

Summary Table

This chart offers an overview of the water quality treatment and runoff volume reduction of the 12 stormwater treatments analyzed in this report. It includes percent pollutant removal efficiencies expressed as median values; percent average peak flow reduction; and the average lag time for each treatment. (Lag time is the difference in minutes between the influent and effluent volume center of mass.) Blue bars present data from the UNH Stormwater Center; white bars show comparative data on the same, or similar treatments, from alternate sources. "N/T" signifies "no treatment," indicating that the stormwater treatment did not remove the pollutant(s) in question.

Treatment Unit Description	Reference	TSS (%)	NO ₃ -N (%)	Zn (%)	TPH-D (%)	Average Peak Flow Reduction (%)	Average Lag Time (Min.)
ADS Water Quality Unit	UNH	66	N/T	74	47	N/T	N/T
	www.ads-pipe.com	80	N/T	N/T			
ADS Infiltration Unit	UNH	99	N/T	99	99	83	364
Surface Sand Filter	UNH	49	6	81	94	60	220
	EPA: Sand Filters	70	N/T	45			
Sand Filter	Clayton & Schueler, 1996	85	N/T	71			
	Bell, W., et al, 1995	61–70	N/T	> 82			
Retention Pond	UNH	81	64	92	61	85	554
	EPA: Wet Detention Ponds	50–90	N/T	40–50			
	Winer, 2000	80 ± 27	43 ± 38				
Bioretention System	UNH	97	44	99	99	85	615
	EPA: Bioretention	90	N/T	N/T			
	Davis, et al, 1998	81	38				
	Winogradoff, 2001	N/T	N/T	87–99			
Aqua-Swirl and Aqua-Filter	UNH	66	10	61	42	N/T	N/T
	EPA website	84	N/T	N/T			
VortSentry	UNH	29	37	42	53	N/T	N/T
	Technical Bulletin 1	80	N/T	N/T			
V2B1 Structural System	UNH	38	-43	35	40	N/T	N/T
	www.env21.com	80					
Continuous Deflective Separation Unit	UNH	41	N/T	26	26	N/T	N/T
	various	52–84					
Gravel Wetland	UNH	99	99	99	99	85	336
	Clayton & Schueler, 1996	80–93	75–87	55–90			
Stone (Riprap) Swale	UNH	52	-74	66	33	N/T	N/T
Vegetated Swale	EPA: Vegetated Swales	81	38	71			
	Clayton & Scheuler, 1996	30–90	0–80	N/T			