

Groundwater Use in Pennsylvania

Overview¹

Total

Groundwater (mgd — fresh, not saline)..... 622
Percentage of total freshwater* supply for state..... 10.32%

Public Supply

Groundwater (mgd) 227
Percentage of total groundwater..... 36.50%
Percentage of total public supply 16.33%

Individual Household

Groundwater (mgd) 208
Percentage of total groundwater..... 33.44%
Percentage of total individual household supply 100%

Irrigation

Groundwater (mgd) 17.5
Percentage of total groundwater..... 2.81%
Percentage of total irrigation..... 51.02%

Livestock/Aquaculture

Groundwater (mgd) 85.1
Percentage of total groundwater..... 13.68%
Percentage of total livestock/aquaculture..... 62.80%

Industrial, Self-Supplied

Groundwater (mgd) 45.9
Percentage of total groundwater..... 7.25%
Percentage of total industrial, self-supplied 7.12%

Mining

Groundwater (mgd) 32.9
Percentage of total groundwater..... 5.29%
Percentage of total mining..... 86.35%

Thermoelectric

Groundwater (mgd) 5.38
Percentage of total groundwater..... 0.86%
Percentage of total thermoelectric..... 0.15%

(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 Pennsylvania'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. Pennsylvania is found in the Northeast, along with these other states: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania. The last American Housing Survey Census indicates this region had 3,210,000² households served by residential wells, with an average of 2.5³ persons per household. The USGS estimates the population of self-supplied water supply users in Pennsylvania to be 3,470,000, with 100% of their water supply from groundwater.⁴
- 1,479 community water systems use groundwater for 1,402,600 people⁵
- 1,123 non-community, non-transient water systems use groundwater for 435,900 people⁶
- 5,263 non-community, transient water systems use groundwater for 720,700 people⁷
- 2,910 irrigation wells used serving 2,140 farms and 11,500 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

Pennsylvania's Groundwater Industry Employment

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

Pennsylvania'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

- 203 firms employ an estimated 1,803 people
- Annual estimated sales of \$395.5 million

Pennsylvania'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.

- 1,250 firms employ an estimated 4,682 people
- Annual estimated sales of \$908.6 million

Remediation¹¹

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

- 295 firms employ an estimated 3,525 people
- Annual estimated sales of \$897.5 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.