

Groundwater Use for Michigan¹

Total

Groundwater (mgd—fresh, not saline).....	836
Percentage of total water supply for state.....	7%

Public Supply

Groundwater (mgd).....	260
Percentage of total groundwater.....	31%
Percentage of total public supply.....	23%

Individual Household

Groundwater (mgd).....	251
Percentage of total groundwater.....	30%
Percentage of total individual household supply.....	100%

Irrigation

Groundwater (mgd).....	198
Percentage of total groundwater.....	24%
Percentage of total irrigation.....	64%

Livestock/Aquaculture

Groundwater (mgd).....	21
Percentage of total groundwater.....	2%
Percentage of total livestock/aquaculture.....	24%

Industrial, Self-Supplied

Groundwater (mgd).....	89
Percentage of total groundwater.....	11%
Percentage of total industrial.....	14%

Mining

Groundwater (mgd).....	13
Percentage of total groundwater.....	2%
Percentage of total mining.....	14%

Thermoelectric

Groundwater (mgd).....	4
Percentage of total groundwater.....	0%
Percentage of total thermoelectric.....	4%

(mgd = million gallons per day)

Groundwater's Role in Michigan's Economic Vitality

- 2,910,000 residents served by privately owned individual wells¹
- 1,121,075 households served by privately owned individual wells²
- 1,099 community water systems use groundwater for 1,675,765 people³
- 1,374 non-community, non-transient water systems use groundwater for 326,679 people⁴
- 8,464 non-community, transient water systems use groundwater for 1,012,336 people⁵
- 4,097 irrigation wells used serving 1,423 farms and 371,726 acres⁶



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¹ US Geological Survey, October 2009 report on 2005 water use.

² Based on 1990 Census data, last year in which household wells were counted.

³ US EPA Public Water System Inventory Data-Oct 2011.

⁴ US EPA Public Water System Inventory Data-Oct 2011.

⁵ US EPA Public Water System Inventory Data-Oct 2011.

⁶ 2007 Census of Agriculture, Farm and Ranch Irrigation Survey (2008).

Michigan's Groundwater Industry Employment

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

Michigan'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

- 502 firms employ an estimated 2,861 people⁸
- Annual estimated sales of \$135,628,000



Michigan's Scientists and Engineers Employment

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

Environmental Consulting⁹

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.

- 220 firms employ an estimated 1,852 people
- Annual estimated sales of \$141.5 million



Remediation¹⁰

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

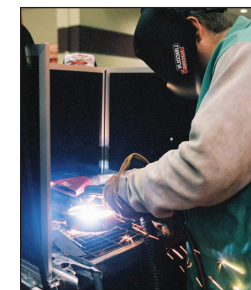
- 114 firms employ an estimated 2,112 people
- Annual estimated sales of \$182.1 million

Public Service and Universities, Colleges, and Research Centers

- Many more dedicated individuals

Sampling of Michigan Manufacturers and Wholesalers

Hartsig Supply Co. Inc.
Milan Supply Co.
Fuller Supply Co.
Valley Farms Supply Inc.
C & N Supply Co. Inc.
Murphys Water Well Bits
Big Foot Manufacturing



⁷ U.S. Census data for employee (1997) and non-employee firms (2002).

⁸ 5.7 employees per firm, Research USA for *Water Well Journal*, September 2003

⁹ Barnes Reports: *Environmental Consulting Services Industry* (NAICS 54162); C. Barnes & Co., 2010 Edition.

¹⁰ Barnes Reports: *Remediation Services Industry* (NAICS 56291); C. Barnes & Co., 2010 Edition