This dataset presents the concentrations of a wide range of stormwater pollutants accumulated in filter materials and forebays of 29 bioretention systems having been in long-term operation for urban stormwater treatment in Ohio, Michigan, and Kentucky (USA). The study investigates pollutants including metals, microplastics, and organic micropollutants (PAHs, phthalates, alkyl phenols, PCBs, as well as 35 PFASs and their precursors). The field study was conducted in November 2019. Table 1 summarizes the site characteristics of bioretentions studied.

At each site, one sample was taken from forebay sediments coded by "FB" (if forebay exists), and nine samples from the filter material at three different distances from the inlet (S1< 1 m, and S2 and S3 approximately 3 and 6 m from the inlet, respectively) and three depths (L1: 0–5 cm, L2: 10–15 cm, and L3: 35–50 cm). See Figure 1 for details.

In the dataset Excel file, each sample was coded with the site name and followed by the location of the sample in the system. For example, the sample code "*Griggs 5A* ***S1L3***" means that the sample was taken from filter material at site "*Griggs 5A"* at distance S1 (within the first meter) from the inlet and depth L3 (35-50 cm). Similarly, the sample code "*Griggs 5A* ***FB****"* means the sample was taken from forebay sediment at site *Griggs 5A*.

The other columns in the dataset show the pollutant concentrations analyzed for each sample.

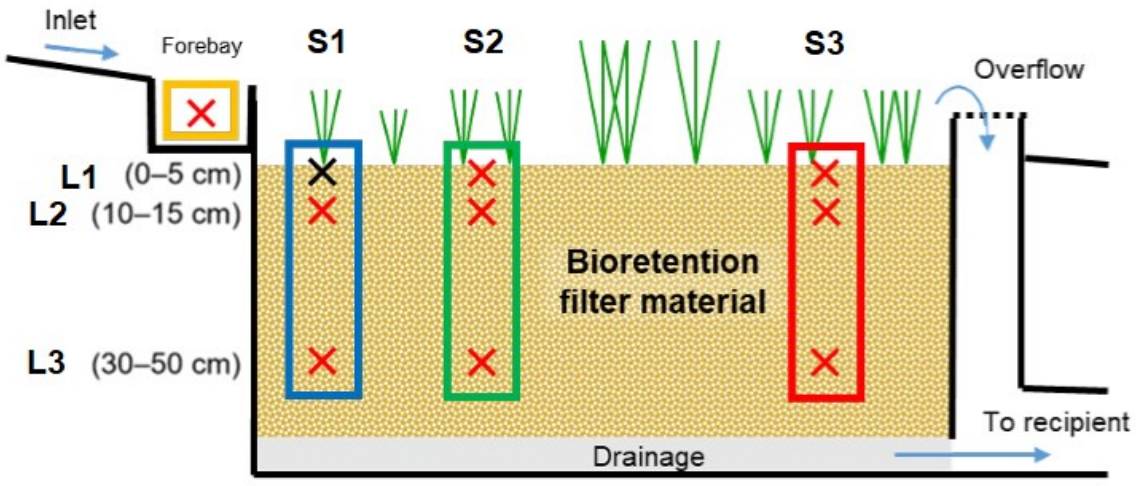


Fig. 1 Schematic sketch of the sampling strategy in bioretention filter media with sampling points at three locations and at three depths, as marked by a red "X."

Table 1. Site characteristics

Sites name	Location	Site no. assigned in different studies				Forebay	Age [yr]	Catchment area	Catchment Area (CA) [m²]	Filter Area (FA) [m²]	FA/CA [%]	Bioretention depth	S1 (m)	S2 (m)	S3 (m)	Difuse inlets
		Metals	OMP	MP	PFAS											
Griggs 6A	Upper Arlington, OH	1	1	9		Yes	9	Residential	318488	950	0.3	50	1	3	6	
Griggs 5A-A (B)	Upper Arlington, OH	2			3	Yes	9	Residential	1253311	1200	0.1	35	1	3	6	
Griggs 5A	Upper Arlington, OH	3			6	Yes	9	Residential	223791	900	0.4	50	1	3	6	
Griggs 8	Upper Arlington, OH	4			7	Yes	9	Residential	145687	1900	1.3	30	1	3	6	
Kingsdale S	Upper Arlington, OH	5	2	3		No	8	Commercial	750	40	5.3	50	0.33	1	2	multiple
FCE	Columbus, OH	6	3	2		No	10	Industrial	6000	300	5.0	37.5	1	3	6	
Hoover Main	Westerville, OH	7			8	Yes	8	Parking/Roads	12000	600	5.0	32.5	1	3	6	
Hoover Trench	Westerville, OH	8			9	Yes	8	Parking/Roads	2000	50	2.5	37.5	0.5	1.5	3	
Walmart	Westerville, OH	9	4	4		Yes	7	Commercial	4000	170	4.3	50	1	3	6	
Audubon	Columbus, OH	10			2	Yes	9	Parking/Roads	4500	580	12.9	50	1	3	6	
Ohio EPA	Columbus, OH	11	5	5		Yes	9	Downtown Urban	300	40	13.3	50	1	3	6	
Rich St	Columbus, OH	12	6	7		Yes	8	Downtown Urban	50	10	20.0	50	0.33	1	2	
BCE8020	Hamilton, OH	13			5	Yes	12	Industrial	4500	200	4.4	50	1	3	6	edge
BCE7030	Hamilton, OH	14	7	1		Yes	12	Industrial	4500	300	6.7	50	1	3	6	edge
BCE6040	Hamilton, OH	15			4	Yes	12	Industrial	4500	200	4.4	50	1	3	6	edge
KY	Cincinatti, KY	16			10	No	16	Commercial	3000	190	6.3	50	1	3	6	multiple
Maywood	Toledo, OH	17			12	No	9	Residential	250	50	20.0	50	1	3	6	
Sparrow	Lansing, MI	18	8	6		No	12	Downtown Urban	600	50	8.3	50	1	3	6	
Wash	Lansing, MI	19	9	8		Yes	11	Downtown Urban	500	50	10.0	50	1	3	6	
Mallets	Ann Arbor, MI	20			11	Yes	14	Parking/Roads	2250	156	6.9	50	1	3	6	
Panera 7	Seven Hills, OH	21			13	No	11	Commercial	1200	200	16.7	50	1	3	6	
Sheetz Parma	Parma, OH	22	10		17	Yes	8	Fueling station	2500	200	8.0	50	1	3	6	
Sheetz twins #393	Twinsburg, OH	23	11		18	No	13	Fueling station	2000	70	3.5	25-35	1	3	6	multiple
Sterncrest N	Orange Village, OH	24			19	No	10	Residential	250	20	8.0	50	0.5	1.5	-	edge
Sterncrest S	Orange Village, OH	25			20	No	10	Residential	250	20	8.0	50	0.5	1.5	-	edge
Sheetz Kent #452	Kent, OH	26			14	Yes	11	Fueling station	800	70	8.8	45	1	3	6	multiple
Akron Bus	Akron, OH	27			1	Yes	13	Parking/Roads	6500	180	2.8	35-45	1	3	6	
Sheetz N Canton A #431	North Canton, OH	28	12		15	Yes	12	Fueling station	1250	180	14.4	50	1	3	6	
Sheetz N Canton B	North Canton, OH	29			16	Yes	12	Fueling station	1000	100	10.0	50	1	3	6	