Contaminant Load Model

Version MAY06

Auckland Regional Council
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SOURCE	SOURCE TYPE		Source Area (m^2)	First management option	Second management option	Third management option	Fraction of area draining to train	Sediment Yield (g m^{-2} a^{-1})	Sediment Initial load (g a^{-1})	Sediment Load reduction efficiency	Sediment Reduced load (g a^{-1})	Zinc Yield (g m^{-2} a^{-1})	Zinc Initial load (g a^{-1})	Zinc Load reduction efficiency	Zinc Reduced load (g a^{-1})	Copper Yield (g m^{-2} a^{-1})	Copper Initial load (g a^{-1})	Copper Load reduction efficiency	Copper Reduced load (g a^{-1})	Total Petroleum Hydrocarbons Yield (g m^{-2} a^{-1})	Total Petroleum Hydrocarbons Initial load (g a^{-1})	Total Petroleum Hydrocarbons Load reduction efficiency	Total Petroleum Hydrocarbons Reduced load (g a^{-1})
Roofs	Galvanised unpainted							5	0	0.00	0	2.200	0.0	0.00	0.00	0.0008	0.0	0.00	0.0				
	Galvanised steel poor paint							5	0	0.00	0	1.600	0.0	0.00	0.00	0.0008	0.0	0.00	0.0				
	Galvanised well painted							5	0	0.00	0	0.150	0.0	0.00	0.00	0.0008	0.0	0.00	0.0				
	Zinc/aluminium unpainted							5	0	0.00	0	0.300	0.0	0.00	0.00	0.0008	0.0	0.00	0.0				
	Colorsteel/colorcote							5	0	0.00	0	0.040	0.0	0.00	0.00	0.0008	0.0	0.00	0.0				
	Concrete							10	0	0.00	0	0.020	0.0	0.00	0.00	0.0013	0.0	0.00	0.0				
	Clay							5	0	0.00	0	0.020	0.0	0.00	0.00	0.0008	0.0	0.00	0.0				
	Slate							5	0	0.00	0	0.020	0.0	0.00	0.00	0.0008	0.0	0.00	0.0				
	Copper							5	0	0.00	0	0.000	0.0	0.00	0.00	3.0000	0.0	0.00	0.0				
	Decramastic							5	0	0.00	0	0.200	0.0	0.00	0.00	0.0017	0.0	0.00	0.0				
	Other materials							5	0	0.00	0	0.020	0.0	0.00	0.00	0.0008	0.0	0.00	0.0				
	Unknown (no galvanised steel/copper)							7	0	0.00	0	0.200	0.0	0.00	0.00	0.0008	0.0	0.00	0.0				
		Length (m)																					
Roads		<1000	0					4	0	0.00	0	0.021	0.0	0.00	0.00	0.0070	0.0	0.00	0.0	0.11	0.0	0.00	0.0
		1000-5000	0					30	0	0.00	0	0.107	0.0	0.00	0.00	0.0349	0.0	0.00	0.0	0.54	0.0	0.00	0.0
	Vehicles/day	5000-20000	0					150	0	0.00	0	0.537	0.0	0.00	0.00	0.1744	0.0	0.00	0.0	2.68	0.0	0.00	0.0
		20000-50000	0					299	0	0.00	0	1.068	0.0	0.00	0.00	0.3472	0.0	0.00	0.0	5.34	0.0	0.00	0.0
		50000-100000	0					300	0	0.00	0	2.281	0.0	0.00	0.00	0.7414	0.0	0.00	0.0	11.41	0.0	0.00	0.0
		>100000	0					300	0	0.00	0	3.532	0.0	0.00	0.00	1.1480	0.0	0.00	0.0	17.66	0.0	0.00	0.0
Paved Surfaces other than roads	Residential							20	0	0.00	0	0.070	0.0	0.00	0.00	0.0100	0.0	0.00	0.0				
	Industrial							50	0	0.00	0	0.100	0.0	0.00	0.00	0.1300	0.0	0.00	0.0				
	Commercial							100	0	0.00	0	0.050	0.0	0.00	0.00	0.0500	0.0	0.00	0.0				
Urban Grass lands		<10						35	0	0.00	0				0.0				0.0				
