



# STATE BIOSOLIDS SURVEY

2018 data  
conducted 2020-2021  
biosolidsdata.org

## Idaho

### Infrastructure & Wastewater

	2004 Data	2018 Data	
<b>Total Number of WWTPs:</b>	<b>27 (survey), 186 CWNS</b>	<b>215</b>	
<b>WWTP &amp; Biosolids Infrastructure Totals</b>			
Number of Separate Preparers (in- or out-of-state, receiving solids from your state):	2	5	-----
Total number of your state's WWTPs sending to those Separate Preparers:	2	more than 12	-----
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	TBD	-----
Number of WWTPs in your state with industrial pre-treatment programs:	data not requested for 2004	at least 13	-----
Number of WWTPs in your state with <i>sludge</i> lagoons:	data not requested for 2004	576	-----
<b>Wastewater Flow Totals</b>			
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	-----
<b>Other Totals</b>			
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	approximately 2	-----
Number of WWTPs involved in those complaints:	data not requested for 2004	approximately 2	-----
Percent of population served by on-site systems (e.g. septic systems):	no data	no data	-----

Boise is the largest city in Idaho and has 2 mechanical WRRFs that produce a total of about 4,000 dry U.S. tons. In 2018, the Boise facilities also produced 252 dry tons of struvite fertilizer (not included in the totals here).

### Biosolids Use and Disposal

UNITS:	Dry U.S. tons	Dry U.S. tons	
<b>BIOSOLIDS USED OR DISPOSED, 2018 (adjusted total): 21,300</b>			
<b>Summary</b>			
	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)	18	19,139	64 12,050
Disposal & Alternative Dispositions	9	4,070	11 5,905
Other	0	0	8 3,296
<b>TOTAL</b>	<b>27</b>	<b>23,209</b>	<b>83</b> <b>21,251</b>
<b>t</b>			
	Number of Entities (WWTPs & Sep. Preparers) Going To...	Quantity of Biosolids	Number of Entities (WWTPs & Sep. Preparers) Going To... Quantity of Biosolids
Agricultural	15	17,454	59 8,977
Forestland	0	0	
Reclamation	0	0	
Class A EQ Distribution	3	1,685	5 3,073
Beneficial Use Subtotal	18	19,139	64 12,050
Long-term storage	0	0	0
Number of <i>acres</i> to which biosolids were applied:	no data provided		no data
<b>Disposal &amp; Alternative Dispositions</b>			
	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.

ID DEQ does not compile these data; they estimate that solids produced in 2018 are likely greater than in 2004. Even the 2018 numbers only reflect some of the sites, not all of them. The National Biosolids Data Project filled in data gaps with estimates and data from the U. S. EPA ECHO biosolids database.

Boise, the largest city and biosolids program in the state, land applied 3,933 dry U. S. tons of belt-filter-press dewatered Class B biosolids at its city-owned Twenty Mile South Biosolids Application Site in 2018. Idaho Falls and Pocatello also land apply Class B biosolids. Couer d'Alene has been successfully composting biosolids since 1990, selling Couer d'Green at local nurseries and landscaping companies.

MSW landfill (total)	9	4,070	9	5,769
Burial	data not requested for 2004	data not requested for 2004		
Alternative daily (ADC), intermediate, or final cover	data not requested for 2004	data not requested for 2004		
Surface Disposal	0	0	2	136
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	4,070	11	5,905
<b>TOTAL</b>	<b>27</b>	<b>23,209</b>	<b>75</b>	<b>21,251</b>

Meridian, Nampa, and Caldwell, several of the largest municipalities in Idaho, dispose of their wastewater solids in local landfills.

