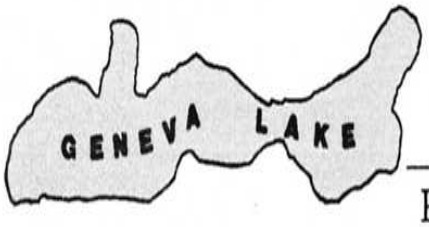
Hello Neighbor:

In this issue we will introduce you to a private well water testing program and list upcoming dates for education and testing. Public health officials recommended that private drinking water wells be tested annually. If your well has been shut down or worked on it is suggested that it be sampled before drinking the water.

Listed below is a schedule of public informational meetings for the upcoming well testing program. If you are interested in testing your well, you will need to attend these meetings. The **Aug. 13** meeting will help us prepare for the number of expected samples and teach you how to collect a good sample. The next weekend, **Aug 20, 21, and 22,** bottles will be distributed and fees collected on Saturday, wells sampled on Sunday and samples returned for delivery to the lab on Monday. If you can't make the sample drop off on Monday perhaps a neighbor can deliver the samples for you. Results will be distributed and discussed in late August or early September.

IMPORTANT DATES FOR UPCOMMING 2011 DRINKING WATER WELL TESTING

- **AUGUST 13**, **SATURDAY—**meetings on well testing. If interested in having your well tested you need to attend one of these meetings.
  9:00 am ———Chapel on the Hill.
  11:00 am———Linn Town Hall.
- **AUGUST 20, SATURDAY—** Pick up bottles and pay for tests.
  9:00 am ———Chapel on the Hill
  11:00 am———Linn Town Hall
- **AUGUST 21, SUNDAY**— Collect sample from well. Sample the well late in the day and keep the sample in the refrigerator until you return them on Monday.
- **AUGUST 22, MONDAY**— Bring sample to collection point for delivery to lab.
  9:00 am———Chapel on the Hill
  11:00 am———Linn Town Hall



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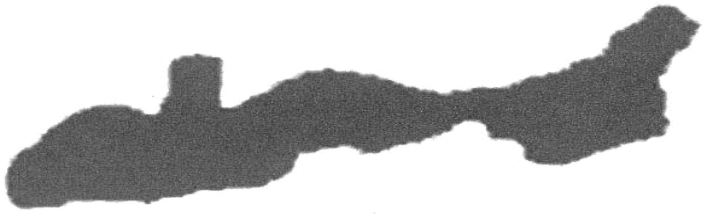
This Groundwater Information, Education and Well Testing Program is brought to you and funded by the Linn Sanitary District and the Geneva Lake Environmental Agency.

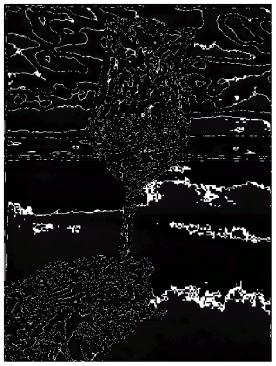


Geneva Lake Environmental Agency

Village of Fontana • City of Lake Geneva • Town of Linn
Town of Walworth • Village of Williams Bay

TESTING YOUR DRINKING WATER WELL

(Bold and italicized words are defined in the glossary on the following page.)



Most of the drinking water in the Geneva Lake area comes from groundwater that falls as rainwater, enters the ground, and moves from ***recharge areas*** to ***discharge areas***. Although often considered safe and protected because it is in the ground, groundwater can become contaminated by many surface and subsurface sources. Some pollutants can become immediately apparent in your water supply with taste, smell, and color changes. However, not all pollutants can be seen, tasted, or smelled. Pollutants such as bacteria, viruses, and other pathogens can cause almost immediate discomfort, while other pollutants such as metals and complex chemicals may not manifest their presence or health impacts for several years.

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Pollutants can move with groundwater. Areas that have good groundwater quality may become contaminated due to changes in land-use activities some distance away. Thus, it is difficult to know what is in the groundwater (or not in it) until it is tested.

Private drinking water wells are not required to be tested unless they have been drilled or repaired. It is to the user's benefit to know his or her well-water quality. A simple annual testing for bacteria can give peace of mind in knowing that your drinking water supply is good.

The most common test done on well water is for ***coliform bacteria.*** The presence of any type of ***coliform bacteria*** is an indication that there may be avenues for more serious contaminants to enter your water supply. ***Fecal coliform*** bacteria are a type of ***coliform bacteria*** that are found in the intestines of warm-blooded animals and are common in fecal waste. An example of ***fecal coliform*** bacteria is the commonly known ***E-Coli bacteria***. The presence of ***fecal coliform*** and specifically ***E-coli bacteria*** is an indication of a fecal-contaminated water supply.