	Slope	10-20						80	0	0.00	0				0.0				0.0				
		>20						160	0	0.00	0				0.0				0.0				
Urban Stream Channel	*length x width*							6000	0	0.00	0				0.0				0.0				
	Urban area without construction sites		**0**					**Totals**	**0**	**#DIV/0!**	**0**	**Totals**	**0.0**	**#DIV/0!**	**0.0**	**Totals**	**0.0**	**#DIV/0!**	**0.0**	**Totals**	**0.0**	**#DIV/0!**	**0.0**
Construction Site (1) open for 2 months/year		<10						400	0	0.00	0				0.0				0.0				
	Slope	10-20						2500	0	0.00	0				0.0				0.0				
		>20						7000	0	0.00	0				0.0				0.0				
Construction Site (2) open for 6 months/year		<10						1300	0	0.00	0				0.0				0.0				
	Slope	10-20						7500	0	0.00	0				0.0				0.0				
		>20						20000	0	0.00	0				0.0				0.0				
Construction Site (3) open for 12 months/year		<10						2500	0	0.00	0				0.0				0.0				
	Slope	10-20						15000	0	0.00	0				0.0				0.0				
		>20						40000	0	0.00	0				0.0				0.0				
	Urban area with construction sites		**0**					**Totals**	**0**	**#DIV/0!**	**0**	**Totals**	**0.0**	**#DIV/0!**	**0.0**	**Totals**	**0.0**	**#DIV/0!**	**0.0**	**Totals**	**0.0**	**#DIV/0!**	**0.0**
Exotic production forest		<10						10	0	0.00	0				0.0				0.0				
		10-20						60	0	0.00	0				0.0				0.0				
	Slope	20-30						200	0	0.00	0				0.0				0.0				
		>30						500	0	0.00	0				0.0				0.0				
Stable bush		<10						5	0	0.00	0				0.0				0.0				
		10-20						30	0	0.00	0				0.0				0.0				
	Slope	20-30						100	0	0.00	0				0.0				0.0				
		>30						250	0	0.00	0				0.0				0.0				
Farmed pasture		<10						50	0	0.00	0				0.0				0.0				
		10-20						100	0	0.00	0				0.0				0.0				
	Slope	20-30						500	0	0.00	0				0.0				0.0				
		>30						1000	0	0.00	0				0.0				0.0				
Retired pasture		<10						20	0	0.00	0				0.0				0.0				
		10-20						100	0	0.00	0				0.0				0.0				
	Slope	20-30						200	0	0.00	0				0.0				0.0				
		>30						500	0	0.00	0				0.0				0.0				
Horticulture		Volcanic						50	0	0.00	0				0.0				0.0				
	Soil type	Sediment						100	0	0.00	0				0.0				0.0				
		Unknown						100	0	0.00	0				0.0				0.0				
	Total area of sources (m^2)		**0**					**Site totals**	**0**	**#DIV/0!**	**0**	**Site totals**	**0.0**	**#DIV/0!**	**0.0**	**Site totals**	**0.0**	**#DIV/0!**	**0.0**	**Site totals**	**0.0**	**#DIV/0!**	**0.0**

Site and source area's agree

Difference = **0**

Bottom of Site contaminant management train				Bottom of Site out-fall Loads (kg a^{-1})				Average yields				Average concentrations (mg kg^{-1})			
First management option	Second management option	Third management option	Fraction of area draining to train	TSS	Zn	Cu	TPH	TSS kg ha^{-1} a^{-1}	Zn g ha^{-1} a^{-1}	Cu g ha^{-1} a^{-1}	TPH g ha^{-1} a^{-1}	TSS	Zn	Cu	TPH
				0.0	0.0	0.0	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!