# Before Hearing Commissioners at Christchurch

under: the Resource Management Act 1991

in the matter of: applications CRC172455, CRC172522, CRC172456, and

CRC172523 to undertake channel deepening dredging

and maintenance dredging in Lyttelton Harbour

and

in the matter of: Lyttelton Port Company Limited

Applicant

Summary and response evidence of Shaun Ogilvie (Effects on Aquaculture and Mahinga Kai)

Dated: 27 April 2017

REFERENCE: JM Appleyard (jo.appleyard@chapmantripp.com)

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#### SUMMARY AND RESPONSE EVIDENCE OF SHAUN CRAIG OGILVIE

#### **INTRODUCTION**

- 1 My name is Shaun Craig Ogilvie.
- 2 I prepared evidence dated 28 March 2017 for Lyttelton Port Company Limited (*LPC*) in relation to its applications for resource consent to undertake works known as the Channel Deepening Project (*CDP*).
- 3 My qualifications and experience are as outlined in that evidence.

#### **SCOPE OF EVIDENCE**

- 4 This evidence summary is divided into two parts:
  - 4.1 Part 1 consists of a summary of my evidence as filed; and
  - 4.2 Part 2 contains evidence in response to evidence filed by submitters.

### **PART 1: SUMMARY OF EVIDENCE**

- My evidence presents an assessment of ecological effects of the applications, with a focus on marine farming and key wild (non-cultured) mahinga kai species.
- The assessment was undertaken with the guidelines of the Environmental Institute of Australia and New Zealand (EIANZ), using information on the current situation with commercial marine farming in the area, on the existing natural baseline turbidity, on numerical modelling on turbidity conditions that could arise as a result of the proposed activity, and on a review of existing literature on mussel capacity to tolerate turbidity.
- The purpose of this work was to assess the potential effects of the CDP on marine farms, and to qualitatively assess potential effects on key wild (non-cultured) mahinga kai species, with the primary concern being the potential for turbidity plumes to move to marine farm sites, and to shoreline mahinga kai species, and the potential ecological effects as a result of this.
- It was found that marine farming on Banks Peninsula is of local and national commercial importance and therefore its value was assessed as high. Through numerical modelling, it was found that the proposed activities are unlikely to cause any change to existing baseline turbidity conditions at the mussel farm sites, and therefore the magnitude of the effect was considered to be negligible.

- 9 Using the EIANZ Guidelines, the assessment of effects on marine farms was that for this high value resource a negligible magnitude of effect would result in a very low overall ecological effect.
- The wild mahinga kai species on Banks Peninsula are a natural resource of cultural importance, well known on a local and regional scale and their value is therefore assessed as high. Through numerical modelling, it was found that the proposed activities are unlikely to cause any change to existing baseline conditions at the coastal mahinga kai sites and therefore the magnitude of effect is assessed as negligible.
- 11 Using the EIANZ Guidelines, the assessment of effects on wild mahinga kai species was that for this high value resource a negligible magnitude of effect would result in a very low overall ecological effect.
- While the numerical modelling indicated only a negligible chance of sediment plumes moving into marine farms and onto shoreline habitats, given the high value of these resources, and as a precautionary approach, I support the intention of LPC to implement a real-time Environmental Monitoring and Management Plan, as a means to monitor and manage turbidity plumes during the activities.
- My evidence also responded to requests by submitters that there be only one offshore disposal ground (rather than one each for channel deepening and maintenance). Given the assessment above (i.e. that the proposed activities would result in very low overall ecological effects), I consider that the removal of one of the disposal grounds will not result in any significant ecological gains or costs in terms of marine farming and of wild mahinga kai species on the shoreline.

## **PART 2: RESPONSE EVIDENCE**

- In evidence for Te Hapū o Ngāti Wheke, Te Rūnanga o Koukourārata, Ngāi Tahu Seafood and Te Runanga o Ngāi Tahu, Islay Marsden stated that there could be adverse effects on key mahinga kai species, and that these have not been appropriately assessed in the application documentation.
- 15 Paragraph 7 of her evidence included a list of documents she reviewed in completing her evidence; that list did not include my report and evidence. As outlined above, my report and evidence included an assessment of effects on key mahinga kai species, which showed that the proposed activities would result in a very low overall ecological effect.

Dated: 27 April 2017

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Shaun Ogilvie