

Report No:	RESC11-06-03
File No:	R650-1
Date:	10 June 2011
Information Only – no decision required	

REPORT SUMMARY

Report to: Engineering Services Committee
Meeting Date: 23 June 2011
Report Author: Sarah Downs, Transportation Planning Officer
Subject: **MOTUEKA FLOOD CONTROL PROJECT**

EXECUTIVE SUMMARY

The purpose of this report is to:

- Provide information on the Motueka Flood Control project.
- Provide the Committee with the outcomes of consultation at stage 'b' of the process outlined in Section 78 (paragraph 1.5).
- Seek the Engineering Services Committee's agreement to proceed to stage 'c' outlined in Section 78 (paragraph 1.5).
- Inform the Committee of future milestones connected to the Motueka Flood Control project (paragraphs 4.1 – 4.5).

RECOMMENDATION/S

That the report be received.

DRAFT RESOLUTION

THAT the Engineering Services Committee receives the Motueka Flood Control Report, RESC11-06-03.

Report No:	RESC11-06-03
File No:	R650-1
Report Date:	11 June 2011
<i>Information Only – no decision required</i>	

Report to: Engineering Services Committee
Meeting Date: 23 June 2011
Report Author: Sarah Downs, Transportation Planning Officer
Subject: **MOTUEKA FLOOD CONTROL PROJECT**

1. PURPOSE

- 1.1 The purpose of this report is to:
- Provide information on the Motueka Flood Control project.
 - Provide the Committee with the outcomes of consultation at stage 'b' of the process outlined in Section 78 (paragraph 1.5).
 - Seek the Engineering Services Committee's agreement to proceed to stage 'c' outlined in Section 78 (paragraph 1.5).
 - Inform the Committee of future milestones connected to the Motueka Flood Control project (paragraphs 4.1 – 4.5).

2. BACKGROUND

- 2.1 The project involves investigating flood control options to provide an affordable scheme for the Motueka River that meets the risks that the community is prepared to accept with regard to flood protection.
- 2.2 Tasman District Council's Ten Year Plan identified the need to reconstruct the current stopbanks on the Motueka River to provide better flood protection to the Lower Motueka Valley. Council has more recently considered the problem and the objectives for the project. Council concluded that there was a need to determine the best practicable and affordable flood control option. Council has also undertaken consultation with the community on this matter and on the issues that need to be considered when identifying the possible options for providing improved flood protection.
- 2.3 Although the stopbanks have prevented major flooding in the past, they do not meet modern standards. It is known that the construction methods used did not provide adequate compaction of the central core of the banks. Recent

investigations have shown that the current engineering fitness of the stopbanks is such that they would not hold up under sustained or repeated flooding events. It is, therefore, considered that in their current state they do not provide adequate protection to local residents and their assets.

- 2.4 Project staff are required to report back to the Council on progress and to enable Council to make decisions at each stage of the process staff are following.
- 2.5 Council had previously resolved to follow Section 78 of the Local Government Act. Under the process consideration of community views must be given at the following stages in the process:
- a) The stage at which the problems and objectives related to the matter are defined;
 - b) The stage at which the options that may be reasonably practicable of achieving an objective are identified;
 - c) The stage at which reasonably practicable options are assessed and proposals developed; and
 - d) The stage at which proposals of the kind described in paragraph above are adopted.
- 2.6 We are presently at the end of stage 'b' and the purpose of this report is to report back on the outcomes of the consultation on the five reasonably practicable options for the project outlined in paragraph 1.7.
- 2.7 At the Engineering Services Committee meeting on 3 February 2011, the committee received the report RESC-11-02-06 Motueka Flood Control. It noted the outcomes of consultation on the process to identify the reasonably practicable options for the project. The committee resolution approved the five reasonably practicable options outlined in paragraph 1.7 of this report and authorised Council staff to consult with the community on these options.
- 2.8 Council staff were also required to report back to the committee on the outcomes on the consultation.
- 2.9 The following table outlines the five reasonably practicable options for improving the flood protection to the Lower Motueka Valley:

