



**Ohio University (OU) Voinovich School of Leadership and Public Affairs
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Plastics Waste Stream in Southern Ohio

Circular economy solutions hold great promise for the region as waste stream protocols and markets continue to evolve. While much of the recent change has been driven by international market forces, the trickle-down effects are impacting local recycling systems across the United States, including Ohio. To determine the market potential of the plastics waste stream in Southern Ohio for business ideation and economic development purposes, a 90-mile radius was implemented from Piketon, Ohio to determine the counties and associated SWMDs in Ohio of interest. The data used here is voluntarily reported to the Ohio EPA by Material Recycling Facilities and commercial and industrial entities.



TOTAL PLASTICS VOLUNTARILY REPORTED 2014-2018 IN SWMDs WITHIN THE 90-MILE AREA OF INTEREST (INCLUDES PETE, HDPE, FILM PLASTICS & MIXED PLASTICS) (TONS)					
	2014	2015	2016	2017	2018
Adams-Clermont Joint SWMD	530.67	510.19	559.34	662.69	710.86
Allen-Champaign-Hardin-Madison-Shelby-Union Joint SWMD (North Central SWMD)	304.64	374.87	584.53	675.24	844.69
Athens-Hocking Joint SWMD	20.72	89.98	38.53	94.34	104.92
Brown Co. Solid Waste Authority	9.80	0.68	0.56	20.99	53.51
Butler Co. SWMD	1484.96	1536.12	1730.76	1894.97	1926.07
Clark Co. SWMD	145.81	179.48	462.96	455.99	495.35
Clinton Co. SWMD	69.20	26.66	71.55	121.66	205.39
Coshocton-Fairfield-Licking-Perry Joint SWMD	359.48	361.97	369.81	507.54	800.00
Delaware-Knox-Marion-Morrow Joint SWMD	823.78	966.12	869.19	760.90	1404.83
Fayette-Highland-Pickaway-Ross Joint SWMD	288.16	473.19	554.56	623.54	669.97
Franklin Co. SWMD (Solid Waste Authority of Central Ohio)	6317.32	6454.68	5856.99	5519.02	13623.88
Gallia-Jackson-Meigs-Vinton Joint SWMD	79.03	115.94	121.03	123.74	109.65
Greene Co. SMWD	476.60	603.81	1147.22	1217.27	1221.14
Guernsey-Monroe-Morgan-Muskingum-Noble-Washington Joint SWMD (Southeast Ohio SWMD)	47.38	156.06	109.70	257.91	319.99
Hamilton Co. SWMD	4602.37	4628.87	5432.86	5353.75	5664.25
Lawrence-Scioto Joint SWMD	432.18	501.82	504.88	528.68	475.05
Montgomery Co. SWMD	5771.83	6197.64	8939.70	9194.95	9997.44
Pike Co. SWMD	8.29	14.10	19.44	17.38	29.53
Warren Co. SWMD	1076.97	1115.93	1388.65	1528.25	1469.82



Plastics resin categories within the Ohio EPA reports includes:

- PETE – polyethylene terephthalate, often used in food packaging, water bottles, and fabrics
- HDPE – high-density polyethylene, commonly used in food packaging like milk jugs
- Film Plastic – commonly low-density polyethylene, used in plastic grocery bags and plastic wrap
- Mixed Plastic – can include any numbered plastic, (i.e., PETE and HDPE, *and/or* other resin types)

PLASTICS BY TYPE VOLUNTARILY REPORTED IN SWMDS WITHIN THE 90-MILE AREA OF INTEREST, DETAIL FOR 2018 (TONS)

	PETE	HDPE	Film Plastic	Mixed Plastic	Total
Adams-Clermont Joint SWMD	258.31	129.76	119.20	203.59	710.86
Allen-Champaign-Hardin-Madison-Shelby-Union Joint SWMD (North Central SWMD)	263.97	148.23	162.35	270.15	844.69
Athens-Hocking Joint SWMD	0.83	0.80	57.75	45.54	104.92
Brown Co. Solid Waste Authority	0.27	0.13	20.33	32.78	53.51
Butler Co. SWMD	785.43	393.93	197.82	548.89	1926.07
Clark Co. SWMD	168.19	96.08	69.75	161.34	495.35
Clinton Co. SWMD	64.20	36.61	33.73	70.86	205.39
Coshocton-Fairfield-Licking-Perry Joint SWMD	230.88	99.68	116.61	352.84	800.00
Delaware-Knox-Marion-Morrow Joint SWMD	438.80	199.74	99.99	666.30	1404.83
Fayette-Highland-Pickaway-Ross Joint SWMD	258.91	122.25	99.26	189.55	669.97
Franklin Co. SWMD (Solid Waste Authority of Central Ohio)	3512.11	1481.88	2878.56	5751.34	13623.88
Gallia-Jackson-Meigs-Vinton Joint SWMD	24.92	10.98	44.27	29.47	109.65
Greene Co. SMWD	486.78	277.45	114.07	342.83	1221.14
Guernsey-Monroe-Morgan-Muskingum-Noble-Washington Joint SWMD (Southeast Ohio SWMD)	97.56	43.65	81.85	96.93	319.99
Hamilton Co. SWMD	2301.80	1163.04	571.81	1627.60	5664.25
Lawrence-Scioto Joint SWMD	202.98	101.97	72.51	97.59	475.05
Montgomery Co. SWMD	4228.29	2401.25	312.89	3055.00	9997.44
Pike Co. SWMD	0.30	0.20	16.49	12.54	29.53
Warren Co. SWMD	633.47	323.74	112.55	400.06	1469.82

- The voluntary nature of recycling reporting in Ohio creates underrepresentation of the quantity and composition of the materials currently recovered—and those not yet collected—through recycling
- Incomplete recycling data is a challenge at state, national, and global levels
- Certain plastics have strong existing markets, others have strong potential if their value can be demonstrated across the supply chain
- Additional domestic market demand and outlets encourage continued collection and new opportunities
- For more information, see “The Plastics Waste Stream in Southern Ohio” at www.portsfuture.com