

DASHBOARD

New Jersey State Biosolids Statistics

Data Quality & Methods	2018	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>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):</p> <p>reported by others: average MGD:</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>HIGH</p> <p>State biosolids coordinator has decades of experience & tracks biosolids use & disposal closely.</p> <p>145% % in ECHO vs. the total presented</p> <p>8,908,520</p> <p>4,706,560</p> <p>1,211.4</p> <p>237</p> <p>152</p> <p>69</p> <p>37,589</p> <p>1,018</p> <p>1194</p> <p>20</p> <p>no data</p> <p>35</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>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 (facilities > 20,000 gpd only)</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>463,019</p> <p>10%</p> <p>7,537</p> <p>0.18%</p> <p>0.37</p> <p>12%</p>	<p>https://nuickstats.nass.usda.gov/result/0CBAN84-6032-3776-AF8B-624088825822</p> <p>calculated</p> <p>https://nuickstats.nass.usda.gov/result/FS56563D1-C9CD-30EE-9274-2F91CC0649EC</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>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>6,752</p> <p>4,394</p> <p>20,904</p> <p>21%</p> <p>2,813</p> <p>1,114</p> <p>4,321</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-purchase</p> <p>calculated</p> <p>calculated assuming avg. 2% biosolids P</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-purchase</p>

<p>If all state's biosolids applied, what % of state's applied P would come from biosolids?</p>	<p>34%</p>	<p>calculated</p>
<p>State Regulatory Involvement Biosolids oversight agency / division: Permitting.... of biosolids programs: ...of land application sites: FTEs: state biosolids regulatory program: Biosolids program FTEs per million population: Enforcement: Inspections of biosolids facilities & field sites in 2018: Formal violations issued: Amount of state regulations beyond Part 503: Amount of state regulation of nutrient management & phosphorus: Accessibility of biosolids data to public: State encouragement of biosolids recycling to soils: Voluntary additional protections by land appliers known & reported by state coordinator:</p>	<p>Environment agency - water / wastewater program specific & general NPDES permits, and solid waste permits Preparer receives a NPDES permit. Site specific approvals are issued by letter for the sites to be used for Class B. 3.52 0.40 0 0 Moderate High Moderate High None</p>	<p>survey response by state expert calculated survey response by state expert survey response by state expert rankings by survey team based on information provided in survey (options: High, Moderate, Low, None)</p>
<p>Trends New land application activity, 2018 - new permits & acreage, acres applied: acres applied in 2018: Local regulations & their impacts?: details... Legislative & state regulatory actions in 2018 & their impacts?: details... Biosolids beneficial use increasing... ..in 2018?: in 2020?: details...</p>	<p>None 852 None no activity in 2018 None It's staying the same. Yes Two new large facilities planned, but with new State Environmental Justice law and internal movement on PFAS, it is unknown how these regulatory burdens will affect the momentum that was gained.</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) 0 survey response by state expert survey response by state expert</p>
<p>Changes in Biosolids Use & Disposal Change* in solids reported used or disposed (in units used by state): Beneficial Use - percentage point increase or decrease (-): Landfill & surface disposal - % point increase or decrease (-): Incineration - percentage point increase or decrease (-): Class A - percentage point increase or decrease (-): Class B - percentage point increase or decrease (-): No class or not known - percentage point increase or decrease (-):</p>	<p>(81,905) 4.4% 2.6% -6.9% 0.3% -1.6% 1.2%</p>	<p>*Change may be due to population increase/decrease and/or different systems of data tracking and reporting. calculated comparing these 2018 data to 2004 data compiled by the same survey team (NEBRA, 2007)</p>
<p>Pressures on biosolids, 2018 1 PUBLIC INVOLVEMENT- concerns of neighbors, environmental groups, and others 2 MANAGEMENT ISSUES - the hassle of biosolids recycling/land application 3 COST - disposal options are least expensive 4 AGRICULTURAL ISSUES - declining farmland due to less agriculture or due to development, sprawl, seasonal restrictions, or competition with manures, etc. 5 REGULATIONS ON BENEFICIAL USE- strict EPA and/or state regulation and enforcement</p>	<p>survey response by state expert</p>	