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**Contaminants that might be expected to be in source water (untreated water) include:**

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems.

**Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

**Per- and Polyfluoroalkyl Substances (PFAS)**, are a group of chemicals that have been classified by the U.S. EPA as an emerging contaminant and have been used in many industrial applications and consumer products such as carpeting, waterproof clothing, upholstery, food paper wrappings, fire-fighting foams, and metal plating. PFAS have been found at low levels both in the environment and in blood samples from the general U.S. population. For more PFAS information go to: <http://michigan.gov/pfasresponse>

In order to ensure tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL(s) are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

**At-Risk Populations**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

**Lead in Drinking Water**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Sheldon Dunes is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

**FACT:**  
**The Sheldon Dunes System  
Provided 6.99 Million Gallons of  
Drinking Water in 2019**

**DID YOU KNOW?**

- ◆ Only 3% of the tap water we use on a typical day is used for drinking.
- ◆ Households consume at least 50% of their water by lawn sprinkling.
- ◆ Water lawns early in the morning when the sun's rays aren't working to evaporate water.
- ◆ Toilets use the most water with an average of 27 gallons per person per day.
- ◆ Water efficient toilets, bathroom faucets and accessories can save the average home more than 11,000 gallons per year.
- ◆ An 8-oz glass of water can be refilled approximately 15,000 times for the same price as a six-pack of soda.
- ◆ The original reason for building many community water systems in North America wasn't to deliver safe drinking water—it was to fight fires!



Photos courtesy of SDHA member Jim Robbert.

**Sheldon Dunes**

We're very pleased to provide you with this year's Annual Quality Water Report. We want to keep you informed about the excellent water we have delivered to you over the past year. Our goal is, and always has been, to provide to you a safe and dependable supply of drinking water. We are pleased to report that your drinking water is safe and meets federal and state requirements.



Photos courtesy of SDHA member Jim Robbert.

The Sheldon Dunes Water System utilizes a ground water source, drawing its water from three wells located in the heart of the Sheldon Dunes community.

The water system is routinely monitored for contaminants in the drinking water according to Federal and State laws. The table on the next page shows the results of our monitoring for the period of January 01, 2019 to December 31, 2019 unless otherwise noted. In addition to the test results listed in the table, we analyzed for 65 different volatile organic compounds, 10 different carbamates, 7 different herbicides, and 31 different pesticides; none of which were found at detectable levels in the prior year. You can obtain the complete reports on these additional tests by contacting the distribution supervisor Joe Hebert at 616-842-5400.

The Sheldon Dunes Water System met all federal and state drinking water regulations during 2019. However, federal law requires that the highest level of any contaminant detected in our treated water be reported to you.

Federal law also requires that we explain the contaminants that may be present in source water (untreated water), not just the wells, which are the source for the Sheldon Dunes water system, but other types of source water as well.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land and through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

**Source Water Assessment**

A Source Water Assessment indicates the vulnerability of a water supply to potential sources of contamination. The Michigan Department of Environment, Great Lakes, and Energy has performed an assessment and found the Sheldon Dunes Water System to have a moderately low susceptibility. Copies of the report may be obtained by contacting the Port Sheldon Township Hall during normal business hours. Contact 616-399-6121.

If you have any questions about this report or concerning your water, you may contact Joe Hebert at 616-842-5400 or participate in our board meetings at the Port Sheldon Township Hall on the second Thursday of every month at 6:00 PM.



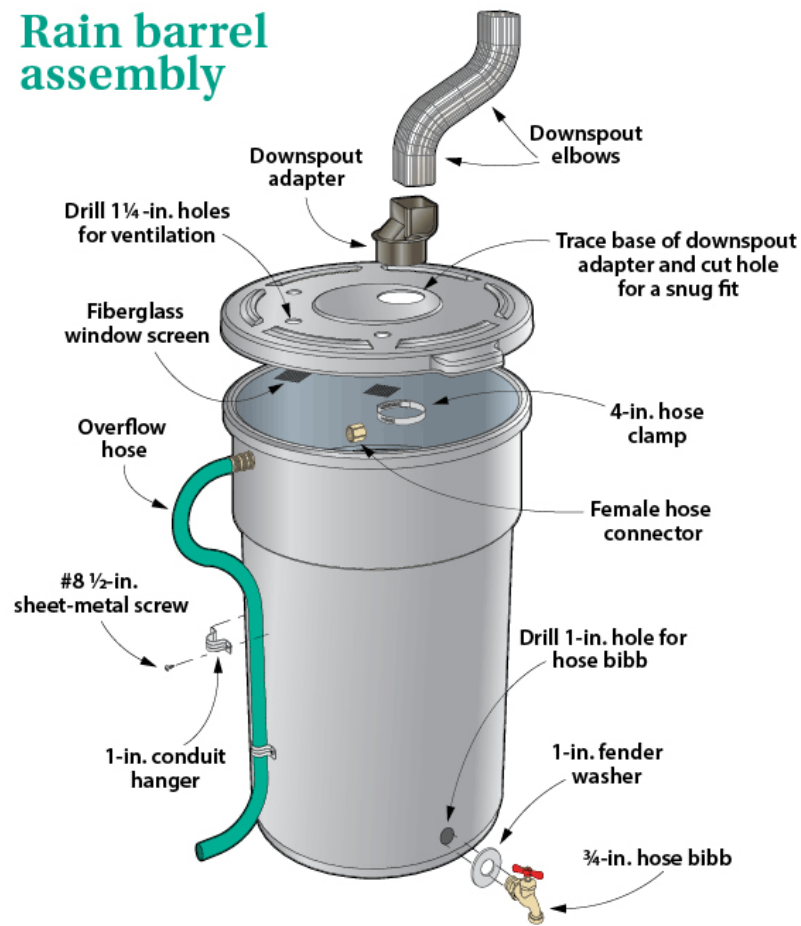
Photos courtesy of SDHA member Jim Robbert.

