

Report No.

20-35

Information Only - No Decision Required

**LOWER MANAWATU SCHEME - SECONDARY STOPBANK RUAHINE STREET TO RUAMAHANGA CRESCENT****1. PURPOSE**

- 1.1. The purpose of this item is to inform Council of the challenges associated with maintaining a section of secondary stopbank adjacent to the Fitzroy Bend in the Manawatu River in Palmerston North.

**2. EXECUTIVE SUMMARY**

- 2.1. River Management staff recently completed an inspection of the section of stopbank located in the Hokowhitu / Terrace End part of Palmerston North. Retained as a second line of flood defence for the city against Manawatu River flooding with the construction of the new Fitzroy Bend stopbank in the 1990's, it delineates residential development and the Palmerston North Golf Club.
- 2.2. The structure spans multiple parcels of private land and the recent inspection has highlighted a considerable number of integrity issues, many of which are likely to predate local government reorganisation back in the late 1980s. Determining how actively staff should pursue historic issues is a complex area that has resourcing implications for the Lower Manawatu Scheme.

**3. RECOMMENDATION**

That the Committee recommends that Council:

- a. receives the information contained in Report No. 20-35 and Annex.

**4. FINANCIAL IMPACT**

- 4.1. Although there are wider considerations around the cost of inspecting and maintaining this section of the network that protects Palmerston North there are no specific financial impacts associated with this particular item.

**5. COMMUNITY ENGAGEMENT**

- 5.1. No community engagement related to this item is envisaged.

**6. SIGNIFICANT BUSINESS RISK IMPACT**

- 6.1. This item relates to risks in the form of flood protection for Palmerston North that are significant.

**7. BACKGROUND**

- 7.1. Part of the stopbank network that protects Palmerston North is a section of stopbank that runs from the southern end of Ruahine Street in Hokowhitu to Ruamahanga Crescent in Terrace End. Almost exactly 2km long and sited on around 75 different properties, the section of stopbank was part of the primary defence network for the city prior to the

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relocation of the Manawatu River at Fitzroy Bend and the construction of a new section of primary stopbank in the 1990's. The stopbank was retained as a secondary stopbank, the only section of secondary stopbank protecting the city.

- 7.2. This section of stopbank has protections both through the Soil Conservation and Rivers Control Act 1941 and the provisions contained in the One Plan. Information around the stopbank is also contained within property files held by **Palmerston North City Council (PNCC)**. Activities undertaken on and in the vicinity of the secondary stopbank are discretionary and allowable as long as the functionality of the structure is not compromised (Section 17-15 of the One Plan). Consents have been granted for the construction of decks and patios on the embankment; for excavations where properly engineered retaining walls are constructed to support the bank; and for amenity planting.
- 7.3. In 2004 Council received, amongst others, a submission on its (then) Long Term Council Community Plan requesting that Council either accept responsibility for maintaining the stopbank as a scheme asset, or alternatively remove the existing designation and restrictions. A staff report advised that retaining the stopbank was desirable and Council resolved to retain the structure on the asset register.
- 7.4. The scheme asset management plan requires annual 'oblique' inspections to be undertaken from the golf club with more detailed walkover inspections every five years. This inspection regime is as per recommendations following the initial property-by-property inspections undertaken in 2005, itself undoubtedly driven by the 2004 floods. Property owners are each notified of the inspection by letter and invited to arrange a specific time for them to be present if they wish. The most recent inspection took place in November of last year.
- 7.5. All properties have structures that impinge on the stopbank to some degree. Currently there are three houses which incorporate the stopbank in their construction, 10 that have significant structures over the stopbank and two houses that are under construction over the stopbank. One compliance check and one consent enquiry for new work has been received since the detailed inspection in November.

## 8. DISCUSSION

- 8.1. Structures on or near the stopbank include; houses, garages, decks, sheds, retaining walls of uncertain structural design, swimming pools, greenhouses, trees, landscaping and sand pits. All these structures appear to have been in existence for many years.
- 8.2. Planting of trees that have the potential to further compromise the structure is on-going and difficult to control. The Golf Club and Parkland School have, amongst others, engaged in enhancement planting along the stopbank. Discussions with the Principal at Parkland School raised his awareness of the One Plan and what is permitted on the stopbank. Staff are working with the School and the Golf Club to come up with a maintenance plan for related to these issues.
- 8.3. In some cases there was a lack of awareness of the importance of the secondary stopbank – in others apparent ignorance as to the purpose of the structure. To raise property owners awareness, a list of properties and current owners will be maintained by River Management, and detailed inspections undertaken once every three years rather than five yearly. It is a time consuming job to prepare, schedule, visit then collate the photos and prepare a summary report. Annual walk-by inspections will continue but may be preceded by a courtesy notification letter if necessary.

## 9. COMMENT

- 9.1. Although perhaps not explicitly stated at the time, it is likely that one of the drivers for the Fitzroy Bend realignment and new stopbank construction in the 1990s was the degree to

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which the existing stopbank had been compromised over many years and the very difficult (if not impossible) task of upgrading it to standard adequate as a first line of defence.

- 9.2. There is a wider question around whether the structure should be retained as a component of the city's flood defences. Such a decision has a large component of value judgement to it – the likelihood of the primary line of defence being compromised or over-whelmed. Given the high level of criticality associated with protecting the city presumably the 2004 staff advice to Council took a 'belt and braces' approach to that question. The detail of the 2019 Tonkin and Taylor report suggests that it is still necessary to retain this structure as a second line of defence.
- 9.3. The question then becomes not only the resourcing / funding required to ensure that the structure doesn't become more compromised over time but also further investment to lift the integrity of the structure. The key body of work in this space that provides the overall resourcing picture for the Lower Manawatu Scheme is the Operations and Maintenance Manual – a complete list of all of the inspection, maintenance and flood surveillance tasks and the associated resourcing requirement.

## **10. CONSULTATION**

- 10.1. No consultation on the matters raised in this item is required at this time.

## **11. TIMELINE / NEXT STEPS**

- 11.1. The interim measures identified and actions captured from the November inspection will be progressed. It's hoped to complete the LMS Operations and Maintenance Manual by the end of the financial year and for the resourcing / funding picture that it provides to form part of the Long-term Plan update discussions.

## **12. SIGNIFICANCE**

- 12.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.

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## **ANNEXES**

- A Fitzroy Bend Figure