

# DASHBOARD

## Nevada State Biosolids Statistics

Data Quality & Methods	2018	explanations & sources
<p><b>Quality &amp; Confidence in this state's data:</b></p> <p>Data sources &amp; methods:</p> <p>State biosolids included in 2018 EPA ECHO data</p>	<p><b>Moderate</b></p> <p>No state regulations. Biosolids covered in wastewater permits. Data from EPA Region 9 &amp; ECHO.</p> <p>101% % 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><a href="https://echo.epa.gov/facilities/facility-search?mediaSelected=bioAnnual">https://echo.epa.gov/facilities/facility-search?mediaSelected=bioAnnual</a></p>
<p><b>Demographics &amp; Wastewater</b></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><b>Average population served per WRRF:</b></p> <p><b>Average wastewater flow statewide (MGD, NBDP):</b></p> <p>avg.wastewater flow statewide (MGD, Seiple):</p> <p><b>Number of WRRFs that treat &gt;75% of state flow:</b></p> <p><b>% of population served by on-site (septic) systems:</b></p> <p><b>Biosolids used or disposed / person in 2018 (lbs):</b></p>	<p>3,034,392</p> <p>70,259,840</p> <p>27.6</p> <p>14</p> <p>52</p> <p>13</p> <p><b>55,436</b></p> <p><b>279</b></p> <p>279</p> <p><b>6</b></p> <p><b>5%</b></p> <p><b>43</b></p>	<p>U. S. Census estimate for July 1, 2018 <a href="https://www.census.gov/newsroom/press-kits/2018/pop-estimates-national-state.html">https://www.census.gov/newsroom/press-kits/2018/pop-estimates-national-state.html</a></p> <p>calculated</p> <p>survey response by state expert</p> <p>Seiple et al., 2020; state experts, etc. <a href="https://echo.epa.gov/facilities/facility-search?mediaSelected=bioAnnual">https://echo.epa.gov/facilities/facility-search?mediaSelected=bioAnnual</a></p> <p>calculated</p> <p>survey response by state expert</p> <p>Seiple et al., 2020 <a href="https://doi.org/10.1016/j.jenvman.2020.110852">https://doi.org/10.1016/j.jenvman.2020.110852</a></p> <p>Seiple et al., 2020 <a href="https://doi.org/10.1016/j.jenvman.2020.110853">https://doi.org/10.1016/j.jenvman.2020.110853</a></p> <p>survey response by state expert</p> <p>calculated</p>
<p><b>Biosolids Application</b></p> <p>Agricultural land cropland (acres):</p> <p><b>% of state area in cropland:</b></p> <p>Number of farms with that cropland:</p> <p><b>% cropland to which biosolids were applied:</b></p> <p><b>Application rate if all state biosolids were applied to cropland (dry U.S. tons/ac.):</b></p> <p><b>% cropland needed if all state biosolids were applied at typical rate (~3 dt/ac):</b></p>	<p>794,699</p> <p><b>1%</b></p> <p>2,012</p> <p><b>no data</b></p> <p><b>0.08</b></p> <p><b>2.7%</b></p>	<p><a href="https://quickstats.nass.usda.gov/results/0CBBAD84-6032-3776-4E8B-624D88825822">https://quickstats.nass.usda.gov/results/0CBBAD84-6032-3776-4E8B-624D88825822</a></p> <p>calculated</p> <p><a href="https://quickstats.nass.usda.gov/results/F56563D1-C9CD-30FF-9774-2F91CC0640EC">https://quickstats.nass.usda.gov/results/F56563D1-C9CD-30FF-9774-2F91CC0640EC</a></p> <p>calculated</p> <p>calculated</p> <p>calculated</p>
