

Report 02.502 15 August 2002

File: N/06/09/10

kls-#119570

Report to the Landcare Committee from Alistair Cross, Senior Resource Planner, Flood Protection

Kapiti Coast Flood Hazard Review: Introducing the Review and **Programme**

1. **Purpose**

To inform the Landcare Committee of the current review of the Waikanae and Otaki River flood hazard, highlighting:

- the reasons and goals for the review.
- the process being followed and the progress to date.
- the programme to June 2003.

2. **Background**

2.1 Why Review the Flood Hazard?

Significant progress has been made on the implementation of structural measures on the Waikanae and Otaki Rivers. To date approximately 32% of the structural measures in the Otaki River Floodplain Management Plan and 45% in the Waikanae River Floodplain Management Plan have been implemented. This progress has meant that the flood risk affecting the Waikanae and Otaki floodplains has been reduced, and it is now appropriate to update the flood hazard information held by the Wellington Regional Council and Kapiti Coast District Council.

Consequently, a review of the flood hazard and associated planning provisions commenced in November 2001. Scoping, in consultation with KCDC officers, was completed in March 2002. A WRC / KCDC officer working group has been formed to guide the process, with the Regional Council taking the initial responsibility for driving the flood hazard review.

2.2 The Review's Goals

The intended outcome of this review is revised flood hazard and planning maps in response to the positive effects of new structural measures¹, and to form revised planning provisions for the Kapiti Coast District Plan (KCDP).

3. **Progress Made**

3.1 Components

The review involves the following major components:

- modelling and mapping the flood hazard.
- incorporating local stream flooding.
- reclassifying the flood hazard in both the river corridor and floodplain.
- revising KCDP provisions.

3.2 Modelling and Mapping the Flood Hazard

Hydraulic modelling of the flood hazard for both rivers is virtually complete, and working drafts of the flood extent maps have been prepared. The draft maps show a substantial reduction in the flood risk for the Waikanae floodplain (north of the river). However, the continued vulnerability of the existing stopbank downstream of Chrystall's Bend means that a direct flood risk remains over much of the Otaki floodplain. The 1 in 100-year (design standard) flood event is used to assess the flood hazard.

Making Information Publicly Available

The draft maps and new flood level information is programmed for completion in early September 2002. It will then be made immediately available to KCDC for public use.

Making this information immediately available to the public will be significant for two reasons:

- i) Residents, land owners and pending developers can gain new information on how the modified flood hazard is likely to affect them.
- ii) New flood levels can be applied to existing District Plan provisions governing minimum floor levels and building sites, as an interim measure prior to the instigation of any plan change process.

Ongoing minor refinement of flood maps is likely to continue following September 2002.

WRC Doc. #119570

-

The review is based on the effects of structural measures completed to date. However, the review also assumes that the forthcoming realignment of the Jim Cooke Park reach of the Waikanae River will be completed as planned.

3.3 Incorporating Local Stream Flooding

KCDC are responsible for leading this part of the review, which aims to integrate small stream flooding information with river flooding hazard information.

New and modified existing flood hazard information affecting a number of local streams may eventually be included on the revised maps, particularly for the Waikanae Floodplain.

How much local stream information is eventually included in the District Plan will be dependent on the progress KCDC is able to make within the next few months on the modelling and mapping of the various watercourses.

3.4 Reclassifying the Flood Hazard

The main outcome of the modified flood hazard is the general reduction of the *direct* flood risk, with a proportional increase in *residual* flood risk.

Residual risk is the 'left over risk' following the construction of flood mitigation structures, and acknowledges that flood risk can never be fully eliminated. Flooding in areas affected by residual flood risk would occur only if stopbanks were breached or overtopped.

The river corridor extents are also being examined, with a view to improving the identification of the erosion hazard. The main impetus for this work comes from the erosion damage suffered on both rivers in the October 1998 floods.

3.5 **Revising District Plan Provisions**

Work on revising flood hazard related planning provisions has commenced. Draft provisions are likely to retain a mix of controls, with significant reduction in the level of control in residual risk areas. An improved recognition of the erosion hazard in the draft provisions is also likely.

4. Programme to June 2003 and Beyond

A feature of this year's programme is the gradual transfer of responsibility for the process from the Regional Council to KCDC. KCDC is expected to lead much of the process from the consultation phase onwards, with support provided by the Regional Council as required. Preparation of plan change documents and subsequent applications would also be made by KCDC. Table 1 provides the general programme to June 2003.

Members will be presented with the draft maps and planning provisions at the next Landcare Committee meeting in October 2002.

Table 1: WRC and KCDC Tasks Through to June 2003

Task	Commences	Finishes
Refine flood hazard maps for public use	July 2002	September 2002
Revise planning provisions	June 2002	October 2002
Seek endorsement for public consultation from KCDC	October 2002	November 2002
Consult with the Kapiti Coast community	December 2002	April 2003
Revise provisions following consultation	May 2003	June 2003
Prepare and notify plan change documents and subsequent applications	July 2003	

5. Communication

There are no direct communications required with the community stemming from this report. The main communications will happen through the consultation process on draft maps and measures, which will be discussed at the October Landcare Committee meeting.

6. **Recommendations**

That the Committee:

- (1) **Receive** the report.
- (2) *Note* the contents of the report.

Report prepared by: Approved for submission:

ALISTAIR CROSS GEOFF DICK

Senior Resource Planner Manager, Flood Protection

PHILLIP PURVES
ROB FORLONG
Senior Engineer
Divisional Manager, Landcare

WRC Doc. #119570