



# Central Michigan District Health Department

*Promoting Healthy Families, Healthy Communities*



Jennifer Morse, MD, MPH, FAAFP  
Medical Director

Steve Hall, RS, MS  
Health Officer

June 4, 2021

David Udy  
Gerrish Township Supervisor  
2997 E Higgins Lake Dr  
Roscommon, MI 48653

RE: Higgins Lake Area Public Sewer Development, Roscommon County, Michigan

Dear Mr. Udy:

The Central Michigan District Health Department (CMDHD) strongly supports the development and installation of public sewers around Higgins Lake. CMDHD provides public health services in the counties of Arenac, Clare, Gladwin, Isabella, Osceola, and Roscommon. Our environmental health staff permit and inspect onsite sewage treatment systems and onsite water supplies to ensure proper design and function for the purpose of protecting public and environmental health. CMDHD has issued onsite sewage treatment permits in Roscommon County since 1970. The area around Higgins Lake was largely developed prior to modern codes making it particularly challenging to place an adequately sized onsite sewage treatment system and properly isolated water well on parcels.

Small lot sizes and dense housing often do not allow for drinking water wells and sewage treatment systems to meet the minimum isolation of 50 feet. The lack of area results in onsite sewage treatment systems that can be undersized, utilize drywells which provide less nutrient reduction, or are simply holding tanks that must be pumped frequently. In addition, up to 40% of occupied properties developed before the CMDHD Sanitary Code do not have a permit on file. The unpermitted systems generally would not meet today's requirements for treatment area, isolation to groundwater, or isolation to drinking water wells.

None of the onsite sewage treatment systems installed are equipped to remove nutrients, such as nitrogen and phosphorous. These nutrients are quickly mixed into the shallow water table and transported to Higgins Lake. Previous studies of Higgins Lake have clearly demonstrated the link between onsite wastewater disposal density and nitrogen and phosphorous entering the lake.

All of the homes and businesses in the area rely on drinking water wells. A minimum of 50 feet of isolation between the well and onsite sewage disposal systems is sometimes impossible to achieve. This minimum isolation is needed to protect the well and drinking water aquifer from contamination. In many places around Higgins Lake the drinking water wells are shallow and unprotected by a clay layer. This puts these wells at risk for contamination through surface and subsurface discharge of wastewater.

*Please visit us at our website [www.cmdhd.org](http://www.cmdhd.org)*

Including non-permitted or properties without records on file, it would be expected that up to 68 percent of the 4,300 homes and businesses in the proposed sewer area would not meet one or more requirements of the current Sanitary Code. CMDHD supports the installation of public sewers in this densely populated area around Higgins Lake to eliminate the impact onsite wastewater discharge has on area groundwater and surface water resources.

Sincerely,

A handwritten signature in black ink that reads "Steve King". The signature is written in a cursive, flowing style.

Steve King, R.S.  
Director of Environmental Health  
Central Michigan District Health Department  
2012 E. Preston St  
Mt. Pleasant, MI 48858