Ref	Proposed Scheme	Comments
1	Rebuild the right and left stopbanks.	Approximately equivalent to the stopbank option previously proposed to the community.
2	Refurbish the right and left stopbanks.	Would need to include all feasible and cost effective options for improving bank structure.
3	Spillway over right bank, and provide secondary banks set back to create channel for overland flow and take the pressure off existing stopbanks. Do minimum refurbishment of the existing stopbanks. This option was split into two at the MCA workshop to represent the spillway located either at Woodman's Bend (Option 3A) or opposite Fry's Island (Option 3B).	Likely to be complications around land ownership and transport routes within the secondary flow path. Land and property within the secondary flow path would be at a lower level of protection.
4	Spillway over left bank and provide secondary banks set back to create flow path to west of Riwaka. Do minimum refurbishment of the existing stopbanks.	Possible, but the influence of other streams and rivers will need to be considered. Likely to require significant ground works to create secondary flow path. Land and property within the secondary flow path would be at a lower level of protection.
5	Secondary stopbanks on both sides of the river, and create secondary flow paths. Do minimum refurbishment work on original stopbanks and crest levels to meet 100 ARI design standard.	Additional protection to Riwaka town likely to be required. Land and property within the secondary flow path would be at a lower level of protection.

2.10 These were the options that were consulted on at the meetings held on 20 April 2011.

3. Consultation

3.1 A public meeting was held on Wednesday 20 April 2011 at the Memorial Hall in Motueka. During the afternoon, interested residents were able to view information concerning the Motueka Flood Control Project and the five practicable options for further consideration (as outlined in paragraph 2.9). Designs were displayed to show what the five options would look like. There was also information available as to why flood control was important to the Motueka area.

3.2 Ten people attended the afternoon session and spent a considerable amount of time discussing the project with staff and councillors.

- 3.3 In the evening, 23 people attended a presentation about the project. After the presentation, there was the opportunity for questions and answers regarding the flood control options. The 23 members of the public included members of the Motueka Community Board.

4. Feedback from the Public Meeting and Submissions

- 4.1 Option D (refurbishment of the existing stopbanks) was seen as the most cost effective option and there wouldn't be 'holes' in the stopbanks during the construction period. This would be the situation if Option E (full replacement of the stopbanks) was chosen. Option D received considerable support from many of the other attendees. Others present felt that a combination of options might need to be considered (such as a combination of Options D and E). There was some limited support for Option C (Spillways).
- 4.2 One person felt there was greater need to look at the causes of flooding and the management of the catchment area. As part of the modelling that has already been completed analysis has been done on the amount of run-off in the upper river catchment. It was found that regardless of vegetation type the main problem was the amount of time that flood water flows along the stopbanks. In the event of a flood the stopbanks would only hold for a certain length of time.
- 4.3 One attendee (with support from others) put forward the idea of lining the existing stopbanks with an impermeable layer of imported clay.
- 4.4 Cost of the project was the greatest issue and attendees felt that to make it affordable, work would need to be staged. Information on funding options would be included in stage (c) as part of that consultation process.
- 4.5 There was considerable debate over the issue of gravel extraction, the removal of gravel beaches and general river maintenance (including the removal of crack willow and other vegetation). Some members of the audience felt the extraction of gravels at Motueka Bridge was also required.
- 4.6 Other concerns and suggestions included public access to the river; channelling at Peach Island; liaison with landowners; and the need to have a peer review of the project.
- 4.7 Every property in the Motueka district received a copy of the second newsletter. This newsletter gave information on the feedback to date and the six options up

for further consideration. The newsletter had a submission form attached. The information was also available on the website and residents were able to submit via this medium. Council received fifty three submissions in total.

4.8 Residents were able to choose their preferred option. Below are the results:

- Option A (Status Quo) – (28%)
- Option B (Build secondary stopbanks) – (2%)
- Option C (Build spillways) – (15%)
- Option D (Refurbish existing stopbanks) – (49%)
- Option E (Rebuild stopbanks) – (0%)

4.9 It should be noted that a number of submitters (6%) chose a mix of options.

4.10 Feedback from the submission forms included:

- Half of the submitters wished to have Option D (refurbish the existing stopbanks); they did refer to the cost and how much it would add onto the rates for residents from Motueka. Twenty-one percent of submitters discussed the need to investigate gravel extraction further, which followed a similar theme to the discussions at the public meeting.
- Again, improved river maintenance was considered important. This would cover the requirement to remove vegetation such as broom and willow from encroaching on the flood channel.
- Other feedback included the need to open up old river channels, the impact on the bridge and lining the existing banks with clay.
- Leaving the stopbanks as they are was the second most preferred option (28%) and again the main reason for this was the cost of the other options and that Council should look further into gravel extraction and better maintenance of the river and the catchment area.
- Stopbanks were considered a high priority by submitters; however comments on other issues considered tsunamis and coastal flooding as being more important.
- Concerns were raised over cattle damage and sheep grazing and how this could be detrimental to the stopbanks. It was suggested that the banks should be fenced to prevent this from happening.
- Previous suggestions such as improving the river channel around Peach Island and better management of the upper catchment area were also put forward for consideration.

