



# South Meadow Village Cooperative

## 2018

PWS ID: #4052001

# REPORT ON WATER QUALITY

This is South Meadow Village's (SMV) annual report to you on water quality. The statistics in this report are based on testing done throughout 2018 and prior years. We hope you will find it helpful to know the sources of your water and the process by which safe drinking water is delivered to your home.

### Where Does My Water Come From?

The source of your water is four eight-inch gravel-packed wells. Water is pumped from these wells and potassium hydroxide is injected into the water prior to entering the distribution system to raise the pH. The water then travels through the distribution system to a 150,000 gallon storage tank located adjacent to the maintenance garage. There is a generator that provides electricity to run the pumps in case of a power failure.

### Is My Water Treated?

Our water system makes every effort to provide you with safe and pure drinking water. Potassium hydroxide is added from the Corrosion Control Facility located adjacent to the well field to raise the pH of the water. This process reduces the corrosion of household plumbing and subsequently reduces the copper levels in your water. The water quality of our system is constantly monitored by us and the MassDEP to determine the effectiveness of existing water treatment and to determine if any additional treatment is required.



### STEPS WE ARE TAKING TO IMPROVE THE WATER SYSTEM

South Meadow Village continuously makes improvements to the system to ensure the highest quality drinking water possible. The ongoing leak detection program and repairs when necessary across the system have greatly reduced water usage and has helped to eliminate wasted water. The 150,000 gallon storage tank underwent some exterior painting and maintenance. Updates were made to the pump-house well controls and chemical injection. Other maintenance programs completed by the Village Maintenance Staff included the annual system flushing and valve maintenance program. The standby emergency generator for the pump-house was also replaced. These combined programs maintain water quality and ensure the control of water in the event of an emergency.



### Maintaining Water Quality

South Meadow Village continuously strives to produce the highest quality water possible to meet or surpass every water quality standard. We monitor both our sources and distribution system very closely. The standards we operate under were enacted by the U.S. Congress as the Safe Drinking Water Act in 1974 and were amended in 1986 and 1996.

In order to ensure tap water is safe to drink, the MassDEP and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

## South Meadow Village Cooperative

The South Meadow Village Cooperative (SMVCC) water supply system is operated by WhiteWater, Inc., (WWI) and maintained by the South Meadow Village maintenance department. If you have any questions about this report, please contact Russell E. Tierney, Northeast Regional Manager, Water, WWI at (888) 377-7678.

Additional copies of this report are available upon request or at [www.whitewateronline.com](http://www.whitewateronline.com)



## DISTRIBUTION SYSTEM WATER QUALITY

This report summarizes only those items detected during sampling - not all contaminants that are monitored.

<b>Microbial Results</b>	<b>Highest # Positive in a Month</b>	<b>Total # Positive</b>	<b>MCL</b>	<b>MCLG</b>	<b>Violation</b>	<b>Possible Source of Contamination</b>
Total Coliform	6	8	1	0	Yes	Naturally present in the environment
<i>E. Coli</i>	0	0	*	0	No	Human and animal fecal waste

\*Compliance with Fecal Coliform / *E. Coli* MCL is determined upon additional repeat testing.

**Total Coliforms** are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct an assessment to identify problems and to correct any problems that were found during these assessments.

<b>Assessments</b>	<b>Number Required</b>	<b>Number completed</b>	<b>Number of corrective actions required</b>	<b>Number of corrective actions completed</b>	<b>Assessment Findings</b>
Level 1 Assessment	1	1	1	1	In August 2018 after a week of heavy rains, it was determined that wind could have blown water underneath the lip of an access hatch on top of the storage tank. The hot weather also encourages bacterial growth. The tank was temporarily chlorinated and we installed pipe insulation around the tank hatch to form a tight seal.
Level 2 Assessment	1	1	2	2	In November 2018 after further coliform detections, a more thorough Level 2 Assessment was conducted. We were required to chlorinate the storage tank with a residual chlorination of 0.5 ppm and to wrap the atmospheric vent and roof hatch in EPDM rubber to block any rain intrusion. Both of these action items were completed.

<b>Lead &amp; Copper</b>	<b>Date(s) Collected</b>	<b>90<sup>th</sup> Percentile of Sample</b>	<b>Action Level</b>	<b>MCLG</b>	<b># of Sites sampled</b>	<b># of Sites Above Action Level</b>	<b>Exceeds Action Level?</b>	<b>Possible Source of Contamination</b>
Lead (ppb)	2017	4	15	0	10	0	No	Corrosion of household plumbing systems
Copper (ppm)		0.18	1.3	1.3			No	Corrosion of household plumbing systems

### TESTING FOR LEAD

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. **South Meadow Village** 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>.

