GET TO KNOW YOUR DRINKING WATER

Massachusetts Water Resources Authority 2019 Drinking Water Test Results

This report contains very important information about your drinking water. Please translate it, or speak with someone who understands it.

Si usted desea obtener una copia de este reporte en español, llamenos al telefono 617-788-1190.

La relazione contiene importanti informazioni sulla qualità dell'acqua della Comunità. Tra-durlo o parlarne con un amico che lo comprenda.

O relatório contém informações importantes sobre a qualidade da água da comunidade. Tra-duza-o ou peça a alguém que o ajude a entendê-lo melhor.

Sprawozdanie zawlera ważne informacje na temat jakości wody w Twojej miejscowści. Poproś kogoś o przellurnaczenie go lub porozmawiaj z osobą która je dobrze rozumie.

يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته أو ابحث التقرير مع صديق لك يفهم هذه المعلومات جيدا.

Η κατούδεν αναφορα παρουσιαζη σπουδαιες πληροφορειες για το ποσιμο νερο σας. Πρακαλώ να το μεταφρασετε η να το σξολειασετε με κασοιον που το καταλαβαινη απολητως.

Im Bericht steht wichtige Information über die Qualität des Wassers Ihrer Gemeinschaft. Der Bericht soll übersetzt werden, oder sprechen Sie mit einem Freund, der ihn gut aversteht.

这份报告中有些重要的信息，讲到关于您所在社区的水的品质。请您找人翻译一下，或者请能看得懂这份报告的朋友给您解释一下。

この資料には、あなたの飲料水についての大切な情報が書かれています。内容をよく理解するために、日本語に翻訳して読むか説明を受けてください。

इस रिपोर्ट में "पीने के पानी" के विषय पर बहुत जरूरी जानकारी दी गई है। कृपया इसका अनुवाद कीजिये, या किसी जानकार से इस बारे में पुछिये।

រាយការណ៍នេះមានតម្លៃមានសារៈ ន៍អំពីទឹកបរិភោគ ។ សូមបកប្រ ឬពិគ្រោះជាមួយអ្នកដែលយល់ រាយការណ៍នេះ ។

이 보고서에는 귀하가 거주하는 지역의 수질에 관한 중요한 정보가 들어 있습니다. 이것을 번역하거나 충분히 이해하시는 친구와 상의하십시오.

Bản báo cáo có ghi những chi tiết quan trọng về phẩm chất nước trong cộng đồng quý vị. Hãy nhờ người thông dịch, hoặc hỏi một người bạn biết rõ về vấn đề này.

Ce rapport contient des informations importantes à propos de votre eau potable. Demander à quelqu'un de traduire ces informations pour vous ou discuter avec une personne qui comprend ces informations.

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Massachusetts Water Resources Authority
The Chicopee Water Dept.
South Hadley F.D. No. 1
Wilbraham Water Division

Where To Go For Further Information

Massachusetts Water Resources Authority (MWRA)	www.mwra.com	617-242-5323
Massachusetts Dept. of Environmental Protection	www.mass.gov/dep	617-292-5500
Massachusetts Dept. of Public Health (DPH)	www.mass.gov/dph	617-624-6000
Department of Conservation and Recreation	www.mass.gov/dcr/watersupply	617-626-1250
US Centers for Disease Control & Prevention (CDC)	www.cdc.gov	800-232-4636
List of State Certified Water Quality Testing Labs	www.mwra.com/testinglabs.html	617-242-5323
Source Water Assessment and Protection Reports	www.mwra.com/sourcewater.html	617-242-5323
Information on Water Conservation	www.mwra.com/conservation.html	617-242-SAVE

Public Meetings

MWRA Board of Directors	www.mwra.com/boardofdirectors.html	617-788-1117
MWRA Advisory Board	www.mwraadvisoryboard.com	617-788-2050
Water Supply Citizens Advisory Committee	www.mwra.com/wscac.html	413-213-0454

For A Larger Print Version, Call 617-242-5323.

