

MEMORANDUM



To: Rotorua Lakes Project Management Team

From: Andy Bruere, Lake Operations Manager

Date: 10 April 2012

File Ref:

Copy To: Warwick Murray, Group Manager: Land Resources, Rob Donald , Group Manager: Water Management

Subject: **Possible Hornwort impact: Lake Rotoiti**

As part of the requirements to monitor the impact of the Ohau Diversion wall we have undertaken regular monitoring for a number of fish species prior to the wall commissioning and since that time. This includes specific monitoring for the native koura and kakahi in Lake Rotoiti. This work is undertaken by Ian Kusabs (Fisheries Expert) and Willie Emery (Ngāti Pikiao)

This monitoring work is reported to the Fisheries Review Panel, as required by the resource consent conditions. Although the monitoring continues to show abundant koura and kakahi populations it has been reported by the fisheries expert that invasive hornwort (aquatic weed) is starting to create some problems with the monitoring and possibly affecting the koura habitat.

It is reported that there is a significant decline in koura at the Te Akau site (control) while numbers at Okere (treatment) have not changed. This may be due to the inundation of the Te Akau site with hornwort. The hornwort has two effects according to Ian Kusabs; 1. Causes Do levels to decline, and 2. The inundation of the site with hornwort is an unsuitable habitat for koura and excludes their occupation of the area.

With the improvement in water quality being recorded for the lake, in particular water clarity, light penetration increases and it is likely that invasive weed problems could increase. The fisheries panel wishes to raise this matter with the Regional Council, with the aim of alerting the council to a problem not associated with the diversion wall, but recognised through the monitoring work undertaken as part of the wall monitoring programme.

The impact has initially been identified at a site outside of the negative impact region of the diversion wall at Te Akau. However, with the existence of the invasive hornwort in Lake Rotoiti, this problem is likely to increase, and continue to impact on the native to a greater extent.

The Fisheries Panel recognises that it has no jurisdiction over the control of invasive weeds in Lake Rotoiti, but believes it is pertinent to raise the issue for Regional Council as the positive effects of the diversion wall could be diluted if this problem continues without being addressed.