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Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.  
 Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.  
 Parts per trillion (ppt) or Nanograms per liter - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.  
 NA - Not Applicable  
 pCi/L - Picocuries Per Liter is a measure of the radioactivity in water.  
 Action Level - The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow  
 Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG(s) as feasible using the best available treatment technology.  
 Maximum Contaminant Level Goal - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG(s) allow for a margin of safety.  
 90th Percentile - 90 percent of the samples were below the number listed.  
 LHA - Lifetime Health Advisory: A non-regulatory health-based reference level at which there are no adverse health risks when ingested over a lifetime.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

### Rain barrel assembly



### What are the benefits of using a rain barrel?

In addition to saving water in the yard and garden, rain barrels can save money, energy, protect the environment and provide plants with untreated "soft water" free of dissolved salts or sediment. Using a rain barrel will reduce the amount of storm water runoff into local community water systems which may reduce flooding and stress on the water system.

[https://www.canr.msu.edu/news/rain\\_barrels\\_are\\_economical\\_and\\_ecolog](https://www.canr.msu.edu/news/rain_barrels_are_economical_and_ecolog)

REGULATED MONITORING AT THE CUSTOMER TAP							
Compliance is determined using 90th percentile (i.e., 9 out of 10 samples must be below the AL)	Violation Yes/No	Action Level (AL)	MCLG	90th Percentile	Year Sampled	Number of Samples Above AL	Likely Source of Contamination
Lead (ppb)	No	15	0	3	2018	0	Corrosion of household plumbing systems <b>Copper and Lead testing is performed once every three years. (next is 2021)</b>
Copper (ppb)	No	1300	1300	545	2018	0	
REGULATED AND UNREGULATED MONITORING AT THE TREATMENT PLANT AND DISTRIBUTION SYSTEM							
Substance	Violation Yes/No	Highest Level Detected	Unit Measurement	Range of Detection	MCL	MCLG	Likely Source of Contamination
Total Coliform / E. coli Bacteria	Yes <sup>1</sup>	Not Detected	Presence or Absence	Never detected	5% of monthly samples		Naturally present / Human or animal fecal waste
Hardness (As CaCo3)	No	147	mg/l	144 - 154			Erosion of natural deposits
Iron	No	0.7	mg/l	0.5 - 0.7			Erosion of natural deposits
Chloride	No	19	ppm	12.8 - 23.6			Runoff from fertilizer and septic tanks
Sodium	No	10	ppm	7.04 - 12.3			Mineral and nutrient erosion
Sulfate	No	28	ppm	27.9 - 28.6			Mineral and nutrient erosion
Nitrate	No	0.17	ppm	<0.1 - 0.17	10	10	Runoff from fertilizer and septic tanks
Gross Alpha (2014)	No	0.23	pCi/L	(0.23±0.58)	15	0	Erosion of natural deposits
Barium (2017)	No	76	ppb		2	2	
Arsenic (2017)	No	Not Detected	ppb	Not Detected	10	0	
ADDITIONAL MONITORING							
Compound	Violation Yes/No	Highest Level Detected	Unit Measurement	Range of Detection	Year Sampled	Recommended Limit (ppt)	Likely Source of Contamination
PFNA	No	< 2	ppt	Not Detected	2019	6	Used in many industrial applications and consumer products  Current lifetime health advisory = 70ppt for PFOS and PFOA combined
PFOA	No	< 2	ppt	Not Detected	2019	8	
PFHxA	No	< 2	ppt	Not Detected	2019	400,000	
PFOS	No	< 2	ppt	Not Detected	2019	16	
PFHxS	No	< 2	ppt	Not Detected	2019	51	
PFBS	No	< 2	ppt	Not Detected	2019	420	

1. During the monitoring period from 11/01/2019 to 11/30/2019, we did not take the required number of routine samples for E. coli Bacteria. This violation did not pose a threat to the quality of the drinking water. The collected samples were not analyzed and chains of custody have been improved to ensure future sampling procedures are met. Additional samples were collected thereafter to confirm that the water supply was indeed safe.