

# STAFF REPORT

**TO:** Chairman and Members, Engineering Services Committee  
**FROM:** Philip Drummond, Asset Engineer Rivers/Roads  
**REFERENCE:** R507  
**DATE:** 03 April 2007  
**SUBJECT:** **PROPOSED GRAVEL RELOCATION TRIALS**

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## 1 PURPOSE

The purpose of this report is to present a proposal to relocate gravel from high beaches into deep channels in the Motueka River bed on a trial basis.

## 2 BACKGROUND TO PROPOSAL

A statement generated by the TDC E&P River Scientist, Eric Verstappen, indicates that the sustainability of gravel in TDC rivers in general is zero. The report indicates that there are isolated places where small amounts of gravel may need to be moved for river management purposes. It can be shown that in many other places the perceived imbalance of gravel on apparently high beaches can be balanced by simply relocating the gravel from high beaches into the deep channels, particularly around well rocked meanders.

## 3 RESOURCE CONSENT

The current Rivers Global Consent NN010109 does not permit work within the day to day wetted river channel. A special resource consent will need to be applied for before such a trial can be carried out.

## 4 RECOMMENDED SITES

The AOMP lists the sites at which the Asset Engineer Rivers has already, or intends, to move gravel for river management purposes. Several of the recently worked sites will offer excellent opportunities for a series of trials. They are each different from one another and would provide a good range of results on which to base an assessment of success following future flood events.

- Baigent's Beaches at Kohatu
- Bakers Beaches below the Tapawera Bridge
- McLean's Picnic Area Island
- William's Beach D/S of Alexandra Bluff Bridge

## 5 WHAT THE PROCESS WOULD INVOLVE

The process would involve using a Cat D8 or Komatsu 155AX sized bulldozer to cut the top off the high beach on the inside of the bend or island and move the material into the adjacent deep channel.

A resource consent to work in the waterway would need to be obtained prior to work starting as the current Global Consent NN 010109 does not permit this type of operation. The restrictions requiring discussion with affected parties will be aimed at getting permission to fit within the limitations of fish spawning seasons and at times when the public expects access for recreational activities.

While Fish and Game will prefer the operation be carried out during a river fresh when the waters are naturally silty, this is not often a suitable time for operators and plant to be put at risk in the river bed.

Some additional survey control will need to be put in place prior to the work and re-measured at intervals afterwards.

## 6 ESTIMATED COST OF SITES

Resource Consent	\$ 3000 +
Survey – Monitoring	\$10,000
Komatsu 155 AX	\$250/hour

Baigent's Beaches at Kohatu	\$5000
Bakers Beaches below the Tapawera Bridge	\$5000
McLean's Picnic Area Island	\$6000
William's Beach D/S of Alexandra Bluff Bridge	\$6000

The estimate of these works (\$35,000 plus) is considerably less than previously reported as they are all sites at which a lot of the preparatory work, above water level, has been done by contractors during the last season. However, the cost of this work is over and above the rivers budget set for 2007-2008. Therefore if the work proceeds within the allocated budget then other scheduled maintenance activity will need to be deferred in 2007-2008.

## 7 RECOMMENDATION

**THAT the process of obtaining resource consents be continued and that funding be allocated for the physical trials to be carried out between 1 October 2007 and 30 November 2007 or in February-March of 2008 from within the rivers operations budget indicated in the Draft Annual Plan 2007-2008.**

Philip Drummond  
**Asset Engineer Rivers/Roads**