This report is required under the Federal Safe Drinking Water Act. MWRA PWS ID# 6000000

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For more information on MWRA and its Board of Directors, visit www.mwra.com.

Dear Customer,

I am pleased to share with you the annual results of our water quality testing. Each year, MWRA takes hundreds of thousands of tests to ensure your water is safe and of the highest quality. In 2019, we again met every federal and state drinking water standard.

Of course, the coronavirus is first and foremost in everyone's mind this year. While this report looks back on water quality results from 2019, I want to assure you that your drinking water does not contain or carry the virus and that your water quality remains excellent. The dedicated women and men who run this critical water system have been hard at work throughout the pandemic – protecting the watersheds, running the treatment plants, taking samples every day and performing maintenance.

Lead in drinking water continues to be an important issue. Your local water department successfully treats the water to make it less corrosive, resulting in low lead levels at the tap. More information is on page 5 of this report.

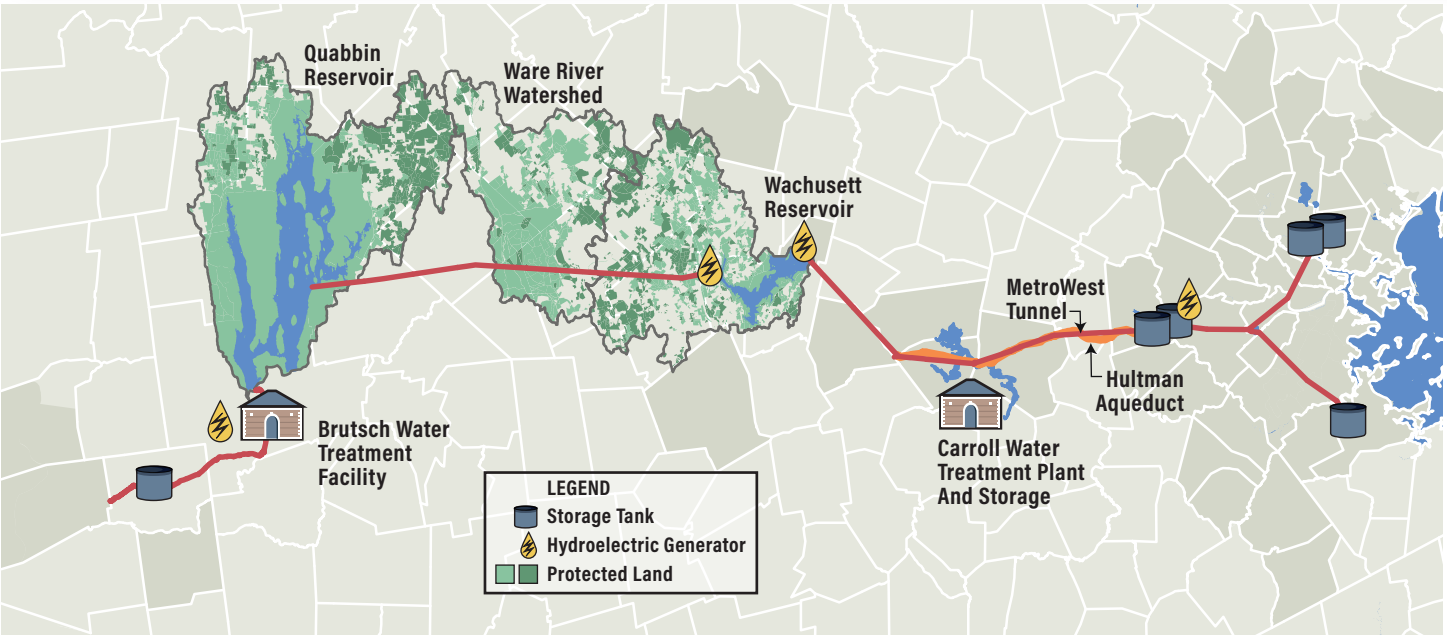
Your water system is well protected – from the source reservoirs to the treatment plants to the storage tanks – and real-time water quality monitoring allows us to check the water every step of the way. We also have emergency plans for all of our facilities so we can quickly respond any time of day or night.

