

# Michigan Resource Stewards

Resource Professionals Continuing a Tradition of Service

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## Michigan Resource Stewards White Paper on Septic Legislation

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### **BACKGROUND**

If there is one word that describes Michigan it is water. Michigan is blessed with more fresh water than anyplace else on our planet. Approximately half of Michigan's population depends on groundwater for their daily water supply. In less urbanized areas without public waste water collection and treatment systems, Michigan homeowners must rely on on-site septic systems to manage their household waste water. More than 1.3 million households currently depend on septic systems. Michigan is the only state in the Union without a statewide sanitary code to ensure that these septic systems are properly operated and maintained. This means, that except for the handful of communities that have enacted local codes to address some residential septic systems, most septic systems are not subject to any maintenance or correction requirements after they are installed. Likewise, there are no legal requirements for homes with substandard or no systems at all to upgrade unless they are causing a direct and obvious threat or public nuisance. This is typically the result of a complete system failure where raw domestic sewage is discharging to the ground surface or into a home. Inadequate septic systems are a threat to drinking water and to surface waters across the state resulting in the discharge of dangerous human pathogens as well as algae forming nutrients and other household chemicals and pharmaceuticals to our most precious resource.

### **WHAT IS THE THREAT TO PUBLIC HEALTH AND THE ENVIRONMENT FROM SEPTIC SYSTEMS**

Recent studies by Dr. Joan Rose at Michigan State University have demonstrated that an estimated 30% of septic systems in Michigan are not preventing human Escherichia coli bacteria (e. coli) from reaching our waters. Another study by Aaron Snell at Streamside Ecological Services of seven different watersheds in Southwestern Michigan showed that e.coli contamination including human sourced bacteria exceeded state water quality standards at some point during the sampling period in every single stream. The current point of sale inspection program in Kalkaska County identified over 80% of inspected systems to have some issue that could require attention; from inadequate sized tanks to ineffective home built tanks and dry well systems as well as some failed systems. Separately local health departments are required to report failed septic systems identified by each local health department to DEGLE. For the year 2018, the District 10 Health Department reported 463 failed systems in their ten county area. Currently there are only 11 county/local regulatory programs addressing existing septic systems, and then only at the time of sale, with many exemptions to those. And many counties have considered eliminating or have eliminated those programs.

A 2018 study of septic systems in the five county Saginaw Bay area conducted by Public Sector Consultants (PSC) concluded that there was an estimated total of 6,091 to 15,227 failing septic systems within the five Saginaw Bay counties. Building from this information, PSC then estimated the amount of sewage that may be entering the environment in coastal counties along the Saginaw Bay from failing septic systems. On average, an American individual uses 88 gallons of water per day (U.S. EPA ). In Michigan, the average household size is just over 2.5 people per house, meaning that, on average, households generate approximately 225 gallons of wastewater every day, totaling more than 82,000 gallons annually (U.S. Census 2010). If homes are relying on a septic system that is not operating as designed, this effluent can contribute sewage to the environment, increasing public and

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environmental health risk. In counties along the Saginaw Bay, households with failing septic systems generate between approximately 1.4 million and 3.5 million gallons of sewage each day. Annually, these households generate approximately 505 million and 1.26 billion gallons of sewage, assuming a 10 percent and 25 percent failure rate. While these estimates represent a substantial amount of sewage that may be entering the environment, some systems may provide partial treatment, which decreases pollution levels making their way to the environment. Similarly, not all the discharges immediately reach waterways, but they can still be present in the environment.

The point is that Michigan lacks the regulatory framework to ensure that septic systems do not pollute our ground and surface waters. And it has been clearly shown that such contamination is taking place all across the state. As more and more Michigan citizens move to less urbanized areas where public wastewater treatment facilities are not available, reliance on on-site septic systems to manage domestic waste is increasing. Exposure to e.coli contamination is a public health threat. The internet is filled with confirmed stories of both children and adults who became sick after swimming in e.coli contaminated water. Hundreds of public beaches in Michigan are periodically closed to public use every summer due to e.coli contamination. The presence of e. coli contamination in water is also an indicator of the probable presence of other pathogens and chemical contaminants that are not effectively treated by inadequate on site waste water treatment systems.

Inadequate septic systems discharge human waste to nearby surface waters and to groundwater. Since most residential septic systems are in rural locations that also lack public water supplies, these groundwater discharges threaten the safety of private water wells that are the only sources of drinking water for local residents.

### **WHAT IS THE CURRENT STATE OF SEPTIC SYSTEM REGULATION**

As noted, Michigan has no statewide regulatory scheme for septic systems. In response, some Michigan communities, concerned about the lack of statewide regulation, have enacted local regulations. Most of these local ordinances (or provisions of local health department sanitary codes in some cases) address only existing systems at the time of transfer of the property. These so called "Point of Sale" or "Time of Transfer" regulations are limited in scope, contain a number of significant exemptions and of course, do nothing to address the majority of potentially problematic septic systems where properties are not changing hands. These POS regulations are very unpopular with the realty community as the inspection/correction process only occurs at the time a property is listed for sale, may impose unexpected costs on property sellers, and in some instances have caused delays in closings. Since the scope of regulating the entire community of septic systems is a daunting undertaking, local jurisdictions have balked at enacting more comprehensive regulatory approaches. Given the gravity of the pollution potential from unregulated septic systems and the vast and growing extent to which on-site septic systems are utilized throughout Michigan, and understanding the nature of ground and surface water resources throughout our state that are vulnerable to serious negative impacts from substandard or poorly maintained septic systems, the only approach that can mitigate this threat is enactment of a statewide regulatory program. Such a program should establish a regular frequency of system inspections, define appropriate thresholds to require remediation of systems, provide a funding mechanism to support the local agencies who are the only means to conduct these programs, and provide for a process to phase in the inspection program to avoid a sudden workload increase that local agencies will be unable to manage. The Michigan Legislature has considered bills to establish a statewide sanitary code in several of the past sessions. However no bill has ever achieved the consensus necessary to achieve passage. Thus all such bills died at the end of their respective sessions of introduction. A number of citizen activists and environmental lobbying groups are once more working to see introduction of such bills in the current legislative session. Recognizing the difficult balance necessary to gain support for these bills from the organizations most interested in them, this coalition intends to reach out to a wide array of parties who have shown interest in this issue to attempt to craft bills that can move through the Legislature. The Michigan Resource Stewards should work with the Michigan Environmental Council, FLOW (For Love of Water), Clean Water Action and others to seek agreement from the Michigan Association of

