Groundwater Use in Virginia

Overview

Total
Groundwater (mgd — fresh, not saline) ............................................ 284
Percentage of total freshwater* supply for state............... 6.59%

Public Supply
Groundwater (mgd) .......................................................... 82.8
Percentage of total groundwater............................................. 29.2%
Percentage of total public supply....................................... 11.9%

Individual Household
Groundwater (mgd) .......................................................... 125.0
Percentage of total groundwater............................................. 44.0%
Percentage of total individual household supply ............. 100%

Irrigation
Groundwater (mgd) .......................................................... 7.93
Percentage of total groundwater............................................. 2.79%
Percentage of total irrigation.............................................. 15.3%

Livestock/Aquaculture
Groundwater (mgd) .......................................................... 6.7
Percentage of total groundwater............................................. 2.36%
Percentage of total livestock/aquaculture....................... 4.79%

Industrial, Self-Supplied
Groundwater (mgd) .......................................................... 66.0
Percentage of total groundwater............................................. 23.2%
Percentage of total industrial, self-supplied ................. 17.8%

Mining
Groundwater (mgd) .......................................................... 6.20
Percentage of total groundwater............................................. 2.18%
Percentage of total mining................................................ 24.9%

Thermoelectric
Groundwater (mgd) .......................................................... 1.08
Percentage of total groundwater............................................. 0.38%
Percentage of total thermoelectric..................................... 0.04%

*All totals and ratios are measures of freshwater only.

Groundwater’s Role in Virginia’s Economic Vitality

• Approximately 42,800 known residential wells statewide.²
• 734 community water systems use groundwater for 399,100 people³
• 513 non-community, non-transient water systems use groundwater for 166,800 people⁴
• 1,234 non-community, transient water systems use groundwater for 185,800 people⁵
• 1,190 irrigation wells used serving 834 farms and 7,570 acres⁶

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2 Virginia Department of Environmental Quality, Office of Water Supply
4 ibid.
5 ibid.
6 Census of Agriculture 2013 Farm and Ranch Irrigation Survey.
Virginia’s Groundwater Industry Employment

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

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.7
- 103 firms employ an estimated 799 people
- Annual estimated sales of $186.4 million

Virginia’s Scientists and Engineers Employment
Geologists, hydrogeologists, engineers, geochemists, geophysicists, microbiologists, regulators.

Environmental Consulting8
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.
- 793 firms employ an estimated 3,420 people
- Annual estimated sales of $646.7 million

Remediation9
NAICS 56291: Establishments include those engaged in remediation and cleanup of contaminated buildings, mine sites, soil, or groundwater.
- 167 firms employ an estimated 1,750 people
- Annual estimated sales of $424.2 million

Public Service and Universities, Colleges, and Research Centers
- Many more dedicated individuals

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7 InfoUSA, SIC 1781, June 2019.