NATIONAL BIOSOLIDS DATA PROJECT

STATE BIOSOLIDS SURVEY

2018 data
conducted 2020-2021
biosolidsdata.org

District of Columbia (Washington, DC)

Infrastructure & Wastewater

	2004 Data	2018 Data		
Total Number of WWTPs:	1	1		
WWTP & Biosolids Infrastructure Totals				
Number of Separate Preparers (in- or out-of-state, receiving solids from your state/district):	0	0	----------	
Total number of your state's/district's WWTPs sending to those Separate Preparers:	0	0	----------	
Number of operating sludge incinerators in your state/district (total):	0	0	----------	
Fluidized bed:	0	0	----------	
Multiple hearth:	0	0	----------	
Number of Part 258 landfills in your state/district accepting sewage sludge:	data not requested for 2004	0	----------	Data presented here are from survey response by DC Water staff as part of the National Biosolids Data Project online survey for WRRFs/WWTPs, January 29, 2021. • DC Water operates 1 large WRRF - the Blue Plains treatment facility, which serves a population of 2.3 million, including all of DC and large portions of Montgomery and Prince George's counties in Maryland and Fairfax and Loudon counties in Virginia. Its solids are sent to four different beneficial use outlets. • Estimate for on-site systems (1%) is carried forward from 2004 data.
Number of WWTPs in your state/district with industrial pre-treatment programs:	data not requested for 2004	1	----------	
Number of WWTPs in your state/district with *sludge* lagoons:	data not requested for 2004	0	----------	
Wastewater Flow Totals				
Total average daily wastewater flow (MGD):	data not requested for 2004	318	----------	
Total WWTP *design* capacity for wastewater flow (MGD):	data not requested for 2004	384	----------	
Total average daily *dry weather* flow (MGD):	data not requested for 2004	270	----------	
Other Totals				
Number of documented odor & nuisance complaints received by state/district in 2018 related to biosolids transportation and use or disposal outside of the gates of the WWTP:	data not requested for 2004	N/A	----------	
Number of WWTPs involved in those complaints:	data not requested for 2004	N/A	----------	
Percent of population served by on-site systems (e.g. septic systems):	1%	1%	----------	

Biosolids Use and Disposal

UNITS:	Dry U.S. tons	Dry U.S. tons		
BIOSOLIDS USED OR DISPOSED, 2018 (adjusted total):			51,400	

Summary

	Number of Entities (WWTPs & Sep. Preparers) Going To…	Quantity of Biosolids	Number of Entities (WWTPs & Sep. Preparers) Going To…	Quantity of Biosolids	**NOTE:** Quantity of sewage sludge or biosolids used or disposed means the quantity that goes out the gate of the WWTPs. Use the units (the form of measurement) you chose above.
Beneficial Use (applied to soils, not including ADC)	1	105,787	1	51,395	
Disposal & Alternative Dispositions	0	0	0	0	DC Water - formerly known as DC WASA - produced Class B, alkaline-stabilized biosolids until the early 2010s.
Other	0	0	0	0	
TOTAL	**1**	**105,787**	**1**	**51,395**	

Beneficial Use

	Sep. Preparers) Going To…	Quantity of Biosolids	Preparers) Going To…	Quantity of Biosolids	
Agricultural (EQ, Class A, & Class B)	1	96,892	1	42,279	
Forestland (EQ, Class A, & Class B)	1	7,955	1	3,533	DC Water biosolids are treated by anaerobic digestion preceded by thermal hydrolysis, producing high quality, relatively low-odor biosolids that are used in bulk in agriculture and forestry and blended with other feedstocks to make soil amendment products for use in gardens and landscapes throughout the District of Columbia and beyond. In 2018, 3% of biosolids were cured and dried to create another, different biosolids product. • All of the treatment and preparation of the DC Water biosolids is done by DC Water staff. Marketing, distribution, and land application is conducted by contracted haulers, marketers, and land appliers. • Bulk biosolids were applied to 7000 acres of forest land and agricultural land, where the crops grown include hay/grass for animal feed, wheat, soy, other grains, woody biomass. Biosolids soil blends used in gardens and landscapes supported the growth of vegetables for human consumption, flowers and shrubs, turfgrass, fruit trees, and native vegetation.
Reclamation (EQ, Class A, & Class B)	1	939	1	1,867	
Class A EQ Distribution (bagged or bulk, public distribution, or unsure where it went)	1	0	1	3,717	
Beneficial Use Subtotal	**1**	**105,787**	**1**	**51,395**	
Long-term storage	0	0	0	0	
Number of *acres* to which biosolids were applied:		data not provided		7,000	