Other well-water pollutants often tested for are ***nitrate-nitrogen***, ***arsenic,*** and chloride. If found in a high enough concentration, nitrogen and arsenic can impact health. Chloride is generally a nuisance, or an aesthetic pollutant, as it may not cause any direct health issues but may limit the use of the water supply.

Glossary of Terms

***Arsenic* –** A highly poisonous metallic element that can restrict the use of the water when found present. In certain areas of Wisconsin its presence in drinking water can be from chemical changes in the aquifer.

***Coliform bacteria* –** a collection of relatively harmless microorganisms that live in large numbers in soils, plants, and intestines of warm-blooded (humans) and cold-blooded animals.

***Discharge area* –** An area where an aquifer discharges water to the ground's surface as a spring, creek, or seepage.

***E-coli bacteria* –** *Escherichia coli* bacteria, a specific type of fecal coliform bacteria that lives in the intestines of people and animals.

***Fecal coliform bacteria* –** A type of coliform bacteria usually found in the intestinal tracts of animals, including humans.

***Nitrate nitrogen* –** A form of nitrogen that is often found in water. Its presence at high levels can be an indication of pollution and results in restrictions of drinkability.

***Recharge area* –** An area in the landscape where water enters the ground and moves into the aquifer.

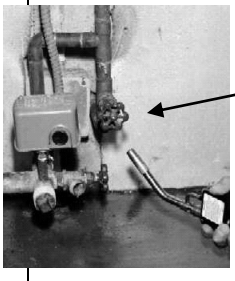
HOW TO TEST A DRINKING WATER WELL

Specific tests require specific sample bottles and techniques. Always check with a certified lab that will be doing the analysis for any special sampling methods or bottles that may be needed. Often the lab will supply the bottles. When sampling, do not touch or contaminate the bottle lip, its cap, the sampling faucet, or the water.

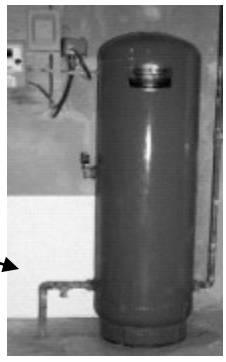
Sampling a Private Well:

- **Locate a sampling faucet that is closest to the well head. Do not sample water that has passed through a hose, softener, filter, or any type of treatment system. Most new wells have a sampling faucet near the pressure tank. If you do not have a sampling faucet by the pressure tank, sample at the first faucet from the pressure tank on the cold-water line.**
- **Using a small torch or flame, sterilize the faucet lip, being careful not to get the faucet so hot that the washers melt. Do not flame plastic faucets.**
- **Turn the faucet flow to a continuous even flow.**
- **Flush the water line by letting it run until you hear the pump turn on (3-5 min.).**
- **Carefully open the sampling bottle so as to not contaminate the bottle, cap, or faucet.**
- **Slowly run sample water into the bottle, leaving a small unfilled area at the bottle's top.**
- **Carefully close the bottle, and put it in the enclosed plastic bag.**
- **Complete the information on data sheet, and include it in the Styrofoam shipper with the sample bottle.**
- **Keep the sample refrigerated until taken/sent to the lab.**
  - **Samples should arrive at the lab within 24-36 hours of sampling.**

PRESSURE TANK TAP



Sterilizing sampling faucet with a torch.



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GENEVA LAKE ENVIRONMENTAL AGENCY

PLEASE OPEN AND READ

IMPORTANT DATES FOR DRINKING WATER TESTING

For more information on Groundwater visit:

Central Wisconsin Groundwater Center
http://www.uwsp.edu/cnr/gndwater/

Wisconsin Department of Natural Resources (WDNR)
http://dnr.wi.gov/org/water/dwg/

United States Geological Survey (USGS)
http://water.usgs.gov/ogw/

Wisconsin Geological and Natural History Survey (WGNHS)
http://www.uwex.edu/wgnhs/

United States Environmental Protection Agency (USEPA)
http://www.epa.gov/

University Of Wisconsin—Extension
http://www.uwex.edu/

Geneva Lake Environmental Agency (GLEA)
http://www.genevaonline.com/~glea/

Linn Sanitary District (LSD)
http://www.townoflinn.com/Sanitary.htm

Wisconsin State Lab of Hygiene (WSLH) for testing
http://www.slh.wisc.edu