

Utah

Infrastructure & Wastewater

	2004 Data	2018 Data	
Total Number of WWTPs:	49 (survey), 106 CWNS	39	
WWTP & Biosolids Infrastructure Totals			
Number of Separate Preparers (in- or out-of-state, receiving solids from your state):	0	1	-----
Total number of your state's WWTPs sending to those Separate Preparers:	0	~10	-----
Number of operating sludge incinerators in your state (total):	0	0	-----
Fluidized bed:	0	0	-----
Multiple hearth:	0	0	-----
Number of Part 258 landfills in your state accepting sewage sludge:	data not requested for 2004	17	-----
Number of WWTPs in your state with industrial pre-treatment programs:	data not requested for 2004	all the larger WRRFs	-----
Number of WWTPs in your state with <i>sludge</i> lagoons:	data not requested for 2004	many smaller WRRFs	-----
Wastewater Flow Totals			
Total statewide average daily wastewater flow (MGD):	data not requested for 2004	no data	-----
Total statewide WWTP <i>design</i> capacity for wastewater flow (MGD):	data not requested for 2004	no data	-----
Total statewide average daily <i>dry weather</i> flow (MGD):	data not requested for 2004	no data	-----
Other Totals			
Number of documented odor & nuisance complaints received by state in 2018 related to biosolids transportation and use or disposal outside of the gates of the WWTP:	data not requested for 2004	"too numerous to count"	-----
Number of WWTPs involved in those complaints:	data not requested for 2004	6	-----
Percent of population served by on-site systems (e.g. septic systems):	no data	no data	-----

Data presented here are from the Utah Department of Environmental Quality (UT DEQ), with some adjustments made by NBDP, as explained below.

Biosolids Use and Disposal

UNITS:	Dry metric tons	Dry metric tons	
BIOSOLIDS USED OR DISPOSED, 2018 (adjusted total): 51,000			
Summary			
	Number of Entities (WWTPs & Sep. Preparers) Going To...	Quantity of Biosolids	Number of Entities (WWTPs & Sep. Preparers) Going To... Quantity of Biosolids
Beneficial Use (applied to soils, not including ADC)	28	44,527	22 30,797
Disposal & Alternative Dispositions	9	1,859	21 19,804
Other	12	6,554	6 7,000
TOTAL	49	52,940	49 50,601
Beneficial Use			
	Number of Entities (WWTPs & Sep. Preparers) Going To...	Quantity of Biosolids	Number of Entities (WWTPs & Sep. Preparers) Going To... Quantity of Biosolids
Agricultural	9	14,396	11 13,381
Forestland	0	0	0 0
Reclamation	5	11,040	0 0
Class A EQ Distribution	14	19,091	11 17,416
Beneficial Use Subtotal	28	44,527	22 30,797
Long-term storage	12	6,554	0 0
Number of <i>acres</i> to which biosolids were applied:	no data		4559
Disposal & Other Disposition			
	Number of Entities (WWTPs & Sep. Preparers) Going To...	Quantity of Biosolids	Number of Entities (WWTPs & Sep. Preparers) Going To... Quantity of Biosolids
MSW landfill (total)	9	1,859	20 19,348
Burial	data not requested for 2004	data not requested for 2004	20 19,348

NOTE: Quantity of sewage sludge or biosolids used or disposed means the quantity that goes out the gate of the WWTPs. Quantities are in the units (the form of measurement) indicated above.

UT DEQ had entered 24,773 dry metric tons (dmt) for disposal here (cell E32) and 58,767 dmt for the total solids used or disposed in 2018. However, NBDP noted that ~4272 dmt solids were likely being double counted and left them out of the disposal total and grand total. UT DEQ included the "other" 7,000 dmt, but provided no further information as to what "other" refers to in this instance. Because UT DEQ data show a total generation of 50,743 dmt, NBDP did not include the 7,000 "other" dmt in the state total.

UT DEQ entered "10" for the number of EQ production facilities; however, UT DEQ data show 11 composters, which is what is reported here. Other changes made by NBDP based on review of raw UT DEQ data were as follows in the beneficial use table at left: 11 shown in cell D37 was listed as 7 by UT DEQ, 13,381 was 8,023, 11 was 10, and 17,416 was 18,971. Overall, these adjustments were relatively small.

