

SHARING BOTH THE RESPONSIBILITIES AND RESOURCES TO REDUCE N LEACHING: A NEW PARADIGM FOR DAIRY FARMING

David Horne, R Singh, P Tozer and D Gray

School of Agriculture and Environment, Massey University, Palmerston North

In order to improve surface water quality in 'sensitive' catchments in the Horizon region, each dairy farmer is prescribed a unique, nitrogen (N) leaching allocation. This value is determined by the mix of LUC classes on the farm which is only one of the many factors that affect current N loads to rivers. As is reasonably well understood, there are many features of a dairy farm that impact on N leaching, not least of all; climate, soils types, productivity, and the extent of 'in-field' mitigation measures in place. Furthermore, there is both natural and built attenuation at the field edge and beyond.

This paper explores the possibility that there may be mutual benefits to dairy farmers to share their responsibilities to reduce N leaching, and to pool their soil, mitigation and attenuation resources. While this obviously represents a paradigm shift or transformative approach to landuse and farm management, it may allow rural industries to meet their environmental obligations in a more efficient manner. Using a case study approach, this paper explores the potential to manage the dairy landscape, at both the large and small scale, in a coordinated manner for improved environmental outcomes.

Editor's note: *An extended manuscript has not been submitted for this presentation.*
