

Report No:	REP12-06-04
File No:	L333-1
Date:	18 June 2012
<b>Decision Required</b>	

## REPORT SUMMARY

**Report to:** Environment & Planning Committee  
**Meeting Date:** Thursday, 28 June 2012  
**Report Author:** Lisa McGlinchey, Policy Planner  
**Subject:** **TAKAKA FLOOD HAZARD PROJECT - COMMUNITY BOARD FEEDBACK**

### EXECUTIVE SUMMARY

This report identifies the feedback received from the Golden Bay Community Board on the future direction of the Takaka River Flood Hazard Project and provides a staff commentary on the feedback to assist the EPC in determining an appropriate Council response to the flood hazard risk identified.

The Golden Bay Community Board made four key recommendations:

- 1. There appears to be no appetite in the local community for significant expenditure associated with a structural engineered response to the flood hazard risk from extreme flood events (>50yr ARI). Response to this risk should focus on planning methods including protection of flowpaths, land use and building controls and zone review to minimise the risks.*
- 2. There appears to be appetite in the local community for limited expenditure associated with small scale structural engineered responses to the flood hazard risk from small to moderate flood events (<20yrARI). Such responses would focus on providing a consistent level of protection from existing stopbanks and elevated land, including possible options for enhancement of these banks and discussions with the landowner regarding future Council legal access to and management of the bank. Other flood management measures, such as improving key urban flow paths, could also to be considered to further reduce flood risk from small to moderate flood events.*
- 3. Gravel extraction in specific locations, such as the Waingaro confluence and upstream of the Waitapu Bridge, is of interest to the community. The Community Board would like to see another Takaka River cross-section survey undertaken to provide information on the nature and extent of changes within the Takaka River bed since the last survey in 2006. This survey would help quantify any changes in bed morphology as a result of flood activity since 2006 and help determine if targeted gravel extraction would reduce the frequency of floodwater breakout in small to medium events (<20yrARI). General river management techniques should continue to be observed to maximise the overall main channel flood carrying capacity before breakout begins.*

*Vegetation management, gravel relocation and where necessary, selected removal, should be done to reduce “pressure point” areas in the river”*

- 4. There is also interest in the local community to pursue options to improve stream health, including investigating possible reinstatement of flood flushing of the Te Kakau and Motupipi waterways, undertaking riparian planting to improve stream shading and investigating other landuse management methods to improve water quality.*

## RECOMMENDATIONS

Staff recommend that further assessment to define options for appropriate land and building controls and closure or change to residential zoning be progressed.

Staff recommend that a review of the urban Takaka flood flow paths be undertaken to identify potential opportunities for both future protection and capacity remediation of these flows paths.

Staff consider that further consideration of Council involvement in and potential for enhancement of the existing informal stopbank has merit. Should this option be considered for further progression, Staff suggest that further investigation work be undertaken by Engineering Services in conjunction with the New Zealand Transport Agency.

Staff support further consideration of general river management techniques to maximise the overall main channel flood carrying capacity before breakout begins at “pressure point” areas in the river, but note that this will not have a significant effect on reducing flood hazard risk for major events and that gravel extraction at more than a very small scale, may have significant adverse effects on river bank stability.

Staff support the suggested actions for improving the health of the Motupipi and Te Kakau streams, however such a project would need buy-in from adjacent landowners and would be best driven by the community with Council assistance and advice provided as needed. Staff recommend further investigation of the viability and potential adverse effects of reinstating flood freshes to these waterways in conjunction with investigations of the existing informal bank.

## DRAFT RESOLUTION

- 1. THAT the Environment & Planning Committee receives the Takaka Flood Hazard - Community Board Summary REP12-06-04 and;**
- 2. That the Environment & Planning Committee instruct Staff to progress with further definition of appropriate land use and building controls and zone changes and closures to avoid or minimise flood hazard risk in urban Takaka.**

- 3. That the Environment & Planning Committee recommend to the Engineering Services Committee that consideration be given to undertaking a review of the current urban flood flow paths, their legal protection and identification of any potential flow path remediation options to promote drainage of flood waters.**
- 4. That the Environment & Planning Committee recommend to the Engineering Services Committee that consideration be given to investigating options in conjunction with the landowner, for Council involvement in management and potential enhancement of the informal stopbank south of the township.**
- 5. That the Environment & Planning Committee recommend to the Engineering Services Committee that consideration be given to investigating options for minimising breakout of floodwaters at key pressure points in the Takaka River and other potential engineered responses that may minimise the risk from flood events with less than a 20 year Average Recurrence Interval.**

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**Subject:** Takaka Flood Hazard Project - Community Board Feedback

## 1. Purpose

- 1.1 This report identifies the feedback received from the Golden Bay Community Board on the future direction of the Takaka River Flood Hazard Project and provides a staff commentary on the feedback to assist the EPC in determining an appropriate Council response to the flood hazard risk identified.

