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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 dairy 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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Table of Contents

Abstract	ii
Acknowledgements	iii
Chapter 1 Introduction	1
1.1. Thesis Introduction	1
1.2. Background	1
1.3. Definition of a Nutrient Management Plan	3
1.4. Problem Statement.....	4
1.5. Research Question and Objectives	4
1.6. Research Question	4
1.7. Research Objectives.....	5
1.8. Thesis Structure	5
Chapter 2: Literature Review	6
2.1. Introduction	6
2.2. Benefits of NMPs	6
2.3. New Zealand Literature	10
2.4. Factors influencing the uptake of NMPs by Farmers.....	12
2.5. Summary	17
Chapter 3 Methodology	20
3.1. Introduction	20
3.2. Research Design.....	20
3.3. Selection Criteria.....	23
3.4. Data Collection.....	25
3.5. Data Analysis.....	26
3.6. Ethical Considerations.....	26
3.7. Summary	27
Chapter 4 Contextual Information to Cases	29
4.1. Introduction	29
4.2. Geography and Climate	30
4.2.1. Waikato.....	30
4.2.2. Otago.....	31
4.3. Policy.....	32
4.3.1. Waikato	32

4.3.2. Otago.....	33
4.4. Farm Details	35
4.5. Summary	37
Chapter 5 Results	38
5.1. Introduction	38
5.2. Development and Promotion of NMPs in NZ	38
5.3. Otago Results	40
5.3.1. Reasons for the introduction of NMPs to Dairy Farmers.....	40
5.3.2. Influences on the degree of uptake and opinions of NMPs by Dairy Farmers	41
5.3.3. NMPs consideration of the unique characteristics of the individual farm:	42
5.3.4. Support & Education.....	43
5.3.5. Implementation Process	45
5.3.6. Farmers concerns regarding NMPs.....	45
5.3.7. Influence of NMPs on the management practices of Dairy Farmers.....	46
5.3.7.1. Consideration of Effluent	48
5.3.7.2. Soil Tests	48
5.3.7.3. Fertiliser Application	49
5.3.7.4. Consideration of other factors such as irrigation and bought in feed.....	49
5.3.8. Summary	49
5.4. Waikato results	50
5.4.1. Reasons for the introduction of NMPs to Dairy Farmers.....	50
5.4.2. Influences on the degree of uptake and opinions of NMPs by Dairy Farmers	51
5.4.3. NMPs consideration of the unique characteristics of individual farms.....	52
5.4.4. Support & Education.....	53
5.4.5. Implementation Process	54
5.4.6. Farmers concerns regarding NMPs.....	55
5.4.7. Influence of NMPs on the management practices of Dairy Farmers.....	56
5.4.7.1. Fertiliser Application	58
5.4.7.2. Consideration of Effluent	58
5.4.8. Summary	59
5.5. Combined Data	59
5.5.1. Reasons for the introduction of NMPs to Dairy Farmers.....	59
5.5.2. Influences on the degree of uptake and opinions of NMPs by Dairy Farmers	60
5.5.3. Implementation Process	61

5.5.4. Influence on Management Practices	62
Chapter 6 Discussion.....	64
6.1. Introduction	64
6.2. Drivers contributing to the acceptance and use of NMPs by dairy farmers:.....	64
6.3. Support and Awareness	66
6.4. Farmers opinions / concerns regarding NMPs.....	68
6.5. Influence of NMPs in the management practices of dairy farmers.....	69
6.5.1. The development and expansion of the farmer’s effluent block	71
6.5.2. Increased precision and efficiency of the fertiliser application.....	72
6.5.3. Consideration of other factors that can influence farm nutrient flows.	73
6.5.4. Soil Tests	73
6.6. Summary	73
Chapter 7 Conclusions.....	76
7.1. Introduction	76
7.2. Research findings summary	76
7.3. Conclusions	79
7.4. Implications for the Industry.....	81
7.5. Research Methodology Assessment.....	82
7.6. Further Research.....	83
References	85
Appendices	89
Appendix 1: Participant Consent Form.....	89
Appendix 2: Information Sheet.....	90
Appendix 3: Interview Schedule for Farmers.....	92
Appendix 4: Interview Schedule for Key Informants	94