

Report No.	18-92
Information Only - No Decision Required	

KAWHATAU GRAVEL RESOURCE STUDY

1. PURPOSE

- 1.1. The purpose of this report is to inform the Committee about the findings of a study of the gravel resource in the Kawhatau River.

2. EXECUTIVE SUMMARY

- 2.1. The study has found that between 2001 and 2015 the gravel resource in the surveyed reaches of the Kawhatau River degraded by approximately 75,000 cubic metres. This equates to a rate of approximately 5,300 cubic metres of gravel lost per year.
- 2.2. Based on the available information, it is not possible to say with certainty whether this loss of gravel is entirely attributable to human actions or natural processes occurring within the river. As such it is not recommended to make any changes to the gravel extraction policy at this time. Rather extraction shall continue to be guided by observations in the field by Horizons staff with the river scheduled for resurvey in 2020/21 as per the fluvial survey programme.

3. RECOMMENDATION

That the Committee recommends that Council:

- a. receives the information contained in Report No. 18-92.

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 on the Kawhatau River.

6. SIGNIFICANT BUSINESS RISK IMPACT

- 6.1. There are no significant business risk impacts associated with this item.

7. BACKGROUND

- 7.1. From its headwaters in the Ruahine Ranges the Kawhatau River generally flows westwards to its confluence with the Rangitikei River at Manui. The Kawhatau is a confined river, which is very downcut and gorge-like, and is a significant source of gravel for the Rangitikei River.
- 7.2. Historically the gravel resource of the Kawhatau has been a valuable resource and commercial extraction has occurred at a number of locations along Kawhatau and Valley Roads.

- 7.3. The extraction of gravel from the River is currently managed through the consenting process administered by the regulatory arm of Horizons.
- 7.4. It is important to understand how the gravel resource in the river is changing over time to ensure that the gravel extraction policy is sustainable and that the flood carrying capacity of the channel, the stability of the river channel, or the integrity of any community infrastructure are adversely affected by any changes in the gravel resource.
- 7.5. This investigation was done as a collaborative effort between the Science, Survey, and River Management teams. The survey work, along with the analysis was funded from gravel extraction levies.

8. REPORT PRECIS

- 8.1. The study examined the gravel resource in the Kawhatau River based on an analysis of river cross section information and gravel extraction records. It covers a 14 km reach of the river extending downstream from the Rangitane Road Bridge.
- 8.2. The study has found that between 1997 and 2001 the gravel resource in the Kawhatau River remained fairly constant. However, between the 2001 and 2015 the gravel resource degraded by approximately 75,000 cubic metres. This equates to a rate of approximately 5,300 cubic metres of gravel lost per year.
- 8.3. The study has found no evidence that this reduction in the gravel resource is directly attributable to gravel extraction activities, and could indeed be due to natural variations as gravel moves during flood events.
- 8.4. It is recommended that the Kawhatau River is resurveyed as part of the fluvial programme, in the summer of 2020/21, to monitor how the river changes in the future to see if any long term trends begin to be seen.
- 8.5. Unfortunately the findings of the report are limited by the information on which it is based. The survey records of the Kawhatau Reaches are limited to 4 discrete reaches, with an average length of 0.78km. These four reaches themselves are located within a 14km reach of the river, which does not cover some of the reaches from which gravel extraction occurs. The limited nature of the survey record makes it impossible to draw any meaningful conclusions about how the gravel resource is changing in the wider river.
- 8.6. To enable more meaningful conclusions to be drawn in the future it is recommended that when the Kawhatau River is next surveyed, the survey reach is extended to the confluence with the Rangitikei River, and that cross-sections are surveyed at least every kilometre along the length of the river.
- 8.7. This recommendation to extend the survey reach will enable us to determine how the gravel resource is changing in the Kawhatau River as a whole. It is important understand this as the Kawhatau is a significant source of gravel to the lower Rangitikei River which has numerous commercial pressures on its gravel.
- 8.8. The full report is available on request.

9. SIGNIFICANCE

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

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ANNEXES

There are no attachments for this report.