Last August, an algae bloom occurred in the Quabbin Reservoir, which caused an unpleasant taste to the water. Nuisance algae blooms are rare in the Quabbin, and the presence of low levels of algae (naturally occurring microscopic plants) is actually a sign of a healthy reservoir. While the water tasted bad during the bloom, it was always safe to drink.

I hope you will take a few moments to read this important report and learn more about your water system. We have great confidence in the water we deliver to your home and we want you to share that confidence. Please contact us if you have any questions about this report or any of MWRA's programs.

Sincerely,

Frederick A. Laskey
Executive Director



FIND OUT ABOUT
YOUR DRINKING WATER

Learn More About Your Drinking Water

Every year the Massachusetts Water Resources Authority (MWRA) carries out hundreds of thousands of tests, monitors water disinfection systems, and evaluates new research and water quality findings to ensure your drinking water is safe. The annual MWRA drinking water quality report for 2019 provides information and resources about how MWRA and your community provide safe, clean water.

Testing Your Community's Water System

MWRA and local water departments work together to test water all the way to the tap. We test water samples in the city and town pipes each week for total coliform and *E. coli* bacteria. Total coliform bacteria can come from the intestines of warm-blooded animals, or can be found in soil, plants, or other places. Most of the time these bacteria are not harmful. However, their presence could signal that harmful bacteria from fecal waste may be there as well. The EPA requires that no more than 5% of the samples in a given month may be positive for total coliform. *E. coli* is a pathogen found in human and animal fecal waste that can cause illness. No *E.coli* was found in any CVA community water in 2019.

Testing Our Water - From Forest to Faucet

MWRA analyzes your drinking water continuously, from the source in a protected natural watershed, to the pipes in your community. MWRA works with towns and cities, the Massachusetts Department of Environmental Protection (MassDEP), the EPA, and the Massachusetts Department of Public Health (MDPH) to ensure the safety of the water at your tap. MWRA testing results show few contaminants are found in Quabbin Reservoir water. The few that we find are in very small amounts—well below the EPA standards. Turbidity (the cloudiness of the water) is one measure of overall water quality. There are two standards for turbidity. All water must be below 5 NTU (Nephelometric Turbidity Units) and water can only be above 1 NTU if it does not interfere with effective disinfection. Typical levels at the Quabbin Reservoir were 0.27 NTU and all samples were below 1 NTU 100% of the time. The highest level detected was 0.92 NTU.

MWRA also tests reservoir water for pathogens—such as fecal coliform, bacteria, viruses, and the parasites *Cryptosporidium* and *Giardia*. They can enter the water from animal or human waste. All test results were well within state and federal testing and treatment standards. For more information visit www.mwra.com.

Help Us Know About Your Drinking Water

MWRA takes customer concerns seriously. Every call is investigated. Most complaints are related to discolored water (usually related to local construction or hydrant use), or conditions in a building's plumbing. If you have any questions or concerns, contact your local water department, or call MWRA at (617) 242-5323.

Learn About Your Water's Quality

MWRA tests your water before treatment —and after. MWRA conducts hundreds of thousands of tests every year for over 120 contaminants to meet EPA and state regulations for drinking water. A complete list of our tests is available at www.mwra.com. Details about our 2019 test results are available below and on page 5. The data show our water quality is excellent.

Important Health Information - Drinking Water and People with Weakened Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 EPA's Safe Drinking Water Hotline 1-800-426-4791.

KNOW ABOUT PFAS

PFAS compounds, used for everything from stain and water proofing to firefighting, were in the news a lot in 2019. MWRA testing showed only very low levels, well below proposed state standards. See mwra.com for more details.

