Nutrient Management Plans and their influence on the farm management practices of dairy farmers

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Abstract

Nutrient Management Plans (NMPs) are a relatively recent innovation in the New Zealand dairy industry, however due to their growing use in regional council policy, and initiatives such as the Dairying and Clean Streams Accord (2003), it is likely that NMPs will become mandatory for the diary industry in the near future. There is currently limited information on the use and benefits of NMPs in the New Zealand context, and how dairy farm management practices have been influenced by the introduction of NMPs.

The main objective of this research was to investigate how the introduction of an NMP has influenced the farm management practices of dairy farmers. This was achieved through the use of two case studies within the Waikato and Otago regions. These regions have contrasting approaches to nutrient management; The Waikato Regional Council has incorporated the use of NMPs in regional policy and has supported a number of community initiatives regarding nutrient management. In comparison, at the time of the research, the Otago Regional Council, while stating that they promoted the adoption of nutrient management practices, had no current policy requiring NMPs.

Results indicated that the degree of NMP uptake varied amongst farmers, depending on a variety of influences with regards to the farmer's own unique goals, circumstances and opinions. It was also found that while the reasons for NMP introduction varied amongst the farmers interviewed, the overall influences of NMPs on farm management practices were similar across both cases. The key influences of NMPs on farm management practices were; the increased precision and efficiency of fertiliser application, an increased appreciation and use of effluent as a nutrient source, and the identification and manipulation of other factors such as the effects of bought in feed and stock movement on nutrient flows on the farm.

There was a perceived lack of ongoing support and education for farmers regarding NMPs. This contributed to a general distrust amongst farmers of NMPs, in turn affecting their opinions, and uptake of NMPs. Furthermore NMPs were not being used to their full potential by the majority of farmers who participated in this research. The greater the involvement and support offered by the regional council and industry, the greater the trust and cooperation amongst the particular farmers with the relevant regional council and industry representatives.

Overall, while this research has found that NMPs do provide benefits to farmer's management practices, further support and ongoing education is required to ensure NMPs are accepted and used to their full potential by dairy farmers.

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