



Environmental Health within State Policy

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Denver, CO



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State Drinking Water Needs

- US EPA estimates that \$334 billion is needed to maintain existing water and wastewater infrastructure through 2026
 - 49,250 Community Water Systems
 - 21,400 Non-Profit Noncommunity Water Systems, Indian Water Systems and Alaska Native Village Systems
- Since 1996, a substantial amount of funding for such projects have come from the SRF programs
 - 97 – 16 \$32.5 b for 13,183 projects
- Congressional increased their support in FY 2018
 - Only EPA Program the Trump Administration supported an increase
- Bond markets make up to 65.1% of water project financing in states in 2009
 - Requires ratepayers to cover costs of infrastructure upgrades (through debt service)



State Drinking Water Needs

- Microbial regulations account for 69% of upgrades
 - Upgrading treatment plants to control *E. coli* *Hepatitis A*, *Giardia lamblia*, *Cryptosporidium*
- Chemical Contaminants
 - 80 organic or inorganic contaminants
 - Nitrate/Nitrite Standard, Arsenic Standard, Lead & Copper Rule
- Recent Regulations
 - 1999 Radon Rule (\$4.2 billion)



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State Drinking Water Revolving Funds

- Financial assistance programs set up by the state to help fund local water system projects
- Established to help the local water systems to achieve the health protection objectives under the Safe Water Drinking Act
- Funds up to 80% of State Water Infrastructure Development
- Requires a State Match
- Water treatment, transmission and distribution, source water, water storage, water consolidation, and creation of new systems, Lead Service Lines



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Drinking Water Revolving Funds Needs

\$74.4 billion needed for small systems that serve 3300 or fewer people

RI needs are \$97.4 million

\$210.6 billion needed for medium systems serving 3300 to 100,000 people

\$174.4 billion needed for large systems serving over 100,000 people

RI needs are \$715.2 million

| 1995 | 1999 | 2003 | 2007 | 2011 | 2015 |
|-----------|-----------|-----------|-----------|-----------|-----------|
| \$253.6 B | \$250.9 B | \$419.4 B | \$423.7 B | \$428.6 B | \$472.6 B |



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EPA State Sampled Needs

In millions of dollars

| State | Distribution | Treatment | Storage | Source | Total |
|---------------|--------------|-----------|---------|--------|----------|
| Connecticut | \$2542 | \$770 | \$400 | \$187 | \$4017 |
| Massachusetts | \$8601 | \$1850 | \$1184 | \$330 | \$12,244 |
| Maine | \$883 | \$198 | \$181 | \$72 | \$1348 |



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Drinking/Clean Water Revolving Funds

\$2.9 billion for the Clean Water and Drinking Water State Revolving Loan fund, which states and localities use for water infrastructure projects

| | FY 18 Omnibus | FY 19 EPA Enacted |
|---------------------------------|-----------------|-------------------|
| DWSRF | \$863,233,000 | \$1,163,233,000 |
| CWSRF | \$1,393,887,000 | \$1,693,887,000 |
| Lead Reduction Grant | \$0 | \$10,000,000 |
| Voluntary Schools Testing Grant | \$0 | \$20,000,000 |



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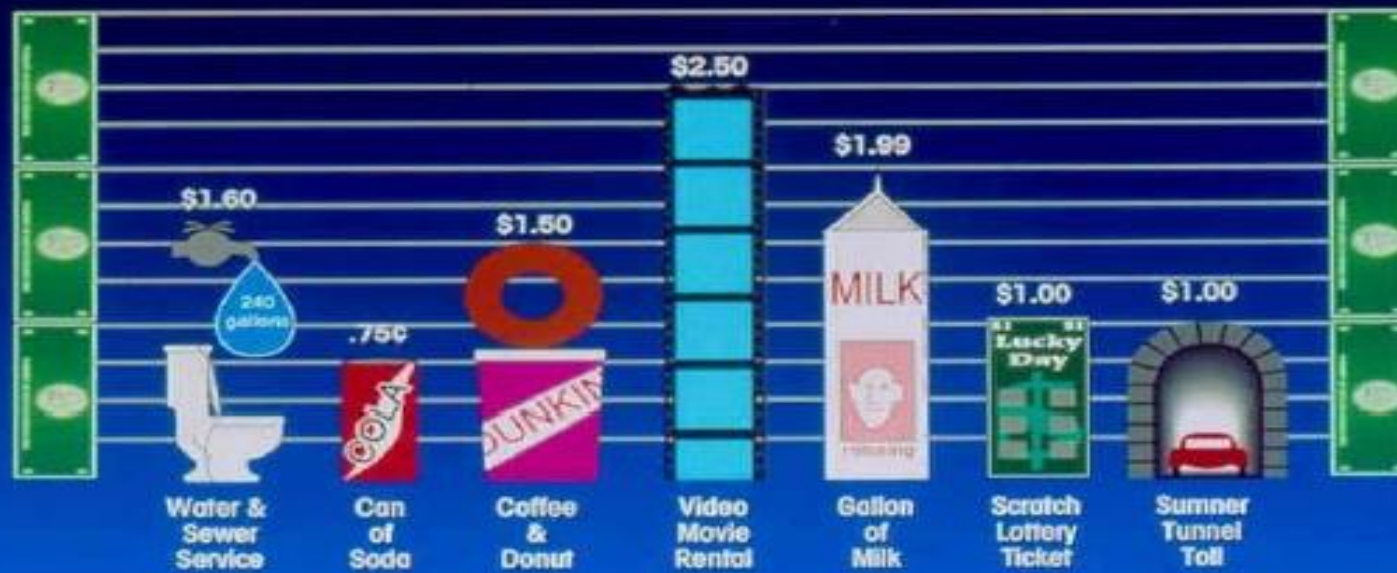
Water Infrastructure Finance and Innovation Act (WIFIA)

