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Committee Landcare
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Floodplain Management plan implementation: Annual progress report to June 2005

1. Purpose

To update the Committee on the implementation of the Hutt, Otaki and Waikanae Floodplain Management Plans.

2. Significance of the decision

The matters for decision in this report do not trigger the significance policy of the Council or otherwise trigger section 76(3)(b) of the Local Government Act 2002.

3. Background

Floodplain Management Plans for the Hutt, Otaki and Waikanae Rivers were completed in 2001, 1998 and 1997 respectively. All three plans contain substantial implementation, monitoring and review programmes. Council's long-term programme is to fully implement all three Floodplain Management Plans by 2040.

This is the third annual implementation progress report presented to Landcare. The last progress report was presented to the Committee in 2004 (Report 04.491).

4. Progress report format

This report is structured as follows:

- Report progress against the 40-year implementation programme that commenced in the year 2000. This was the year that Council formally adopted the programme.
- A review of the most recent year's achievements.
- A summary of upcoming work.

5. Summary progress to the 2004/05 financial year

Summary Comment

We have now completed year five of the implementation programme commenced in year 2000.

2004/05 saw the beginning of the big expenditure on the Hutt River with the construction of the Strand Park Realignment. In Kapiti effort was mainly orientated towards planning for the major physical works on both the Waikanae and Otaki Rivers due to commence in 2005/06 (Jim Cooke Park) and 2006/07 (Chrystalls Extended, South Waitohu).

Considerable effort also went into the repairs and follows up, required following the January 2005 flood, which was an 80 year return period event in the Waikanae and a 40 year return period event in the Otaki. Overall the protection works performed very well with only expected levels of damage to edge protection works etc.

Capital Expenditure Summary

	Total 40 year budget (\$M)	Expenditure 2004/05 (\$M)	Total expenditure to June 2005 (\$M)	Total expenditure to 2013 (\$M) (end of current LTCCP)
Hutt	\$78.00	\$3.62	\$6.00	\$24.90
Otaki	\$12.07	\$0.34	\$3.51	\$ 6.06
Waikanae	\$ 8.69	\$0.10	\$3.06	\$ 4.04
Total	\$98.76	\$4.06	\$12.57	\$35.00

Notes:

1. Hutt, Otaki and Waikanae budgets are based on 1999, 1998 and 1997 dollar values respectively.
2. Expenditure figures shown above have not been converted to floodplain management plan dollars (FMP\$).
3. Hutt expenditure excludes Ewen Floodway expenditure of \$15 million.
4. Otaki expenditure excludes Chrystalls bend realignment expenditure of \$1.4 million.

Attachments 1 – 3 provide a progress summary of implementing all three FMP's by project.

Progress towards completion

	% Complete to June 2005	Forecast % complete by June 2013	% complete in Benefit Terms to June 2005 (flood damages saved)
Hutt	6%	31%	0%
Otaki	26%	42%	54%
Waikanae	34%	46%	60%

Note: Percentage figures above have been converted to FMP \$

The table above summarises progress towards completion of all three floodplain management plans. The *percent complete in benefit terms* is related to the estimated flood damages saved with the implementation of each project. Large benefits have been obtained early by undertaking projects providing the greatest benefits first. At June 2005 12.5% of the 40 year implementation time had elapsed.

The percentage completed for the Waikanae and Otaki Rivers did not change over the last year, and will not show much improvement until construction of the major works currently being designed is completed. Once these works are completed the Kapiti Plans will be well advanced and there will be an opportunity to further review the implementation programme in light of the agreed 40 year target.

6. 2004/05 Financial year report

The 2004/05 work programme generally progressed to plan. All Hutt River projects programmed for the year were substantially completed. The floods in January 2005 did delay progress with some of the projects on the Kapiti Coast but these delays should be able to be made up.

6.1 Hutt River Floodplain management plan

Ava to Ewen project

The Strand Park river realignment was completed ahead of schedule and under budget. The river diversion, completed by the end of April 2005, involved shifting about 90,000 m³ material to realign the river and form the new right bank berm. About 31,000 tonnes of rock were used in edge protections. Despite the shortage of rock caused by the February 2004 flood the contractor managed to supply the required quantities on time from the Linton quarry near Palmerston North.

Design and draft tender documents for the Alicetown stopbank contract were reviewed and tenders were called in June 2005. The contract was awarded to Barry Foster Contracting Limited in August 2005.

Opus International consultants were appointed in October 2004 to complete the detailed design of the Ava Rail and Strand Park stopbanks. The information required for preparing the detailed design of the Opanu Pump station was provided.

Belmont improvements

Follow up works at Belmont including the groyne extension outside 11 Charles Street and the extension of the 900 mm stormwater pipe at the end of Charles Street were completed. The walkway ramps at Charles Street and Richard Street were improved and about 400 natives were also planted as part of the additional works. The design of the Norfolk Street floodgate was completed and the fabrication of floodgates commenced.

Whirinaki Crescent stopbank upgrade

The preliminary design for the Whirinaki Crescent stopbank is complete. The current proposal includes a floodwall on the Wellington golf club land to replace the north east section of the stopbank. An agreement outlining responsibilities between GWRC and WGC for the design, construction and maintenance of this floodwall was prepared.

