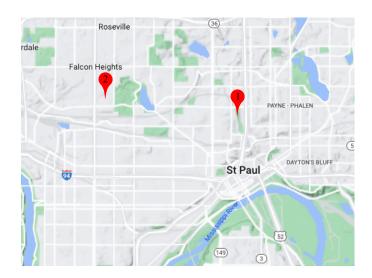
Supplemental Information for Stormwater applications of zeolitecoated biofilm carriers for ammonium and PFAS removal



- 5 Figure S1. Locations of the stormwater systems in which the carriers were deployed.
- The number 1 indicates the Maryland stormwater pond and the number 2 indicates the
- 7 South Pascal raingarden. Map generated by Google Maps.

1 2



Figure S2. Images of the carrier installation field sites. The panels show the following: A) carrier installation at the outlet control box of the Maryland stormwater pond, B) the Maryland stormwater pond, C) installation of carriers at the South Pascal raingarden where carriers were covered with 4 inches of soil, and D) the South Pascal raingarden. Red arrows indicate location of carriers when deployed.

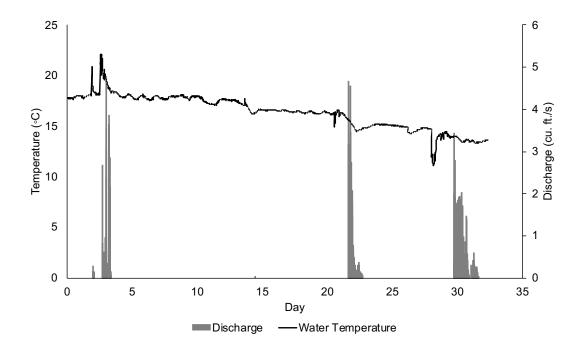


Figure S3. Temperature and discharge at the Maryland stormwater pond. Records were collected from the CRWD website from September 30 (date of deployment) to November 1.(40)

Table S1. Regression analysis of log gene copies with time for carriers deployed in the raingarden

Gene (log	Carrier	Slope (log	P-value	Lower 95%	Upper 95%
copies)	Type	copies per			
		day)			
16S rRNA	Control (C)	0.00043007	0.88104247	-0.0054033	0.00626344
	Control Pre-	-0.0127703	2.5734E-06	-0.0167517	-0.008789
	seeded (CP)		2.3734E-00	-0.010/31/	-0.008/89
	Zeolite (Z)	0.00410123	0.06005286	-0.0001856	0.00838809
	Zeolite Pre-	-0.0032727	0.30241995	-0.009749	0.00320358
	seeded (ZP)				
Amx	Control (C)	0.00850041	0.3748314	-0.010807	0.0278078
	Control Pres-	-0.0095339	0.04671165	-0.0189133	-0.0001545
	eeded (CP)			-0.0189133	-0.0001343
	Zeolite (Z)	0.00632947	0.61601833	-0.0192354	0.03189436
	Zeolite Pre-	0.01099261	0.13285336	-0.0036781	0.02566331
	seeded (ZP)				

amoA	Control (C)	0.01160085	0.02522742	0.00155044	0.02165126
	Control Preseeded (CP)	-0.0140843	0.00110099	-0.0217136	-0.006455
	Zeolite (Z)	0.00626229	0.18575445	-0.0031937	0.01571827
	Zeolite Preseded (ZP)	0.00010092	0.98410271	-0.010393	0.01059481

Table S2. Regression analysis of log gene copies with time for carriers deployed in the

pond

Gene (log copies)	Carrier Type	Slope (log copies per day)	P-value	Lower 95%	Upper 95%
16S rRNA	Control (C)	0.02498187	0.00037337	0.01232792	0.03763583
	Zeolite (Z)	0.02400616	9.0911E-05	0.01323514	0.03477718
	Control Preseded (CP)	-0.013528	6.8277E-05	-0.0190548	-0.0080012
	Zeolite Preseeded (ZP)	-0.0246347	2.2802E-06	-0.0322448	-0.0170247
	Control (C)	0.02490174	0.00144166	0.01046932	0.03933416
Amx	Zeolite (Z)	0.00945516	0.22970758	-0.0063181	0.02522846
	Control Preseded (CP)	-0.0192256	8.8217E-05	-0.0272659	-0.0111853
	Zeolite Preseded (ZP)	-0.0453363	7.4378E-11	-0.0523933	-0.0382794
amoA	Control (C)	0.02004466	1.5221E-05	0.01217808	0.02791123
	Zeolite (Z)	0.03195017	1.218E-09	0.02458565	0.03931469
	Control Preseded (CP)	-0.0171981	0.00132541	-0.0267184	-0.0076777
	Zeolite Preseded (ZP)	-0.0408793	2.594E-09	-0.0488117	-0.0329469