

Community Water Supply Source Water Assessment

Fremont

805 West Oak Street, Fremont, MI 49412

SUBJECT: Fremont – County: Newaygo WSSN: 02490 Source ID: 002

Provided is the Source Water Assessment (SWA) Report generated by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Drinking Water and Environmental Health Division (DWEHD), for an active well providing water to your community water supply. This well was assessed by Brandon Ryan.

The 1996 amendments to the Federal Safe Drinking Water Act require each state to develop and implement a Source Water Assessment Program to assess the susceptibility of all public water supply sources to contamination. This program requires EGLE to analyze source sensitivity, delineate source water areas, inventory contaminant sources, determine susceptibility, and assure the public is notified of this determination. EGLE, in cooperation with your local health department, has recently updated the information in your SWA. It is intended to assist owners and regulatory agencies in making decisions affecting their drinking water systems, future sampling, and groundwater protection efforts.

The susceptibility determination is noted at the end of your SWA Report. We encourage you to evaluate your current practices and to take action to increase water supply protection through best-management practices.

You are not required to take any specific action at this time. Our purpose is to notify you of your updated assessment. We encourage all public water supplies to implement source

water protection activities and hope this assessment serves as a tool to safeguard this valuable drinking water resource.

If you wish to discuss the scoring of your water source, you may contact your assessor, Brandon Ryan at RyanB5@michigan.gov, or Jason Berndt, Environmental Quality Specialist, Emerging Contaminants Unit, Environmental Health Section, DWEHD, at 517-203-9631; Berndtj1@Michigan.gov; or you may contact us by mail at EGLE-DWEHD-Emerging Contaminants Unit, P.O. Box 30817, Lansing, Michigan 48909-8311.

Sincerely,

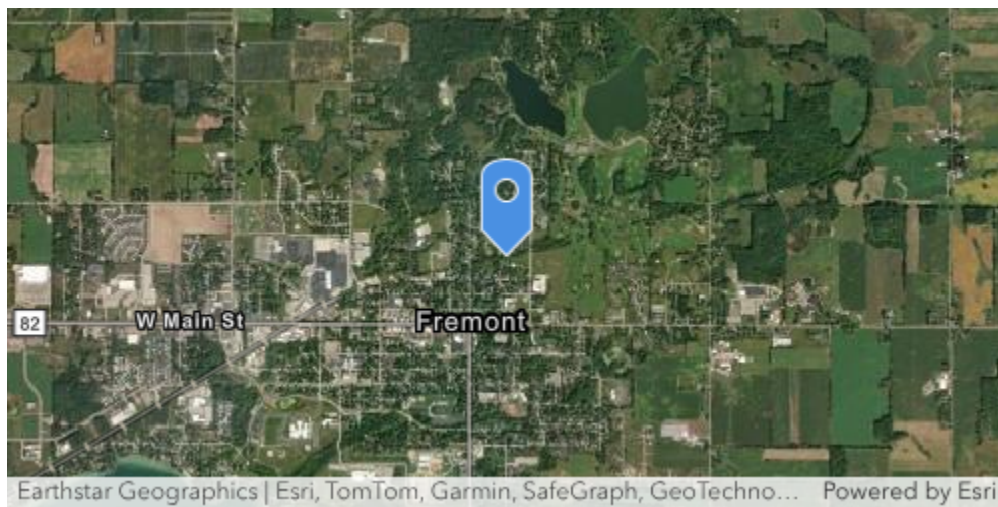
Ian Smith, Supervisor
Emerging Contaminants Unit
Drinking Water and Environmental Health Division

Fremont Location

1:20000 Scale



1:70000 Scale



What is SWAS?

The Source Water Assessment Score (SWAS) is a process that factors geologic and water well attributes, water chemistry, and the potential contaminant sources for each drinking water source into a ranking system to determine the relative potential for contamination.

