

Deep drainage of nitrogen

Deep drainage is a key transport pathway for nitrogen in the following physiographic zones:

- Central Plains
- Old Mataura
- Oxidising
- Riverine

Some example good management practices for leaching of nitrogen to groundwater which could be included in your Farm Environmental Management Plan include¹:

Please note

The factsheet on General Good Management Practices is applicable everywhere, and should be referred to in conjunction with this factsheet. There may also be other key transport pathways and associated good management practices which are relevant to your property, depending on which physiographic zones and variants are present.

You can search for your property and view the physiographic zones map on <http://gis.es.govt.nz>

Mitigation	Example GMPs	✓
Reduce the accumulation of surplus N in the soil, particularly during autumn and winter	Reduce inputs of N, such as fertiliser or nitrogen contained in imported feed	
	Control the duration of grazing of pasture and forage crops (on-off grazing)	
	Winter stock off-paddock	
	Plant catch crops to capture N from grazed winter forages (e.g. barley and triticale)	
	Optimise timing and amounts of irrigation input	
	Substitute autumn diets with low-N feed (such as whole crop silage)	
	Reduce stocking rate	
	Cut and carry fodder crops if practical and affordable	
	Use gibberellic acid to boost pasture growth to reduce overall N inputs	
	Re-sow areas of bare or damaged soil as soon as possible	

¹Regardless of the good management practices chosen, the entire farm environmental management plan must be prepared in accordance with Appendix N. On-farm actions must comply with all relevant rules in the Southland Water and Land Plan 2016, and any relevant resource consent conditions.