



Report **04.491**
Date 8 August 2004
File N/50/01/15

Committee **Landcare**
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Floodplain Management plan implementation: Annual progress report 2004

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.

This is the second annual progress report presented to Landcare with an initial report presented to the Committee in 2002 (Report 02.622) and then the first annual report in 2003 (Report 03.486).

3. Progress report format

This is the second annual report following the format outlined in report 03.486. The format of the report is still developing and will be refined as feedback is received. 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.
- Providing a more detailed review of the most recent year's achievements.
- Providing a summary of upcoming work.

4. Summary progress to the 2003/4 financial year

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

Good progress has been made in implementing each of the plans. The two Kapiti plans are well ahead of schedule 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 a significant chunk of Otaki and Waikanae works had already been completed. Further impetus towards completing the Otaki Plan was made with KCDC agreeing to fund an increased local share of the Chrystalls Extended stopbank costs allowing it to be brought forward 3 years from that previously planned.

In the Hutt, construction works on the major Ava to Ewen project has commenced and a smaller project, the Belmont improvements, was substantially completed. The HCC District Plan change process has also commenced.

Table 1 shows the expenditure to June 2004.

Table 1: Progress capital expenditure summary

	Total 40 year budget (\$M)	Expenditure 2003/4 (\$)	Total expenditure to June 2004 (\$)	Total expenditure to 2013 (\$) (end of current LTCCP)
Hutt	\$78.00	\$1.37	\$2.39	\$24.50
Otaki	\$12.07	\$0.12	\$3.17	\$ 5.92
Waikanae	\$ 8.69	\$0.15	\$2.96	\$ 3.96
Total	\$98.76	\$1.64	\$8.52	\$34.38

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.
3. Hutt expenditure excludes Ewen Floodway expenditure of \$15 million.
4. Otaki expenditure includes Chrystalls bend realignment expenditure of \$1.4 million.

Table 2 below summaries 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. The higher benefits have been obtained by undertaking of the projects, providing the greatest benefits first.

Table 2: Progress towards completion

	% Complete to June 2004	Forecast % complete by June 2013	% complete in Benefit Terms to June 2004 (flood damages saved)
Hutt	3%	31%	0%
Otaki	24%	42%	54%
Waikanae	33%	46%	60%

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

The Hutt River Floodplain Management Plan (HRFMP) is in its early stages of implementation at 3 % complete based on the expenditure. The target to June 2004 was 3.4%. The shortfall is mainly due to rock supply delays caused by February 2004 floods.

Overall the Otaki Floodplain Management Plan is now 24% complete when measuring expenditure against budget. Next year will again be a relatively quiet year but the bringing forward of the Chrystals Extended work to start in 2005/06, combined with the South Waitohu works starting in the same year will see accelerated progress with the OFMP.

The Waikanae Floodplain Management Plan is now 33% complete when measuring expenditure against budget. Work is now progressing on the Jim Cooke Park Realignment which will put the WFMP at 46% complete by 2013.

5. Progress during the 2003/4 financial year

The 2003/4 financial year performance generally progressed to plan. The floods in February 2004 did delay progress with some of the projects but these delays should be able to be made up.

5.1 Hutt River Floodplain management plan

Ava to Ewen project

A solid start was made with the Strand Park river realignment contract during the 2003/04 financial year. The viewing platform was completed and about 1300 tonnes of rock riprap was delivered to site. Rock delivery was slower than expected. At this stage we remain reasonably confident that the contract will be completed by August 2005.

A concept design for the Opahu Stream pump station was completed on target. GWRC has granted resource consents for the pump station. Detailed design for

the Ava Bridge stopbank upgrade and pump station is on track for completion during the 2004/05 financial year.

Belmont improvements

All planned structural and environmental works were completed by June 2004 on time and within budget. The structural works included edge protection works along an 850 metre length of the river and a stopbank with a gap at the southern end of the Norfolk Street. However, this project has to be continued through the 2004/05 financial year to complete minor additional works necessary to address community concerns over remaining flooding and erosion hazards following completion of the substantive works.

Whirinaki Crescent stopbank upgrade

The preliminary design for the Whirinaki Crescent upgrade was substantially completed by the end of June 2004. The preliminary design was originally planned to commence during the 2005/06 financial year. However, this was advanced to 2003/04 due to spare staff capacity. Land negotiations with the Wellington Golf Club and Silverstream College Board of Proprietors will continue during the 2004/05 financial year. The project is on track for construction during 2006/07.

Non-structural measures

Substantial progress was made in implementing the non-structural measures.

