



Old Farm Road Water Trust

2021

PWS ID: #3078001

REPORT ON WATER QUALITY

This report is a snapshot of the quality of the drinking water that we provided last year. The statistics in this report are based on testing done throughout 2021 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.

Water Treatment

Our water system seeks to provide you with safe, pure drinking water. Early in 2006 we installed a corrosion control system at the request of the MassDEP. The system utilizes an up-flow calcite contactor, water passes through the calcite media which makes the water less acidic by raising the pH, and reduces the likelihood of lead or copper leaching from plumbing. Over time the up-flow calcite contactors outgrow their effective usefulness and need to be replaced to maintain the proper pH balance in the water system. The up-flow calcite vessels were replaced in 2014. The filters were re-bed with calcite media in January 2018 to optimize pH adjustment. Our water quality is monitored by us and the MassDEP to determine whether any additional treatment may be required in the future.

Where Does My Water Come From?

Old Farm Road Water Trust is located in Dover, MA and draws its water from a single well located at 16-18 Old Farm Road in Dover, MA. The system has fifteen residences connected to the system, all of whom are members and beneficiaries of the Trust.

PERCHLORATE MONITORING

We continue to monitor the perchlorate levels sampling quarterly and have continued to remain below the maximum contaminate level set by the MassDEP for all of 2021. At this time we have not installed any treatment specifically for perchlorates as the water is safe for consumption.

Where Can I Find More Information About Our System?

Three of the Trust members serve as designated trustees. They will schedule and inform you of the time and place of the annual Fall meeting and any other gatherings concerning your water system. The current trustees are Andrew Waugh, Andrea DiFabio, Brian Berube, and Amy Greeley.

Maintaining Water Quality

OFRTW 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.



It's Their Legacy

Old Farm Road Water Trust

The water system for Old Farm Road Water Trust is operated and maintained by WhiteWater, Inc. If you have any questions about this report, please contact WhiteWater at 1-888-377-7678.

You can also contact one of current system trustees, Brian Berube, Andrea DiFabio, Andy Waugh, and Amy Greeley.

Additional copies of this report are available upon request at



www.whitewateronline.com

DISTRIBUTION SYSTEM WATER QUALITY

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

| Microbial Results | Highest # Positive in a Month | Total # Positive | MCL | MCLG | Violation | Possible Source of Contamination |
|--------------------------------|--------------------------------------|-------------------------|------------|-------------|------------------|---|
| Total Coliform | 2 | 2 | 1 | 0 | Yes | Naturally present in the environment |
| Fecal coliform- <i>E. coli</i> | 1 | 1 | * | 0 | Yes | Human and animal fecal waste |

*Compliance with the Fecal Coliform/*E. coli* MCL is determined upon additional 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.

E. coli: *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found *E. coli* bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that were found during these assessments. We were required to complete a Level 2 Assessment because we found *E. coli* in our water system.

| Assessments | Number Required | Number completed | Number of corrective actions required | Number of corrective actions completed |
|--------------------|------------------------|-------------------------|--|---|
| Level 2 Assessment | 1 | 1 | 3 | 3 |

Boil Water Order and Level 2 Assessment Findings: On 7/19/2021 on sample was TC positive in routine monitoring which triggered additional testing. During additional testing on 7/21/2021 another TC positive and an *E. coli* positive sample were detected within the distribution system. MassDEP immediately issued a Boil Water Order for the public water system due to the confirmed presence of *E. coli*. The well was chlorinated on 7/22/2021 and again on 7/23/2021 and the well screen was replaced. Repeat samples taken again on 7/27 and 7/29 all came back clean, and MassDEP lifted the Boil Water Order. The Level 2 Assessment determined that heavy rains possibly contributed to the *E. coli* contamination. We continue to monitor the system closely for total coliform and *E. coli*.

| Lead & Copper | Date(s) Collected | 90th Percentile of Sample | Action Level | MCLG | # of Sites sampled | # of Sites Above Action Level | Exceeds Action Level? | Possible Source of Contamination |
|--------------------------|--------------------------|---|---------------------|-------------|---------------------------|--------------------------------------|------------------------------|---|
| Lead (ppb) | 2020 | 11 | 15 | 0 | 5 | 0 | No | Corrosion of household plumbing systems |
| Copper (ppm) | | 1.23 | 1.3 | 1.3 | | 1 | 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. **Old Farm Road Water Trust** 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

| <u>Regulated Contaminants</u> | Date(s) Collected | Highest Detect Value | Range Detected | MCL | MCLG | Violation | Possible Source of Contamination |
|-------------------------------------|-------------------|----------------------|----------------|-----|------|-----------|---|
| Inorganic Contaminants | | | | | | | |
| Barium (ppm) | 7/30/19 | 0.028 | n/a | 2 | 2 | No | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nitrate (ppm) | Quarterly 2021 | 5.34 | 3.50-5.34 | 10 | 10 | No | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits |
| Perchlorate (ppb) | 7/7/21 | 0.102 | n/a | 2 | N/A | No | Rocket propellants, fireworks, munitions, flares, blasting agents |
| Radioactive Contaminants | | | | | | | |
| Radium 226 & 228 (combined) (pCi/L) | 1/29/20 | 0.79 | n/a | 5 | 0 | No | Erosion of natural deposits |