The Water Infrastructure Finance and Innovation Act (WIFIA) establishes a new financing mechanism for water and wastewater infrastructure projects. WIFIA provides low interest rate financing for large dollar-value projects.

| | FY 18 Omnibus | FY 19 EPA Enacted |
|-------|---------------|-------------------|
| WIFIA | \$63,000,000 | |



The Average Daily Cost of Water & Sewer Service For a Family of Four vs. Other Common Expenses





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Average Utility Rates

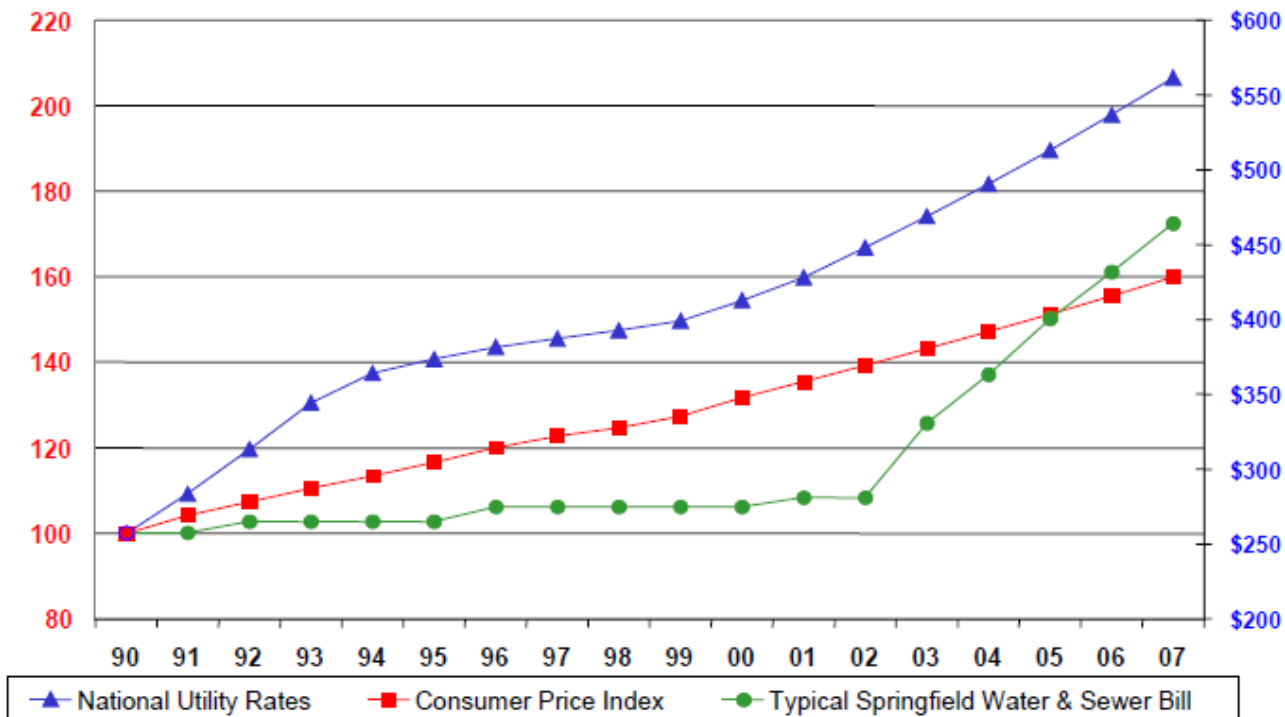
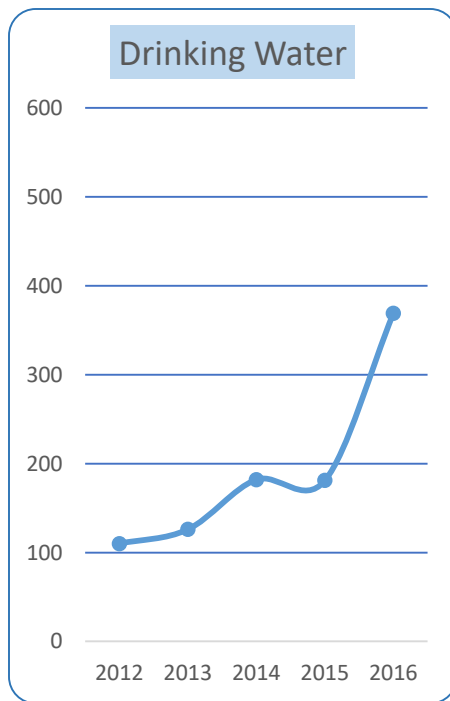


