

Report	15.288
Date	23 June 2015
File	WO/06/01/03-v1
Committee	Te Kāuru Upper Ruamahanga River Floodplain Management Subcommittee
Author	George Harley, Project Engineer

# Te Kāuru Upper Ruamāhanga Project Manager's Report June 2015

### 1. Purpose

This report outlines the general progress of Te Kāuru Floodplain Management Plan (FMP), as well as outlining other flood protection activities being undertaken within the catchment area by Greater Wellington Regional Council (GWRC).

#### 2. Progress

The project is progressing well against the programme attached to this report. There have been no additional delays to the programme.

### 3. Masterton Flood Hazard

Due to its concerns about the flood mapping produced by GWRC, Masterton District Council (MDC) commissioned an analysis by NIWA into aspects of the Waipoua River flood hydrology that were done by Pattle Delamore Partners (PDP) on behalf of GWRC. This analysis focussed in particular on the flood frequency for the gauge site at Mikimiki bridge.

GWRC subsequently raised concerns about the work done by NIWA and has been in discussions with both MDC and NIWA about this. To some degree this reflects difference in how flood hazard is described and presented.

MDC and GWRC have agreed to work together towards a 100-year plus climate change standard of protection for Masterton. The core findings of the NIWA analysis are not significantly different from the PDP analysis. In particular, small differences in flow estimations lead to bigger differences in estimating return periods – the range of estimates for the 1998 event was between 36 years (PDP) and 75 years (NIWA) but the actual difference in flows was small. This highlights some of the uncertainties that are inherent in flood hydrology and that we must take account of when mapping flood hazard.

We will be working with MDC staff to carry out some limited further hydrology investigations, including setting up an additional flow gauging site, to reduce some of the remaining uncertainties. Any changes will be reflected in the hydraulic modelling for design of the preferred option combination later this year.

MDC has responsibility for land use management and building controls. On the basis of the technical work to date, MDC considers that Masterton is currently protected to a 50-year standard and is currently considering what information to put on LIMS and what level of building controls it will require in the Masterton urban area.

### 4. Homebush residents group presentation and submission

At the meeting held on 21 April 2015, a presentation was given by resident Steve Blakemore. This presentation and written submission raised concerns held by a number of Homebush residents regarding river management practices and the impacts that these may be having on the bed levels of the river and adjacent groundwater levels, which may be causing private bores and a local stream to run dry during summer low flow months.

A meeting was held on 21 April 2015 between the Homebush residents and GWRC, where the residents raised their concerns and observations around the lowering ground water table and issues this was having, concluding that the situation may be attributable to river management activities, specifically around gravel extraction.

GWRC gave a presentation to the residents in which the following points were noted;

- Gravel extraction may be one contributing factor to the groundwater situation. To what extent is uncertain. Further investigation is needed.
- Gravel extraction is one river management tool.
- Rock armouring the bank edges is also contributing to the degrading river bed.
- There is a conflict between the scheme's river management expectations and the adjacent community's expectations, that is, the scheme seeks to control river alignment and erosion and the adjacent community wishes to maintain a stable groundwater table.

The group of those present were unanimously supportive of the following initiatives:

• Gravel extraction should cease in the Te Ore Ore reach of the Ruamahanga River.

• The Te Kauru Floodplain Management Plan should put in place effective systems to ensure that the stable groundwater table is of equal importance to any other flood protection/river control objectives.

Follow up action from GWRC was noted to include:

- Temporary cessation of gravel extraction in the reach, until such time that river changes require extraction again.
- The concerns and discussion of the meeting will be tabled for consideration at the next Te Kauru Floodplain Management Plan Sub-committee.
- The GWRC Environmental Science team will be made aware of the concern and discussion of the meeting.

# 5. River Management Scheme Meetings

The River Management Scheme meetings were held at the start of June. At these meetings the Project Team presented an update to the committees on the progress of the TKURFMP.

Discussion was also initiated around future governance of the schemes and the implementation of the FMP.

### 5.1 Future Governance

The Scheme Meetings represented an opportunity to initiate discussion around future governance of the schemes following development of the FMP and for its subsequent implementation.

A new governance framework should be investigated to ensure that river management activities have wider representation across the community, reflect a wider range of values, incorporate requirement for FMP implementation and in general improve operational efficiency.

The current FMP subcommittee was established to facilitate development of the FMP; however, at this time its role does not extend into delivery of the FMP. An outcome of the FMP will be to recommend the governance structure for delivery.

June 2015	Initiate discussion		
August 2015 - March 2016	Development of options for governance		
June 2016	Selection of preferred governance option		
June 2017	Earliest implementation date for new		

A timetable was presented outlining the process to be followed;

governance structure

### 5.2 Vision and Aims

The approved FMP Vision and Aims were presented at each of the Scheme Meetings. The Scheme Members appeared generally supportive although it was noted by one individual that explicit use of the word erosion was limited and that in terms of Scheme interests, erosion management represented the most important area of concern.

### 5.3 River Management Issues

The Schemes debated the allocations for general rates and reserve fund contributions. The following table show the proposed and agreed rate structure for 2015/16.

