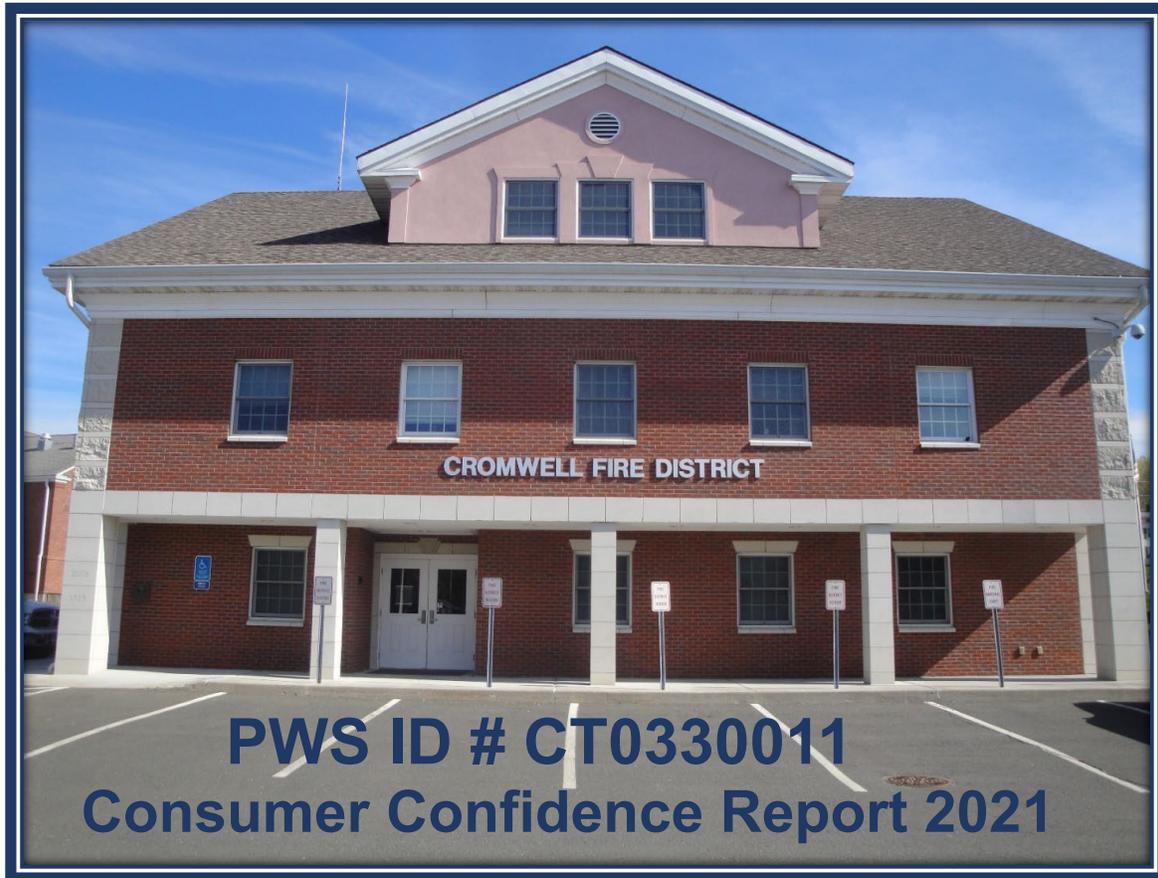


# Cromwell Fire District Water Division

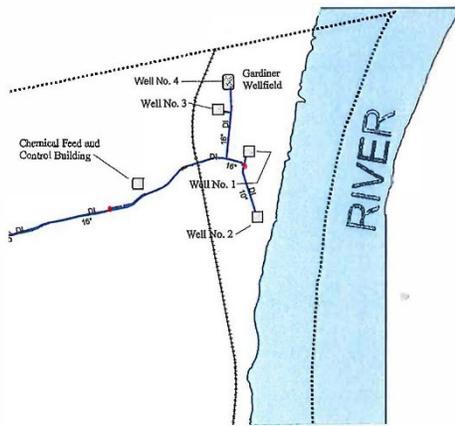


## **Is my water safe?**

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

## **Do I need to 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).



## Where does my water come from?

The District's water is supplied by groundwater pumped from our 4 wells that are located at the northeast corner of town. This facility is known as the Gardiner Well Field. These wells extend into an enormous aquifer that runs below the Connecticut River Valley.

