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Committee Landcare
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Floodplain management plan implementation: annual progress report

1. Purpose

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

2. 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.

An initial report was presented to the Committee last year (report 02.622) which detailed progress towards completion of the Floodplain Management Plans and outlined the format for an annual report to the Committee.

3. Progress report format

This is the first annual report following the format outlined in report 02.622. The format of the report is still developing and will be refined as feedback is received. Our current thoughts are to structure the report as follows:

- To report progress against the 40-year implementation programme that commenced in the year 2000. This was the year that Council formally adopted the programme.
- To provide a more detailed review of the most recent years achievements.
- To provide a summary of upcoming work.

The key part of the report will be the report against the 40-year target. Our thoughts are to provide tracking information against the following three indicators:

- financial – total expenditure converted to floodplain management plan dollars¹ and shown as a percentage of the total project cost specified in the relevant floodplain management plan.
- physical – total quantity of work completed for each plan implementation element (e.g. length of stopbank) against the total quantity provided in the relevant floodplain management plan.
- benefits – measured in saved damages and shown as a percentage of total damages to be saved through each Floodplain Management Plan.

We have not reported in this level of detail for this year’s report but have simply provided a table of expenditure to date and a short description of the first three years achievements.

4. Summary progress to the 2002/03 financial year

We have now completed year three of the 40-year Floodplain Management Plan implementation programme commenced in year 2000.

Good progress has been made in implementing each of the plans, particularly the Kapiti plans due to the acceleration of capital improvements in response to the October 1998 and 2000 flood events. This means at the July 2000 start date for reporting purposes a significant chunk of Otaki and Waikanae works had already been completed.

Table 1 shows the expenditure to June 2003.

Table 1: Progress capital expenditure summary

	Total budget (\$M)	Expenditure 2002/03	Total expenditure to June 2003	Forecast expenditure to 2013
Hutt	\$78.00	\$0.46	\$1.02	\$24.70
Otaki	\$12.07	\$0.18	\$2.87	\$ 5.84
Waikanae	\$ 8.69	\$0.04	\$3.45	\$ 4.37
Total	\$98.76	\$0.68	\$7.34	\$34.91

Notes:

1. Figures shown above have not been converted to floodplain management plan dollars.
2. Hutt expenditure excludes Ewen Floodway expenditure of \$15 million.
3. Otaki expenditure includes Chrystalls bend realignment expenditure of \$1.4 million.

¹ Dollar value relevant to each Floodplain Management Plan estimate. Hutt, Otaki and Waikanae cost estimates are based on 1999, 1998 and 1997 dollar values respectively.

The Hutt River Floodplain Management Plan (HRFMP) is in its early stages of implementation, with construction yet to start. Designs, consents and tendering process to commence construction in the 2002/03 financial year were completed on time. However, we could not commence construction as planned due to the delay in the transfer of Strand Park. This delay will not have an impact on the completion date for the Ava to Ewen project (June 2010) set out in the HRFMP.

Overall the Otaki Floodplain Management Plan is now 26% complete when measuring expenditure against budget. In benefit terms, measuring flood damages saved, the project is 54% complete. Overall we still have a lot of work to do in Otaki with the Chrystalls extended stopbank upgrade being a major milestone.

The Waikanae Floodplain Management Plan is now 38% complete when measuring expenditure against budget. In benefit terms, measuring flood damages saved, the project is 60% complete. The Waikanae Plan is clearly the most advanced with about half the river management improvements completed and one (Kauri-Puriri) of the two major north bank stopbank upgrades completed. This year work commences on the Jim Cooke Park realignment, which will pave the way for the upgrade of the Jim Cooke Park stopbank.

Note the higher figures in benefit terms in the Otaki and Waikanae Floodplain Management Plans reflect the focus on projects that have the highest benefit cost ratio.

5. Progress during the 2002/03 financial year

The 2002/03 financial year performance was a mix of successes and disappointments. Construction of two significant capital construction projects, the Strand Park river realignment and the Otaihanga Domain floodwall did not commence. However, good progress was made on planning for the Belmont improvements and with the Hutt and Kapiti non-structural measures projects.

5.1 Hutt River Floodplain Management Plan

Ava to Ewen project

Construction of the Strand Park river realignment could not be commenced due to the land transfer delay. As a consequence of this the completion of Alicetown stopbank upgrade was also reset back by one year to June 2007. Note this still meets the completion date set out in the HRFMP. All other aspects of the Ava to Ewen project including the final design and selecting a preferred contractor for the Strand Park river realignment were completed on time.

Belmont improvements

Design and consents for edge protections were completed ahead of schedule. The necessary consent application was lodged on 27 May 2003. The long standing Belmont encroachments were also successfully resolved.

The Belmont house raising proposals were refined in consultation with affected homeowners. Out of thirteen homeowners eligible for house raising assistance five did not want their houses raised. The remaining eight were in Norfolk Street and these homeowners also did not want their houses raised, preferring a stopbank at the southern end of Norfolk Street. The stopbank option was adopted.

