2024 Consumer Confidence Report

For

Dunstable Water Department

Dunstable, Massachusetts

MASSDEP PWSID # *2081000*

This report is a snapshot of the drinking water quality that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards. We are committed to providing you with this information because informed customers are our best allies.

PUBLIC WATER SYSTEM INFORMATION

Address**:** 511 Main Street, Dunstable, Massachusetts, 01827

Contact Person: John O'Brien, Chair

Telephone #: 978-649-4514 X249 Email: water@dunstable-ma.gov

Internet Address: https://www.dunstable-ma.gov/water-department

Introduction:

The Dunstable Water Department (DWD) is pleased to present our Annual Report on the quality of the water that was delivered to you in 2024. This report meets the Federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports" and contains information on the source of our water, its constituents, and the health risks associated with any contaminants.

In 2024, the DWD supplied more than 10 million gallons of potable water through the distribution system to approximately 333 customers. The DWD ensured that the operation and maintenance of the Town's two pumping stations, water storage tank, water supply wells, water mains and fire hydrants were conducted in compliance with Environmental Protection Agency (EPA) and Massachusetts Department of Environmental Protection (MassDEP) requirements. The DWD ensures the water provided meets all federal, state and local regulations for safe drinking water.

DWD received the 2025 Public Water System Award presented by MassDEP. This award recognizes small community systems for outstanding performance and achievement in 2024. It is a testament to the dedication of DWD to exceed MassDEP expectations.

Maintaining Water Quality

The Dunstable Water Department 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 EPA and MassDEP prescribe regulations that limit the concentration 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.

Opportunities for Public Participation

Monthly Meetings

The Water Department typically meets the 4th Wednesday of each month at 6:00 pm at the Dunstable Town Hall. The meeting notices are published 48-hours in advance on the Town's website. The public is welcome at these meetings.

Contact Us

If you have any questions about your water quality, the information contained in this report or your water service in general; please call the Dunstable Water Department office at: 978-649-4514 x249, typical hours are Monday through Thursday 8:00 AM to 4:00PM. You may also contact us at: water@dunstable-ma.gov
Fax: 978-649-8893
After hours and on weekends call— 978-433-2737

Board of Water Commissioners
John O'Brien - Chair
Bridgette Braley – Commissioner
Dave Tully III - Commissioner

YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

The Dunstable Water Department (DWD) uses groundwater as the source of its water. There are two wells located off Main Street that provide water to the center of the town. These wells are named Salmon Brook Well #1 and Well #2. The wells are approximately 90 feet deep, gravel packed, with the current capacity to each pump 250 gallons per minute. In 2024, the distribution system included approximately 3 miles of water mains, and 105 services connections. Your water is provided by the following sources listed below:

Source Name	MassDEP Source ID	Source Type	Location of Source
Salmon Brook Well #1	2081000-02G	Groundwater	711 Main Street
Salmon Brook Well #2	2081000-03G	Groundwater	711 Main Street

Is My Water Treated?

The water system staff makes every effort to provide you with safe and clean drinking water. To improve the quality of the water delivered to you, Potassium Hydroxide (KOH) is added to increase the pH of the groundwater, which is naturally below the MassDEP standards. Sodium Hypochlorite (NaOCl) is also added to the water as a disinfectant to kill bacteria, viruses, and other pathogens. This treatment was mandated by MassDEP and started in November 2024.

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.

The water system is checked daily for pH in several locations and sampled for bacteria each month from each source, the water storage tank and several distribution locations. Additional chemical samples are taken as required based on the MassDEP sampling schedule.

How Are These Sources Protected?

The MassDEP has prepared a Source Water Assessment Program (SWAP) Report for the water supply source serving the Dunstable Water Department. The report assesses the susceptibility of public water supplies to contamination and makes recommendations. The report is available at the following link:

https://www.mass.gov/doc/dunstable-water-department-swap-report. If you have any questions, please contact the Dunstable Water Department at 978-649-4514.

A susceptibility ranking of high 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. The town of Dunstable Water Department in concert with its certified operator, the Pepperell Water Division of the Pepperell DPW, is addressing the concerns as stated in the SWAP Report. Should you have questions or concerns please do not hesitate to contact us.

What Can Be Done To Improve Protection?

