WATER QUALITY & QUANTITY

The U.S. has serious water quality problems.

- 195 million Americans are exposed to contaminated tap water on a daily basis. [1]
- Agricultural and urban runoff accounts for 60 percent of the total contaminants found in the nation's water. [2]
- Agricultural runoff is the leading source of pollution in rivers and streams. It accounts for 105,000 miles of impaired waterways. [3]
- Aging wastewater infrastructure is responsible for more than 850 billion gallons of untreated sewage released into the country's freshwater supply each year. [4]

The U.S. also faces severe water quantity problems that are likely to get worse. [5]

- Severe drought conditions in the South have resulted in water restrictions in Georgia, curtailed nuclear power generation in Alabama, and reduced water flow for fisheries in Florida.
- The reduced snowpack in California—currently at 61 percent of its average depth—is likely to lead to one of the worst droughts in California's history. [6]
- Groundwater is being depleted faster than it is being replenished. The Ogallala-High Plains aquifer, which lies underneath the Great Plains and stretches underneath portions of eight states, supplies 30 percent of the nation's irrigation water and is at half its original volume.

States have taken action on multiple fronts to address the nation's water quality and quantity problems. More action will be needed.

- Seven states (Colorado, Idaho, Michigan, Ohio, Oregon, Pennsylvania and Vermont) participate in credit trading programs, and four other states (Florida, Maryland, Minnesota and West Virginia) are developing programs to reduce pollution levels. States cap the desired level of contaminants in a particular watershed and permit a maximum amount that entities can pollute. Those that reduce their pollution levels below the cap can sell credits to entities that exceed the cap.
- Agricultural Environmental Management programs such as one in New York provide grants and other incentives to farmers to undertake good environmental stewardship practices such as maintaining a set distance between where cows graze and streams. [7]
- The Association of State and Interstate Water Pollution Control Administrators estimates $300 billion to $500 billion in funding will be needed for wastewater infrastructure improvements in the states. [8]
- Five states (California, Tennessee, Texas, Washington and Wisconsin) have passed legislation requiring water audits or setting water efficiency standards, [9] a trend likely to continue among states.

References

[1] The Environmental Working Group, A National Assessment of Tap Water Quality, December 2005, *http://www.ewg.org/tapwater/findings.php.*

[2] Environmental Working Group, Ibid.

[3] Hoyt, Sarita, EPA Office of Wastewater Management.

[4] EPA, Impacts and Control of CSOs and SSOs, 2004, *http://cfpub.epa.gov/npdes/cso/cpolicy_report2004.cfm.*

[5] Swain, Gabe, The Council of State Governments, Trends in America Issue Brief: Water Scarcity: Preventing Water Shortages, February 2008.

[6] USA Today, California Facing Worst Drought in Modern History, February 2009.

[7] See *http://www.agmkt.state.ny.us/soilwater/AEM/index.html* for details on NY's program.

[8] Swain, Gabe, The Council of State Governments, Trends in America Issue Brief: Water Quality in the States, September 2008.

[9] Alliance for Water Efficiency, accessed from *www.allianceforwaterefficiency.org* on February 6, 2009.

WATER QUALITY & QUANTITY

States	Expected Water Shortages [10]	Percent of Impaired Water in Rivers and Streams [11]	Probable Primary Source of Impairment
Alabama	(DNA)	27%	Livestock (Grazing or Feeding Operations)
Alaska	•	10%	Resource Extraction
Arizona	•	36% (2004)	Natural Sources
Arkansas	•	38% (2004)	Agriculture
California	(DNA)	93% (2004)	Habitat Modification
Colorado	•	14%	Unknown
Connecticut		33%	Unknown
Delaware		100%	Agriculture
Florida	•	N/A	N/A
Georgia	•	56%	Non-Point Source
Hawaii	•	100%	N/A
Idaho	•	N/A	N/A
Illinois		58%	Unknown
Indiana	•	58%	Non-Point Source
Iowa		55%	Unknown
Kansas	•	39%	Agriculture
Kentucky	•	57%	Unknown
Louisiana	•	78%	Unknown
Maine	•	4%	Agriculture
Maryland		N/A	N/A
Massachusetts	•	69%	N/A
Michigan	(DNA)	54%	Atmospheric Deposition
Minnesota	•	80%	N/A
Mississippi		58%	Unknown
Missouri	•	53%	Non-Irrigated Crop Production
Montana	•	85%	Agriculture
Nebraska	•	53%	Unknown
Nevada	(DNA)	51%	Unknown
New Hampshire	•	100%	Atmospheric Deposition
New Jersey	•	86%	N/A
New Mexico	(DNA)	47%	Rangeland Grazing
New York	•	17%	Agriculture
North Carolina	•	51%	N/A
North Dakota		5% (2008)	Grazing
Ohio	•	51%	Non-Irrigated Crop Production
Oklahoma	•	82%	Unknown
Oregon	•	67%	N/A
Pennsylvania	•	19%	Abandoned Mine Drainage
Rhode Island	•	45% (2008)	Unknown
South Carolina	•	62%	N/A
South Dakota	•	47% (2008)	Livestock Grazing
Tennessee	•	37%	Grazing in Riparian Zones
Texas	•	38%	Unknown
Utah		28%	Agriculture
Vermont		51%	Streambank Modifications
Virginia	•	63%	Unknown
Washington	•	53% (2004)	N/A
West Virginia	•	53%	Coal Mining
Wisconsin	•	61%	Atmospheric Deposition
Wyoming	•	19%	Unknown

References

[10] GAO, Freshwater Supply: States' Views of How Federal Agencies Could Help Them Meet the Challenges of Expected Shortages, July 2003, 65. Accessed from: *http://www.gao.gov/new.items/d03514.pdf <http://www.gao.gov/new.items/d03514.pdf>* on February 4, 2009. Key: DNA= Did not answer survey. It is highly likely that CA will face water shortages.

[11] EPA, Watershed Tracking and Assessment Results, 2006, accessed from: *http://iaspub.epa.gov/waters10/attains_status.state_status <http://iaspub.epa.gov/waters10/attains_status.state_status>* on February 4, 2009. Note: Data is from percent of streams assessed; each state collects data differently and thus has its own definition of impairment. Data is for 2006 unless otherwise noted in parentheses.