## 2. Background

- 2.1 On the 29 March 2012 the EPC resolved to seek further feedback from the Golden Bay Community Board on the future direction of the Takaka River Flood Hazard Project to inform the Council's response to the risk identified. This followed relatively low levels of community feedback following public communication of the Project's findings in November 2011.
- 2.2 On the 15 May 2012 the Community Board met with Council staff members Lisa McGlinchey (Policy Planner) and Eric Verstappen (Rivers Scientist) to discuss the feedback received from the public and the staff recommendations for future work. This workshop included field visits to various parts of the lower Takaka River to view river gravel levels, the existing informal bank and land elevations to the south of the Takaka township.
- 2.3 The Golden Bay Community Board then met on the 12 June 2012 and finalised their feedback to the EPC. A copy of their feedback is provided below.

## 3. Present Situation/Matters to be Considered

### 3.1 Golden Bay Community Board Feedback

The following feedback has been received from the Golden Bay Community Board:

- There appears to be no appetite in the local community for significant expenditure associated with a structural engineered response to the flood hazard risk from extreme flood events (>50yr ARI). Response to this risk should focus on planning methods including protection of flowpaths, land use and building controls and zone review to minimise the risks.*

2. *There appears to be appetite in the local community for limited expenditure associated with small scale structural engineered responses to the flood hazard risk from small to moderate flood events (<20yrARI). Such responses would focus on providing a consistent level of protection from existing stopbanks and elevated land, including possible options for enhancement of these banks and discussions with the landowner regarding future Council legal access to and management of the bank. Other flood management measures, such as improving key urban flow paths, could also to be considered to further reduce flood risk from small to moderate flood events.*
3. *Gravel extraction in specific locations, such as the Waingaro confluence and upstream of the Waitapu Bridge, is of interest to the community. The Community Board would like to see another Takaka River cross-section survey undertaken to provide information on the nature and extent of changes within the Takaka River bed since the last survey in 2006. This survey would help quantify any changes in bed morphology as a result of flood activity since 2006 and help determine if targeted gravel extraction would reduce the frequency of floodwater breakout in small to medium events (<20yrARI). General river management techniques should continue to be observed to maximise the overall main channel flood carrying capacity before breakout begins. Vegetation management, gravel relocation and where necessary, selected removal, should be done to reduce “pressure point” areas in the river”*
4. *There is also interest in the local community to pursue options to improve stream health, including investigating possible reinstatement of flood flushing of the Te Kakau and Motupipi waterways, undertaking riparian planting to improve stream shading and investigating other landuse management methods to improve water quality.*

### **3.2 Staff Commentary**

The recommendations above from the Golden Bay Community Board have different implications for the existing and future development in Takaka. Recommendation 1 is effectively a “live with the risk” approach for existing development. In this situation, efforts to minimise risk would focus primarily on the existing flood warning system, providing improved information for CDEM responses (e.g evacuation procedures) and a focus on recovery options following an extreme event.

- 3.3 For future development the Community Board has endorsed the suggested planning responses including zone review and land and building controls, as well as protection of flood flow paths. These responses would seek to avoid or minimise risk to new development within the flood plain, including additions to existing development.
- 3.4 The Community Board’s second and third recommendations represent a desire of the Board to refocus the project from the original aim of considering flood hazard in extreme events (50, 100 and 200yr ARI events) to smaller, more

frequent flood effects (less than 20yr ARI). The potential responses to floods of this size have not been specifically considered so far and may differ to those appropriate to extreme events. The key aim of this approach is to minimise the frequency of breakout of floodwaters from the main Takaka River channel at key pressure points, for example Bridges Hollow, and redirect lower level flood flows, thereby reducing the frequency at which flood waters begin to affect the Takaka urban area.

