

## **A Proposal for Private Drinking Water well testing program, Linn Sanitary District and the Geneva Lake Environmental Agency, Walworth County, WI**

GLEA adopted 05/29/14. Adopted by LSD 6/11/14

**What:** A volunteer private well testing program to include E- coli, nitrates and some arsenic will be offered to Linn Sanitary District residents at a reduced cost of \$10. The well sampling program would be open to all Linn Sanitary District residents with private drinking water wells. Other wells could be sampled at full cost of the sampling and analysis. Trained Geneva Lake Environmental Agency (GLEA) and Walworth County Public Health Services' employees would sample private wells upon permission of the home owner. Samples would be taken to the Walworth County Public Health Services' lab for analysis. Upon identifying a drinking water problem the homeowner would be notified with recommendation for resolving the problem. Following the completion of the sampling and testing a public meeting would be held (north shore/south shore) to explain the results and what can be done to resolve any identified water quality issues. An assessment of the overall groundwater quality would also be discussed. Data will be presented in a spatial context without specifically naming owners.

**Goals:** 1) to sample the major source of drinking water within the Linn Sanitary District and record results in a regional and spatial context. 2) To identify any water quality issues and to resolve those issues, thus assuring a safe potable water supply for all residents. 3) Identify area groundwater quality. 4) To encourage residents to establish an annual well testing program of their private drinking water wells.

**Why:** Most Linn Sanitary District residents receive their drinking water from private drinking water wells. These wells are of different depth and withdraw water from several different aquifers. There are no requirements for these wells to be tested for their water quality. The last time many of these wells may have been tested was probably when the home was purchased. Past efforts by the District to encourage well testing have not been very successful for several reasons. An attempt to offer reduced costs and coordination of a testing program by the Linn Sanitary District and the Geneva Lake Environmental Agency in 2011 resulted in limited response. Thus many of the residents are drinking water of unknown quality hoping that it is potable. In most cases it may be but it is not a given.

One of the comments received during the 2011 well testing program was that there would have had more involvement if someone would have done the sampling. Having trained and background checked staff from the GLEA/LSD meet with the homeowner and actually do the well sampling would address this with the hope of getting more involvement. Offering a cost sharing on the lab analysis may also help improve participation.

**Who:** Major players would be the Linn Sanitary District, the Geneva Lake Environmental Agency and the Walworth County Public Health Services. College interns would be hired to conduct the sampling. Interns would be solicited from George Williams College (GWC), other nearby colleges and the Area Health Education Center (AHEC) via the County Division of Public Health. They would be trained by GLEA and county personnel. The Walworth County Public Health Services' lab would be used for any nitrate and bacteria analysis. Pertinent state and federal resources would also be solicited for assistance (State and local Dept. of Health, University of Wisconsin, and the WDNR).

**How:** Working together, the Linn Sanitary District, the Geneva Lake Environmental Agency and the Walworth County Public Health Services would establish a private well monitoring program that would

involve trained individuals meeting with homeowners to sample private drinking water wells. A team of intern students would be trained for meeting with the home owners, collecting the samples during the summer months, collecting and recording relative information about the well, delivering the samples to the lab in a timely manner and recording the results in a data base. Arsenic test would be done only on deep wells (>175 ft.) using a test kit. A fee of \$10 would be charged for participating in the project. Other cost would be picked up by the LSD and GLEA. AHEC will cover the cost of two interns.

Project administration, any billing involved in the project and coordination with the lab would be the responsibility of the GLEA.

One intern would be hired by the GLEA and two by AHEC. They would be trained by the GLEA and Walworth County Public Health Services in the proper method of sampling private wells, processing the sample and educating the participants in maintenance and upkeep of private wells. Background checks would be conducted on the individual interns to assure creditability.

The GLEA/LSD would do a media campaign prior to the actual testing to let people know that the opportunity to have their wells tested by trained individuals with the potential for cost sharing on the analysis. Interested parties would contact the GLEA/LSD. The crews would get back to the interested parties to set up a sampling date, sample the wells, gather the needed information and send the samples to the lab in a timely manner. Results and relative information would be compiled in a spreadsheet. Specific test results would be discussed in a letter to the homeowner sent in a timely manner. Periodic newsletters would be sent out updating homeowners on the project's progress. In early fall an informational meeting would be held to discuss the results on a general basis. Participating homeowners would be encouraged to establish an annual testing program.

**Partners or Sources of Resources:**

Linn Sanitary District, Geneva Lake Environmental Agency, George Williams College, Walworth County Public Health Services would be major partners in the project. Additional input would be welcomed from Wisconsin Division of Health, Wisconsin Department of Natural Resources, Wisconsin State Lab of Hygiene, UW Stevens Point Groundwater Center, Wisconsin Geological and Natural History Survey.

**Personnel:**

The project would be coordinated between the Geneva Lake Environmental Agency, the Linn Sanitary District and the Walworth County Public Health Services. Two, 2 person crews would conduct the sampling. Training the interns would be the responsibility of the GLEA and the Walworth County Public Health Services. The LSD and GLEA, Walworth County Public Health Services, along with George Williams College would be involved in the hiring of the interns. The Walworth County Sheriff's Dept. would be asked to conduct background checks. GLEA would secure official identification badgers for the interns.

**Timeline:**

Nov – Dec 2013                      Project planning, approval and coordination with major players, LSD, GLEA, GWC. Complete memorandum of Agreement. Search for funding, and resources.

Jan-Feb 2014:                      Finalize project planning. Initiate and implement a public relations campaign about the project with mailing, newsletters and articles in the local papers.

March – April 2014: Hire crews as needed. Run background checks on crew members. Secure a lab and prices. Secure ID card for crews.

April – May 2014 GLEA intern begins in May. Initiate an updated public relations campaign, and work on contacting residents and establishing a data base.

June- July. 2014 AHEC interns start. Training and initial set up of sampling. Contact residents, set dates for sampling, samples wells, establish data base, send initial letter with results, develop and hold community meetings with discussion on regional results and annual testing. AHEC crew finished end of July.

August 2014 Finish sampling and follow-ups with results. Start to analyze results.

Sept. - Dec. 2014 Finish uncompleted aspects of the project. Review data and success of program. Complete final report. Work on getting follow ups for annual testing.