The SWAP report recommends:

- Continuing to inspect Zone I regularly, and when feasible, remove any non-water supply activities.
- Educate residents on ways they can help you to protect drinking water sources.
- Work with emergency response teams to ensure that they are aware of the storm water drainage in your Zone II and to cooperate on responding to spills or accidents.
- Work with horse owners in your protection areas to make them aware of your water supply and to encourage the use of a NRCS farm plan to protect water supplies.
- Develop and implement a Wellhead Protection Plan.

Residents can help protect sources by:

- Practicing good septic system maintenance.
- Limiting disposal of manmade chemicals to the septic system.
- Supporting water supply protection initiatives.
- Taking hazardous household chemicals to hazardous materials collection days.
- Contacting the water department or Board of Health to volunteer for monitoring and education outreach to schools.
- Limit pesticide and fertilizer use.

SUBSTANCES FOUND IN TAP WATER

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 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 stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, and farming.

Pesticides and herbicides -which may come from a variety of sources such as agriculture, urban stormwater 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 stormwater runoff, and septic systems.

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

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).

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 (1-800-426-4791).

IMPORTANT DEFINITIONS

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) –The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

90th Percentile – Out of every 10 homes sampled, 9 were at or below this level.

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

Unregulated Contaminants

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

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

Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.

Running Annual Average (RAA) – The average of four consecutive quarter of data.

Maximum Residual Disinfectant Level (MRDL) -- The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) -- The level of a drinking water disinfectant (chlorine, chloramines, chlorine dioxide) below which there is no known expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (ug/l)
ppt = parts per trillion, or nanograms per liter
pCi/l = picocuries per liter (a measure of radioactivity)
NTU = Nephelometric Turbidity Units
ND = Not Detected
N/A = Not Applicable
mrem/year = millimrems per year (a measure of radiation absorbed by the body)

WATER QUALITY TESTING RESULTS

What Does This Data Represent?

The water quality information presented in the table is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table.

Microbiological						
Bacteria	**Indicator Organism**	**MCLG**	**Value**	**Date**	**Violation (Y/N)**	**Possible Sources**
Total Coliform Bacteria	Y	0	Positive	09/09/2024	N*	Naturally present in the environment

* Dunstable Water detected total coliform bacteria during routine water sampling.
More information about this situation is provided in the section below.

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.

Coliforms were detected during routine sampling on 09/09/2024. As required by the Revised Total Coliform Rule, we collected repeat samples from the distribution system and the resample results were negative. The detection was due to water age and the distribution system was flushed.

Disinfectants and Disinfection By-Products							
Regulated Contaminant	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Chlorine (ppm) (free, total or combined)	Monthly in 2024	0.61	0.30-0.61	4	4	**N**	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	8/8/2024	3.2	3.2	60	N/A	**N**	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs) (ppb)	8/8/2024	9.9	9.9	80	N/A	**N**	Byproduct of drinking water chlorination

Lead and Copper								
Regulated Contaminant	Date(s) Collected	90^{TH} percentile	Action Level	MCLG	# of sites sampled	# of sites above Action Level	Range	Possible Source of Contamination
Copper (ppm)	9/17/2024-9/24/2024	0.100	1.3	1.3	10	0	0.022-0.128	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	9/17/2024-9/24/2024	5.1	15	0	10	1	ND-17.4	Corrosion of household plumbing systems; Erosion of natural deposits

The Lead Service Line Inventory (LSLI) has been completed and submitted to the Massachusetts Department of Environmental Protection. If you would like information regarding the LSLI, please contact the water department via email at SBresnick@dunstable-ma.gov. A copy of the LSLI is available to view at Dunstable Town Hall, 511 Main Street.

Inorganic Compounds							
Regulated Contaminant	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Barium (ppm)	5/13/2024	0.015	0.015-0.015	2	2	**N**	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate (ppm)	5/13/2024	2.9	2.04-2.9	10	10	**N**	Runoff from fertilizer use; leaching from septic tanks; natural deposits
Perchlorate (ppb)	7/15/2024	0.15	0.13-0.15	2	N/A	**N**	Rocket propellants, fireworks, munitions, flares, blasting agents

Radioactive Contaminants							
Regulated Contaminant	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Gross Alpha (pCi/l) (minus uranium)	5/13/2024	ND	ND	15	0	**N**	Erosion of natural deposits
▲The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.							
Radium 226 & 228 (pCi/L) (combined values)	4/3/2023	1.4	0-1.4	5	0	**N**	Erosion of natural deposits

Perfluoroalkyl substances (PFAS)							
Regulated Contaminant	Date(s) Collected	Highest Quarterly Average	Range Detected	MCL	Violation (Y/N)	Health Effects	Possible Source(s) of Contamination
PFAS6 (ppt)	12/26/2024	4.97	2.96-6.98	20	N	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.	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.

