



Report 07.437
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Committee Landcare
Authors Kees Nauta Area Engineer, Kapiti
Graeme Campbell Manager, Flood Protection

House Raising at Otaihanga

1. Purpose

- To confirm that house raising is the preferred flood mitigation measure for Otaihanga.
- To decide whether to bring forward funding assistance for the raising of the Harrison's house at 17 Makora Road, Otaihanga.

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

In a submission to Greater Wellington's proposed 2007/08 Annual Plan, John and Denise Harrison of 17 Makora Road requested Council assistance for the raising of their home above the 100 year flood level. (Refer to **Attachment 1**).

In response to the submission Councillors asked that officers confirm whether house raising was still the preferred option and if it was, to bring a proposal back to the Landcare Committee on bringing forward raising the Harrison's house this financial year rather than in the 2008/09 financial year as currently programmed.

This report considers the option of house raising versus stopbanking, and makes a recommendation on whether to bring forward raising of the Harrisons house.

4. Proposed Flood Mitigation at Otaihanga

The Waikanae Floodplain Management Plan (WFMP) provides for the raising of three sections of road, and the raising or flood proofing of 16 houses as the preferred method of flood mitigation in Otaihanga.

4.1 House Raising

The houses to be raised or flood proofed fall into two areas:

- Ten properties on the river side of Makora Rd, being the odd numbers from 1-19 Makora Road.
- Six isolated properties at 21, 61 and 73 Makora Road and 11, 13 and 15 Toroa Road.

Five of the six isolated houses have now been raised or flood proofed. The houses at 11 and 13 Toroa Road were raised following the 1998 flood, and the houses at 21 and 73 Makora Road and 15 Tora Road were raised following the 2005 flood. 61 Makora Road has not been raised. The house has had a substantial upgrade since the WFMP was prepared with the lower area now primarily being a basement. Although 61 Makora Road was flooded in the January 2005 flood no request for assistance was made.

Of the ten properties along the river side of Makora Rd, three no longer require raising as they have been substantially upgraded since the plan leaving seven houses still to be raised.

4.2 Road Raising

The road raising comprises the raising of three sections of road, two on Makora Rd and one on Otaihanga Rd

The section of Otaihanga Rd has been raised and a flood wall adjacent to Otaihanga Domain constructed instead of physically raising this section of Makora Rd. The third section of road raising to protect the houses at 2-14 Makora Road did not proceed at the request of the residents as they decided they did not want the work done due to traffic safety and access issues at this time. The proposal is still contained within the WFMP but no budget is included within the current LTCCP.

5. House Raising and Road Raising Versus a Stopbank

The local community and the Kapiti Floodplain Management Committee (KFMC) selected house raising as the preferred method of flood mitigation in Otaihanga in 1997. Following the January 2005 floods a number of residents on both sides of Makora Rd (adjacent to 1 – 19) asked Council to reconsider the option of stopbanking to protect their properties instead of the combination of house raising and road raising. The following section summaries the findings of the comparison between the two options. We have not gone back to the individual owners at this stage but have made our assessment from observations of the properties from the road.

5.1 House/Road Raising

Between 1 and 19 Makora Road there are ten flood prone properties, one of which is the Otaihanga Boating Club at No.19. The WFMP allowed for these houses to be raised, however we believe that three of these no longer need to be raised as they have been privately converted to upper floor living. Therefore we believe that seven buildings, including the Boating Club, are eligible for raising, if this option was chosen. The cost of raising these seven buildings would be about \$315,000.

There is now a complication with the houses from 2-14 Makora Rd following their rejection of road raising that we will have to consider this as part of the review of the Waikanae Floodplain Management Plan. However for this analysis we have assumed that the road will be either raised at some future date or these houses would be raised.

The cost of raising the road to this Council is estimated to be \$160,000. This is on the basis of a cost sharing with Kapiti Coast District Council (KCDC), and the works being undertaken when the next major road improvement works are done. GW's share is for raising the road and resurfacing, and the KCDC share is for the kerb, channel and footpath works. However when the residents decided they did not want to proceed with the road raising KCDC still undertook an upgrade with new kerb and channel works in 2002. It is now unlikely that any major road upgrading would be undertaken for some time. As an alternative between 2 and 14 Makora Road there are seven flood prone properties. It is estimated that five of the houses would require raising if this option was pursued. The cost of raising these five houses would be about \$225,000.