Non-structural measures

Our original programme for the year was to prepare plan change or variation applications for integrating the HRFMP non-structural measures into the Hutt City Council (HCC) and Upper Hutt City Council (UHCC) District Plans. The revised year-end target agreed with HCC and UHCC officers, and endorsed by the Hutt River Advisory Committee, was a set of draft provisions for each District Plan². Drafting of these new provisions was completed. Five emergency management projects and a flood hazard fact sheet were also completed.

Hutt River ranger

The Hutt River ranger service commenced on 14 October 2002 and a successful service was provided throughout the year.

5.2 Otaki River Floodplain Management Plan

SH1 to mouth edge works upgrade

The upgrade of the edge protection works in the lower Otaki River took a step forward with the completion a further 100m of rock rip-rap bank edge protection. In the end we completed a section upstream of the bridges, effectively an extension of the Stresscrete protection works undertaken as part of the October 2000 flood damage repairs. This ongoing programme of replacing the former Manawatu Catchment Board works is making a big difference with a noticeable increase in the security of the river alignment in this reach of the river. We are presently reviewing whether this increased security is appropriately reflected in the flood hazard maps (see below).

Otaki mouth lagoon

We completed construction of the hard landscape works for the Otaki mouth lagoon enhancement project, and commenced the environmental planting. The Friends of the Otaki River group took an active role in the planting and are continuing the work this year with their Care Group planting project.

² The target was revised to allow Hutt City Council and Upper Hutt City Council to implement measures in accordance with their planning programme rather than having to respond to a plan change or variation application from Greater Wellington.

Flood hazard maps update

Considerable time and effort was put into updating the flood hazard maps to reflect the benefits of the works constructed since the maps were first produced in 1995. The mapping work was completed and forwarded to the Kapiti Coast District Council (KCDC). KCDC has started consultation with the Kapiti Community as the first step in the formal District Plan change process. The consultation with the Otaki community has raised several important issues with the new flood maps that will need to be followed up over the coming year.

We had proposed to organise a flood response exercise at Rangiuru in conjunction with KCDC emergency management staff. However, priority had to be given to the flood hazard maps work. The District Plan change consultation has served to ensure that flood awareness is being maintained at a high level.

5.3 Waikanae River Floodplain Management Plan

Otaihanga floodwall

The main Waikanae construction project programmed for the year ending June 2003 was the floodwall adjacent to the Otaihanga Domain – Stage 3 of the Otaihanga road raising project. Construction of the wall has been delayed.

Considerable effort went into consultation with adjacent residents, KCDC and the Otaihanga community over a preferred option for the Stage 3 improvements. In the end the preferred option is a free-standing floodwall adjacent to the Otaihanga Domain. The necessary resource consents have been obtained, and KCDC have approved the design in principle but they have not yet given their agreement as landowner to the works being constructed on Road Reserve. KCDC are seeking an indemnity against any liability the wall may present and the lawyers have yet to agree a suitable wording to such an agreement. The works have been rebudgeted into the 2003/04 financial year and construction is due to start in November 2003.

Flood hazard maps update

As with the Otaki, considerable time and effort has been spent updating the flood hazard maps to include the benefits of the works constructed since the maps were first produced in 1995.

Friends of the Waikanae River Inc.

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

6. Activities proposed in the next 10 years

Attachment 4 is a copy of the capital expenditure programme included in the Flood Protection 2003-2013 Operating Plan.

Hutt River

The two major projects are the upgrade of the Ava to Ewen reach (\$15.3M) and the construction of the new Hutt/Boulcott stopbank (\$5.8M).

The Ava to Ewen project has now all but reached the construction phase, with most design, land and consent issues resolved. This work has taken three years.

The Hutt/Boulcott project will involve difficult land matters and will require extensive consultation to find an option acceptable to adjacent residents and the two affected Golf Clubs. We have also allowed three years for this work.

The first of the smaller projects included in the 10-year programme of work, the Belmont improvements, is proceeding very well. The delay in the commencement of the Strand Park construction has also provided an opportunity to get an early handle on design and land issues associated with the proposed upgrade of the Whirinaki Crescent stopbank.

Otaki River

Key works over the next 10 years are summarised as follows:

A further 500m of rock rip-rap bank edge protection in the lower river	\$0.54M
Construction of the South Waitohu stopbank	\$0.49M
Construction of the Chrystalls extended stopbank plus environmental	\$1.36M

Waikanae River

Key works over the next 10 years are summarised as follows:

Jim Cooke Park river realignment plus environmental enhancements	\$0.74M
House raising in Otaihanga	\$0.23M

7. 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.

8. Recommendations

That the Committee:

1. *receive the report.*
2. *note the contents of the report.*
3. *note the proposed reporting format outlined in Section 3 of the report.*
4. *note 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 2003–2013