The Required Water Quality Sampling Schedule supplied by MassDEP required PFAS samples to be collected in October of 2024. The samples were collected in December 2024 and this constitutes a monitoring failure and the health effects are unknown.

Unregulated and Secondary Contaminants

Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

Unregulated Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
Bromodichloromethane (ppb)	8/8/2024 & 5/13/2024	ND-3.2	1.1	N/A	N/A	Trihalomethane; by-product of drinking water chlorination
Bromoform (ppb)	8/8/2024 & 5/13/2024	ND-1.3	0.43	N/A	N/A	Trihalomethane; by-product of drinking water chlorination
Chloroform (ppb)	5/13/2024	ND-0.4	0.2	N/A	70	Trihalomethane; by-product of drinking water chlorination.
Dibromochloromethane (ppb)	8/8/2024	3.4	3.4	N/A	N/A	Trihalomethane; by-product of drinking water chlorination
Perfluorobutanesulfonic (PFBS) (ppt)	12/26/2024	1.39-1.91	1.65	N/A	20	Manmade chemical; used as a replacement for perfluorooctane sulfonic acid (PFOS); used in water and stain-repellent products and coatings, paints, and cleaning agents.
Perfluoroheptanoic Acid (PFHpA) (ppt)	12/26/2024	ND-0.933	0.47	N/A	20	Manmade chemical; used in products to make them stain, grease, heat, and water resistant.
Perfluorohexanesulfonic acid (PFHxS) (ppt)	12/26/2024	1.1-1.4	1.23	N/A	20	Manmade chemical; used as a surfactant to make fluoropolymers, in water-and stain-protective coatings. Impurity from industrial production processes.
Perfluorooctanesulfonic acid (PFOS) (ppt)	12/26/2024	1.57-2.39	1.98	N/A	20	Surfactant or emulsifier; used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for inset bait traps; U.S. manufacture of PFOS phased out in 2002; however, PFOS still generated incidentally
Perfluorooctanoic acid (PFOA) (ppt)	12/26/2024	2.96-4.59	3.78	N/A	20	Used for its emulsifier and surfactant properties in or as fluoropolymers (such as Teflon), fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives, and photographic films
Sodium (ppm)	5/13/2024	27.6-33.6	30.6	N/A	20	Discharge from the use and improper storage of sodium containing de-icing compounds or in water-softening agents
Sulfate (ppm)	5/17/2021 & 6/7/2021	9-9.5	9.25	250	N/A	Natural sources

Secondary Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
Copper (ppm)	6/7/2021	0.004	0.004	1	N/A	Naturally occurring organic material
Iron (ppb)	5/13/2024	16-155	86	300	N/A	Natural and industrial sources as well as aging and corroding distribution systems and household pipes.
Manganese* (ppb)	05/13/2024	ND-10	5	50	Health Advisory of 300	Erosion of natural deposits
* US EPA has established a lifetime health advisory (HA) value of 300 ppb for manganese to protect against concerns of potential neurological effects, and a one-day and 10-day HA of 1000 ppb for acute exposure.						

COMPLIANCE DRINKING WATER REGULATIONS

Does My Drinking Water Meet Current Health Standards?

The Dunstable Water Department is committed to providing you with the best water quality available. We can report that last year your drinking water met all applicable health standards regulated by the state and federal government.

Drinking Water Violations

The drinking water is being disinfected with sodium hypochlorite under Emergency Chlorination Protocol per Department of Environmental Protection.

EDUCATIONAL INFORMATION

Do I Need to Be Concerned about Certain Contaminants Detected in My Water?

Manganese- is a naturally occurring mineral found in rocks, soil and groundwater, and surface water. Manganese is necessary for proper nutrition and is part of a healthy diet, but can have undesirable effects on certain sensitive populations at elevated concentrations. The United States Environmental Protection Agency (EPA) and MassDEP have set an aesthetics based Secondary Maximum Contaminant Level (SMCL) for manganese of 50 ug/L (micrograms per liter), or 50 parts per billion, and health advisory levels. In addition, EPA and MassDEP have also established public health advisory levels.

