

Groundwater Use in North Carolina

Overview¹

Total

Groundwater (mgd — fresh, not saline)..... 694
Percentage of total freshwater* supply for state..... 6.25%

Public Supply

Groundwater (mgd) 194
Percentage of total groundwater..... 28.00%
Percentage of total public supply 20.20%

Individual Household

Groundwater (mgd) 231
Percentage of total groundwater..... 33.30%
Percentage of total individual household supply 100%

Irrigation

Groundwater (mgd) 88.3
Percentage of total groundwater..... 12.70%
Percentage of total irrigation..... 24.10%

Livestock/Aquaculture

Groundwater (mgd) 68.4
Percentage of total groundwater..... 9.86%
Percentage of total livestock/aquaculture..... 4.44%

Industrial, Self-Supplied

Groundwater (mgd) 83.8
Percentage of total groundwater..... 12.10%
Percentage of total industrial, self-supplied 30.90%

Mining

Groundwater (mgd) 27.8
Percentage of total groundwater..... 4.01%
Percentage of total mining..... 85.30%

Thermoelectric

Groundwater (mgd) 0.37
Percentage of total groundwater..... 0.05%
Percentage of total thermoelectric..... 0.00%

(mgd = million gallons per day)

*All totals and ratios are measures of freshwater only.

¹ US Geological Survey, November 2014 report on 2010 water use.

² US Census Bureau 2013 American Housing Survey.

³ US Census Bureau 2013 American Community Survey.

⁴ US Geological Survey, November 2014 report on 2010 water use.

⁵ *Ibid.*

⁶ US EPA Federal Safe Drinking Water Information System Data for 2014.

⁷ *Ibid.*

⁸ Census of Agriculture 2013 Farm and Ranch Irrigation Survey.

Groundwater's Role in North Carolina'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. North Carolina 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 2.55³ persons per household. The U.S. Census stopped asking citizens their source of water supply following the 1990 Census. The USGS estimates the population of self-supplied water supply users in North Carolina to be 3,300,000⁴.
- 1,590 community water systems use groundwater for 1,540,000 people⁵
- 363 non-community, non-transient water systems use groundwater for 94,300 people⁶
- 3,430 non-community, transient water systems use groundwater for 308,000 people⁷
- 2,310 irrigation wells used serving 1,290 farms and 38,400 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

North Carolina's Groundwater Industry Employment

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

North Carolina'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

- 178 firms employ an estimated 1,150 people¹⁰
- Annual estimated sales of \$265

North Carolina's Scientists and Engineers Employment

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

Environmental Consulting¹¹

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.

- 637 firms employ an estimated 2,060 people
- Annual estimated sales of \$300 million

Remediation¹²

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

- 144 firms employ an estimated 1,490 people
- Annual estimated sales of \$228 million

Public Service and Universities, Colleges, and Research Centers

- Many more dedicated individuals



⁹ InfoUSA, SIC 1781, March 2015.

¹⁰ Barnes Reports: Remediation Services Industry (NAICS 56291); C. Barnes & Co., 2015.

¹¹ Barnes Reports: Environmental Consulting Services Industry (NAICS 54162); C. Barnes & Co., 2015.

¹² Barnes Reports: Remediation Services Industry (NAICS 56291); C. Barnes & Co., 2015.