

Ground Water Use for America

Total

Ground water (mgd—fresh, not saline)	83,213
Percentage of total water supply for nation	24%
Estimated annual economic value of pumped water ¹	\$21.63 bil. ²

Public Supply

Ground water (mgd)	15,979
Percentage of total ground water	19%
Percentage of total public supply	36.9%
Estimated annual economic value of pumped water	\$14.15 bil. ³
Estimated value of installed well/pump infrastructure	\$3.73 bil. ⁴

Individual Household

Ground water (mgd)	3,534
Percentage of total ground water	4%
Percentage of total individual household supply	95%
Estimated annual economic value of pumped water	\$3.09 bil. ⁵
Estimated value of installed well/pump infrastructure	\$64.31 bil.

Irrigation

Ground water (mgd)	58,040
Percentage of total ground water	70%
Percentage of total irrigation	42.4%
Estimated annual economic value of pumped water	\$1.161 bil. ⁶
Estimated value of installed well/pump infrastructure	\$6.0 bil.

Livestock/Aquaculture

Ground water (mgd)	2,070.32
Percentage of total ground water25%
Percentage of total livestock/aquaculture	37.9%
Estimated annual economic value of pumped water	\$41.41 mil. ⁷

Industrial, Self-Supplied

Ground water (mgd)	3,576
Percentage of total ground water	4%
Percentage of total industrial	19.3%
Estimated annual economic value of pumped water	\$3.16 bil. ⁸

Mining

Ground water (mgd)	765.06
Percentage of total ground water	1%
Percentage of total mining	38.1%
Estimated annual economic value of pumped water	\$15.3 mil. ⁹

Thermoelectric

Ground water (mgd)	409.27
Percentage of total ground water	0.05%
Percentage of total thermoelectric	0.419%
Estimated annual economic value of pumped water	\$11.30 mil. ¹⁰

(mgd = million gallons per day)

Ground Water's Role in America's Economic Vitality

- 45.9%¹¹ of America's population regularly depends upon ground water for its drinking water supply¹²
- 44,372,500 American residents served by privately owned individual wells¹³
- 90,499,550 American residents served by ground water supplied community water systems¹⁴
- 15,426,000 American households served by privately owned individual wells¹⁵
- 107,848 community supply¹⁶ wells serving 41,264¹⁷ American community water systems
- 18,403 non-transient, non-community water systems serving 5,050,678 people¹⁸
- 84,374 transient, non-community water systems serving 15,432,962 people¹⁹
- 379,674 irrigation wells serving 104,776 farms²⁰
- The U.S. bottled water industry used 5.34 billion gallons of ground water in 2001²¹



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America's Ground Water Industry Employment

Men and women working to provide and protect America's ground water resources for the benefit of people, business, and our environment.

America's Contracting Employment

Drill and service water wells, install and service pumps, install and service point of use water treatment devices. This portion of the industry is characterized by small firms, many of which are multi-generation family-owned and operated.²²

- 8,085 firms employ an estimated 44,358 people
- Annual estimated sales of \$2,466,137,000



America's Scientists & Engineers Employment

Geologists, hydrogeologists, engineers, geochemists, geophysicists, microbiologists, regulators.²³

Hazardous Waste Management Firms

- 1,800 firms employ an estimated 46,777 people
- Annual estimated sales of \$5.8 billion

Remediation & Industrial Service Firms

- 4,400 firms employ an estimated 116,145 people
- Annual estimated sales of \$11.15 billion

Environmental Consulting Firms

- 3,900 firms employ an estimated 170,111 people
- Annual estimated sales of \$15.31 billion

Government, Research Institutes, Universities and Colleges

- Hundreds more



American Manufacturers & Wholesalers

In 2005, shipments of domestic water systems used for wells equaled 2,168,163 pumps valued at \$379,607,000.²⁴ Shipments of new machines used to drill water wells totaled 307 units at a combined value of \$129,003,000 in 2005.²⁵ Shipments of ground and ground water source heat pumps, fossil fuel-saving technology, totaled 79,844 units in 2005, at a value of \$150,021,000²⁶

There are hundreds of firms employing thousands of individuals throughout the nation.

¹ Value of extracted water as a resource before the water is applied for noted economic use

² Sum of all estimates below

³ Calculated by using value of \$0.0024227 per gallon for treated water from a Midwest utility. American Water Works Association, 2004

⁴ Based on dollar values for wells and pumps reported in *Ground Water Contracting Industry Survey*, September 2003, ResearchUSA, Inc. Same source for individual household and irrigation segments.

⁵ Calculated by using value of \$0.0024227 per gallon for treated water from a Midwest utility. American Water Works Association, 2004

⁶ Calculated by using value of \$17.86 of direct agricultural impact per acre-foot of ground water in Kansas, or \$0.0000548 per gallon. The Docking Institute of Public Affairs, 2001, chapter 4.

⁷ Calculated by using the value of ground water for irrigation

⁸ Calculated by using the value of \$0.0024227 per gallon of treated water from a Midwest utility. American Water Works Association, 2004

⁹ Calculated by using the value of ground water for irrigation

¹⁰ Calculated by using the value of ground water for irrigation

¹¹ Resident population of U.S. 2000 was 281,421,906, U.S. Census

¹² US Geological Survey, March 2004 report on 2000 water use

¹³ US Geological Survey, March 2004 report on 2000 water use

¹⁴ US EPA, 2004

¹⁵ American Housing Survey, US Census, 2003

¹⁶ US EPA, 2004

¹⁷ US EPA, 2004

¹⁸ US EPA, 2004

¹⁹ US EPA, 2004

²⁰ US Dept. of Agriculture, 2004

²¹ Drinking Water Research Foundation, May 2005

²² U.S. Census data for employee (1997) and non-employee firms (2002)

²³ Environmental Industry of the United States, US Commerce, January 1999

²⁴ U.S. Census, Current Industrial Reports – Pumps and Compressors, 2005

²⁵ U.S. Census, Current Industrial Reports – Mining and Construction Machinery, 2005

²⁶ U.S. Census, Current Industrial Reports – Refrigeration, Air Conditioning, and Warm Air Heating Equipment, 2005