

Report No. 20-77

Information Only - No Decision Required

POHANGINA GRAVEL RESOURCE STUDY

1. PURPOSE

1.1. The purpose of this report is to inform members of the findings of an updated assessment of the gravel resource of the Pohangina River (from just above the confluence with the Makawakawa Stream to the Manawatū River confluence).

2. EXECUTIVE SUMMARY

- 2.1. The study concludes that the gravel resource in the Pohangina River has aggraded by approximately 147,100 cubic metres since it was last surveyed in 2012, which equates to around 24,500 cubic metres per annum.
- 2.2. While the study has concluded that overall the river has aggraded there are sections of the river which also display a loss of gravel. It also notes that in the lower part of the reach between Hanlon Road and the Manawatū River confluence the river was in a significant degradation state in the previous study. The resource is currently in a recovery phase and has not yet returned to pre-2012 levels and as such, a continuation of the current management regime is recommended.
- 2.3. Recommended limits that were set in the previous study have been revised and while most of the conclusions are to retain those limits in the lower reaches of the river, there is potential to increase extraction above Raumai Bridge.

3. **RECOMMENDATION**

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-77.

4. FINANCIAL IMPACT

4.1. There are no financial impacts associated with this report or its recommendations.

5. COMMUNITY ENGAGEMENT

5.1. The findings of this report will be communicated to gravel extractors and other key stakeholders.

6. SIGNIFICANT BUSINESS RISK IMPACT

6.1. There are no significant business risks associated with this item.

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7. BACKGROUND

- 7.1. As part of the fluvial programme the gravel resource of the Pohangina River was last surveyed in 2012 with the study completed in 2013. This study builds upon those findings with information gathered by cross sectional survey carried out in October-November 2018.
- 7.2. The Pohangina River cross sections have been surveyed at various times by Horizons Regional Council and its predecessors. These surveys have been undertaken for a variety of reasons which include informing the management of the river and its gravel resource.
- 7.3. Historically, the Pohangina River between the 21 and 1 mile marks has been frequently surveyed. Gravel extraction has necessitated the need to understand how this activity has affected the physical characteristics of the river. Over recent years the river survey has formed part of the fluvial programme, funded through levies associated with gravel extraction consents.

8. DISCUSSION

- 8.1. The study examined the gravel resource of the Pohangina River based on an analysis of river cross section information and gravel extraction records. It covers the 21 mile reach of the River just upstream of the confluence with the Makawakawa Stream downstream to the confluence with the Manawatū River.
- 8.2. Data comparison found that between 2012 and 2018 overall the gravel resource of the river has aggraded by approximately 147,100 cubic metres. This equates to approximately 24,500 cubic metres per annum.
- 8.3. The study has found that between 2012 and 2018 there were two consents for gravel extraction from the Pohangina River, one of which expired during the study period, leaving the global consent held by Horizons Regional Council's River Management Group remaining current as of 2020. A majority of the gravel extraction occurred under this consent over the study period.
- 8.4. The One Plan (Table 17.1 Long term average annual allocable volumes of gravel) considers the Pohangina River as one gravel extraction reach with an allocable volume of 25,000 cubic metre per annum. Following on from the recommendations of the 2013 study gravel extraction occurred at a rate of around 15,000 cubic metres per annum between 2012 and 2018. The findings of this study have found that gravel extraction could occur at a rate of 20,000 cubic metres per annum as long as areas of aggradation are targeted.
- 8.5. The study recommends that the Pohangina River should be resurveyed in 2023-2024 so the gravel trends can be re-analysed.
- 8.6. The study looked at how recent trends compare with those observed in the 2013 study. It found that the trend of degradation noticed between Hanlon Road and the Manawatū River confluence, which includes the Rail Bridge, has reversed and aggradation of the gravel resource is occurring in this section, evident with the piles that support the Rail Bridge piers less visible than they were. As such, the recommendation is to continue the current management regime in this reach of the river unless there is a specific river management requirement for gravel extraction.
- 8.7. It was also found that with the reach from Pohangina township to the Makawakawa Stream the aggradation trend identified with the last assessment has reversed with a small amount of degradation occurring. This is likely due to the dynamic nature of the river and a trend that could reverse again with the next assessment.
- 8.8. The 2013 study recommended setting limits for gravel extraction for different sections of the gravel reach. This study suggests that some of these limits should remain as per the 2013 assessment but noting that due to the dynamic nature of the river these recommended limits. Increased extraction outside the recommended limits should only



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occur if there is a river management requirement with the overall extraction amount not exceeding what is provided for in the One Plan.

9. SIGNIFICANCE

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

Ella Whale RIVER MANAGEMENT ANALYST

Jon Bell MANAGER INVESTIGATIONS AND DESIGN

ANNEXES

There are no attachments for this report.