### 3.5 There are several key issues for the EPC to consider:

- Formalisation and Council involvement in management of the existing informal bank would help to give greater confidence in the ongoing level of protection afforded by the existing bank, particularly if recommended enhancement works are undertaken to minimise potential failure risk.
- Council involvement in the management and/or ownership of the existing bank would require a resolution of its legal status and consideration of its adverse effects on other properties (eg by way of retrospective resource consent).
- The benefits afforded by any potential responses to address the flood risk from smaller events will need to be balanced against the costs to the community and any adverse effects on other properties.
- While general river management techniques can be utilised to maximise the overall main channel flood carrying capacity before breakout begins at “pressure point” areas in the river, they will not have a significant effect on reducing flood hazard risk for major events and in particular gravel extraction may have significant adverse effects on river bank stability. For these reasons, staff consider that appropriate investigation and assessment of any gravel movement, relocation or extraction be done through liaison between staff of EPD and ESD, before any programme can be defined.
- Resolving the legal status of the existing informal bank needs to go hand in hand with a commitment to its ongoing management for its flood mitigation value; this requires close liaison between EPC and ESC.

### 3.6 The Community Board’s fourth recommendation highlights concern within the community of the degraded nature of both the Motupipi and Te Kakau Streams. It does not represent a response to flood hazard risk. The proposed actions for improving stream health are supported by conclusions from the 2010 SOE report which considered options to improve these waterways and rank both waterways as a high priority for action. Reinstatement of flood flushing from the Takaka River may be possible, but would also need to consider localised changes to topography and infrastructure to ensure there was no increase in flood hazard from smaller flood events, particularly for properties at risk of flooding within the Motupipi and Te Kakau flood plains and State Highway 60.

#### **4. Financial/Budgetary Considerations**

- 4.1 There is \$1million in funding within the Ten Year Plan for the Takaka Flood Hazard Project starting in year 8 (2019). This is no specific budget for further investigation work into protection options within Engineering Services budgets prior to this.
- 4.2 There is budget available over the next ten years for Resource Policy staff time and consultancy costs for further consideration of zone changes and land use and building controls, and for the costs of preparing a plan change.
- 4.3 Environmental Information have budget available for staff time to respond with specialist advice, but there are no specific projects identified in the LTP to cover additional modelling costs etc. There is annual budget for general river cross section work, but no funding has been specifically assigned for Takaka.

#### **5. Significance**

- 5.1 This is not a significant decision according to the Council's Significance Policy. The next phase of the project will involve further consideration of the preferred responses to the hazard risk identified. Any such options will be subject to a formal public consultation process. As such there are no significant financial, social, economic or cultural impacts at this stage of the project.

#### **6. Recommendation/s**

- 6.1 Staff recommend that further assessment to define options for appropriate land and building controls and closure or change to residential zoning be progressed.
- 6.2 Staff recommend that a review of the urban Takaka flood flow paths be undertaken to identify potential opportunities for both future protection and capacity remediation of these flows paths.
- 6.3 Staff consider that further consideration of Council involvement in and potential for enhancement of the existing informal stopbank has merit. Should this option be considered for further progression, Staff suggest that further investigation work be undertaken by Engineering Services in conjunction with the New Zealand Transport Agency.
- 6.4 Staff support further consideration of general river management techniques to maximise the overall main channel flood carrying capacity before breakout begins at "pressure point" areas in the river, but note that this will not have a significant effect on reducing flood hazard risk for major events and that gravel extraction at more than a very small scale, may have significant adverse effects on river bank stability.

- 6.5 Staff support the suggested actions for improving the health of the Motupipi and Te Kakau streams, however such a project would need buy-in from adjacent landowners and would be best driven by the community with Council assistance and advice provided as needed. Staff recommend further investigation of the viability and potential adverse effects of reinstating flood freshes to these waterways in conjunction with investigations of the existing informal bank.

## **11. Draft Resolution**

- 1. THAT the Environment & Planning Committee receives the Takaka Flood Hazard - Community Board Summary REP12-06-04 and;**
- 2. That the Environment & Planning Committee instruct Staff to progress with further definition of appropriate land use and building controls and zone changes and closures to avoid or minimise flood hazard risk in urban Takaka.**
- 3. That the Environment & Planning Committee recommend to the Engineering Services Committee that consideration be given to undertaking a review of the current urban flood flow paths, their legal protection and identification of any potential flow path remediation options to promote drainage of flood waters.**
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- 5. That the Environment & Planning Committee recommend to the Engineering Services Committee that consideration be given to investigating options for minimising breakout of floodwaters at key pressure points in the Takaka River and other potential engineered responses that may minimise the risk from flood events with less than a 20 year Average Recurrence Interval.**



Lisa McGlinchey  
**Policy Planner**