Generally, sources with lower scores are considered to be less susceptible to contamination than sources with higher scores. However, exceptions do exist. This assessment is required by the Michigan Source Water Assessment Program (SWAP) under the provisions of the 1996 amendments to the Federal Safe Drinking Water Act.

Source ID: 002

Date Assessed: September 3, 2025

Well Record

A well record is a legal document describing the well location, construction, depth, soil formations penetrated, and capacity. Drilling contractors have been required to complete a well record and submit it to the owner, local health department, and State since 1967. The lack of information from a well record may increase the SWAS.

Wellogic ([Secure1.State.MI.US/Wellogic](https://secure1.state.mi.us/Wellogic)) is the State's online electronic database for well record information.

Wellogic ID: 62000003848

Geologic Sensitivity

The score represents the degree of natural protection afforded by the materials overlying the water bearing formation. Lower scores indicate more protection. Points are deducted based on the thickness and type of geologic material that overlies the source of water. Surface contaminants migrate downward at varying rates dependent upon geological material and thickness. CCM stands for Continuous Confining Material (e.g., clay). CPCM stands for Continuous Partially Confining Material (e.g., mix of sand and clay). More points

are deducted for a thick clay layer than a thick sand and clay layer or thinner clay layer. Point Range 0-30.

CCM Points Deducted:	15
PCM Points Deducted:	9
Geologic Sensitivity SWAS(G):	6
Geologic Sensitivity Rating:	<u>Moderate</u>

Well Construction

Points are added when a well lacks features that help protect the water supply from contamination. These include whether the well was grouted (sealing the space created between the casing and the soil formations during construction), the well age, how deep the casing extends into the ground, and pumping rate. Point range 0-15.

Susceptibility increases one level if well construction reflects an adverse condition.

Well Grouting Points:	15
Well Age Points:	15
Casing Depth Points:	10
Pumping Rate Points:	5
Well Construction SWAS(W):	45
Total SWAS(W) Points:	45

Water Chemistry and Isotope Data

Points are added if water sample results indicate detectable levels of nitrates or nitrites, volatile organic chemicals (solvents and fuel components), synthetic organic chemicals (pesticides and herbicides), or inorganics (metals, cyanide, arsenic). Point range 0-50.

(50 points = MCL exceedance).

Susceptibility is Very High if contaminants exceed the Maximum Contaminant Level (MCL)

Nitrates/ Nitrites:	10
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Inorganics:	0
SOC:	10
VOC:	0
Radionuclides:	10
Total SWASC Points:	30
PFAS/PFOS:	Yes
Tritium:	No
Tritium:	0

Isolation from Sources of Contamination

Points are added based on the number and type of potential contaminant sources within the Source Water Protection Area (SWPA), which is the ten-year time of travel capture zone (delineated area). Points are added if the water supply does not own or control the isolation area (or another EGLE approved area). Examples include standard sources such as septic tanks, sewer lines, and surface waters; major sources are chemical and fuel storage, landfills, lagoons, and known plumes of groundwater contamination.

Major Sources \geq 2,000 ft. and in SWPA:	2 x 10
Major Sources within 2,000 ft.:	0 x 20
Standard Sources within 200 ft.:	2 x 10
Known Sources within SWPA:	0 x 25
Total SWAS(S) Points:	40

Control of Isolation Area

Isolation Points:	10
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Source Water Assessment Score (SWAS)

The total SWAS is factored with the Geologic Sensitivity to determine the overall susceptibility to contamination.

Source Water Assessment Score: SWAS(G) 6 + SWAS(W) 45 + SWAS(C) 30+ Tritium 0+SWAS(S) 40+ Isolation Points 10 = SWAS 131

Susceptibility Determination

Susceptibility is a means to identify the relative potential of contamination for public water supply sources. Although little can be done to improve geologic sensitivity to afford more protection for your well, some actions can be taken to decrease susceptibility (lessen the potential for contamination). This might mean installing a new well, properly plugging an unused well, eliminating a potential source of contamination such as a fuel storage tank, or following best management practices.

Susceptibility Determination: **MODERATE**

