

Report	09.646
Date	11 November 2009
File	N/50/01/05

Committee Catchment Management Committee Author Daya Atapattu Team Leader, Western FMPs

# Floodplain Management Plan Implementation: Annual progress report to June 2009

## 1. Purpose

To advise the Committee on progress made to June 2009, 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 seventh annual report on the implementation of the western FMPs and the second annual report on the Wairarapa capital works.

## Western FMPs

The Hutt, Otaki and Waikanae Floodplain Management Plans (Western FMPs) were completed in 2001, 1998 and 1997 respectively. They 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 \$28 million has been spent up to the end of June 2009. The Flood Protection, 2009-2019 Operating Plan provides a further \$41 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

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 implementation progress. The tables below show the summary of financial progress to date and the expected achievements by 2019. The progress, shown as 'percent complete' to June 2009 and the forecast to 2019 was computed by discounting current dollars to dollars at the time of adoption of the respective FMPs.

River	Total 40 year budget (\$M) <sup>1</sup>	Expenditure in 2008/09(\$M) <sup>2</sup>	Expenditure to June 2009 (\$M) <sup>2</sup>	Total expenditure forecast to 2019 (\$M) <sup>2</sup>
Hutt	78.00	2.88	18.3	52.9
Otaki	12.07	0.23	5.4	9.87
Waikanae	8.69	0.16	4.33	6.44
Total western FMPS	98.76	3.27	28.03	69.21
LWVDS	7.82	0.75	1.62	8.3
Total	106.58	4.02	29.65	77.51

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 d	lollars	% Complete		% complete in	
	Total 40 Year budget (\$M)	Expenditure to June 2009 (\$M)	Actual to June 2009	Forecast to June 2019	benefit terms to June 2009 (Flood damages saved)	
Hutt	78	13.05	17.0%	44%	20%	
Otaki	12.07	4.34	36%	58%	54%	
Waikanae	8.69	3.79	44%	58%	68%	
LWVDS	7.82	1.62	21%	100%		

#### 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 and are programmed to be completed by 2019. However, some benefits accrue from the partial completion of each section.

## 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 the Chrystalls stopbank and Jim Cooke realignment works. Providing 'free' advice on flood hazards to the public is continuing on an ongoing basis. UHCC officers have commenced the process for a district plan change to update the existing planning controls in the unprotected areas of the Hutt River floodplain to bring them in line with the HRFMP.

## 4.2 Structural measures

## 4.2.1 Hutt River

By the end of June 2009, \$18.3 million had been spent in implementing the Hutt River FMP. The project is now about 17% complete and progressing well.

The Belmont project is complete and the Ava to Ewen project is substantially complete. The Whirinaki Crescent stopbank upgrade is about 95% complete and the remaining 50 metres will be completed by Christmas 2009. The detailed design and the preparation of designation consent applications for the Boulcott/Hutt stopbank is progressing. The Boulcott/Hutt stopbank is scheduled for completion by 2013. Two properties at the end of Mills Street required for the City Centre stopbank construction were purchased. The detailed design for the City Centre stopbank will commence in 2012/13.

## 4.2.2 Kapiti Rivers

By the end of June 2009, \$9.7 million had been spent in implementing the Kapiti FMPs. Implementation of the Otaki and Waikanae FMPs is now 36% and 44% 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, Jim Cooke Park realignment and part of Otaihanga edge protections are complete.

## 4.2.3 LWVDS

Implementation of the LWVDS development works programme commenced in 2007/08. All works programmed up to 2008/09 amounting to about 21% of the total project were completed. The total expenditure to June 2009 is \$1.62 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.

## 4.3 FMP reviews

All three western FMPS have adopted a 40 year timeframe to fully implement with reviews proposed every 10 years. The review of the Waikanae FMP commenced in 2008/09. Stage 1, review and evaluate the FMP, was completed by June 2009. The review will be completed by June 2010. Otaki FMP review will also commence in March 2010.

# 5. 2008/09 Targets and achievements

Significant progress was made on all FMP projects during 2008/09. A total of \$4 million was spent during the year. The highlights for 2008/09 are summarised below.

## Western FMPs

In the Hutt, the \$2.8 million Strand Park stopbank reconstruction was substantially completed on time and about \$1 million under budget. Good progress was made in the detailed design for the Boulcott/Hutt stopbank and consultation with the affected residents and the two golf clubs. Following consultation, the designs were amended at key locations to reduce the impacts on adjoining residential properties. Preparation of the designation application was also commenced. The Maoribank investigations were completed and the resource consents required to complete the remaining 50 metres of the Whirinaki Crescent stopbank were obtained.

