

2.1 Conditions and Trends

The primary use of groundwater in Washtenaw County is to supply drinking water. Well water is the only water source available to County residents that do not fall into a community water system. With the exception of the service area of Ann Arbor, which draws approximately 15% of its water from the ground and the portions of the County served by the City of Detroit Water and Sewer Department, all of Washtenaw County's community water systems are sourced by groundwater. See Section 4.0 for information on the individual water systems (Figures 2 and 3).

Groundwater in Washtenaw County has many components other than H₂O. Some are naturally occurring, like iron and calcium ("Hardness"), and some are the result of contamination, like Volatile Organic Compounds (VOCs) which are typically components of petroleum products. In addition, there are some substances that can be found in the water supply that may be both naturally occurring or the result of contamination, such as nitrates and heavy metals.

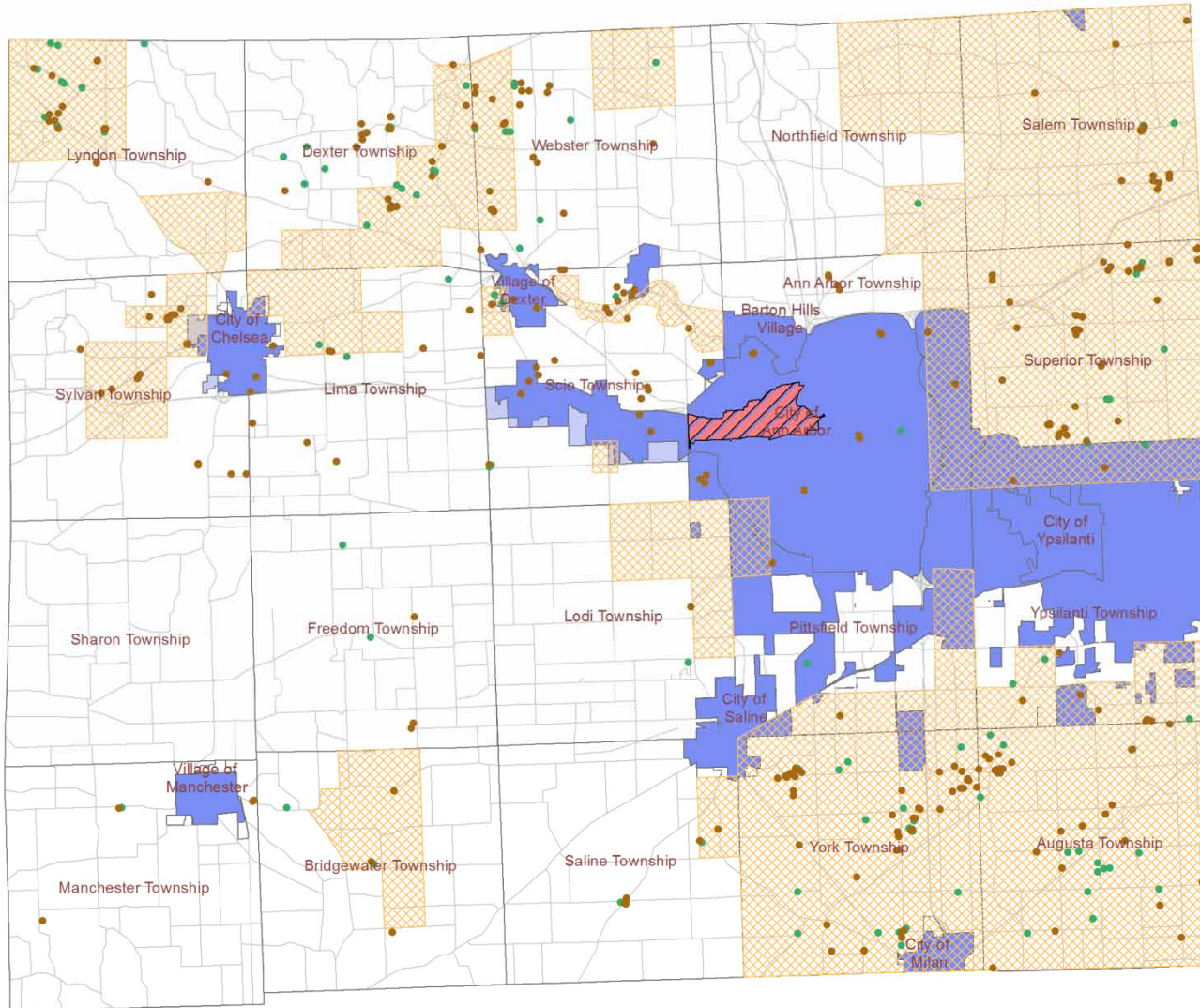
Some of the substances found in the water pose no health risk, but are a nuisance because of their taste, sight, or smell. Iron, for instance, will stain plumbing fixtures. Hardness, tannins, and manganese do not cause health effects but may have other effects that are undesirable; hardness causes scaling of water fixtures and soap scum, tannins cause a yellow discoloration, and manganese causes a bad taste and can stain clothing.

Some substances that may pose a health risk are virtually undetectable by taste, sight and smell. Nitrates, arsenic, and lead are all examples of dangerous substances that may be in Washtenaw County well water that are physically undetectable.

There are other substances that may pose a health risk that are more likely to be detected because of an adverse smell or taste. Methane and hydrogen sulfide gas, heavy metals, and VOCs may all be physically detectable and could pose a health risk. Bacteria can also possess an odor; however, it is not likely to be detectable in small amounts.

Well owners with questions regarding their drinking water are encouraged to contact the Washtenaw County Department of Planning and Environment Development Services Division at (734) 222-3800. A sanitarian can provide specific information on well testing services available and make suggestions for tests that address issues unique to each home owner's well.









Map 2: Municipal Water Services and Wells First Areas

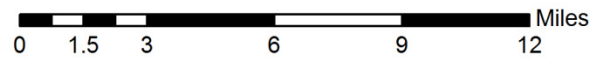


Washtenaw County:



Legend

-  Well First Area
-  PLS Prohibition Zone
-  Low Yield Well (0 - 7 gpm)
-  Dry Hole
-  Roads
-  Townships
- Municipal Water Service**
-  Current Service Areas
-  Planned Construction



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