This gives a total cost for the house/road raising option of between \$475,000 and \$535,000

5.2 Stopbanking Option

The alternative to house raising is a stopbank around the properties at an estimated cost of \$900,000. The works comprise a stopbank starting between 19 and 21 Makora Rd, passing around the houses and joining on to Otaihanga Rd adjacent to No 1 Makora Rd. A plan of the proposed works is contained in **Attachment 2**. To enable the stopbank to be constructed a river realignment and bank edge protection is required, along with a concrete retaining wall adjacent to No's 1 and 17 Makora Rd. Even so, some land may be required to be purchased from the properties.

A pumping station would be required to deal with the internal storm water which would drain into the area and pond behind the houses. The local storm water catchment area is quite large and the ponding depths could exceed the existing floor levels of some of the houses hence the requirement for the pumping station. A vehicle track leading to the local boat ramp and reserve would have to be provided for on top of the stopbank adjacent to No 1 Makora Rd.

5.3 Summary

In conclusion the raising of seven properties between 1 and 19 Makora Road and raising Makora Road between 2 and 14 Makora Road, at an estimated total cost of \$475,000, is the most financially favourable option. In addition to this other considerations such as environmental, landscape, sustainability and recreation, favour the house raising option. The table in **Attachment 3** summarises these issues which are considered to be of high significance.

On the basis of this work it is recommended that Council proceed with the house raising option as currently contained within the WFMP.

It is suggested that Council's contribution be capped at \$45,000 per property, giving the total of \$315,000 for the seven properties between 1 and 19 Makora Road. This figure is based on the contribution of \$40,000 per house used following the 2005 floods, increased to allow for the increases in building costs since that time. A copy of the conditions that would be attached to any GW contribution is contained within **Attachment 4**.

6. Bringing Forward the Harrison's House Raising

The Harrison's submission to the Annual Plan asked that the raising of their house be done this financial year rather than wait until next financial year (2008/09) when the first financial allowance has been made for the raising of houses between 1 and 19 Makora Rd.

6.1 Bringing forward the raising of the Harrison's house to this financial year

The Harrison's house was flooded in the January 2005 floods but their house was not raised early, primarily because they were part of the block of ten houses along Makora Rd identified for raising and there were questions at that time as to whether we should reconsider the stopbank option. The houses that were raised following the 2005 were at isolated locations and where stopbanking was not an option. The Harrison's could therefore be considered unlucky not to have been included with the other houses following the 2005 flood as they met all of the other criteria to be eligible to have their house raised.

Now that we have reassessed the flood mitigation options, and can confirm that house/road raising is the most financially viable and sustainable option, it is an option to fund the Harrison's works as a special case because of the seriousness of the flood risk. They have been affected by flood water on 4 occasions in the last few years with water entering the house twice.

If Council considered it appropriate to raise the Harrison's house this financial year, as a special case, we recommend using the flood contingency fund as this was how the other house raising was funded following the 2005 flood. Using the flood contingency fund would ensure no impact on the 2007/08 work programme.

6.2 Confirming the start of house raising in the 2008/09 financial year.

The alternative to raising the Harrison's house this financial year is to advise them that work will commence in the 2008/09 financial year. The current Flood Protection Operation Plan LTCCP allows \$120,000 per year for the funding of house raising at Otaihanga between 2008/09 and 2011/12. The Harrison's would be a high priority, because of the seriousness of the flood risk their property. Therefore their house would most likely be raised in 2008/09. We would however have to look at how to prioritise the work should there be more than three people wanting to proceed with raising in the first year.

7. Communications opportunities

The outcomes of Council's decision will be promptly reported to all of the directly affected residents in Otaihanga.

8. Recommendations

That the Committee:

1. **Receives** the report.
2. **Confirms** house and road raising in Makora Road remains the preferred flood mitigation measure.
3. **Approves** the raising of the Harrison's house this financial year by way of a contribution of up to \$45,000 towards the cost, funded from flood reserves.

or

Declines the Harrison's request to raise their house this financial year but advises that funding for the raising of three houses will be available in the 2008/09 financial year and that they are likely to be eligible for funding assistance in that year.

Report prepared by:

Report prepared by:

Report approved by:

Kees Nauta
Area Engineer, Kapiti

Graeme Campbell
Manager, Flood Protection

Geoff Dick
Divisional Manager,
Catchment Management

Attachment 1 Annual Plan submission from John and Denise Harrison

Attachment 2 Plan of Otaihanga properties to be raised and stopbank option

Attachment 3 Benefits and Disadvantages of House Road Raising and Stopbanks

Attachment 4 Conditions for GW funding of house raising