

Report 08.722
Date 24 September 2008
File N/50/01/05

Committee Catchment Management
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Floodplain Management Plan Implementation: Annual progress report to June 2008

1. Purpose

To advise the Committee on progress made to June 2008, implementing the Hutt, Otaki, Waikanae Floodplain Management Plans (western FMPs) and the Lower Wairarapa Valley Development Scheme (LWVDS) upgrade.

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

This is the sixth annual report on the implementation of the western FMPs. This year we have combined the western FMP's and Wairarapa capital works so as to have a single report for flood protection.

Western FMPs

The Hutt, Otaki and Waikanae Floodplain Management Plans (western FMPs) completed in 2001, 1998 and 1997 respectively, recommend structural, non-structural and environmental measures to reduce the flood risk to the respective floodplains and improve the environment. Greater Wellington has adopted a 40-year time frame to fully implement the three FMPs at a total cost of \$98M. Implementation of the FMPs commenced in 2000 and a total of \$24.7 million has been spent up to the end of June 2008. The Flood Protection, 2008-2016 Operating Plan provides a further \$31 million for implementing the three FMPs.

LWVDS

A major review of the LWVDS completed in 2006 recommended a structural upgrade programme to improve the security of the flood defences in the lower valley. The proposed works costing \$7.82 million generally involve

strengthening river bank protections and upgrading of stopbanks on the Ruamahanga and Tauherenikau rivers. Implementation commenced in 2007/08 and Greater Wellington has adopted a 10 year time frame to fully implement the works programme.

4. Summary progress

The FMP implementation is progressing well with the target of completing the western projects by 2040 and the LWVDS by 2017. **Attachments 1 to 4** provide a summary by project of the progress in implementing these projects. The tables below show the summary of financial progress to date and the expected achievements by 2016. The progress, shown as 'percent complete' to June 2008 and the forecast to 2016 was computed by discounting current dollars to dollars at the time of adoption of the respective FMPs.

River	Total 40 year budget (\$M) ¹	Expenditure in 2007/08 (\$M) ²	Expenditure to June 2008 (\$M) ²	Total expenditure forecast to 2016 (\$M) ²
Hutt	78.00	3.46	15.41	42.6
Otaki	12.07	1.32	5.16	8.2
Waikanae	8.69	0.06	4.16	5.3
Total western FMPS	98.76	4.84	24.73	56.1
LWVDS	7.82	0.87	0.87	7.1
Total	106.58	5.71	25.60	63.2

Notes:

1. Hutt, Otaki, Waikanae and LWVDS budgets are based on 1999, 1998, 1997 and 2007 dollar (FMP dollars) values respectively
2. Expenditure figures have not been converted to FMP dollars.

River	FMP dollars		% Complete		% complete in benefit terms to June 2008 (Flood damages saved)
	Total 40 Year budget (\$M)	Expenditure to June 2008 (\$M)	Actual to June 2008	Forecast to June 2016	
Hutt	78	11.31	14.5%	37%	See note below
Otaki	12.07	4.22	35%	51%	54%
Waikanae	8.69	3.69	42%	50%	68%
LWVDS	7.82	0.87	11%	75%	

Note:

3. The completion of all stopbanks on the true left bank of the Hutt River from the Ava Rail Bridge to Kennedy Good Bridge are required to realise 40% of the flood damages saved benefits.

4.1 Non-structural measures

Hutt and Kapiti flood hazard information has been included in Hutt City and Kapiti district plans. The Kapiti flood hazard has been amended to reflect the reduced flood risk from Chrystalls extended and Jim Cook realignment works. Providing free advice on flood hazards to the public is continuing on an ongoing basis. We are still working with UHCC to get the relevant information into their District Plan.

4.2 Structural measures

4.2.1 Hutt River

By the end of June 2008, \$15.4 million had been spent in implementing the Hutt River FMP. The project is now about 14.5% complete and progressing well.

The Belmont project is complete and the Ava to Ewen project is about 80% complete and is on track for completion by 2010. The Whirinaki Crescent stopbank upgrade is about 95% complete and the remaining 50 metres will be completed by February 2009. Greater Wellington has adopted a preferred alignment for the Boulcott/Hutt stopbank with work expected to be completed by 2013. No work has started on the City Centre works at this stage.

4.2.2 Kapiti Rivers

By the end of June 2008, \$9.3 million had been spent in implementing the Kapiti FMPs. Implementation of the Otaki and Waikanae FMPs is now 35% and 42% complete respectively. In Otaki, the Chrystalls stopbanks, the Rangiuru floodgates, the Mangapouri culverts and about 50% of the river management works upstream of SH1 are complete. In Waikanae the Kauri Puriri works, Otaihanga Road raising and Jim Cooke Park realignment are complete.

