

*Supplementary Material***Coastal Stormwater Pond Age and Phosphorus Cycling within Water and Sediment**

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The following supporting material is included:

**Table S1** Mean equilibrium phosphorus concentration values ( $EPC_0$ ) and  $R^2$  values from linear regression analyses used to estimate  $EPC_0$  in all stormwater ponds sampled across two seasons (summer and winter)

Pond age		Summer		Winter	
		$EPC_0$	$R^2$	$EPC_0$	$R^2$
Young	Y1	-0.61	0.78	-0.63	0.35
	Y2	2.19	0.64	2.23	0.90
	Y3	0.82	0.53	6.17	0.53
Middle-age	M1	30.9	0.50	0.95	0.71
	M2	-1.44	0.36	3.52	0.32
	M3	0.91	0.95	0.5	0.91
Old	O1	0.63	0.56	2.39	0.51
	O2	0.49	0.14	0.85	0.88
	O3	0.30	0.79	1.47	0.58

**Table S2** Mean particle size distribution and organic carbon (OC) across stormwater pond sections (% fraction)

Pond age	Sampling seasons	Sand (%)	Fine (%)	OC (%)
Young	Summer	90.0 ± 7.1	10.0 ± 7.1	4.01 ± 2.5
	Winter	94.0 ± 4.0	6.01 ± 4.0	4.01 ± 2.6
Middle-age	Summer	90.0 ± 4.0	10.0 ± 4.0	4.30 ± 2.5
	Winter	93.0 ± 4.1	7.01 ± 4.1	5.01 ± 2.1
Old	Summer	92.0 ± 7.1	8.01 ± 7.1	6.01 ± 3.5
	Winter	91.0 ± 8.1	9.01 ± 8.1	5.01 ± 4.0