

DASHBOARD

New York State Biosolids Statistics

Data Quality & Methods	2015 (adjusted & assumed representative of 2018 data)	explanations & sources
<p>Quality & Confidence in this state's data:</p> <p>Data sources & methods:</p> <p>State biosolids included in 2018 EPA ECHO data</p>	<p>MODERATELY HIGH</p> <p><i>State biosolids coordinators regularly oversee organic waste recycling, including biosolids use and disposal, but data are only occasionally compiled. Reported here are 2015 data, which are derived from WRRF surveys representing >99% of state wastewater flow. These 2015 data have been adjusted by NBDP only by shifting ~8000 dry U.S. tons of solids from incineration and allocating them to 2/3 landfill disposal and 1/3 agricultural land application. Otherwise, the 2015 data are assumed to be representative for 2018, allowing for these NY data to be included in national totals.</i></p> <p>86% % in ECHO vs. the total presented here</p>	<p>ranking by survey team based on information provided in survey (options: High, Moderate, Low, None)</p> <p>https://echo.epa.gov/facilities/facility-search?mediaSelected=bioAnnual</p>
<p>Demographics & Wastewater</p> <p>State population:</p> <p>Total land area in state (acres):</p> <p>Population density (persons/square mile):</p> <p>Total number of WRRFs reported in state survey:</p> <p>total number of WRRFs permitted/reported elsewhere:</p> <p>number of WRRFs in EPA ECHO reports for 2018:</p> <p>Average population served per WRRF:</p> <p>Average wastewater flow statewide (MGD, NBDP):</p> <p>avg.wastewater flow statewide (MGD, Seiple):</p> <p>Number of WRRFs that treat >75% of state flow:</p> <p>% of population served by on-site (septic) systems:</p> <p>Biosolids used or disposed / person in 2018 (lbs):</p>	<p>19,542,209</p> <p>30,160,640</p> <p>414.7</p> <p>612</p> <p>583</p> <p>126</p> <p>26,816</p> <p>2,400</p> <p>2,763</p> <p>23</p> <p>20%</p> <p>39</p>	<p>U.S. Census estimate for July 1, 2018</p> <p>https://www.census.gov/newsroom/press-kits/2018/pop-estimates-national-state.html</p> <p>calculated</p> <p>survey response by state expert</p> <p>Seiple et al., 2020; state experts, etc.</p> <p>https://echo.epa.gov/facilities/facility-search?mediaSelected=bioAnnual</p> <p>calculated</p> <p>survey response by state expert</p> <p>Seiple et al., 2020</p> <p>https://doi.org/10.1016/j.jenvman.2020.110852</p> <p>Seiple et al., 2020</p> <p>https://doi.org/10.1016/j.jenvman.2020.110853</p> <p>survey response by state expert</p> <p>calculated</p>
<p>Biosolids Application</p> <p>Agricultural land cropland (acres):</p> <p>% of state area in cropland:</p> <p>Number of farms with that cropland:</p> <p>% cropland to which biosolids were applied:</p> <p>Application rate if all state biosolids were applied to cropland (dry U.S. tons/ac.):</p> <p>% cropland needed if all state biosolids were applied at typical rate (~3 dt/ac):</p>	<p>4,291,388</p> <p>14%</p> <p>27,676</p> <p>no data</p> <p>0.09</p> <p>2.9%</p>	<p>https://quickstats.nass.usda.gov/results/0CBBAD84-6032-3776-AF8B-624DB8825822</p> <p>calculated</p> <p>https://quickstats.nass.usda.gov/results/F56563D1-C9CD-30EF-9774-2F91CC0649EC</p> <p>calculated</p> <p>calculated</p> <p>calculated</p>
<p>Nutrient Sources - Comparison</p> <p>Nitrogen (N) in all this state's biosolids (metric tonnes, 2018):</p> <p>N in this state's animal manures (metric tonnes):</p> <p>N in this state's purchased fertilizer (metric tonnes, 2011):</p> <p>If all state's biosolids applied, what % of state's applied N would come from biosolids?</p>	<p>16,442</p> <p>85,755</p> <p>70,747</p> <p>9.5%</p>	<p>calculated assuming avg. 4.8% biosolids N</p> <p>https://www.epa.gov/nutrient-policy-data/estimated-animal-agriculture-nitrogen-and-phosphorus-manure</p> <p>https://www.epa.gov/nutrient-policy-data/commercial-fertilizer-purchased</p> <p>calculated</p>