4.2.3 LWVDS

Implementation of the LWVDS commenced in 2007/08. All works programmed for 2007/08 amounting to about 11% of the total project were completed. The total expenditure to June 2008 is \$0.8 million.

4.2.4 Environmental enhancement works

Significant environmental enhancement works have been completed with all the above capital projects. Environmental Strategies have been completed for the Hutt Otaki and Waikanae Rivers. These strategies generally include

planting native trees, improving existing walkways or providing new walkways and general landscaping.

5. 2007/08 Targets and achievements

Significant progress was made on all FMP projects during 2007/08. A total of \$5.71 million was spent during the year. The highlights for 2007/08 are summarised below.

Western FMPs

In the Hutt the \$3 million Ava Rail stopbank reconstruction and waterway upgrade contract was completed on time and within budget. Stage 1 planting of the Opahu Stream inanga spawning habitat project was completed. A \$2 million contract was let for the last stage of the Ava to Ewen project, the Strand Park stopbank reconstruction. Stage 2 of the Whirinaki Crescent stopbank upgrade was completed bringing the total length completed to 875 metres out of the 925 metre long stopbank. The Boulcott/Hutt stopbank reached a major milestone with Greater Wellington adoption of a preferred alignment for the proposed stopbank. A risk assessment of Maoribank bed degradation was completed and an option assessment commenced. River Ranger services were continued throughout the year and well received.

In Kapiti, the Chrystalls stopbank project was completed on time and well below the budget. Walkways and planting associated with the stopbank project were completed with the participation of Otaki Friends. The preliminary design for the South Waitohu stopbank was completed and agreement in principle was reached with the Porirua Trust Board to obtain the required land easements for construction. The Howarth land purchase, a part of the process for transferring Waikanae River Corridor land to public ownership, was completed.

LWVDS

The development works programme started in 2007/08. The budget for that year was \$870,000. Work completed included shifting 350m of stopbank at Tim Wall's, extension of 380m of rock berm at Butcher's, boulder groynes at 5 locations and boulder rip rap protection to 990m on the Ruamahanga River. 1400 metres of stopbank on the Tauherenikau River was also upgraded.

6. 2008/09 works programme

Western FMPs

The total western FMP budget for 2008/09 is \$4.7 million. The key western FMP projects for 2008/09 include;

- Working with UHCC to complete a district plan change to include the revised Hutt flood hazard in the Upper Hutt district plan
- Completing the Strand Park stopbank reconstruction project

- Completing the South Waitohu stopbank project
- Completing the edge protections in the Waikanae River adjacent to the Otaihanga Boating Club
- Obtaining resource consents and completing the remaining 50 metres of the Whirinaki Crescent stopbank
- Progressing the land negotiations, detailed design and statutory approvals for the Boulcott/Hutt stopbank project
- Completing the Chrystalls extended land purchase
- Completing the Maoribank river bed stabilisation investigations
- Working with the Waikanae and Otaki Friends on environmental projects including the restoration works at Dricon and Chrystalls Bend sites

We are also aiming to complete the 10 year review of the Waikanae Floodplain Management Plan

LWVDS

The total LWVDS budget for 2008/09 is \$0.75 million. The key projects for 2008/09 include;

- Rock berm, boulder groynes and rip rap protection in Ruamahanga River
- Upgrade of the stopbank on the Tauherenikau River
- Planting/fencing in the Tauanui River

7. Activities proposed over the next 10 years

The works to be undertaken over the next 10 years are currently being reviewed as part of the 2009-2019 LTCCP and will not be confirmed until mid 2009. The draft plan proposes to spend more than \$42 million over the 10 year period to complete the key FMP projects in the western rivers and the Wairarapa. **Attachment 5** contains a list of projects planned for completion during the 10 year period. In addition to these structural works we will continue with non-structural measures which include refining flood hazard assessments, initiating district plan changes to include the flood hazard and providing advice to public on flood hazard.

These projects are aimed to achieve a significant reduction in flood risk to the regional community.

8. Communication

Communication initiatives are in place for all FMP projects. This report was written primarily for internal purposes. However, a copy of this report will be sent to HCC, UHCC, KCDC for their information.

9. Recommendations

That the Committee:

1. **Receives the report.**
2. **Notes the content of the report.**

Report prepared by:

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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: LWVDS summary progress table
- Attachment 5: Proposed capital works 2009-2019