Pre-notification consultation on HCC District Plan measures started in May 2004. The Belmont community has significant concerns over the remaining hazards following the completion of works. We are currently investigating the issues raised by the community. We expect HCC will formally notify the proposed district plan changes during the 2004/05 financial year.

Preliminary work for the proposed UHCC district plan changes were completed. The UHCC district plan is expected to be operative from September 2004 and we expect the plan change process to commence during the latter part of 2004/05.

Five out of the six emergency management projects programmed for the 2003/04 financial year were completed. A flooding hazard fact sheet for Hutt Valley was produced as part of the voluntary action programme.

5.2 Otaki River Floodplain management plan

SH1 to mouth edge works upgrade

The works under this category involved the construction of a 100m extension to an existing rock lining below Chrystalls Bend. This section of work is above SH1 but was seen as the most critical area requiring strengthening. Approval for the works in this reach was given by the Landcare Committee at its September 2003 meeting. Problems with the supply of rock riprap and the need for urgent repairs following the February 2004 floods meant that the works

were not completed. The rock riprap was supplied but not placed as there was insufficient time before the beginning of the trout spawning season at the end of May. It is proposed to place the rock in early the 2004/05 financial year. In addition, there is budget in the 2004/05 for a further 200m of rock riprap. This rock will be placed in the reach immediately below the Winstones Aggregate processing plant.

Winstones walkway

This project involved the construction of a pedestrian walkway on the river side of the Winstones Aggregates processing plant. The walkway enables public access from SH1 to the mouth on the right bank of the Otaki River. The main construction was finished but further tidy up works and planting is required to complete the work. The works were delayed due to the need to complete the in channel flood repairs following the February 2004 floods.

Flood hazard maps update

Considerable time and effort was put into further refining the Kapiti Flood Hazard Maps. A draft version of the new maps was sent out to all of the affected community for their comments. We then evaluated and prepared responses to all of the individuals who had written in about the information. In addition to this, a community meeting was held to provide feedback on the general issues that had been raised.

The primary issue to be dealt with was the community desire to bring the construction of the Chrystalls Extended stopbank forward. KCDC forwarded a proposal to Greater Wellington to bring the design and construction forward 3 years starting 2005/06. This proposal has been accepted and the necessary changes to the Flood Protection Operating Plan made. There will be considerable pressure on staff resources in the 2005/06 financial year with three major capital projects being underway at one time.

5.3 Waikanae River Floodplain management plan

Otaihanga floodwall

The main Waikanae construction project for the year ending June 2004 was the construction of the floodwall adjacent to the Otaihanga Domain, the third stage of the Otaihanga road raising project. Construction of the wall has been completed.

Jim Cooke Park River realignment

The design of this river realignment has commenced. The land requirements have been identified and an agreement to purchase the necessary private land reached. The preferred channel alignment has been finalised and three options for bank edge protection prepared. The major interest groups have been consulted with over the options. Their feedback has been sought for input into the decision making process to select the bank edge protection approach. Generally the group's preferred rock groynes over long lengths of rock riprap for maintaining the river alignment.

Discussions with the Environment Division indicate that the consent can proceed non notified so a start to construction should be able to be made in the 2004/05 financial year as programmed. The supply of rock riprap is however a concern and may affect the final construction programme. The supply will have to consider the Hutt River commitment and work being undertaken by Horizons Regional Council.

Flood hazard maps update

As with the Otaki, considerable time and effort has been spent updating the flood hazard maps following the community consultation.

Friends of the Waikanae River Inc.

We are 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 to 2012/13

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

Hutt River

The Ava to Ewen reach and Hutt/Boulcott upgrades continue to be the two major projects to be completed by 2013.

The Ava to Ewen project will be implemented in four packages. Construction of the first package, the Strand Park realignment has commenced. Draft tender documents for the second package, the Alicetown stopbank upgrade, are ready and tenders will be invited during the latter part of 2004/05. Detailed designs for the remaining two packages, Ava Bridge improvements and Strand Park stopbank, are on track for completion in 2004/05.

The Hutt/Boulcott project is scheduled to commence in 2007/08. This project will involve difficult land matters. We will continue to work with Hutt and Boulcott Golf clubs on these matters until projects formally commence in 2007/08.

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

Otaki River

Key works up to 2012/13 are summarised as follows:

A further 400m of rock rip-rap bank edge protection in the lower river	\$0.64M
Construction of the South Waitohu stopbank	\$0.49M
Construction of the Chrystals extended stopbank plus environmental	\$1.30M
Start Southbank protection work	\$0.23M
Environmental Strategy implementation	\$0.09M

Waikanae River

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

Jim Cooke Park river realignment plus environmental enhancements	\$0.65M
Environmental Strategy implementation	\$0.12M
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 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