Figure 14
Comparative rate chart—Springfield, MA



Drinking Water Legislation 12 - 16



- Funding for Small Water Systems (AZ, CO)
- Safe Drinking Water Act
- Improved testing and treatment of private drinking water wells (ME, VT)
- Fluoride Testing/Bans (NE, TN)

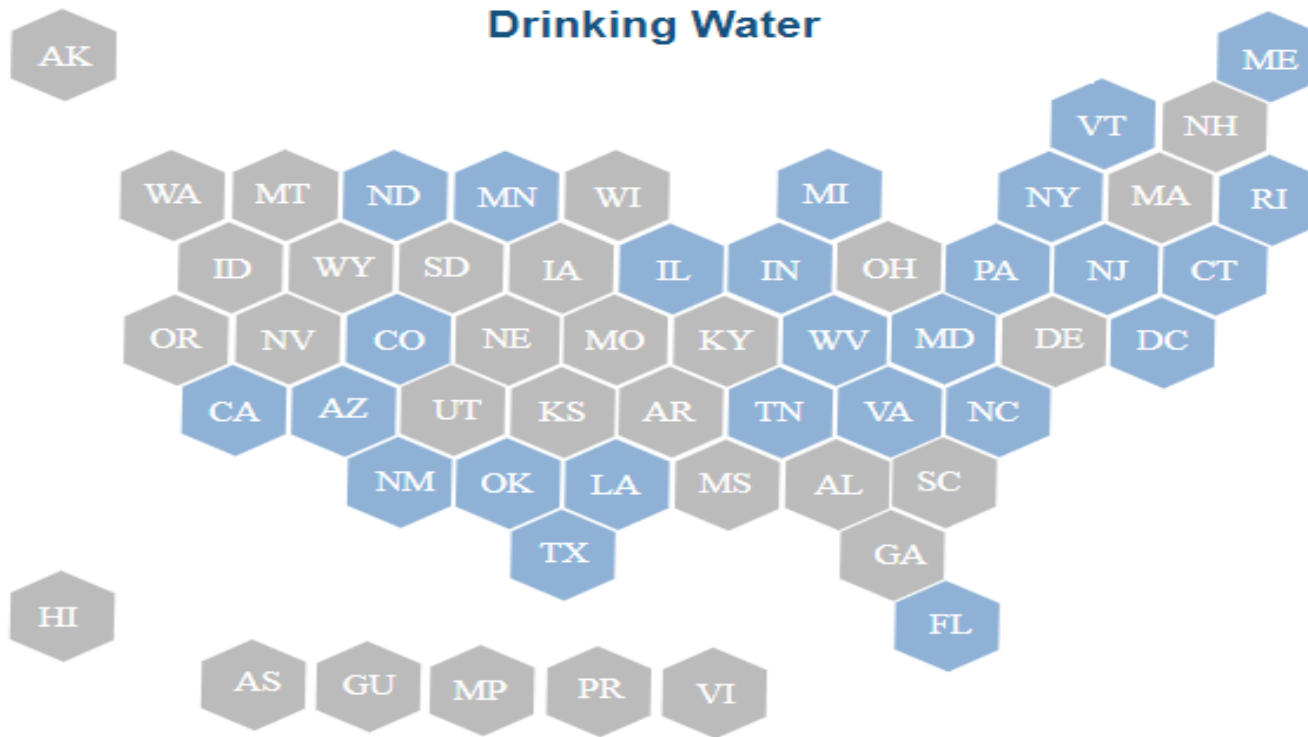


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Drinking Water Legislation 2017