### 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	3	9,508	5	3,073	Most larger Idaho WRRFs use anaerobic digestion and create Class B biosolids, even though some are landfilled. In these estimates regarding quality, it is assumed that all solids going to landfill and surface disposal are Class B.
Other Class A	0	0	0	0	
Class B	5	5,562	59	14,882	
Other (no data, etc.)	19	8,139	8	3,296	
<b>TOTAL</b>	<b>27</b>	<b>23,209</b>	<b>72</b>	<b>21,251</b>	

### 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...	
<b>Stabilization</b>					Mesophilic anaerobic digestion (AD) is common amongst the larger WRRFs, including Boise. Composting producing Class A EQ biosolids happens at Couer d'Alene, and Moscow, with a little compost production reported by Boise for 2018. Burley has a heat-dryer producing Class A EQ.
<b>Aerobic Digestion (total)</b>	2	no data	no data	no data	
Class A (ATAD/Other)	data not requested for 2004	data not requested for 2004	no data	no data	
Class B	data not requested for 2004	data not requested for 2004	no data	no data	
<b>Anaerobic digestion (AD) (total)</b>	24	14,970	several, including Boise	14,882	
Class A (e.g. thermophilic)	data not requested for 2004	data not requested for 2004	0	0	
Class B (mesophilic)	data not requested for 2004	data not requested for 2004	several, including Boise	14,882	
WWTPs co-digesting (FOG, food, glycol, etc.)	data not requested for 2004	data not requested for 2004	no data	N/A	
Biogas used (heating, electricity, fuel, etc./scf/year)	data not requested for 2004	data not requested for 2004	yes, by several, including Boise	N/A	
<b>Lime/Alkaline (total)</b>	1	no data	no data	no data	
Class A lime/alkaline	data not requested for 2004	data not requested for 2004	no data	no data	
Class B lime/alkaline	data not requested for 2004	data not requested for 2004	no data	no data	
<b>Composting</b>	3	1,636	3	2,150	
<b>Thermal (e.g. heat drying, not incineration/gasification/pyroly)</b>	0	0	2	≥922	
<b>Gasification</b>	data not requested for 2004	data not requested for 2004	0	0	
<b>Pyrolysis</b>	data not requested for 2004	data not requested for 2004	0	0	
<b>Hydrolysis (thermal, chemical, etc.)</b>	data not requested for 2004	data not requested for 2004	0	N/A	
<b>Long-term (lagoons, reed beds, etc.)</b>	0	0	many	N/A	
<b>Oxidation ditch / extended aeration</b>	data not requested for 2004	data not requested for 2004	0	N/A	
<b>Other stabilization technology</b>	0	0	ring beds / curing are used by so	no data	
<b>Dewatering</b>					
<b>Belt Filter Press</b>	3+	3,915	many, including Boise	no data	
<b>Plate &amp; Frame Press</b>	0	0	no data	no data	
<b>Screw Press</b>	0	0	no data	no data	
<b>Centrifuge</b>	2	8,715	some	no data	
<b>Vacuum Filter</b>	0	0	no data	no data	
<b>Drying beds (open-air)</b>	4+	2,083	several	no data	
<b>Solar drying (e.g. in greenhouse)</b>	data not requested for 2004	data not requested for 2004	no data	no data	
<b>Other dewatering technology</b>	0	0	no data	no data	
<b>Thickening</b>					
<b>Gravity thickener</b>	data not requested for 2004	data not requested for 2004	no data	no data	
<b>Gravity belt thickener (GBT)</b>	data not requested for 2004	data not requested for 2004	no data	no data	
<b>Centrifuge</b>	data not requested for 2004	data not requested for 2004	no data	no data	
<b>Dissolved air flotation (DAF)</b>	data not requested for 2004	data not requested for 2004	no data	no data	
<b>Other thickening technology</b>	data not requested for 2004	data not requested for 2004	no data	no data	
<b>Other</b>					
<b>Biosolids sold in bags (explain at right what size bags)</b>	data not requested for 2004	data not requested for 2004	0	0	

## State Pollutant (trace metal, etc.) Concentration Limits in Biosolids Applied to Land, 2018

Enter numbers only where state limits differed in 2018 from U.S. EPA limits.

	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Copper (Cu)	Lead (Pb)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Zinc (Zn)
EPA Table 1 (mg/kg)	75	85		4300	840	57	75	420	100	7500
EPA Table 3 (mg/kg) & CPLR (kg/ha)	41	39		1500	300	17		420	36 (CPLR = 100)	2800
State ceiling limit (higher limit) (mg/kg)										
State high quality (lower number) limit (mg/kg)										
State CPLR (kg/ha)										
State APLR (kg/ha/365days)										