In Kapiti, the maintenance and tidying up works of Chrystalls stopbank including the second foot bridge were completed. The land purchase negotiations for the LINZ land between SH1 and Chrystalls continued. In March 2009, the Catchment Management Committee considered the consultation outcomes on the South Waitohu stopbank and deferred construction until it can be taken up with Convent Road works in 2010/11. In Waikanae, the Jim Cooke Park foot Bridge was completed by KCDC with financial assistance from GW, Transpower and Lions. The property at 17 Makora Road was raised and part of the Otaihanga edge protections was completed.

## LWVDS

The budget for 2008/09 was \$753,000. Work completed included edge protection work at Tim Wall's and the removal of the old stopbank, an extension of 270m of rock berm at Butcher's, boulder groynes at 3 locations

and boulder rip rap protection to 980m of the Ruamahanga River. 1150 metres of stopbank on the Ruamahanga and Tauherenikau Rivers were also upgraded.

Total amount of Major Works carried out up to 30 June 2009 are:

•	Shifting of stopbanks	-	308 m
•	Upgrading of stopbanks	-	2,565 m
•	Boulder rip rap protection	-	2,539 m
•	Rock berm	-	650 m
•	Boulder groynes	-	61 constructed

# 6. 2009/10 works programme

## Western FMPs

The total western FMP budget for 2009/10 is \$2.6 million. The key western FMP projects for 2009/10 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 Ava to Ewen project
- Completing the detailed design and lodging designation/consent applications for the Boulcott/Hutt stopbank project
- Completing the Whirinaki Crescent stopbank project
- Completing urgent works at the Maoribank bend of the Hutt River
- Completing the detailed design, consents and negotiations with NZTA for the proposed edge protections at Ebdentown, Upper Hutt.
- Completing edge protections below Chrystalls in Otaki
- Completing land purchase at Chrystalls in Otaki
- Completing Waikanae FMP review and commencing Otaki FMP review
- Contribute to the raising of Otaihanga Boating Club house
- Progressing with environmental enhancement works

## LWVDS

The total LWVDS budget for 2009/10 is \$0.77 million. The key projects for 2009/10 include:

- Completing land purchase at Tauanui Delta area (15 ha)
- Completing native shrub planting on the lower Ruamahanga River for wave damage erosion protection and biodiversity purposes
- Undertaking rock berm, boulder groynes and rip rap protection on the Ruamahanga River

## Waiohine FMP

• Progress the development of the Waiohine FMP

# 7. Activities proposed over the next 10 years

Attachment 6 from the 2009-2019 LTCCP shows the 2009-2019 capital works programme for implementing the western FMPs, LWVDS and other flood protection projects. The programme also includes completing the UHCC plan change and consultation with KCDC to develop measures for further refining land use controls on the floodplains.

## 7.1 Hutt

The programme provides for completing all stopbanks on the left bank from Kennedy Good Bridge to Ava Rail Bridge to provide the HRFMP recommended standard of protection to the Hutt CBD. The Boulcott/Hutt stopbank, which is a component of this project, is programmed for completion by 2013. Upper Hutt projects including Maoribank bed stabilisation, Ebdentown and Bridge Road edge protections will be completed.

## 7.2 Waikanae

In Waikanae, the Jim Cooke Park stopbank project will be completed by 2016. The house raising and further environmental enhancement works will continue through the period.

## 7.3 Otaki

The programme provides for completing the Convent road improvements combined with South Waitohu stopbank, land purchase and North stopbank improvements by 2014. The programme also provides for further bank edge protection works and environmental enhancement works to be completed from the mouth to the Otaki Gorge.

## 7.4 Wairarapa

The programme provides for completing the LWVDS development works by 2016/17 and the Waiohine FMP works by 2014.

# 8. Communication

This report was written primarily for internal purposes. However, a copy of this report will be sent to HCC, UHCC and KCDC for their information.

# 9. Recommendations

That the Committee:

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

Report prepared by:

Report approved by:

Report approved by:

Enne Coffee

Daya Atapattu Team Leader, Western FMPs Graeme Campbell Manager, Flood Protection

Wayne O'Donnell Divisional Manager, Catchment Management

Attachment 1: Hutt FMP summary progress table Attachment 2: Otaki FMP summary progress table Attachment 3: Waikanae FMP summary progress table Attachment 4: Wairarapa Projects - LWVDS summary progress table Attachment 5: Waiohine summary progress table Attachment 6: Flood Protection Capital expenditure programme 2009 – 2019