River Scheme	Budget (15/16)	Rate increase	Comments
Mt Bruce	\$116,500	4%	Aerial spraying to be considered (Veg control on beaches) – potential management option not currently used. FMP should consider
Te Ore Ore	\$155,000	4%	
Gladstone	\$170,000	4%	Confirm how overhead component is apportioned and how annual increases are split Buffer development on
	<u> </u>	40/	true right bank (XS204.5)
Waipoua	\$18,500 (urban) \$104,000 (rural)	4%	Discussion around '4' rated assets and the trees in stopbanks – FMP to provide guidance on this. Minimise ripping as a management tool Weed maintenance
Waingawa	\$185,000	4%	-
Kopuaranga	\$25,000	85%	Discussion was held around how FMP should

			engage landowners upstream of scheme. FMP Project Team will look into this.
Whangaehu	\$7,000	4%	-
Taueru	\$5,500	4%	-

### 5.4 Scheme Engagement

It was identified during the Scheme Meetings that there is a need to increase the level of engagement with River Management Scheme Members. This has been noted and a strategy to achieve this will be incorporated in an updated Engagement Plan.

# 6. Masterton Urban Options Development

A draft report has been received from Cardno (consultants) on conceptual Masterton urban flood protection options and the geotechnical investigation of the existing stopbanks. While there was uncertainty about our approach to the Masterton urban flood hazard, the project team has focussed on options development on other river reaches. We will now be able to return to developing these options and cost estimates in more detail. One outcome from our discussions with MDC has been that we will consider the feasibility of staged approaches and whether we can upgrade the worst areas first, thereby spreading the cost to the community over a longer timeframe.

The landscape architecture students gave final presentations of their projects on 16 June. With different proposals including wetlands, flood parks, housing development projects to highlight just a few. It is envisaged that full details of what the student have developed will be presented in more detail at the next Subcommittee meeting.

# 7. Regional Plan

In preparation of the release of the Proposed Natural Resources Plan for the Wellington region in late July, a Public Notice was placed in the Dominion Post on 8 June 2015, advising of the documents proposed to be incorporated by reference. Comments can be made up to 5pm on 6 July as detailed in the Public Notice.

Once all the suggestions and comments have been considered, a proposed Natural Resources Plan will be approved by Council, published and a formal public submissions process will begin mid to late 2015.

### 8. Whaitua

The Ruamahanga Whaitua have been holding a series of community engagement meetings around the Wairarapa. These meetings are designed to provide direct input to the Committee from the community and provide a way for the community to identify, amongst other things, what the important issues are for the community at the moment and what the community would like waterways to be like in the future. Five engagement meetings have been held since February.

This information is being used to identify the values of waterways that are important to the community. The Committee has a draft list of seven values, which may be refined over time. The Committee is now starting work on identifying key attributes of these values, which will be used to describe and keep track of whether the values that are important to the community are being achieved.

The modelling process is continuing and is working towards being able to test different scenarios that the Committee will develop. This will assist the Committee to understand the implications of potential decisions they will make.

### 9. Wairarapa Water Use Project

Pre-feasibility investigations into water storage and distribution in Wairarapa have now been completed and two schemes selected for the next phase of work – 'feasibility'.

The two schemes selected, Black Creek and Tividale, between them could irrigate almost 30,000 hectares and provide water for other uses. Black Creek incorporates a smaller option, Wakamoekau, which has the potential to be a stand-alone scheme.

The three other schemes considered - Te Mara, Mangatarere and White Rock Road - have been discounted from further study by the project. Three others previously kept in reserve have also been discounted.

# 10. Te Kāuru Area Scheme Operations

The 4th quarter of the 2014/15 financial year was a very busy period for Scheme Maintenance Operations. This was mainly due to the long period of low-flow conditions from just before Christmas through to early April where we avoided in-stream work to reduce causing any further environmental stress to the river ecosystem. River flow increased in April and allowed for a significant component of channel maintenance work to be completed in the Upper Ruamahanga, Mt Bruce and Gladstone Schemes.

June 1 is recognised in the Scheme Operations consents as a restricted period due to trout spawning. With the restriction on in-stream work in place, we are now focused on completing some remaining vegetation control work, such as clearing unwanted channel vegetation and tidying up river berms.

The focus for operations staff during this early winter period, is on collecting information that goes into our Asset Management processes and we are now beginning to put the detailed plans in place for this season's buffer planting. We plan to plant over 15,000 willow poles in the coming few months. We are also seeking opportunity to provide some native trees for planting where we have landowner support to provide the initiative to plant and maintain native trees.

# 11. Communications

Further communication will be undertaken in accordance with the Te Kauru FMP Communications Plan.

# 12. The decision-making process and significance

No decision is being sought in this report.

### 12.1 Engagement

Engagement on this matter is unnecessary.

### 13. Recommendations

That the Subcommittee:

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

Report prepared by:

Report approved by:

Report approved by:

**George Harley** Projects Engineer Mark Hooker Team Leader, ISP Graeme Campbell Manager Flood Protection