

## Central Michigan District Health Department



Promoting Healthy Families, Healthy Communities

Jennifer E. Morse, M.D. Medical Director Steve Hall, RS, MS Health Officer

January 3, 2024

Mr. Kory Mindel Nottawa Twp Hall 3024 W Weidman Rd. Weidman, MI 48893

## Dear Supervisor Mindel:

The Central Michigan District Health Department (CMDHD) supports the ongoing efforts by Nottawa Towship to construct and maintain a municipal sewer system to serve residents of the Coldwater Lake area.

In much of the area, small lot sizes and dense housing severely limit the use of onsite sewage disposal systems. The lack of area results in on-site sewage treatment systems that can be undersized for the intended use or require holding tanks that must be pumped out frequently. Many instances have been identified where existing sewage systems are located less than 50 feet from a drinking water well or Coldwater Lake, putting these important water resources at increased risk of contamination. Finding undersized septic systems, nonexistent systems, and systems not meeting minimum isolation is not surprising given 46% of developed properties do not have a permit on file. Un-permitted systems do not meet today's requirements for treatment area, isolation to groundwater, or isolation to drinking water wells.

Traditional onsite sewage systems consisting of a tank and disposal area function as designed. When meeting today's minimum design standards, bacteria and viruses are reduced before effluent is discharged to the groundwater. However, these systems are poorly suited for removing nutrients such as nitrogen and phosphorous from the effluent. Nutrients from high density onsite sewage systems can become major sources of nitrate and phosphorous contamination going into lakes and groundwater. More is being learned about onsite sewage system's role as a major contributor of pharmaceuticals, personal care chemicals, and PFAS compounds introduced into the environment. In high concentrations, these chemicals in our waste stream can become a problem in surface water and in areas with unprotected groundwater used for drinking.

CMDHD supports the installation of public sewers in this densely populated area around Coldwater Lake. Public sewers would eliminate the problems identified with onsite sewage disposal, alleviate property use restrictions caused by onsite sewage disposal, and eliminate the impact onsite wastewater discharge has on area groundwater and surface water resources.

Sincerely,

Steve King, RS

Director of Environmental Health

Central Michigan District Health Department

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