Disposal & Alternative Dispositions

	Number of Entities (WWTPs & Sep. Preparers) Going To…	Quantity of Biosolids	Number of Entities (WWTPs & Sep. Preparers) Going To…	Quantity of Biosolids

Landfill (total)	0	0	0	0
Burial	data not requested for 2004	data not requested for 2004	0	0
Alternative daily (ADC), intermediate, or final cover	data not requested for 2004	data not requested for 2004	0	0
Surface Disposal	0	0	0	0
Incineration	0	0	0	0
Cement kiln or industrial furnace	data not requested for 2004	data not requested for 2004	0	0
Deep well injection	data not requested for 2004	data not requested for 2004	0	0
Gasification	data not requested for 2004	data not requested for 2004	0	0
Pyrolysis	data not requested for 2004	data not requested for 2004	0	0
Disposal & Alternative Dispositions Subtotal	-	-	-	-
TOTAL	**1**	**105,787**	**1**	**51,395**

Biosolids Quality Summary

	Number of Entities (WWTPs & Sep. Preparers) Producing…	Quantity of Biosolids	Number of Entities (WWTPs & Sep. Preparers) Producing…	Quantity of Biosolids
Class A EQ	3	2,103	1	51,395
Other Class A	0	0	0	0
Class B	35	55,000	0	0
Other (no data, etc.)	0	3,574	0	0
TOTAL	**38**	**60,677**	**1**	**51,395**

NOTE: For "number of entities," the total may not match because some entities go to more than one use or disposal.

Biosolids Treatment Practices

	Estimated Number of WWTPs or Separate Preparers Using…	Estimated Quantity of Biosolids Produced Using…	Estimated Number of WWTPs or Separate Preparers Using…	Estimated Quantity of Biosolids Produced Using…
Stabilization				
Aerobic Digestion (total)	1	698	0	0
Class A (ATAD/Other)	data not requested for 2004	data not requested for 2004	0	0
Class B	data not requested for 2004	data not requested for 2004	0	0
Anaerobic digestion (AD) (total)	0	0	1	51,395
Class A (e.g. thermophilic)	data not requested for 2004	data not requested for 2004	1	51,395
Class B (mesophilic)	data not requested for 2004	data not requested for 2004	0	0
WWTPs co-digesting (FOG, food, glycol, etc.)	data not requested for 2004	data not requested for 2004	0	no data
Biogas used (heating, electicity, fuel, etc.;scf/year)	data not requested for 2004	data not requested for 2004	0	no data
Lime/Alkaline (total)	0	0	0	0
Class A lime/alkaline	data not requested for 2004	data not requested for 2004	0	0
Class B lime/alkaline	data not requested for 2004	data not requested for 2004	0	0
Composting	2	1,405	0	0
Thermal (e.g. heat drying, not incineration/gasificatn/pyrol)	0	0	0	0
Gasification	data not requested for 2004	data not requested for 2004	0	0
Pyrolysis	data not requested for 2004	data not requested for 2004	0	0
Hydrolysis (thermal, chemical, etc.)	data not requested for 2004	data not requested for 2004	0	51,395
Long-term (lagoons, reed beds, etc.)	no data	no data	0	0
Oxidation ditch / extended aeration	data not requested for 2004	data not requested for 2004	0	0
Other stabilization technology	no data	no data	0	0
Dewatering				
Belt Filter Press	no data	approx. 21,590	1	51,395
Plate & Frame Press	no data	no data	0	0
Screw Press	no data	no data	0	0
Centrifuge	no data	approx. 21,590	0	0
Vaccuum Filter	no data	no data	0	0
Drying beds (open-air)	no data	7,064	1	0
Solar drying (e.g. in greenhouse)	data not requested for 2004	data not requested for 2004	1	1,542
Other dewatering technology	no data	no data	0	0
Thickening				
Gravity thickener	data not requested for 2004	data not requested for 2004	1	26,211
Gravity belt thickener (GBT)	data not requested for 2004	data not requested for 2004	0	
Centrifuge	data not requested for 2004	data not requested for 2004	1	51,395
Dissolved air flotation (DAF)	data not requested for 2004	data not requested for 2004	1	25,184
Other thickening technology	data not requested for 2004	data not requested for 2004	0	0
Other				
Biosolids sold in bags (explain at right what size bags)	data not requested for 2004	data not requested for 2004	0	N/A

In 2018, DC Water reports producing 1,781,974,200 scf of biogas, 244,562,000 MJ of electricity, and 488,707,000 MJ of heat.