

Groundwater Use in West Virginia

Overview¹

Total

Groundwater (mgd — fresh, not saline)..... 130
Percentage of total freshwater* supply for state..... 5.60%

Public Supply

Groundwater (mgd) 37.7
Percentage of total groundwater..... 29.00%
Percentage of total public supply 20.38%

Individual Household

Groundwater (mgd) 31.3
Percentage of total groundwater..... 24.08%
Percentage of total individual household supply 100.0%

Irrigation

Groundwater (mgd) 0.40
Percentage of total groundwater..... 0.31%
Percentage of total irrigation..... 9.64%

Livestock/Aquaculture

Groundwater (mgd) 9.8
Percentage of total groundwater..... 7.54%
Percentage of total livestock/aquaculture..... 22.08%

Industrial, Self-Supplied

Groundwater (mgd) 25.7
Percentage of total groundwater..... 19.77%
Percentage of total industrial, self-supplied 6.06%

Mining

Groundwater (mgd) 23.8
Percentage of total groundwater..... 18.31%
Percentage of total mining..... 44.65%

Thermoelectric

Groundwater (mgd)1.19
Percentage of total groundwater..... 0.92%
Percentage of total thermoelectric..... 0.08%

(mgd = million gallons per day)

*All totals and ratios are measures of freshwater only.

¹ US Geological Survey, Estimated Use of Water in the United States in 2015, released 2018.

² US Census Bureau 2013 American Housing Survey.

³ US Census Bureau 2013 American Community Survey.

⁴ US Geological Survey, Estimated Use of Water in the United States in 2015, released 2018.

⁵ US EPA Federal Safe Drinking Water Information System Data for 2019.

⁶ *Ibid.*

⁷ *Ibid.*

⁸ Census of Agriculture 2013 Farm and Ranch Irrigation Survey.

Groundwater's Role in West Virginia's Economic Vitality

- Few states can accurately or confidentially determine how many residential wells are in place. For each region, the American Housing Survey by the U.S. Census provides regional data. West Virginia is found in the South, along with these other states: Maryland, Delaware, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Texas, Oklahoma, Arkansas, Tennessee, and Kentucky. The last American Housing Survey Census indicates this region had 4,360,000² households served by residential wells, with an average of 2.44³ persons per household. The USGS estimates the population of self-supplied water supply users in West Virginia to be 392,000, with 100% of their water supply from groundwater.⁴
- 153 community water systems use groundwater for 243,700 people⁵
- 73 non-community, non-transient water systems use groundwater for 28,700 people⁶
- 332 non-community, transient water systems use groundwater for 25,400 people⁷
- 150 irrigation wells used serving 119 farms and 821 acres⁸



Address 601 Dempsey Road, Westerville, Ohio 43081-8978 U.S.A.
Phone 800 551.7379 • 614 898.7791 **Fax** 614 898.7786
Email ngwa@ngwa.org **Websites** NGWA.org and WellOwner.org

West Virginia's Groundwater Industry Employment

Men and women working to provide and protect West Virginia's groundwater resources for the benefit of people, business, and our environment.

West Virginia'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.⁹

- 36 firms employ an estimated 274 people
- Annual estimated sales of \$71.4 million

West Virginia's Scientists and Engineers Employment

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

Environmental Consulting¹⁰

NAICS 54162: Establishments primarily engaged in providing advice and assistance on environmental issues, such as the control of environmental contamination from pollutants, toxic substances, and hazardous materials.

- 114 firms employ an estimated 612 people
- Annual estimated sales of \$121.6 million

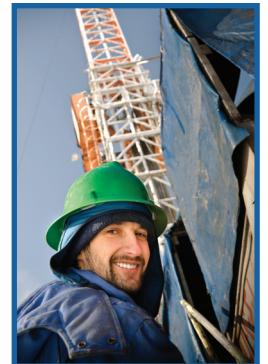
Remediation¹¹

NAICS 56291: Establishments include those engaged in remediation and cleanup of contaminated buildings, mine sites, soil, or groundwater.

- 40 firms employ an estimated 247 people
- Annual estimated sales of \$60.4 million

Public Service and Universities, Colleges, and Research Centers

- Many more dedicated individuals



⁹ InfoUSA, SIC 1781, June 2019.

¹⁰ Barnes Reports: Environmental Consulting Services Industry (NAICS 54162); C. Barnes & Co., 2019.

¹¹ Barnes Reports: Remediation Services Industry (NAICS 56291); C. Barnes & Co., 2019.