<p>Phosphorus (P) in this state's biosolids (metric tonnes, 2018):</p> <p>P in this state's animal manures (metric tonnes):</p> <p>P in this state's purchased fertilizer (metric tonnes, 2011):</p> <p>If all state's biosolids applied, what % of state's applied P would come from biosolids?</p>	<p>6,851</p> <p>17,913</p> <p>11,214</p> <p>19.0%</p>	<p>calculated assuming avg. 2% biosolids P https://www.epa.gov/nutrient-policy-data/estimated-animal-agriculture-nitrogen-and-phosphorus-manure https://www.epa.gov/nutrient-policy-data/commercial-fertilizer-purchased</p> <p>calculated</p>
<p>State Regulatory Involvement</p> <p>Biosolids oversight agency / division: Permitting.... of biosolids programs:</p> <p>...of land application sites: FTEs: state biosolids regulatory program:</p> <p>Biosolids program FTEs per million population:</p> <p>Enforcement: Inspections of biosolids facilities & field sites in 2018:</p> <p>Formal violations issued:</p> <p>Amount of state regulations beyond Part 503:</p> <p>Amount of state regulation of nutrient management & phosphorus:</p> <p>Accessibility of biosolids data to public:</p> <p>State encouragement of biosolids recycling to soils: Voluntary additional protections by land appliers known & reported by state coordinator:</p>	<p>Environment Agency - solid waste program</p> <p>solid waste license/permit</p> <p>One solid waste permit may be acquired for multiple farms to spread a biosolids source</p> <p>3</p> <p>0.15</p> <p>0</p> <p>0</p> <p>High</p> <p>Moderate</p> <p>Moderate</p> <p>High</p> <p>Low</p>	<p>NBDP estimate based on state response calculated</p> <p>survey response by state expert</p> <p>survey response by state expert</p> <p>rankings by survey team based on information provided in survey (options: High, Moderate, Low, None)</p>
<p>Trends</p> <p>New land application activity, 2018 - new permits & acreage, acres applied: acres applied in 2018:</p> <p>Local regulations & their impacts?: details...</p> <p>Legislative & state regulatory actions in 2018 & their impacts?: details...</p> <p>Biosolids beneficial use increasing... ..in 2018?: in 2020?: details...</p>	<p>Moderate</p> <p>no data</p> <p>None</p> <p>Some</p> <p>Towns have the ability to restrict biosolids use, with the big exception that farms in farm districts are protected under state Right to Farm law, which severely limits local laws that interfere with farming practices.</p> <p>It's staying the same.</p> <p>No</p> <p>Cheap disposal, operator turnover, and public opposition have presented a lot of challenges over the past few years.</p>	<p>rankings by survey team based on information provided in survey (options: High, Moderate, Low, None)... With quotes of survey responses by state expert(s)</p> <p>survey response by state expert</p> <p>survey response by state expert</p>
<p>Changes in Biosolids Use & Disposal, 2004 - 2018</p> <p>Change* in solids reported used or disposed (in units used by state):</p> <p>Beneficial Use - percentage point increase or decrease (-):</p> <p>Landfill & surface disposal - % point increase or decrease (-):</p> <p>Incineration - percentage point increase or decrease (-):</p> <p>Class A - percentage point increase or decrease (-):</p> <p>Class B - percentage point increase or decrease (-):</p> <p>No class or not known - percentage point increase or decrease (-):</p>	<p>24,403 dry U.S. tons</p> <p>-31%</p> <p>43%</p> <p>-12%</p> <p>-25%</p> <p>-6%</p> <p>31%</p>	<p>*Change may be due to population increase/decrease, change in treatment at a large WWTP, and/or different systems of data tracking and reporting.</p> <p>calculated comparing these 2018 data to 2004 data compiled by the same survey team (NEBRA, 2007)</p>