## Source water assessment and its availability

A Source Water Assessment of our water supply was completed by the Connecticut Department of Public Health Drinking Water Division. The assessment program identifies potential risk of contamination that might affect the quality of our water sources. Cromwell's overall susceptibility to potential sources of contamination was considered a moderate risk. The complete report can be found on the Department of Public Health's website: <http://www.ct.gov/publicdrinkingwater>

## Why are there contaminants in my drinking water?

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 (EPA) Safe Drinking Water Hotline (800-426-4791). 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 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:

microbial contaminants, such as viruses and bacteria, that 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, or 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; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## How can I get involved?

Monthly Commission meetings are open to the public. They are held the third Tuesday of every month at the Coles Road Fire Station located at 105 Coles Road.

## Description of Water Treatment Process



Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

## Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

## Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and ensuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below, please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

## **Source Water Protection Tips**

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

## **Additional Information 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. Cromwell Fire District Water Division 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>.

## **Additional information on Manganese**

Manganese is a mineral that naturally occurs in rocks and soil and is a normal constituent of the human diet. It exists in well water in Connecticut as a groundwater mineral, but may also be present due to underground pollution sources. Manganese may become noticeable in tap water at concentrations greater than 0.05 milligrams per liter of water (mg/l) by imparting a color, odor, or taste to the water. However, health effects from manganese are not a concern until concentrations are approximately 10 times higher. The Department of Public Health recently set a drinking water Action Level for manganese of 0.5 mg/l to ensure protection against manganese toxicity. This Action Level is consistent with the World Health Organization guidance level for manganese in drinking water. Local health departments can use the Action Level in making safe drinking water determinations for new wells, while decisions regarding manganese removal from existing wells are made by the homeowner in consultation with local health authorities. This fact sheet is intended to help individuals who have manganese in their water understand the health risks and evaluate the need for obtaining a water treatment system.

## ***What Health Effects Can Manganese Cause?***

Exposure to high concentrations of manganese over the course of years has been associated with toxicity to the nervous system, producing a syndrome that resembles Parkinsonism. This type of effect may be

more likely to occur in the elderly. The new manganese Action Level is set low enough to ensure that the potential nervous system effect will not occur, even in those who may be more sensitive. Manganese is unlikely to produce other types of toxicity such as cancer or reproductive damage.

### ***Is Manganese of Particular Concern for Young Children?***

Yes, and especially so for bottle-fed infants. Certain baby formulas contain manganese, and if prepared with water that also contains manganese, the infant may get a higher dose than the rest of the family. In addition, young children appear to absorb more manganese than older age groups but excrete less. This adds up to a greater potential for exposure in the very young. Since manganese's effects on the developing nervous system have not been adequately studied, it is especially prudent that drinking water for pregnant women and young children be below the manganese Action Level.

### ***How Do I Know if I Have Manganese in My Water?***

You may suspect that manganese is in your water if the water is discolored (brownish-red), causes staining of plumbing fixtures (faucets, sinks) or clothing, or has an off-taste or odor. If this is the case, you should have your water tested by a state-certified laboratory for manganese. When you get the results, you should contact your local health department to help you interpret the results. The following questions and answers should also be helpful.

### ***What Is The Water Concentration Where Manganese Becomes A Health Risk?***

As stated in the introduction, manganese concentrations below 0.5 mg/l are not a health concern even though they may cause the water to look, taste, or smell unusual. The Connecticut Action Level of 0.5 mg/l is set well below any health effect level and thus provides a margin of safety. You should consider treating the water to reduce the manganese concentration if it is above the Action Level. This will ensure that an adequate margin of safety exists to protect you and your family.

