

Report to the Landcare Committee
from Graeme Campbell, Project Manager, Flood Protection Group

October 1998 Flood Damage Repair : Progress Report

1. Purpose

To update the Landcare Committee on progress of the October 1998 flood damage repair and improvement works, last reported to the 23 November 1999 Landcare Committee meeting, and to seek approval for budget reallocations within the overall Flood Damage Repair Project budget.

2. Summary

Excellent progress is continuing to be made on all the flood damage repair and capital improvement works being undertaken as part of this project. All works are expected to be completed within the overall budget by the end of this financial year.

Additional flood damage, subsequent to the October 1998 floods, has necessitated a change in the scope and priority of some of the works on the Otaki River, requiring additional budget to complete the works to a satisfactory standard. To maintain the overall project within budget, this report recommends that savings from the Waikanae River Capital Improvements be applied to the Otaki works, to offset the extra expenditure.

3. Work Progress : Flood Damage Repairs (Opex)

3.1 Hutt

The **Manor Park Golf Course** repair works are now substantially complete. The work was completed in less time than estimated and is correspondingly under budget. Accounts for the work are still being processed with the final costs expected to be under \$250,000, a saving of \$50,000 on budget.

The **Memorial Park** rockline, along River Road in Upper Hutt, has also been completed and under budget.

The repair works at **Owen Street** are ready for tender with construction programmed to commence at the end of March 2000. John Ray Ltd will supply rock rip-rap under a separate contract, with stockpiling due to start in mid March.

Flood Protection staff are still finalising design details of the preferred option for the repairs at **Bridge Road**, Upper Hutt. The initial concept designs required review because their costs far exceed the available budget, and potentially the value of benefit. The preferred option is a mixture of rock rip-rap, and stabilisation of the lower bank edge above an existing rock shelf using geotextiles, soil anchors and a single row of gabion baskets. The intent of the proposed design is as per the original flood report (Attachment 2 to Report 98.555), accordingly the responsibility to rebuild back yard platforms will remain with the landowners. The estimated construction cost of this work is up to \$80,000 or \$40,000 more than budget. This can be funded from the savings at Manor Park and Memorial Park.

Consultants have been appointed to prepare working drawings for the repair of the **Avalon Berms**. The draft design is due by the end of January 2000.

3.2 **Waikanae**

All the Waikanae River flood damage repairs are complete.

3.3 **Otaki**

Work on the Otaki River is estimated to be 80 percent complete with progress since the last report on:

- beach contouring adjacent to the Empson's property.
- erosion repairs just below the State Highway 1 Bridge.

The debris fences required at the lower end of **Chrystalls Bend** will not be constructed this financial year. No further erosion has occurred at this point and it was decided to leave these works and undertake them as part of the normal maintenance programme next financial year allowing work to concentrate on the higher priority areas.

3.4 **Waitohu**

No further work has been undertaken on the Waitohu Stream flood damage repairs. Work is now expected to be done in March 2000.

4. **Capital Improvements**

4.1 **Hutt**

Block Road Repair Works

Design work is complete and draft tender documents for construction prepared. John Ray Ltd will supply rock rip-rap under a separate contract, with stockpiling due to start at the beginning of March 2000. Construction will commence at the end of March and is due to be completed by May 2000.

Boulcott Stopbank Land Purchase

A separate report will be prepared for the 23 March Landcare Committee meeting.

4.2 Waikanae

State Highway to Maple Lane Works

These works are progressing well. The construction contract was let to John Ray Ltd on 23 November 1999. John Ray Ltd are also the contractor for the supply of rock rip-rap for this work and it is understood they were able to make efficiencies in the construction contract by integrating the two operations. The overall works are now forecast to be completed approximately \$50,000 under budget. The contractor has now supplied 75 percent of the rock to site, and has placed 50 percent of the rock protection works. Tree planting, debris fences and environmental works will be undertaken by the contractor once the rock rip-rap structures are in place.

House Raising

All work on this project was completed approximately \$58,000 under budget. The under-expenditure is explained by:

- efficiencies in the undertaking of the work \$28,000
- only raising two of the three houses proposed \$30,000

The third house was not raised because the owners chose not to take up Council's offer of assistance.

4.3 Otaki

Stresscrete

Design and draft tender documents for construction of this project are complete and resource consents have been granted. Construction should commence by the end of February 2000. Approximately 30 percent of the rock required for the works is on site with all rock expected to be delivered by mid February.

An area at the upstream end of the site was eroded in a flood in September 1999 and required a rock lining repair costing approximately \$100,000. The extent of remaining flood damage improvement work in this reach has now been adjusted to accommodate this extra expenditure. We believe an effective improvement can be achieved within the overall Stresscrete budget of \$650,000.