TEST RESULTS AFTER TREATMENT Compound	Units	(MCL) Highest Level Allowed	(We Found) Detected Level-Average	Range Of Detections	(MCLG) Ideal Goal	Violation	How It Gets In The Water
Barium	ppm	2	0.006	0.005-0.007	2	No	Common mineral in nature
Nitrate^	ppm	10	0.015	ND-0.015	10	No	Atmospheric deposition

KEY: MCL=Maximum Contaminant Level - The highest level of a contaminant allowed in water. MCLs are set as close to the MCLGs as feasible using the best available technology. **MCLG**=Maximum Contaminant Level Goal - The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. **ppm** = parts per million ^As required by DEP, the maximum result is reported for nitrate, not the average.

FIND OUT ABOUT

HOW WE PROVIDE SAFE DRINKING WATER

COVID CONCERNS

Your water does not contain the coronavirus. Our well-protected watersheds and effective disinfection mean that you don't need to buy bottled water. Despite the emergency, we continue to run the system and monitor water quality.

MWRA-Providing Reliable Service

MWRA is committed to providing a reliable supply of safe water to our customer communities. We plan for emergencies, train our staff on how to respond, and regularly drill to be sure we are prepared. During the coronavirus pandemic, MWRA activated its long-standing pandemic response plan to focus our staff resources on essential work, and to protect the health of our staff so that we could continue to provide your water while meeting all drinking water safety standards.

The Source of Your Water

MWRA supplies about 7 million gallons of high quality water each day to three Chicopee Valley Aqueduct communities: Chicopee, Wilbraham and the South Hadley Fire District #1 (FD#1). MWRA also serves 48 cities and towns in greater Boston and MetroWest. Water to the CVA communities comes from the Quabbin Reservoir. Water from the Ware River is also added to the supply at times.

The Quabbin watershed is naturally protected with over 85% of the watersheds covered in forest and wetlands. To ensure safety, the streams and reservoirs are tested often and patrolled daily by the Department of Conservation and Recreation (DCR).

Rain and snow falling on the watersheds -protected land around the reservoirs-turn into streams that flow to the reservoirs. This water comes in contact with soil, rock, plants, and other material as it follows its natural path to the reservoirs. While this process helps to clean the water, it can also dissolve and carry very small amounts of material into the reservoir. Minerals from soil and rock do not typically cause problems in the water. But water can also transport contaminants from human and animal activity. These can include bacteria and pathogens-some of which can cause illness. The test data in this report show that these contaminants are not a problem in the Quabbin Reservoir's watershed.

The Department of Environmental Protection (DEP) has prepared a Source Water Assessment Program report for the Quabbin Reservoir. The DEP report commends DCR and the MWRA on the existing source water protection plans, and states that our "watershed protection programs are very successful and greatly reduce the actual risk of contamination." MWRA follows the report recommendations to maintain the pristine watershed.

MWRA maintains state-of-the-art treatment procedures to make sure your water is safe, fresh, and tastes great. Your drinking water is treated at the Brutsch Water Treatment Facility before it enters the Chicopee Valley Aqueduct. MWRA's licensed treatment operators carefully add measured doses of chlorine, and further treat the water with ultraviolet light (UV). UV light is essentially a more potent form of the natural disinfection from sunlight. Both disinfection processes are designed to kill pathogens (germs) that may be present in the water. Licensed operators in Chicopee perform additional booster disinfection at the point where the local pipes take water from the aqueduct.

Each community also treats the water to reduce the leaching of lead from home plumbing.

Contaminants in Bottled Water and Tap 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 EPA's Safe Drinking Water Hotline (1-800-426-4791) or MWRA. In order to ensure that tap water is safe to drink, the Massachusetts DEP and EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Learn About New Regulations and Research

MWRA works with EPA and health research organizations to help define new national drinking water standards by collecting data on contaminants that are not yet regulated. Information on this testing, as well as other water quality data, including information on PFAS compounds, *Giardia* and *Cryptosporidium*, and more detailed data on lead can be found at: www.mwra.com/UCMR/2019.