### SOURCE WATER CHARACTERISTICS

**Key to Tables**

- ppm – Parts per million, corresponds to one penny in \$10,000
- ppb – Parts per billion, corresponds to one penny in \$10,000,000
- pCi/L – Picocuries per liter (a measure of radioactivity)
- ND – Not detected
- n/a - not applicable
- RAA –Running annual average
- TT—Treatment technique

The sources of drinking water in the United States (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or 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.

Contaminants that may be present in source 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. These contaminants can also come from gasoline storage, 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.

## SUMMARY OF FINISHED WATER CHARACTERISTICS

Regulated Contaminants	Date(s) Collected	Highest Detect Value	Range Detected	MCL	MCLG	Violation	Possible Source of Contamination
<b>Inorganic Contaminants</b>							
Barium (ppm)	3/15/17	0.008	n/a	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate (ppm)	4/23/18, 7/25/18	0.957	0.403-0.957	10	10	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Perchlorate (ppb)	8/8/18	0.061	n/a	2	n/a	No	Rocket propellants, fireworks, munitions, flares, blasting agents
<b>Radioactive Contaminants</b>							
Radium 226 & 228 (combined) (pCi/L)	11/17/15	1.08	n/a	5	0	No	Erosion of natural deposits
Unregulated Contaminants	Date(s) Collected	Result or Range	Average	SMCL	ORSG	Possible Source of Contamination	
<b>Inorganic Contaminants</b>							
Sodium (ppm)	3/15/17	12.4	n/a	-	20	Natural sources; runoff from use as salt on roadways; by-product of treatment process	
<b>Organic Contaminants</b>							
Methyl Tertiary Butyl Ether (MTBE) (ppb)	1/11/16	ND-0.5	0.25	20-40	70	Fuel additive	

**Sodium** is a naturally-occurring common element found in soil and water. It is necessary for the normal functioning of regulating fluids in human systems. Some people, however, have difficulty regulating fluid volume as a result of several diseases, including congestive heart failure and hypertension. The guideline of 20 mg/L for sodium represents a level in water that physicians and sodium sensitive individuals should be aware of in cases where sodium exposures are being carefully controlled. For additional information, contact your health care provider, your local board of health or the Massachusetts Department of Public Health, Bureau of Environmental Health Assessment at 617-624-5757.

### SOME TERMS DEFINED

**Action Level (AL):** *The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.*

**Maximum Contaminant Level Goal (MCLG):** *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*

**Maximum Contaminant Level (MCL):** *The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.*

**Secondary Maximum Contaminant Level (SMCL):** *These standards are developed to protect the aesthetic qualities of drinking water and are not health based.*

**Massachusetts Office of Research and Standards Guideline (ORSG):** *This is the concentration of a chemical in drinking water, at or below which, adverse, non-cancer health effects are likely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.*

**Total Coliform:** *A bacteria that indicates other potentially harmful bacteria may be present.*

**Unregulated Contaminants:** *Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.*

**90<sup>th</sup> Percentile:** *Out of every 10 homes, 9 were at or below this level.*

### SHOULD SOME PEOPLE TAKE SPECIAL PRECAUTIONS?

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 microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

### Opportunities to Participate

Any matters that concern your drinking water supply or issues you would like to see addressed can be presented at the regularly scheduled meeting of the trustees, association or board. We encourage residents to report any possible leaks and continue to practice water conservation. If your concerns need immediate attention feel free to contact our current Certified Operator, WhiteWater, Inc., at 1-888-377-7678.

## **Source Water Protection**

The Massachusetts Department of Environmental Protection (MassDEP) has not yet completed a Source Water Assessment Program (SWAP) Report for the water supply source serving South Meadow Village. This report assesses the susceptibility of public water systems to contamination and makes recommendations for improvement. Once a SWAP report has been completed, we will notify you.

For further information, please visit <http://www.mass.gov/eea/agencies/massdep/water/drinking/overview-of-the-source-water-assessment-and-protection-pr.html>

Be assured that South Meadow Village in concert with its certified operator, WhiteWater, Inc., will address any concerns as stated in the SWAP Report and welcomes your input to our planning. If you have any questions, please contact WhiteWater, Inc., at 1-888 377-7678.

## **FOR YOUR INFORMATION**

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 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.

Where to go for more information ....

Massachusetts Department of Environmental Protection (MassDEP) 617-292-5885.

<http://www.mass.gov/eea/agencies/massdep>

Massachusetts drinking water education partnership

<http://www.mass.gov/eea/agencies/massdep/water/drinking>



Typical HBVB

SMVCC recommends the installation of Hose Bibb type vacuum breakers on all outside faucets. This will protect all residents from the potential of backflow into their homes and the water system from a hose connection. Studies have shown that hoses are the most commonly unprotected cross connection. For more information about this please contact Russell E. Tierney, Division Manager, WWI at 888-377-7678.

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