Drinking water may naturally have manganese and, when concentrations are greater than 50 µg/L, the water may be discolored and taste bad. Over a lifetime, EPA recommends that people drink water with manganese levels less than 300 µg/L and over the short term, EPA recommends that people limit their consumption of water with levels over 1000 ug/L, primarily due to concerns about possible neurological effects. Children up to 1 year of age should not be given water with manganese concentrations over 300 ug/L, nor should formula for infants be made with that water for longer than 10 days.
See: http://www.epa.gov/safewater/ccl/pdfs/reg_determine1/support_cc1_magnese_dwreport.pdf.

The ORSG differs from the EPA's health advisory because it expands the age group to which a lower manganese concentration applies from children less than six months of age to children up to one year of age to address concerns about children's susceptibility to manganese toxicity.
See EPA Drinking Water Health Advisory for manganese at:
https://www.epa.gov/sites/production/files/2014-09/documents/support_cc1_magnese_dwreport_0.pdf
and MassDEP Office of Research and Standards (ORSG) for manganese
http://www.mass.gov/eea/agencies/massdep/water/drinking/lead-and-other-contaminants-in-drinking-water.html#11

Sodium- Sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the sodium levels where exposures are being carefully controlled.

Perchlorate- Perchlorate may cause adverse effects on the thyroid gland. Sensitive individuals, such as women who are pregnant or nursing, infants, children under 12, or those with hypothyroidism should be aware of perchlorate levels in water and food sources that could contain perchlorate. If you have concerns about exposure to perchlorate please consult your physician.

Lead- 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. DWD is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Dunstable Water Department and Susan Bresnick at 978-649-4514 ext. 249 or SBresnick@dunstable-ma.gov.
Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead

Copper- Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. People with Wilson's Disease should consult their personal doctor. Flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at 800-426-4791.

Cross-Connection Control and Backflow Prevention

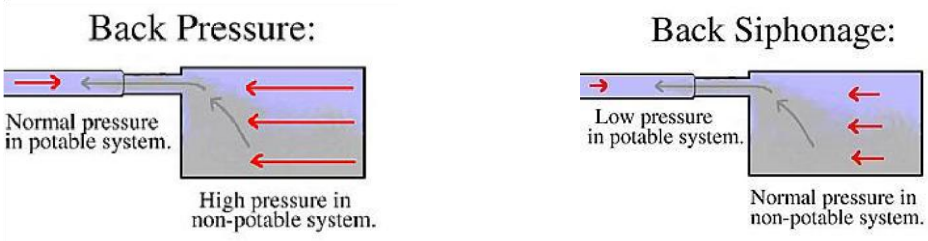
The DWD makes every effort to ensure that the water delivered to your home and business is clean, safe and free of contamination. Our staff works very hard to protect the quality of the water delivered to our customers from the time the water is extracted via deep wells from underground aquifers or withdrawal point from a surface water source, throughout the entire treatment and distribution system. But what happens when the water reaches your home or business? Is there still a need to protect the water quality from contamination caused by a cross-connection? If so, how?

What is a cross-connection?

A cross-connection occurs whenever the drinking water supply is or could be in contact with potential sources of pollution or contamination. Cross-connections exist in piping arrangements or equipment that allows the drinking water to come in contact with non-potable liquids, solids, or gases (hazardous to humans) in event of a backflow.

What is a backflow?

Backflow is the undesired reverse of the water flow in the drinking water distribution lines. This backward flow of water can occur when the pressure created by equipment or a system such as a boiler or air-conditioning is higher than the water pressure inside the water distribution line (back pressure), or when the pressure in the distribution line drops due to routine occurrences such as water main breaks or heavy water demand causing the water to flow backward inside the water distribution system (back siphonage). Backflow is a problem that many water consumers are unaware of, a problem that each and every water customer has a responsibility to help prevent.



