SUMMARY STATEMENT OF MICHAEL CAMPBELL COPELAND FOR WAIMAKARIRI IRRIGATION LIMITED

1. INTRODUCTION

1.1 My name is Michael Campbell Copeland and I am a consulting economist. I have previously provided a written brief of evidence on behalf of Waimakariri Irrigation Limited ("WIL") covering the economic effects of proposed Plan Change 7 ("PC7") for residents and businesses of the Waimakariri District and Canterbury Region. That evidence (my evidence in chief ("EIC")) is dated 17 July, 2020. I also provided a statement of rebuttal evidence dated 18 September, 2020. This statement of rebuttal evidence was in response to evidence of Geoff Butcher, an expert witness for the Christchurch City Council. My qualifications and experience are set out in my EIC. I provide a summary of my EIC and rebuttal evidence below.

2. SUMMARY OF MY EIC

- 2.1 Economic wellbeing, the efficient development and use of resources, economic growth and employment are relevant concepts under the RMA. Achieving the same or improved environmental outcomes at lesser economic cost is consistent with greater efficiency.
- 2.2 Agriculture and agricultural product processing industries are key drivers of the Waimakariri District, Greater Christchurch and the Canterbury Regional economies.
- 2.3 The existing WIL Scheme consent conditions required on-farm reductions consistent with Good Management Practice("GMP") by 1 September 2020. The proposed additional PC7 reductions (for 2030 and beyond) are estimated to result in the following direct and indirect economic impacts at the Waimakariri District level:
 - 2.3.1 Business revenue reductions of \$3.2 million per annum by 2020-30,\$54.5 million per annum by 2040 and \$61.5 million per annum by 2050.
 - 2.3.2 Job losses of 3 by 2020-30, 138 by 2040 and 176 by 2050; and

- 2.3.3 Reductions in household income of \$7.5 million per annum by 2020-30, \$35.7 million per annum by 2040 and \$49.5 million per annum by 2050.
- 2.4 At the Canterbury Regional level the economic impacts are estimated to be:
 - 2.4.1 Business revenue reductions of \$4.2 million per annum by 2020-30,\$72.6 million per annum by 2040 and \$82.0 million per annum by 2050.
 - 2.4.2 Job losses of 4 by 2020-30, 184 by 2040 and 234 by 2050; and
 - 2.4.3 Reductions in household income of \$10.0 million per annum by 2020-30, \$47.6 million per annum by 2040 and \$66.0 million per annum by 2050.
- 2.5 WIL's proposed alternative package of measures to achieve the same or better environmental outcomes at lesser economic cost for WIL farmers and the wider district and regional communities is consistent with greater efficiency and economic wellbeing.

3. SUMMARY OF REBUTTAL EVIDENCE

- 3.1 The additional net present value ("**NPV**") cost of lost farming profits from going from the Zone Implementation Programme Addendum solution in PC7 to the Christchurch City Council's suggested N<1.0 mg/L has been estimated by Geoff Butcher at \$2.1 billion. This is considerably in excess of the estimated NPV cost of investing instead in alternative water supply or water treatment options for Christchurch that would achieve the target of nitrate-nitrogen in the water supply to be kept below 1.0 mg/L, especially if investment in such an option was delayed a number of years.
- 3.2 It is generally considered appropriate to place greater weight on short to medium term costs and benefits, compared to long term costs and benefits, since these are subject to much less uncertainty. There would be significant short and medium term economic and social costs arising from the dramatic changes in land use required to achieve the much lower N target sought by the City Council.

3.3 Reduced farming profits and reduced farming economic activity will flow through to other parts of the regional economy including the Christchurch City economy, especially in the short to medium term. Therefore, it is incorrect to characterise the benefits of allowing nitrate levels at a higher level accruing only to owners of land on which farming leads to nitrates entering groundwater. There are more widespread economic impacts on the regional economy generally.

M C Copeland 11 November 2020