<p><b>Nutrient Sources - Comparison</b></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><b>If all state's biosolids applied, what % of state's applied N would come from biosolids?</b></p> <p>Phosphorus (P) in this state's biosolids (metric tonnes, 2018):</p>	<p>3,103</p> <p>22,792</p> <p>9,246</p> <p><b>8.8%</b></p> <p>1,293</p>	<p>calculated assuming avg. 4.8% biosolids N <a href="https://www.epa.gov/nutrient-policy-data/estimated-animal-agriculture-nitrogen-and-phosphorus-manure">https://www.epa.gov/nutrient-policy-data/estimated-animal-agriculture-nitrogen-and-phosphorus-manure</a></p> <p><a href="https://www.epa.gov/nutrient-policy-data/commercial-fertilizer-purchased">https://www.epa.gov/nutrient-policy-data/commercial-fertilizer-purchased</a></p> <p>calculated</p> <p>calculated assuming avg. 2% biosolids P</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><b>If all state's biosolids applied, what % of state's applied P would come from biosolids?</b></p>	<p>6,765</p> <p>2,852</p> <p><b>11.9%</b></p>	<p><a href="https://www.epa.gov/nutrient-policy-data/estimated-animal-agriculture-nitrogen-and-phosphorus-manure">https://www.epa.gov/nutrient-policy-data/estimated-animal-agriculture-nitrogen-and-phosphorus-manure</a></p> <p><a href="https://www.epa.gov/nutrient-policy-data/commercial-fertilizer-purchased">https://www.epa.gov/nutrient-policy-data/commercial-fertilizer-purchased</a></p> <p>calculated</p>
<p><b>State Regulatory Involvement</b></p> <p><b>Biosolids oversight agency / division:</b> Permitting.... of biosolids programs: ...of land application sites: FTEs: state biosolids regulatory program:</p> <p><b>Biosolids program FTEs per million population:</b></p> <p><b>Enforcement: Inspections of biosolids facilities &amp; field sites in 2018:</b></p> <p><b>Formal violations issued:</b></p> <p><b>Amount of state regulations beyond Part 503:</b></p> <p><b>Amount of state regulation of nutrient management &amp; phosphorus:</b></p> <p><b>Accessibility of biosolids data to public:</b></p> <p><b>State encouragement of biosolids recycling to soils:</b> Voluntary additional protections by land appliers known &amp; reported by state coordinator:</p>	<p><b>N/A</b> thru WWTP's NPDES permit use or disposal is written in NPDES permit</p> <p>0.05</p> <p><b>0.02</b></p> <p><b>0</b> EPA Region 9 does oversight &amp; enforcement</p> <p><b>0</b> EPA Region 9 does oversight &amp; enforcement</p> <p><b>None</b></p> <p><b>None</b></p> <p><b>None</b></p> <p><b>None</b></p> <p>not applicable</p>	<p>estimated by NBDP</p> <p>calculated</p> <p>little state regulatory involvement</p> <p>little state regulatory involvement</p> <p>rankings by survey team based on information provided in survey (options: High, Moderate, Low, None)</p>
<p><b>Trends</b></p> <p><b>New land application activity, 2018 - new permits &amp; acreage, acres applied:</b> acres applied in 2018:</p> <p><b>Local regulations &amp; their impacts?:</b> details...</p> <p><b>Legislative &amp; state regulatory actions in 2018 &amp; their impacts?:</b> details...</p> <p><b>Biosolids beneficial use increasing... ..in 2018?:</b> <b>....in 2020?:</b> details...</p>	<p><b>None</b> no data</p> <p><b>None</b></p> <p><b>None</b></p> <p><b>no</b></p> <p><b>no</b></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>NBDP data</p> <p>NBDP data</p>
<p><b>Changes in Biosolids Use &amp; Disposal</b></p> <p><b>Change* in solids reported used or disposed (in units used by state):</b></p> <p><b>Beneficial Use - percentage point increase or decrease (-):</b></p> <p><b>Landfill &amp; surface disposal - % point increase or decrease (-):</b></p> <p><b>Incineration - percentage point increase or decrease (-):</b></p> <p><b>Class A - percentage point increase or decrease (-):</b></p> <p><b>Class B - percentage point increase or decrease (-):</b></p> <p><b>No class or not known - percentage point increase or decrease (-):</b></p>	<p>8,164 dry metric tons</p> <p>-16%</p> <p>16%</p> <p>0%</p> <p>1%</p> <p>-39%</p> <p>38%</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>