

THE ECONOMIC IMPACT OF WATER QUALITY REGULATION IN NEW ZEALAND

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Abstract. New Zealand (NZ) pastoral agriculture is facing a momentous challenge in terms of bolstering its current strength, amidst societal pressure to reduce contaminant loss to water ways. For the near future, industry groups will be engaged in participatory processes associated with water reform driven by regional and national government. Underlying these difficult discussions are important questions surrounding the potential economic impact of limits placed on agricultural intensity. Within regional processes, economic models are being broadly applied at the catchment level to assess the implications of alternative water quality limits. These frameworks integrate information from a broad range of sources, focusing primarily on land use heterogeneity and how it impacts cost-effective mitigation. The foundation of these models is the relationship between profit and contaminant loss within different agricultural industries.

The primary objective of this presentation is to outline the current state of knowledge regarding the potential economic impact of water-quality limits on NZ grazing systems. This will draw on the author's experience in modelling these impacts, both at the farm and catchment level. Much of the work is drawn from a five-year research programme performed with industry to establish system models that provide a reasonable description of grazing behaviour, especially in the context of limits being placed on farming systems. Key ways forward for both economists and scientists are discussed.

Editor's Note: A manuscript has not yet been submitted for this presentation.