Drinking Water Legislation 2018

- 501 bills in 41 States (out of 46)
- 51 enacted in 26 states
 - CA SCA 4 - Declares the intent of the Legislature to amend the California Constitution to provide a program that would ensure that affordable water is available to all Californians
 - CA A 277 (Act No. 438)- Authorize the State Water Resources Control Board to establish the Water and Wastewater Loan and Grant Program to provide funding to eligible applicants for specified purposes relating to drinking water and wastewater treatment.
 - IA S 513 (Chap. 169) - establishes a Water Quality Infrastructure Fund, establishes a water quality financing program
 - ME H 321 (Chap. 230)- establishes a system designed to help ensure public health, improves testing for and treatment of contaminants or properties in residential private drinking water wells.



Drinking Water Legislation Enacted

- [ME S 426 \(Chap. 28\)](#)- Provides one-time appropriations from the General Fund for treatment of contaminated private drinking water wells
- [MI H 4541 \(Act No. 91\)](#) - Provides for supervision and control over public water supplies, includes water treatment and distribution systems at community supplies, extends sunset on fees for training programs for certified operators.
- [NC H 436 \(Act No. 138\)](#) - Provides for uniform authority to implement system development fees for public water and sewer systems in North Carolina
- [VT S 10 \(Act No. 55\)](#) - Provides that a person who released perfluorooctanoic acid into the air, groundwater, or surface water, or onto the land is strictly, jointly, and severally liable for the costs
- [VT H 851 \(pending\)](#) - Relates to certifying compliance with water quality requirements as a condition of the award of State financial assistance.
- [WI A 226 \(Act No. 69\)](#) - assistance for remediating contaminated wells and failing wastewater treatment systems, increases the amount of the award to pay any portion of eligible costs relating to such remediation



Consolidation of Water Systems - CA

- **California SB 88 (2015-27); SB 552 (2016-773)** - authorizes the state board to order consolidation with a receiving water system where a public water system, or a state small water system within a disadvantaged community, consistently fails to provide an adequate supply of safe drinking water



Consolidation of Water Systems - 2018

- CA S 778 - requires the State Water Resources Control Board to track and publish on its Internet Web site an analysis of all voluntary and ordered consolidations of water systems that have occurred on or after a certain date.
- CA S 1215 - authorizes the State Water Resources Control Board to set timeline and performance measures to facilitate completion of extension of service of drinking water under the Safe Drinking Water Act. Authorizes ordered consolidation with a receiving sewer system for, or extension of sewer service to, a disadvantaged community under specified circumstances.
- CA A 2501 - Authorizes the State Water Resources Control Board to order consolidation with a receiving water system where a disadvantaged community is reliant on a state small water system, an individual well, or an unregulated water system serving fewer than five connections.