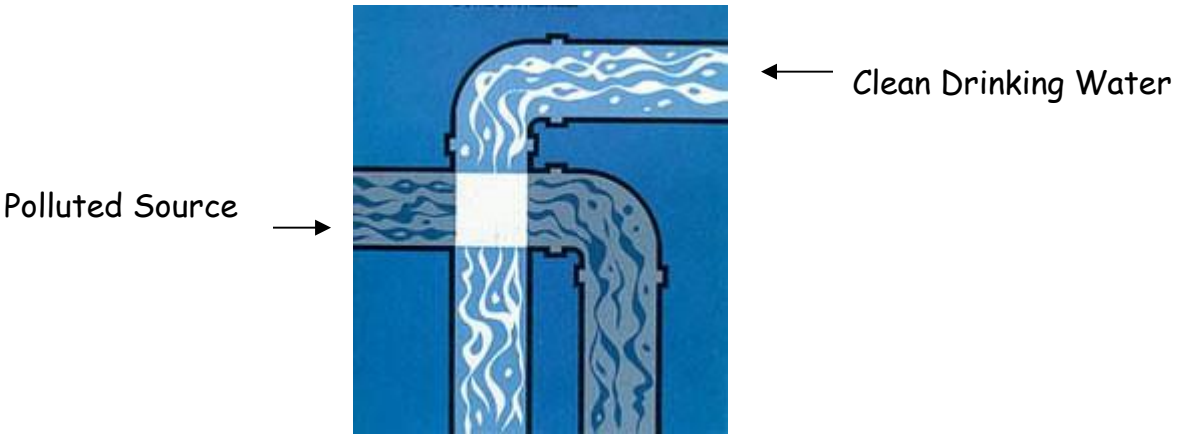
What can I do to help prevent a cross-connection?

Without the proper protection something as simple as a garden hose has the potential to contaminate or pollute the drinking water lines in your house. In fact, over half of the country's cross-connection incidents involve unprotected garden hoses. There are very simple steps that you as a drinking water user can take to prevent such hazards, they are:

- NEVER submerge a hose in soapy water buckets, pet watering containers, pool, tubs, sinks, drains, or chemicals.
- NEVER attached a hose to a garden sprayer without the proper backflow preventer.
- Buy and install a hose bibb vacuum breaker in any threaded water fixture. The installation can be as easy as attaching a garden hose to a spigot. This inexpensive device is available at most hardware stores and home improvement centers.
- Identify and be aware of potential cross-connections to your water line.
- Buy appliances and equipment with backflow preventers.
- Buy and install backflow prevention devices or assemblies for all high and moderate hazard connections.

If you are the owner or manager of a property that is being used as a commercial, industrial, or institutional facility you must have your property's plumbing system surveyed for cross-connection by your water purveyor. If your property has NOT been surveyed for cross-connection, contact your water department to schedule a cross-connection survey.

What is a Cross Connection and what can I do about it?



A cross connection is a connection between a drinking water pipe and a polluted source. The pollution can come from your own home. For instance, you're going to spray fertilizer on your lawn. You hook up your hose to the sprayer that contains the fertilizer. If the water pressure drops at the same time you turn on the hose, the fertilizer may be sucked back into the drinking water pipes through the hose. This problem can be prevented by using an attachment on your hose called a backflow-prevention device.

The DWD recommends the installation of backflow prevention devices, such as a low-cost hose bib vacuum breaker, for all inside and outside hose connections. You can purchase this at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in your town! For additional information on cross connections and on the status of your water systems cross connection program, please contact the DWD at 978-649-4514.

ADDITIONAL INFORMATION

Corrosion Control Through pH Adjustment

Many drinking water sources in New England are naturally corrosive (i.e. they have a pH of less than 7.0). So, the water they supply tends to corrode and dissolve the metal piping it flows through. This not only damages pipes but can also add harmful metals, such as lead and copper, to the water. For this reason, it is beneficial to add chemicals increase the pH and make the water neutral or slightly alkaline. This is done by adding any one, or a combination of several, approved chemicals. The DWD adds potassium hydroxide to the water. This adjusts the water to a non-corrosive pH. Testing throughout the water system has shown that this treatment has been effective at reducing lead and copper concentrations.

All chemicals used are approved for water treatment by one of the following organizations: National Sanitation Foundation (now known as NSF International) or UL, both accredited by the American National Standards Institute (ANSI). Chemicals must also meet performance standards established by the American Water Works Association.

Conclusion

The DWD is committed to providing consumers with water that meets or surpasses standards established by the state and EPA. We also want our customers to be informed of changes in water quality when they occur. If you have any questions, comments or complaints, please call the Dunstable Water Department at 978-649-4514.