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Realtors, The Michigan Association of Counties and the Michigan Townships Association and other related groups on a bill strategy that can gain the broad, interest and bipartisan support necessary for passage.

## **DEQ VERSUS WORTH TOWNSHIP**

Local units of government have liability for untreated or mismanaged septic discharges to Michigan waters. In 2012 the Michigan Supreme Court decided the matter of Department of Environmental Quality versus Worth Township (Sanilac County). In this case the court ruled that Worth Township was liable under Part 31, Water Resource Protection of the Natural Resources and Environmental Protection Act (NREPA) for septic discharges from private residences into Lake Huron that occurred within the township; even though the township had no role in causing the discharges. Part 31 makes municipalities liable to remedy illegal discharges. The definition of municipality includes counties, townships and other local governments. The lack of a state sanitary code places on these local governments the obligation to create programs of their own to protect them from liability under Part 31. A statewide code would provide all jurisdictions with certainty on the legal standard of care all local units must meet and provide home owners and realtors with a consistent across the board set of criteria that would be universally applied. Regulatory mechanisms that establish a level playing field tend to be more accepted.

## **RECOMMENDATIONS**

Michigan is the only state in the United States that does not have a uniform, statewide sanitary code addressing maintenance and repair of septic systems. Relying on county and local governments to address this issue is unreliable and results in a patchwork of inconsistent requirements and no stable regulatory framework on which all parties can rely. Michigan's Legislature needs to enact a uniform state wide sanitary code to end the uncertainty and the conflict that occurs when these issues are debated at the local levels.

Enactment of such a code has been hampered in the past by different groups who are impacted by such proposals. Realtors object to point of sale/time of transfer regulations as a burden on their business, a potential delay that complicates sales and extra costs and regulatory obligations on home sellers that are not imposed on the rest of septic system owners not in the real estate market. Counties and townships object to full scale programs that require inspection and repair to all systems in their jurisdiction without adequate state funding mechanisms. As it would also be difficult for local units to implement an inspection program for all systems at the start of a program, a phased approach is needed to allow them to gear up.

Any legislative solution to this issue requires that these concerns be addressed. Michigan Resource Stewards recommends that proposed legislation contain provisions addressing the following key points:

- Require inspections of all septic tanks every 5-10 years, phasing in this requirement over time using risk based approaches (i.e. known to fail technology, poor infiltration soil types, high water table areas [hydic], age, lack of pumping record, etc.) so that local jurisdictions can address the new work load within their limited resources.
- Provide education to increase public awareness of the link between clean drinking water, safe recreational waters, environmentally sustainable surface and groundwater with watershed based, best management practices related to appropriate wastewater systems, technology, treatment and management.

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- Authorize a fee system to pay for the program. Also include State financial support of health departments for upgraded data tracking and pollution source tracking information systems.
- Establish a State Revolving Loan Fund for septic tank upgrade support for indigent homeowners or orphaned septic tank systems
- Prescribe requirements for septic system inspections and inspectors/pumpers for consistent and clear inspections and records retention.
- Establish a clear definition of what constitutes septic system failure and criteria for when a system must be corrected.
- Assemble a Technical Advisory Committee charged with crafting administrative rules and to advise the DEGLE on program structure and success. This committee must include a representative of licensed septic servicers, installers and/or inspectors as well as representatives from local health departments, the Michigan Association of Counties, the Michigan Townships Association and environmental interests.
- Establish appropriate civil and criminal enforcement tools including penalties for non-compliance of inspections. Tiered statutory penalties, including civil infractions, minor misdemeanors, high misdemeanors, and felonies provide options that meet the needs of enforcers to effectively, yet fairly address minor and major offenses for effective deterrence.

#### **PLANNED ACTIONS TO ADVANCE LEGISLATION**

- Establish relationships and coordinate with other key organizations working on septic code legislation. Current groups include: FLOW (For Love of Water), the Michigan Environmental Council, Clean Water Action, and Wastewater Education. Additional organizations need to be included in discussions to develop consensus draft legislation. These groups include: the Michigan Department of Environment, Great Lakes and Energy, the Michigan Association of Realtors, the Michigan Association of Counties and the Michigan Townships Association.
- Michigan Resource Stewards will continue to participate in efforts to broaden this discussion to include these and other interested parties. MRS will also work with these groups to identify potential legislative sponsors for such legislation, conduct research and develop policy papers to help focus discussions on key issues and provide testimony where appropriate to support enactment of needed legislation. MRS will also provide educational information to public media and at public events as well as offer to provide speakers on this subject where appropriate.

Approved with amendments by the Michigan Resource Stewards at the September 10, 2019 membership meeting.



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