

Supplementary Information

Table S1: Grain size, nutrient, chemical and microbiological testing methods used in the study.

Test	Method	Reference	Limit of detection
Total nitrogen	Catalytic combustion (900°C, O ₂), separation, thermal conductivity detector [Elementar Analyser].	[35]	0.02 g/100 g dry weight
Dry matter for grainsize samples (sieved)	Drying for 16 h at 103°C, gravimetry (free water removed before analysis). Hill Laboratories.	[36]	0.10 g/100 g
Grain size profile (fraction ≥ 2 mm)	Wet sieving with dispersant, as received, 2.00 mm sieve, gravimetry.	[36]	0.1 g/100 g dry weight
Fraction < 2 mm, ≥ 63 µm	Wet sieving using dispersant, as received, 2.00 mm and 63 µm sieves, gravimetry (calculation by difference).	[36]	0.1 g/100 g dry weight
Fraction < 63 µm	Wet sieving with dispersant, as received, 63 µm sieve, gravimetry (calculation by difference).	[36]	0.1 g/100 g dry weight
Arsenic/trace metals (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg)	Dried sample, <2 mm fraction. Nitric/Hydrochloric acid digestion, ICP-MS, trace level. Hill Laboratories. APHA 3125 B 23 1 st Edition.	[37]	0.010–0.4 mg/kg dry weight
<i>E. coli</i>	APHA 5 th Edition, Chapter 9, 2015.	[38]	<30 MPN/100 g
Presumptive enterococci	APHA 4 th Edition, 2001.	[39]	<30 MPN/100 g

Figure S1: Total daily volume of biosolids applied to forestry blocks on Moturoa / Rabbit Island after the baseline survey, 1997–2019.

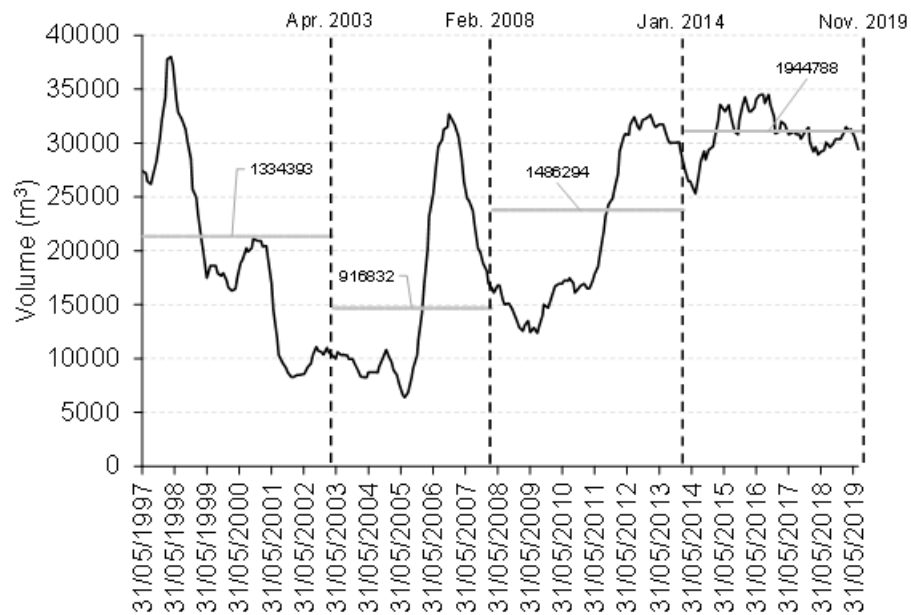


Figure S2: Scatterplot of concentrations of total nitrogen in sediment samples as a function of distance from the nearest Moturoa / Rabbit Island biosolids application area in the 2019 survey.