### ***What Are the Background or Normal Levels of Manganese in Groundwater?***

The levels of manganese in groundwater from natural leaching processes can vary widely depending upon the types of rock and minerals present at the water table. Typically, manganese concentrations from natural processes are low but can range up to 1.5 mg/l or higher. Sources of pollution rich in organic matter (e.g., runoff from landfills, compost, brush or silage piles, or chemicals such as gasoline) can add to the background level by increasing manganese release from soil or bedrock into groundwater. Although natural processes can cause manganese concentrations to reach the state Action Level of 0.5 mg/l, these levels are still a health concern.

### ***How Can I Decrease My Family's Exposure to Manganese?***

If you have a water concentration greater than 0.5 mg/l, you should consider installing a water treatment system or drink bottled water. People often choose to treat the water if the concentration is above 0.05 mg/l because of the way manganese can affect the water's properties (color, taste, staining) at these low levels. Treatment systems are primarily of the filtration type, including manganese greensand, manganese dioxide, ion exchange with potassium chloride regeneration, or aeration followed by filtration. The concentration of manganese in the water and its physical state in the water will help determine the optimum treatment design. Therefore, before purchasing a system check with your local health department, the Connecticut Department of Energy and Environmental Protection (DEEP) (860-424-3705), or CTDPH's Water Supplies Section (860-509-7333).

If the manganese water concentration is above 1.5 mg/l or if the concentration suddenly increases, you or your local health department should contact the DEEP. They will investigate whether a source of pollution may be responsible for the manganese concentrations in your well.

### ***Are There Federal Standards For Manganese In Drinking Water?***

There are no enforceable federal drinking water standards for manganese. The USEPA has a secondary standard of 0.05 mg/l which is intended to let the public know that manganese can affect water quality at this level. This secondary standard is not health-based and is not enforceable. In the absence of a federal standard, the Connecticut Department of Public Health has developed the Action Level described above.

### ***Where Can I Get More Information?***

You can contact the state Department of Public Health at the address and phone number below or your local health department for more information regarding manganese in well water. In addition, you can contact the Connecticut DEEP (860-424-3705) about potential sources of manganese in well water and treatment options. DPH's Water Supplies Section (860-509-7333) can also be called for assistance on manganese treatment options.

## **Water Quality Data Table**

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfection By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	0.56	.18	0.56	2021	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	6	1	6	2021	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	19	4.43	19	2021	No	By-product of drinking water disinfection

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Inorganic Contaminants</b>								
Copper - source water (ppm)	NA		.034	.031	.034	2021	No	Erosion of natural deposits.
Fluoride (ppm)	4	4	0.72	0.69	0.72	2021	No	Erosion of natural deposits; Water additive which promotes strong teeth.
Nitrate [measured as Nitrogen] (ppm)	10	10	2.94	1.22	2.94	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Microbiological Contaminants</b>								
Turbidity (NTU)	NA	5	0.56	NA	NA	2021	No	Soil runoff. Water main flushing.
Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source	
<b>Inorganic Contaminants</b>								
Copper - action level at consumer taps (ppm)	1.3	1.3	.464	2021	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead - action level at consumer taps (ppb)	0	15	1.6	2021	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.	

## Additional Contaminants

In an effort to ensure the safest water possible the State has required us to monitor some contaminants not required by Federal regulations. Of those contaminants only the ones listed below were found in your water.

Contaminants	State secondary MCL	AL	Your Water	Violation	Explanation and Comment	Typical Source
Iron mg/L	0.3		.075	No	This was the highest in a range of <0.010 to 0.075	A naturally occurring mineral commonly found in rocks, soil, groundwater, and surface water. Erosion of natural deposits.
Manganese mg/L	0.05	0.5	.008	No	The Connecticut Action Level of 0.5 mg/l is set well below any health effect level and thus provides a margin of safety.	A naturally occurring mineral commonly found in rocks, soil, groundwater, and surface water. Erosion of natural deposits.

Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.
Important Drinking Water Definitions	

<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level
<b>For more information please contact:</b>	<b>Joseph A. Palmieri, 1 West Street, Cromwell, CT 06416 Phone: 8606354420</b>

**Important Information:  
2021 PWSID #0330011 Consumer Confidence Report**

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