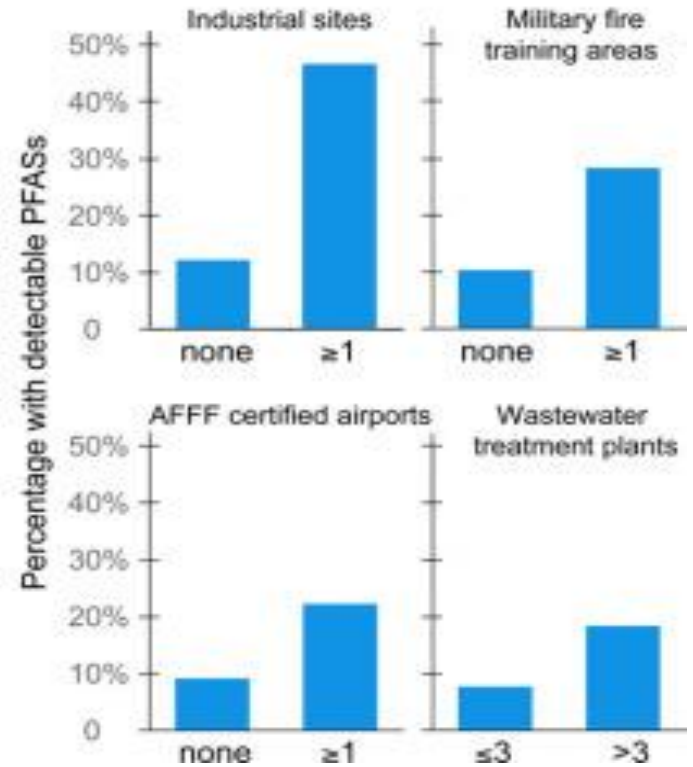
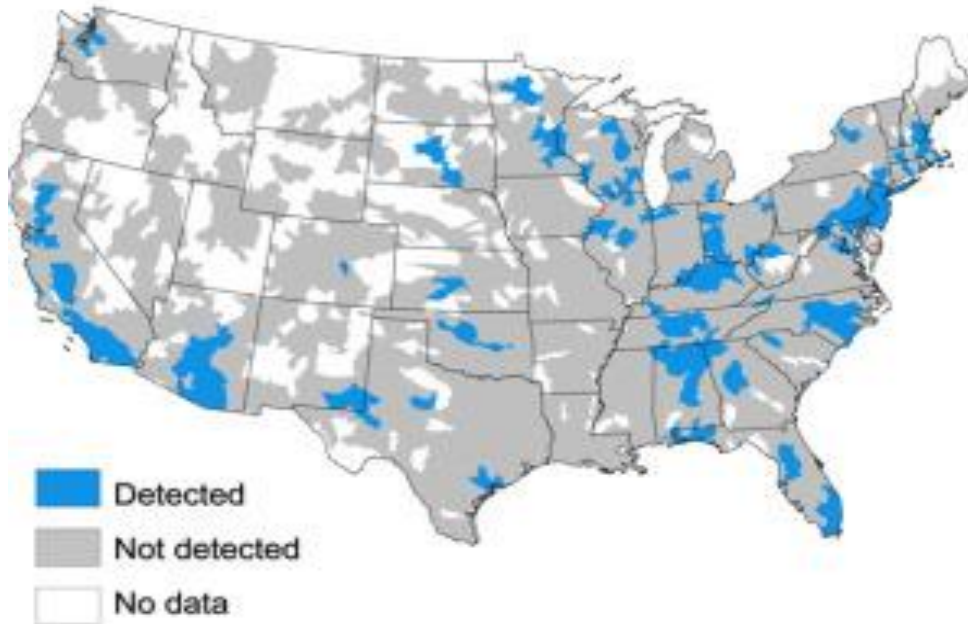


PFOA, PFOS, PFAS, GenX

- [MI H 4320 \(Chap. 201\)](#) - United States Department of Defense shall reimburse the state for costs associated with PFAS and environmental contamination response at military training sites and support facilities.
- [NH H 485](#) - DES will also be required to set the drinking water standards and the ambient groundwater quality standards (AGQS) for PFOA (perfluorooctanoic acid) and PFOS (perfluorooctanesulfonate) to 20 parts per trillion (ppt), as compared to the current AGQS of 70 ppt.
- [NY S 4386](#) - Authorizes the Department of Health to establish maximum levels for perfluoroalkyl carboxylic acids (PFCAs) and (PFSAs) perfluoroalkyl sulfonic acids in public drinking water.
- [NC H 189, S 222](#) – “GENX” and other emerging contaminants; directs the department of health and human services to consult on the process for the establishment of health goals for per- and polyfluoroalkyl substances; directs the department of environmental quality to cooperate with any audit of the NPDES permit program; directs the department of environmental quality to coordinate and share water quality data with states
- [NC H 56 \(Chap. 209\)](#) - the General Assembly finds that the discharge of the poly-fluoroalkyl chemical known as "[GenX](#)" (CAS registry number 62037-80-3 or 13252-13-6) into the Cape Fear River demonstrates the need for supplemental funding for impacted local public utilities for the monitoring and treatment of [GenX](#) and to support the identification and characterization by scientists, engineers, and other professionals of [GenX](#) in the Cape Fear River.
- [VT S 10 \(Act No. 55\)](#) - Provides that a person who released perfluorooctanoic acid into the air, groundwater, or surface water, or onto the land is strictly, jointly, and severally liable for the costs of extending the water supply of a public water system



Hydrological units with detectable PFASs





Lead Testing in Schools

- CA A 746 (Act No. 746)
- DC B 29 (Act No. 21)
- IL S 1943 (Act No. 103)
- MD H 270
- MN H 2 (Act No. 5)





Lead Service Lines

- CA S 427 (Act No. 238)
- NY A 2007
(Appropriations)
- PA H 674
(Appropriations)
- WI S 48 (Act No. 137)





Desalinization Bills 2018

- CA A 554, A 1925 - Relates to desalination projects and opportunities for state assistance and funding.
- HI H 621 – Establishes a three-year pilot project to promote photovoltaic powered desalinization on the island of Kahoalawe and to study certain aspects of the technology's use
- NH H 431 (Act No. 138) - establishes a commission to study long term goals and requirements for drinking water in the seacoast area



Questions or Comments?

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