Alternative daily (ADC), intermediate, or final cover	data not requested for 2004	data not requested for 2004	0	0
Surface Disposal	0	0	1	456
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	9	1,859	21	19,804
TOTAL	49	52,940	43	50,601

In the disposal table, left, NBDP adjusted numbers based on the raw UT DEQ data for 2018. In cell D48, the 20 was listed by UT DEQ as 23. Likewise, the landfilled tonnage, shown here as 13,381 dmt, was 17,773 dmt. The surface disposal facility is likely Ashley Valley, and NBDP subtracted its tonnage from the total disposed (cell E48).

Biosolids Quality Summary

	Number of Entities (WWTPs & Sep. Preparers) Producing...	Quantity of Biosolids	Number of Entities (WWTPs & Sep. Preparers) Producing...	Quantity of Biosolids	NOTE: For "number of entities," the total may not match because some entities go to more than one use or disposal.
Class A EQ	16	19,091	17	28,879	These numbers are approximate. In Utah especially, there is much Class A EQ and Class B biosolids disposed of in landfills, and many WRRFs send some to landfill and some to agriculture or general distribution. It varies based on markets and needs at the time. These estimates are based on assuming that, if UT DEQ identified a facility as producing Class A EQ and/or Class B products, all of their production should be counted as Class A EQ and/or Class B, no matter where it was used or disposed of. As noted above, here in this quality summary area, NBDP tweaked the numbers based on review of the raw UT DEQ data: 17 was shown by UT DEQ as 7; 28,879 was 18,971; 20 was 8; 13,698 was 8,023; 21 was 23; 8,024 was 17,773. Some producers of Class A EQ biosolids sent them to landfills, which is why there are 17 Class A EQ producers shown here, compared to just 11 whose solids went to beneficial use in 2018 (above).
Other Class A	0	0	0	0	
Class B	5	25,436	20	13,698	
Other (no data, etc.)	2	8,413	21	8,024	
TOTAL	23	52,940	58	50,601	

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)	0	0		
Class A (ATAD/Other)	data not requested for 2004	data not requested for 2004		
Class B	data not requested for 2004	data not requested for 2004		
Anaerobic digestion (AD) (total)	14	17,200		
Class A (e.g. thermophilic)	data not requested for 2004	data not requested for 2004		
Class B (mesophilic)	data not requested for 2004	data not requested for 2004		
WWTPs co-digesting (FOG, food, glycol, etc.)	data not requested for 2004	data not requested for 2004		N/A
Biogas used (heating, electricity, fuel, etc./year)	data not requested for 2004	data not requested for 2004		N/A
Lime/Alkaline (total)	1	579	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	18	24,385		
Thermal (e.g. heat drying, not incineration/gasification/pyrolysis)	0	0	1	
Gasification	data not requested for 2004	data not requested for 2004	0	
Pyrolysis	data not requested for 2004	data not requested for 2004	0	
Hydrolysis (thermal, chemical, etc.)	data not requested for 2004	data not requested for 2004	0	N/A
Long-term (lagoons, reed beds, etc.)	14	6,554		N/A
Oxidation ditch / extended aeration	data not requested for 2004	data not requested for 2004		N/A
Other stabilization technology	0	0		
Dewatering				
Belt Filter Press	13	no data		
Plate & Frame Press	0	no data	0	
Screw Press	3	no data		
Centrifuge	3	no data		
Vacuum Filter	1	no data		
Drying beds (open-air)	7	no data		
Solar drying (e.g. in greenhouse)	data not requested for 2004	data not requested for 2004	1	
Other dewatering technology	0	no data		
Thickening				
Gravity thickener	data not requested for 2004	data not requested for 2004		
Gravity belt thickener (GBT)	data not requested for 2004	data not requested for 2004		
Centrifuge	data not requested for 2004	data not requested for 2004		
Dissolved air flotation (DAF)	data not requested for 2004	data not requested for 2004		
Other thickening technology	data not requested for 2004	data not requested for 2004		
Other				
Biosolids sold in bags (explain at right what size bags)	data not requested for 2004	data not requested for 2004	1	

Minimal data provided or available. • Central Valley compost (Oquirrh Mountain Compost) sells in 1.5 cu. ft. bags for \$5 each.