FIND OUT ABOUT

YOUR COMMUNITY INFORMATION

CHICOPEE

Phone: 413-594-3420
PWS ID # 1061000

The Chicopee Water Department's Corrosion Control Facility continues to provide excellent water quality by adjusting the water's pH and alkalinity levels. Sodium Carbonate and Sodium Bicarbonate (baking soda) are used to make this adjustment. A phosphate blend also adds an extra level of protection by further reducing corrosion throughout the system. The benefits of these treatment processes are evident in the reduced levels of dissolved metals such as lead, copper, and iron in the city's water supply.

Under the Safe Drinking Water Act, water samples must be collected specifically for the analysis of lead and copper. Household plumbing is the main contributor of these metals in our drinking water and the water's chemistry is adjusted to minimize corrosion well before it reaches the homes of Chicopee's residents.

In 2018, 30 samples were collected for the analysis of lead and copper in Chicopee's drinking water, and our results were excellent. Data is shown on the next page. The Environmental Protection Agency (EPA) has reduced the number of samples that must be collected by the Chicopee Water Department due to its successful maintenance of low to absent levels of lead and copper in the water system. The next round of lead and copper samples will be collected in the spring of 2021.

For disinfection, Chicopee now uses Sodium Hypochlorite in place of the previously used (and much more hazardous) chlorine gas. This change was made in an effort to increase safety for the treatment plant operators and the residents of Chicopee.

The 36" cast iron transmission main was put back into service after being shut down for 6 months while the new redundant main provided water to the city. System improvements and additions were 300 feet of ductile iron pipe on Brightwood Street, 230 feet of ductile iron pipe on Guerin Street and 1,187 feet of ductile iron pipe on Sycamore Lane. Additionally, 30 new fire hydrants were installed into the system.

WILBRAHAM

Phone: 413-596-2807
PWS ID # 1339000

The Corrosion Control Facility on Miller Street in Ludlow continues to inject Sodium Silicate into the drinking water in compliance with the federally mandated Lead and Copper Rule. During the summer months of 2019, the Wilbraham Water Department installed a new section of water main on Glenn Drive between Lance Lane and Brainard Road. Roughly 1000 feet of new water main was installed with 400 feet remaining for 2020. A new hydrant was installed along with eight new service connections.

Within the last year, the Wilbraham Water Department made improvements to the Brookmont Pump station building along with the driveway and walkway and the Old Orchard Pump station access hatch. Routine maintenance was made to the other two pump stations, 2.1 million gallon storage tank and the Corrosion Control Facility. Wilbraham Water Department repaired one significant water main break and 7 service leaks within our distribution system. Five new services were installed and 50 main line gate valves were cleaned and checked for operation. The Water Department continued installing new water meters throughout the distribution system to ensure accurate consumption of each individual household and businesses along with remote electronic readers. Data on lead and copper sampling from 2018 is on the next page. The next sampling is in 2021. The water usage for 2019 was 395,460,000 gallons. This represents a 2% decrease compared to 2018.

SOUTH HADLEY FIRE DISTRICT #1

Phone: 413-532-0666
PWS ID # 1275000

Our Treatment Facility located on Fuller St. in Ludlow continues to add Sodium Silicate for corrosion control. This is necessary in order to comply with the federally mandated Lead and Copper Rule. Our last sampling round just occurred in June of 2019 and our results were excellent. Data is shown on the next page. We will be sampling again in June of 2022.

We continue to maintain and improve our system. Within the past year, our crew has repaired ten water main breaks and our leak detection revealed eleven service leaks throughout the distribution system. In addition to the repair work, four new services have been connected to the distribution system.

We continue to update our water mains with our replacement program. Water main replacements are prioritized by leak history, pipe type and the annual street paving list provided by the Department of Public Works. This collaboration results in reduced costs and extending pavement integrity. This program will continue as funding and time permit.

This past year, we replaced a total of 2200 ft. of 6" Cast Iron with 8" C-909 PVC along Susan Avenue and Cote Blvd. All fire hydrants and water services were replaced as well. The new main will ensure reliability of supply. The Board would like to thank the efforts of our staff by performing the inspection of the project in-house resulting in significant cost savings.

