

Report 11.111
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Committee Hutt Valley Flood Management Subcommittee
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Wainuiomata River Flood and Erosion Hazard Information

1. Purpose

To advise the Subcommittee on the request from Hutt City Council (HCC) to undertake further hydraulic modelling of the Wainuiomata River and seek endorsement of the proposed response.

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. HCC Report

HCC has written to Council asking us to undertake further, more detailed hydraulic modelling of the Wainuiomata River and the floodplain (**Attachment 1**). The request came following a meeting of the HCC Infrastructure and Community Services Committee on 21 February 2011. A copy of the request is contained in Attachment 1 of this report.

4. Background

The Wainuiomata River Flood Hazard Assessment was completed in 2000, in recognition of the increased flood hazard that was considered likely to result from further development of the lower Wainuiomata River floodplain, through the subdivision of rural properties into smaller rural-residential allotments. The reduction in minimum size allotment in the rural area from 40ha to 15ha increased the pressure on floodplain development and the potential for creating flood risks with consequent damages.

Decisions about floodplain and flood risk management need to be in accordance with national, regional and local legislation, regulations and policy

and they also need to align with best practice in floodplain management. **Attachment 2** gives further information about the frameworks that this work is carried out within, and also details of the floodplain management planning process.

4.1 Use of Flood Hazard Information

The results of the Wainuiomata Flood Hazard Assessment are used for planning and advice about future development on the Wainuiomata River floodplain, especially when assessing specific development proposals. In guiding the location of development within the rural section of the Wainuiomata River floodplain, it has provided useful information for proactively saving flood damages for future development.

Subdivision of rural land on the floodplain presents the greatest potential impact and the likely increased demand for river crossing points is of particular concern. The Wainuiomata River flood hazard information has been used to provide advice regarding proposed development on the Wainuiomata River floodplain since 2000; with over 200 requests for information responded to since 2000. As Greater Wellington does not currently, and has no future intent to put in place flood and erosion protection works in the rural section of the Wainuiomata River, channel migration can be expected to continue in the future.

4.2 Accuracy of the Information and Site Specific Application

A description of how the flood hazard for the rural section of the Wainuiomata River was analysed in relation to both the inundation risk and potential channel migration (erosion) is given in **Attachment 3**.

Greater Wellington and Hutt City Council have endeavoured to clarify that the flood and erosion hazard information is based on surveyed cross sections and limited topographical information (through the Hutt City Council LIM information) and also that the flood depths shown on the map should be interpreted as indicative and actual water depths will depend on the local topography. **Attachment 4**, gives one of the series (of 12) information sheets for the Wainuiomata River.

A presentation will be given during the Subcommittee meeting to show a comparison between the generally-observed flood data and the hydraulic modelling results. While the model is based on the cross section information available, we consider that the comparison between modelled and observed information is very close, enabling us to provide appropriate advice.

5. Comment

In 2009, Hutt City Council developed a hazards database to link all the available hazard information about a property, and make this information available through LIMs. Both Councils considered it essential to inform property owners that the Wainuiomata River flood and erosion hazard information was going to be part of a LIM report, if one was requested on their property. The data sheets were produced to inform property owners of the

available information, using the information from the 2000 Wainuiomata River Flood Hazard report.

In response to the HCC request (Attachment 1), Flood Protection proposes to prepare an estimate of the cost to update the flood hazard information for the Wainuiomata River using LIDAR survey information and more extensive cross sections. We propose to report this estimate to the June 2011 Hutt Valley Flood Management Subcommittee Meeting. A decision will then need to be made about the priority for updating the flood hazard information for the Wainuiomata River, with regard to the proposed use of the information.

The Subcommittee should note that until such time as updated information is available, we will continue to use the current information.

6. Communication

There are no specific communication requirements at this stage.

7. Recommendations

That the Subcommittee:

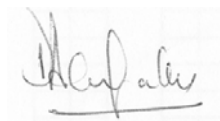
1. **Receives** the report.
2. **Notes** the content of the report.
3. **Endorses** the preparation of a report estimating the cost to undertake more detailed flood modelling of the Wainuiomata River and to report this back to the next HVFMS meeting in June 2011.

Report prepared by:



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Report approved by:



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Report approved by:



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- Attachment 1: Hutt City Memorandum dated 21 March 2011 Agenda item for Hutt Valley Flood Management Committee
- Attachment 2: Memo dated 17 February 2011 – Wainuiomata River Flood and Erosion Hazard Information
- Appendix 1 to Attachment 2: The Floodplain Management planning process
- Appendix 2 to Attachment 2: Report 00.593 dated 4 August 2000 Wainuiomata River Flood Hazard Assessment
- Appendix 3 to Attachment 2: Report 06.664 dated 10 November 2006 Dissemination of flood hazard information
- Attachment 3: Hutt City/GWRC letter dated 15 September 2010 – Wainuiomata River Flood and Erosion Hazard Maps
- Attachment 4: Flood and Erosion Hazard Information Sheet 3