam owners have with respect to the integrity of dams and how they should be managed to protect public safety in the event of failure.

Consultants NIWA have been engaged to complete a reassessment of the hydrology of Stebbings Dam. This follows similar work undertaken in 2001/02 for the Seton Nossiter dam. The purpose is to assess the maximum possible flood, with the objective of evaluating the sufficiency of the flood storage and the adequacy of current flood warning and evacuation procedures for ensuring public safety during extreme flood events.

7.4 Asset management

Assets

We are busy extracting and collating the information required to determine the new unit rates for all of Flood Protection's infrastructural assets. Once this process is complete we can revalue the department's flood protection assets, due to be completed by the end of the financial year.

A project team containing both Western and Wairarapa rivers staff is reviewing our asset management documents with the aim of producing a single base document for both Western and Wairarapa river assets. The completion of this task will be tied into the revaluation project to be completed by the end of the financial year.

Catchment Management Division staff John Eyles and Mike Longworth are participating in an organisation-wide asset management information system review. Proposals from suitable software companies have been received and evaluated with vendor demonstrations to be completed in May.

Graeme Campbell
Manager, Flood Protection