

Waimakariri Land and Water Solutions Programme Options and Solutions Assessment: Nitrate Management Errata

This document provides corrections to tables in the Report 'Waimakariri Land and Water Solutions Programme Options and Solutions Assessment: Nitrate Management'. The corrected values are shown as tracked changes.

Table 4-15: Alternative Pathways - Nitrate modelling results for Christchurch aquifer

Site	ZC limit ¹ (mg/L)	Current Pathways (mg/L)	Lag time (year)	Reduction needed (%)	Option	Beyond GMP reduction (%)	Number of 10yr-stages	Target reached (years)
West	3.8	3.97 (1.24 – 6.86) 4.1 (1.3 – 7.1)	200	7.3 (0-46.5)	C-10	9.2%	0.8 (0-5.1)	210 (0-250)
					20kg-10	8.8%	0.8 (0-5.3)	210 (0-255)
					D-20	16.6%	0.4 (0-2.8)	205 (0-230)
Central	3.8	5.24 (3.38 – 7.36) 5.4 (3.5 – 7.6)	800	29.6 (0-50.0)	C-10	9.2%	3.2 (0-5.5)	830 (0-855)
					20kg-10	8.8%	3.4 (0-5.7)	835 (0-855)
					D-20	16.6%	1.8 (0-3.0)	820 (0-830)
East	3.8	5.24 (3.38 – 7.36) 5.4 (3.5 – 7.6)	1200	29.6 (0-50.0)	C-10	9.2%	3.2 (0-5.5)	1230 (0-1255)
					20kg-10	8.8%	3.4 (0-5.7)	1235 (0-1255)
					D-20	16.6%	1.8 (0-3.0)	1220 (0-1230)

Purple – concentration exceeds ZC threshold
Red – concentration exceeds MAV
 Concentrations are presented in 50th percentile model results, with 5th and 95th percentile results between brackets, see section 3.6.1)
 C-10 : GMP + staged nitrate reductions of 10% per 10 year for all consented land use
 20kg-10 : GMP + staged nitrate reductions of 10% per 10 year for all consented land use with a nitrate loss higher than 20kg/ha
 D-20 : GMP + staged nitrate reductions of 20% per 10 year for dairy and 10% per 10 year for all other consented land use with a nitrate loss higher than 20kg/ha
 Target reached in “0” years means nitrate concentration will always be below ZC limit if this scenario is implemented
 Years is years after full implementation

¹ All water samples collected from CCC community supply wells should meet the limit, recognising that it may take some time to achieve this

Table 4-16: Dryland Farming scenario - Nitrate modelling results for Christchurch aquifer

Site	ZC threshold ² (mg/L)	Current Pathways (mg/L)	Lag time (year)	Fully implemented by	Dryland Farming (mg/L)	Target reached (years)
West	3.8	3.97 (1.24 – 6.86) 4.1 (1.3 – 7.1)	200	2050	1.07 (0.44-1.72)	0 (0-210)
Central	3.8	5.24 (3.38 – 7.36) 5.4 (3.5 – 7.6)	800	2050	1.40 (1.07-1.78)	0 (0-810)
East	3.8	5.24 (3.38 – 7.36) 5.4 (3.5 – 7.6)	1200	2050	1.40 (1.07-1.78)	0 (0-1210)

Purple – concentration exceeds ZC threshold
Red – concentration exceeds MAV
 Concentrations are presented in 50th percentile model results, with 5th and 95th percentile results between brackets, see section 3.6.1.)
 Target reached in “0” years means nitrate concentration will always be below ZC target if this scenario is implemented
 Years is years after full implementation

² Average nitrate concentration in all samples collected from CCC wells >80 m deep should be less than the limit