4.11 All submissions were acknowledged.

5. DISCUSSION

- 5.1 Council staff have decided to undertake further work on the impacts and benefits of gravel extraction. This will be done through computer modelling and robustly assessing the impacts of this option. This will be provided to the Committee and the community to inform them of the potential negative and positive impacts of removing gravel from the river. The project team will report to the Committee on the benefits at the Engineering Services Committee meeting on 4 August 2011. Council will need to decide whether gravel extraction becomes an option in itself or remains a variable on the existing five reasonably practicable options. Council needs to consider whether this information should be included in a community newsletter.
- 5.2 Council will also receive information on the current state of the stopbanks and their ability to prevent flooding. Greater consideration needs to be given to the preferred options and the benefits of each option by Council staff.
- 5.3 Council needs to determine which of the practicable options (outlined in paragraph 2.9) are to be further investigated.
- 5.4 Further investigations into Option B (build secondary stopbanks) and Option C (build spillways) have shown that there may be some fatal flaws in these two options. As part of the development of the project, some additional work will be undertaken on these two options to understand if they are worth pursuing. This along with the additional work on gravel extraction will be presented at the Engineering Services Committee meeting on 4 August 2011.
- 5.5 A technical report will prepared for Engineering Services Committee meeting scheduled for August 4 2011 outlining options, costs, impacts and rating implications. It should be noted that the rating impacts will be based on the rating areas set out in the Ten Year Plan process for 2009.
- 5.6 Further project milestones that Council needs to be aware of include:
- 4 August 2011, Technical Report to Engineering Services Committee outlining options to go to consultation as part of Section 78, stage (c) process Council is following.
 - 23 and 25 August 2011 – public meetings and consultation will take place as part of stage (c). The times and location of these public meetings are listed in paragraph 4.7.

- 22 September 2011 – Council receives a report on feedback from the consultation stage (c). This report will include analysis on the public consultation feedback. Council will be presented with the recommendation of the preferred option.
- 8 December 2011 – Council receives a report on community feedback regarding the preferred option. Full consultation will occur during the LTP process in 2012.

5.7 Consultation dates and location for stage 'c' are:

Tuesday 23 August 2011 – 3.30 pm – 5.00 pm

Thursday 25 August 2011 – 10.30 am – 12.00 pm

7.00 pm – 8.30 pm

All meetings to be held at the Memorial Hall, Pah Street, Motueka

6. RECOMMENDATION

That the report be received.

7. DRAFT RESOLUTION

7.1 THAT the Engineering Services Committee receives the Motueka Flood Control report, RESC11-06-03; and

7.2 THAT the Engineering Services Committee notes that consideration should be given to the views and preferences of the community likely to be affected by, or to have interest in, the project at four stages in the decision-making process as noted in the report RESC11-06-03:

- a) When the problems and objectives of the project are defined;**
- b) When the reasonably practicable options for the project are identified;**
- c) When the reasonably practicable options are assessed and proposals developed;**
- d) When the preferred option is adopted; and**

7.3 THAT the Engineering Services Committee notes that Council staff undertook consultation on stage 'b', (in 2b above) on the reasonably practicable options for the project (in accordance with resolution 9.4 RESC11-02-06 Motueka Flood Control), and that this report, RESC11-06-03 outlines the results of that consultation; and

- 7.4 THAT the Engineering Services Committee notes that Council staff will now use the results of this consultation to feed into a report for consideration by the Engineering Services Committee which will assess the reasonably practicable options consulted on as part of stage (c) as noted in the report RESC11-06-03; and**
- 7.5 THAT the Engineering Services Committee notes that a technical report on the Flood Control options will be presented to the Engineering Services Committee on 4 August 2011 as noted in the report RESC11-06-03; and**
- 7.6 THAT the Engineering Services Committee notes that Council staff will have undertaken further work on the matter of gravel extraction raised in the submissions and to report the impacts back to the Committee as part of the report in 5 above as noted in the report RESC11-06-03.**