Traceys Bank Protection Work

No further work has been done on this site. The beach shaping, undertaken as temporary repairs following the flood, is holding out well and resources have therefore been targeted on more urgent works at Stresscrete and Mangahanene. Work will be completed before the end of the financial year and are expected to be within budget. All materials required for the work have been purchased and delivered to site.

Mangahanene Island

Design for this site was completed and resource consents granted prior to Christmas. It had been proposed to construct these works nearer the end of summer but two small floods caused further damage to the exposed berms and undermined the stopbank. In order to expedite emergency repairs a tender was let, in mid December 1999, for placing fill material to reconstruct the berms. The platform was completed on 24 December. The rock rip-rap lining is being placed by direct plant hire and will be completed January 2000. Once this is complete, it is proposed to reshape the stopbank face and sow to grass.

The works cost will come to approximately \$206,000. This is \$86,000 over the project budget of \$120,000. The over-expenditure is mainly due to the additional fill required to replace the material eroded by the two recent floods and the increased length of work required to be completed now.

Gas Crossing

The construction team working on the Mangahanene site will move directly to the construction of the Gas Crossing works which should be complete by mid February 2000. They are forecast to be completed \$15,000 under the budget of \$110,000.

The need to quickly expedite the flood damage at Mangahanene and Gas Crossing has put pressure on staff resources in Otaki. However, they are coping well with some support from head office.

5. Funding and Budgets

The overall project is proceeding within budget. Forecast expenditure compared to budget is \$57,852 favourable and is summarised in the following table.

Table 1 : Summary Income and Expenditure Statement

	Total Approved Budget	Expenditure to 31 Dec 1999	Forecast to Complete Works by June 2000	Total	Variance to Budget
Flood Damage Repairs	\$1,756,747	\$1,407,135	\$429,230	\$1,836,365	(\$79,618) (U)
Capital Improvements	\$2,975,000	\$577,110	\$2,260,420	\$2,837,530	\$137,470 (F)
Total Expenditure	\$4,731,747	\$1,984,245	\$2,689,650	\$4,673,895	\$57,852 (F)

5.1 Flood Damage Repair Variances (Operating Expenditure)

The total flood damage repair expenditure is forecast to be \$79,618(U). This is primarily as a result of the additional expenditure proposed at Owen Street. Savings and additional income (Hutt River mouth gravel, concrete block sales) in the overall Operations budget, can offset this additional expenditure.

The proposal now to spend up to an additional \$40,000 to complete the flood repairs at Bridge Road, Upper Hutt has been factored into the forecast expenditure. This additional cost has not altered the total project cost from the last report because the savings at Manor Park and Memorial Park have also been factored into the forecast.

5.2 Capital Improvement Project Variances

A number of small floods over the last three months on the Otaki River have resulted in further flood damage. This damage has increased the costs of some of the individual projects. At the same time, lower than estimated tender prices and other savings have reduced the cost of some of the works (refer to Table 2 below).

The Flood Protection capital improvements have been run as a single project so it is considered reasonable to apply under-spends on one project to over-spends on others within the respective rating districts. The Group is seeking Landcare Committee approval to offset such expenditure.

A summary of the current forecasts and projected variances for the individual capital improvement works is given in Table 2 below.

Table 2 : Capital Improvement Project Variances

Project	Budget (\$)	Forecast (\$)	Variance (\$)
Hutt River			
Block Road	300,000	300,000	0
Boulcott	735,000	635,000	(100,000)
Subtotal Hutt River	1,035,000	935,000	(100,000)
Otaki River			
Stresscrete	650,000	650,000	0
Tracys	85,000	85,000	0
Gas Crossing	110,000	95,000	(15,000)
Mangahanene	120,000	206,000	86,000
Waikanae River			
SH1 to Maple Lane	850,000	800,000	(50,000)
Otaihanga House Raising	125,000	67,000	(58,000)
Subtotal Kapiti	1,940,000	1,903,000	(37,000)
TOTAL	2,975,000	2,838,000	(137,000) (F)

6. Communication Opportunities

A press release was issued at the end of November 1999 signalling the start of work at State Highway 1 to Maple Lane. A newsletter was also issued to all parties consulted through the consent process, advising them of the works programme. A further newsletter and press release will be issued when placement of rock has been completed.

A press release will also be prepared about progress on all of the Hutt/Otaki and Waikanae repair works and issued to interested groups.

7. Recommendations

- (1) *That the Landcare Committee receive this report and note its contents.*
- (2) *That the Committee notes the proposed additional expenditure for repair works at Bridge Road, Upper Hutt and endorses the use of savings and additional income in the operations maintenance budget to offset the over-expenditure in the flood damage repair works.*
- (3) *That the Committee endorses the additional proposed capital expenditure in the Otaki River and agrees with the reallocation of the savings from the Waikanae River to fund this additional work.*

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