We feel strongly that the Water Department – Fire District No. 1 has been operated very efficiently by providing the rate payers with what they expect from a municipal department at the lowest possible cost. We would also like to extend our thanks to the Fire Department, Police Department, Fire District No. 2 and the Town Departments for their cooperation.

Please take a moment to view our website with historical and frequently updated information about our Department at the following address www.shdistrict1.org.

FIND OUT ABOUT

LEAD IN YOUR DRINKING WATER

DID YOU KNOW? **Lead poisoning typically comes from exposure to lead paint dust or chips. But lead in drinking water also can contribute to total lead exposure. Depending on the kind of plumbing in your home, lead levels in water can be elevated. To lower your family's risk for exposure, review the steps on this page to reduce lead levels in your home environment.**

What You Need To Know About Lead in Tap Water

MWRA water is lead-free when it leaves the reservoirs. MWRA and local pipes that carry the water to your community are made mostly of iron and steel and do not add lead to the water. However, lead can get into tap water through pipes in your home, lead solder used in plumbing, and some brass fixtures. Corrosion or wearing away of lead-based materials can add lead to tap water, especially if water sits for a long time in the pipes before it is used. Lead levels found in tap water in sampled homes have dropped significantly since the CVA communities improved treatment to make water less corrosive. This means the water is less likely to absorb lead from pipes and other fixtures.

CVA Communities Meet Lead Standard

Under EPA regulations, your local water department must test tap water in a sample of homes that are likely to have high lead levels. These are usually older homes with lead service lines or lead solder. The EPA rule requires that 9 out of 10, or 90% of these sampled homes must have lead levels below the Action Level of 15 parts per billion (ppb). All three CVA communities' results were below the lead Action Level.

Important Information from EPA about 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. MWRA is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. If 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 EPA's Safe Drinking Water Hotline at 1-800-426-4791 or www.epa.gov/safewater/lead.

Reduce Exposure to Lead in Your Home

Take these steps to reduce lead in your drinking water.

- Let the water run before using it: fresh water is better than stale. To save water, fill a pitcher with fresh water and place in the refrigerator for future use.
- Run each faucet used for drinking or cooking until after the water becomes cold, anytime your water has not been used for more than six hours.
- Never use hot water from the faucet for drinking or cooking, especially when making baby formula or other food for infants or young children.
- Check your plumbing fixtures to make sure they are lead-free. Read the labels closely.
- Remove loose lead solder and debris. Every few months remove the aerator from each faucet in your home and flush the pipes for 3 to 5 minutes.
- Be careful of places where you may find lead in or near your home. Paint, soil, dust and pottery may contain lead. Call the Massachusetts Department of Public Health at 1-800-532-9571 or 1-800-424-LEAD for information on health and lead.

LOCAL TEST RESULTS FOR 2019	Total Trihalomethanes (TTHMs) in ppb MCL=80 ppb (Avg)		Haloacetic Acids (HAA5) in ppb MCL=60 ppb (Avg)		Chlorine in ppm MRDL=4 ppm (Avg) MRDLG=4 ppm		Lead in ppb AL=15 ppb MCLG=0		Copper in ppb AL=1300 ppb MCLG=1300		Sodium in ppm
	Annual Average	Range	Annual Average	Range	Annual Average	Range	# Samples over AL	90% Value	# Samples over AL	90% Value	
Chicopee	63	32.8-92.4	60	33.7-109.0	0.82	0.1-1.51	0 of 30	0*	0 of 30	136*	19.8
South Hadley FD #1	71	35.2-114	46	20.6-90.6	0.43	0.02-1.88	0 of 30	6.84	0 of 30	6.41	8.12
Wilbraham	66	42.4-88.8	37	2.6-68	0.36	0.2-1.01	1 of 20	9.3*	0 of 20	90*	8.13

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. **MRDLG**=Maximum Residual Disinfectant Level Goal. The level of a drinking water disinfectant below which there is no known or expected health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination. **ppm**=parts per million **ppb**=parts per billion *Sampled in 2018 **AL**= Action Level-The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.