Nitrate in drinking water at levels above 10ppm is a health risk for infants of less than six month of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

| <u>Regulated</u> | Detect Result or Range | Quarterly Average | MCL | Violation | Possible Sources | Health Effects |
|--------------------|------------------------|-------------------|-----|-----------|---|---|
| PFAS6 (ppt) | 22.7-25.7 | 24.2 | 20 | Yes | Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams. | Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers. |

| <u>Unregulated Contaminants</u> | Date(s) Collected | Result or Range Detected | Average | SMCL | ORSG | Possible Source of Contamination |
|---------------------------------|-------------------|--------------------------|---------|------|------|---|
| Inorganic Contaminants | | | | | | |
| Sodium (ppm) | 7/30/19 | 21 | n/a | - | 20 | Natural sources; runoff from use as salt on roadways; by-product of treatment process |

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 617-624-8757.

| <u>Secondary Contaminants</u> | Date(s) Collected | Result or Range Detected | Average | SMCL | ORSG | Possible Source of Contamination |
|-------------------------------|-------------------|--------------------------|---------|------|------|----------------------------------|
| Manganese* (ppb) | 7/26/17 | 8 | n/a | 50 | 300* | Erosion of natural deposits |

*US EPA and MassDEP have established health advisory levels for manganese to protect against concerns of potential neurological effects.

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.

90th 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).

SWAP

(Source Water Assessment and Protection)

The MassDEP has prepared a Source Water Assessment Program (SWAP) Report for Old Farm Road Water Trust. The report assesses the susceptibility of public water supplies to contamination and makes recommendations. This report is available from WhiteWater, Inc. located at 253B Worcester Road in Charlton, MA, and also at the MassDEP website: <http://www.mass.gov/eea/docs/dep/water/drinking/swap/nero/3078001.pdf>.

A susceptibility ranking of **moderate** was assigned to all wells in our system by the MassDEP and they meet all US Environmental Protection Agency (EPA) and MassDEP drinking water quality standards.

Be assured that the Old Farm Road Water Trust in concert with its certified operator, WhiteWater, Inc., is addressing the concerns as stated in the SWAP Report and welcomes your input to our planning. If you have any questions, please contact one of the Trustees or WhiteWater, Inc. at (888) 377-7678.

FOR YOUR INFORMATION

In order to ensure that tap water is safe to drink, the Department of Environmental Protection (MassDEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided to public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Where to go for more information

Massachusetts Department of Environmental Protection (MassDEP)

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



Old Farm Road Water Trust

6 Old Farm Road
Dover, MA 02030

Cross Connection Control & Prevention

The outside water-
ing tap
and
garden
hose
tend to
be the most common sources
of cross connections



What is a cross connection?

A cross connection occurs whenever a potable drinking water line is directly or indirectly linked to a piece of equipment or piping containing non-potable water.

Why should I be concerned about cross connections?

An unprotected or inadequately protected cross connection in your home or work place could contaminate the drinking water not only in your building, but in neighboring businesses and homes. Severe illnesses— even death— have been caused by cross connection contamination events that could have been prevented. Unprotected and inadequately protected cross connections have been known to cause outbreaks of hepatitis A, gastroenteritis, Legionnaire's disease, chemical poisoning, body lesions (from exposure through showering), damage to plumbing fixtures and explosions.

How can a cross connection contamination occur?

Non-potable water or chemicals used in equipment or a plumbing system can end up in the drinking waterline as a result of backpressure or backsiphonage. Backpressure occurs when the pressure in the equipment such as a boiler or air conditioning unit is greater than the pressure in the drinking water line.

Backsiphonage occurs when the pressure in the drinking water line drops due to fairly routine occurrences such as water main breaks, nearby fires, unusually heavy water demand. Contaminants are then sucked out and into the drinking water line.

What can I do to make sure my water supply is protected from cross connections?

At home:

- Contact your local water supplier to find out what he/she is doing to prevent cross connection contamination incidents.
- Survey your home to make sure you are not unknowingly creating a cross connection
- Do not attach any pesticide, chemical, or any other non-potable liquid applicators to your water line
- Install hose bibb vacuum breakers (HBVB) on all

outside faucets. The HBVB isolates garden hose applications, protecting your drinking water supply from contaminants that could be drawn into your home through the hose.



At work:

- Contact your supervisor and/or maintenance personnel and find out if all cross connections within your workplace are protected.
- Find out when/if all backflow preventers have been tested.
- Ask your facility to provide you with information on its cross connection program.

In general:

- Find out all you can about cross connection control from DEP, your local water department, or a plumbing inspector.

For further information
about our Cross
Connection Control and
Backflow Prevention
Program please contact
WhiteWater at

Phone: 888-377-7678

Fax: 508-248-2895

Email:

mthompson@rhwhite.com



Backsiphonage may occur due to a water main break or other low-pressure incident such as a fire.