Land negotiations with Upper Hutt City Council and the Silverstream College Board of Proprietors commenced. It was agreed that the existing stopbank land parcel, and any purchased, remain in UHCC ownership with an easement granted to GWRC for flood protection purposes.

Non-structural measures

Hutt City Council District Plan change No. 6: 'Hutt River Flood Hazard Areas' was notified and submissions closed on 22 April with nine submissions. Further submissions closed on 17 June 2005 with only one submission received. HCC officers are planning for a 'hearing' in December 2005.

The Upper Hutt City Council plan change consultation and notification by June 2005 was not able to be progressed in 2004/05.

By June 2005 14 of the 16 emergency management projects identified in the HRFMP were completed. Four projects were completed in 2004/05. Of the two remaining projects, one involves UHCC providing alert system in through Upper Hutt. UHCC will consider the funding of this project through its next LTCCP review. The other remaining project is to assess the wider economic impacts of flooding in the Hutt Valley. HCC is currently considering whether to proceed with this study.

6.2 Otaki River Floodplain management plan

SH1 to mouth edge works upgrade

A 260m extension to an existing rock lining below the Winstones Aggregate Processing Plant was constructed. The majority of the rock was trucked down

from Ohakune, as the Linton Quarry used in the past was unable to supply the rock.

Chrystalls Extended Stopbank.

Initial discussions were held with the two land owners affected by these works. The discussions focused on the alignment and programme. Formal land negotiations will not start until the 2005/06 financial year.

South Waitohu Stopbank

Initial discussions were held with the Porirua Trust Board and the farm managers to consider options for the stopbank. The design proper will not start until the 2005/06 financial year.

Flood hazard maps update

The main work undertaken this financial year has been the preparation of responses to submissions made to KCDC when the plan change was notified. The hearing for the plan change is now programmed for late November 2005.

6.3 Waikanae River Floodplain management plan

January 2005

A flood with an estimated return period of 80 years affected the whole of the Waikanae River on 6 January 2005. In Otaihanga 11 houses were flooded with many more having garages and ancillary building flooded. Extensive areas of land were also flooded and over 600 people were evacuated from the Waikanae Christian Holiday Park. The main bank edge protection works and stopbanks worked as designed with damage within expected levels for such a major event.

As a result of the flood Council brought forward the raising of three Otaihanga houses identified in the WFMP as requiring raising, and also assisted with the setting up of a local flood warning network.

Jim Cooke Park River realignment

The design, consents and tendering of the works were completed and a contractor appointed for construction. The works are programmed to be completed by June 2006. Additional budget of \$290,000 was approved for the works primarily to cover the increase in the price for rock rip rap which is now being trucked in from Ohakune. These higher prices will have an impact on the cost of the remaining bank edge protection improvements in the WFMP, as well as those in the Otaki and Hutt Rivers.

Flood hazard maps update

As with Otaki responses to submissions on the proposed Flood Hazard Map plan change have been prepared in preparation for the hearing in November 2005.

Friends of the Waikanae River Inc.

We are continuing to actively support the Friends of the Waikanae River (and the Otaki Friends) in their Waikanae Floodplain Management Plan monitoring role and, with the implementation of the Care Group projects initiated through the Environment Division.

7. Activities proposed over the next 10 years

The work to be undertaken over the next 10 years are currently being reviewed as part of the 2006-16 LTCCP process and will not be finalised until mid 2006. The draft plan proposes an increase over current expenditure levels allowing a number of major works to be brought forward. The works included in the current plan are set out in **Attachment 4**.

Hutt River

The Ava to Ewen reach and Hutt/Boulcott stopbank upgrades on the two major projects to be completed by 2013. Work will continue on the construction of the Ava to Ewen works including the Alicetown stopbank upgrade, Opahu pump station, Ava Railbridge edge works and Strand park stopbank. The Ava to Ewen project is on track for completion by June 2010.

Design of the new Hutt/Boulcott stopbank is now due to start in January 2006. The project, which involves difficult land matters, will be implemented in three phases. We aim to recommend a preferred new stopbank alignment to the Hutt River Advisory Committee by December 2006.

Two smaller projects, the Whirinaki Crescent stopbank upgrade and the Bridge Road edge protections, are scheduled to be completed by 2007 and 2010 respectively.

Otaki River

The key focus in Otaki over the next couple of years will be to complete the construction of the Chrystalls Extended and South Waitohu stopbanks. Construction of further sections of rock rip-rap bank edge protection is planned on the lower river. A start on the protection works for the cliff areas on the south bank upstream of the SH1 bridge is planned for 2012/13.

Waikanae River

2005/06 the main activity will be the construction of the Jim Cooke Park Realignment works. Once the realignment is completed the focus will be on the completion of the house raising in Otaihanga. The implementation of the Environmental Strategy and support for the Friends groups will also continue.

8. Communication

This report was written primarily for internal purposes. However, it is proposed to forward a copy to HCC, UHCC and KCDC for their information.

9. Recommendations

That the Committee:

1. *Receives the report.*
2. *Notes the contents of the report.*
3. *Notes that a copy of this report will be sent to Hutt City Council, Upper Hutt City Council and the Kapiti Coast District Council for their information.*

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- Attachment 1:** Hutt FMP summary progress table
Attachment 2: Otaki FMP summary progress table
Attachment 3: Waikanae FMP summary progress table
Attachment 4: Capital expenditure programme 2004-2013