### TESTING

For each of the following constituents, indicate if testing is required by your state, as of 2018.	Is testing required for all sewage sludge or biosolids?	Or is testing required only for biosolids being beneficially used as fertilizers and soil amendments?	Frequency of testing (indicate how often testing must be done for each parameter):		If frequency depends on wastewater flow or amount of biosolids used or disposed of, please explain:
			In accordance with Part 503 requirements	In accordance with other frequency required by state (if applicable, please specify)	
Part 503 metals (As, Cu, Hg, etc.)	yes	yes	yes		
Other metals (boron, silver...)	no	no	yes		
Dioxins/furans	no	no	yes		
PCBs	no	no	yes		
Priority pollutants ( <a href="https://www.epa.gov/sites/production/files/2015-09/documents/priority-pollutant-list-epa.pdf">https://www.epa.gov/sites/production/files/2015-09/documents/priority-pollutant-list-epa.pdf</a> )	no	no	yes		
Other organic compounds (e.g. PDBEs, pharmaceutical)	no	no	yes		
Radioactive isotopes (alpha, beta, Ra 226, etc.)	no	no	yes		
Nutrients (NPK)	no	yes	yes		
Pathogen reduction (Class A or B)	no	yes	yes		
Vector attraction reduction (VAR)	no	yes	yes		
PFAS (as of 2018)	no	no	yes		
Microplastics (as of 2018)	no	no	yes		
TCLP (toxicity characteristic leaching procedure)	no	no	yes		
Paint Filter Liquids Test	no	no	yes		

Overall, if a material falls under 40 CFR Part 503, then all of those requirements apply. If sewage sludge or biosolids is sent to a landfill, the landfill will have requirements that are outlined in the landfill's operations plan that include requirements for other federal regulations. If the sewage sludge or biosolids may have a known potential for a hazardous substance then testing for that hazardous substance may be required as needed.

### REPORTING

For each of the following, indicate what WWTPs and/or biosolids preparers must report to the state:	Is reporting to the state required for these parameters?	Frequency of reporting (indicate how often testing must be done for each parameter):		How are these data stored by the state?	Are data compiled by the state in reports or summaries? If so, please attach.
		In accordance with Part 503 requirements	In accordance with other frequency required (if applicable, please specify)		
The amounts of biosolids/ sewage sludge used or disposed	yes	yes		not applicable (N/A)	no
Part 503 metals (As, Cu, Hg, etc.)	yes	yes		not applicable (N/A)	no
Other metals (boron, silver...)	no	yes		not applicable (N/A)	no
Dioxins/furans	no	yes		not applicable (N/A)	no
PCBs	no	yes		not applicable (N/A)	no
Priority pollutants ( <a href="https://www.epa.gov/sites/production/files/2015-09/documents/priority-pollutant-list-epa.pdf">https://www.epa.gov/sites/production/files/2015-09/documents/priority-pollutant-list-epa.pdf</a> )	no	yes		not applicable (N/A)	no
Other organic compounds (e.g. PDBEs, pharmaceutical)	no	yes		not applicable (N/A)	no
Radioactive isotopes (alpha, beta, Ra 226, etc.)	no	yes		not applicable (N/A)	no
Nutrients (NPK)	yes	yes		not applicable (N/A)	no
Cumulative Pollutant Loading Rates (CPLR)	yes	yes		not applicable (N/A)	no
How biosolids achieve Class A or Class B	yes	yes		not applicable (N/A)	no
How biosolids achieve vector attraction reduction (VAR)	yes	yes		not applicable (N/A)	no
Solids stabilization process(es) used	yes	yes		not applicable (N/A)	no
Other biosolids treatments	yes	yes		not applicable (N/A)	no
End use or disposal practice	yes	yes		not applicable (N/A)	no
PFAS (as of 2018)	no	yes		not applicable (N/A)	no
Microplastics (as of 2018)	no	yes		(please select)	no
TCLP (toxicity characteristic leaching procedure)	no	yes		not applicable (N/A)	no
Paint Filter Liquids Test	no	yes		not applicable (N/A)	no

Documents in 2018 were generally received by paper or PDFs of Word documents with data in each of the reports. The reports are generally stored as a PDF or scanned report. There is no general summary report generated from each system's submittal. There is no electronic data that can be generated. Each report would need to be opened up, read through and the data entered into a system from the turned-in report. EPA had primacy in 2018, and they may have other data/summary reports.