


Customer Service Center  
City Hall  
1101 S. Saginaw St.  
Flint, MI 48501

Postage

A graphic showing a splash of water against a light blue background. The water is captured in mid-air, creating a dynamic and refreshing visual.

## City of Flint October, 2015 Quarter Water Quality Report

The Quarterly Water Quality Report provides important information about your drinking water. This report includes information about the water source, current drinking water issues, lead information, water filters, testing, 3<sup>rd</sup> quarter news, and temporary expectations when changing water sources. The City of Flint Department of Utilities is dedicated to providing quality drinking water to the residents of the community. The Flint Water Plant operates and maintains a certified drinking water laboratory to assure compliance with all state and federal regulations, and is committed to prompt and thorough notification to the consumers if there is any reason for concern about the quality of the drinking water. Information about your drinking water is available on the City of Flint web page at [www.cityofflint.com](http://www.cityofflint.com) or by calling the City of Flint Water Plant at **(810) 787-6537**. The Safe Drinking Water Hotline at **(800) 426-4791** is a resource for health related questions and water quality issues. General drinking water information can also be found on the U.S. Environmental Protection Agency (EPA) web site at [www.epa.gov/safewater/](http://www.epa.gov/safewater/).

## Water Source

The City of Flint began using the Flint River as a water source in May of 2014. After 16 months of treating water from the Flint River, the City became aware that the level of corrosiveness found in Flint River water could result in more lead leaching from service lines and household plumbing. Reports of elevated blood lead levels in children and expert analysis resulted in the City's Technical Advisory Committee making a recommendation to return to the previous source of water while waiting for the KWA to provide water from Lake Huron.

On Friday October 16<sup>th</sup>, 2015, with the consent of Governor Snyder, the City returned to Detroit as the primary source of drinking water. The decision, along with the Technical Advisory Committee's recommendation followed two consecutive lead and copper test periods that exceeded 5ug/L which calls for additional action. In addition to the switch, the City has submitted a final corrosion control design to the DEQ for comments and approval. The City has requested to use the corrosion control as an additive to treated water it will be required when the city begins treating raw water from the Karegnondi Water Authority which is anticipated to begin in the summer of 2016.

In order to make the transition possible, the City contributed \$2 Million dollars, the Mott Foundation contributed \$4 Million dollars, and the State of Michigan contributed \$ 6 Million dollars.

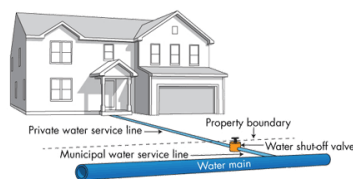
## Current Drinking Water Issues & Lead Information

There has been a heightened awareness of lead leaching into drinking water through service lines and household plumbing. The City's Technical Advisory Committee has enlisted the support of EPA lead experts and is working with State of Michigan representatives to increase testing, rebuild public confidence, and implement long-term solutions to lead. It is recommended that everyone get their water tested, obtain a water filter, and check with a plumber to evaluate the type and condition of your household plumbing. The City is currently mapping all of its lead service lines and working to develop a program to get lines changed over time.

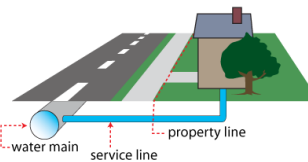
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Flint is responsible for providing high quality drinking 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 5 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>.



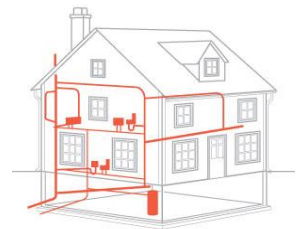
**No lead** in water leaving the Treatment Plant.



Little or **no lead** in water in the transmission mains.



**Lead** can leach into water through service lines.



**Lead** can leach into water through household plumbing.

## *Water Filters & Testing*

Free water filters have been made available to current Flint residents at several locations. The MDHHS and the Genesee County Community Action Resource Department (GCCARD) are providing Free National Sanitation Foundation certified water filters at the following locations.

Residents receiving MDHHS assistance are encouraged to visit either the **125 E. Union St.** or **4809 Clio Rd. MDHHS** office location to obtain a free, certified home water filter. Residents who are not currently enrolled in MDHHS assistance programs should visit the (GCCARD) offices located at **2727 Lippincott** and **601 N. Saginaw** in Flint.

Staff will be onsite at all four locations from **9 a.m. to 4 p.m., Monday through Friday**, to distribute filters and assist residents who have questions about proper installation.

If you want more information on obtaining a water filter, please call 211.

### Other suggestions related to water safety and testing:

- We recommend that everyone get their water tested. Call us at (810)-787-6537.
- Contact the Health Department about having your child's blood tested (810)-257-3612.
- It is advisable to have a plumber check your household plumbing.
- Check your faucet aerator (large lead solder particles can occasionally get lodged in here).

## *Temporary issues to be aware of when Changing Water Sources*

Changing water sources back to Detroit will not fully eliminate the lead concerns. The potential for lead to leach off of certain water service lines or household plumbing will continue to exist regardless of the water source. The City is committed to increased testing, better communication, and developing a lead service line map to identify all of the City owned lead service lines.

As the city changes water sources you can expect the following:

- It could take up to three weeks for the switch in water source to reach all taps in the City.
- Over the next several weeks, we will be winterizing our hydrants which will result in discoloration of the water but will also help accelerate the water flowing through the system.
- Lead will continue to leach off of certain service lines and household plumbing.
- Main breaks could result as a change in source water occurs.
- Water could have discoloration or cloudiness, if this happens, run your faucet until the water clears, if this lasts longer than 20 minutes please report it to our water service center at (810)-766-7202.

## *Water Timeline*

A timeline of events, beginning with signing the KWA contract leading up to the current status of switching back to our previous source of water is available on the City website and can be found by visiting the “water” page located under “residents”. Please email [flintwater@cityofflint.com](mailto:flintwater@cityofflint.com) with your questions or to request a water test or, call the Water Plant at (810)-787-6537.

## *3rd Quarter News*

### **July**

- Completed the evaluation of over 8000 valves in the system and identified over 2300 that are currently inoperable. The repair of these valves will be budgeted and worked into our multi-year Capital Improvement Plan.

### **August**

- Successfully completed the installation of Granulated Activated Carbon at the water treatment plant which reduced the TTHM level in the water and helped bring the City back into compliance with the Safe Drinking Water Act.

### **September**

- Leak Detection on all 600 miles of the distribution system has started and is over halfway complete. Several dozen leaks have been identified and repairs continue as more leaks are found. This has decreased the amount of water loss existing in the system.
- Construction of a load out facility at our wastewater plant is on target for completion by November and will allow the City to eliminate the use of the incinerator resulting in significant annual savings.
- Over 3500 new water meters have been installed this year creating better accuracy, accountability, and decreasing the number of estimated reads on water & sewer bills.

## *Contact Information*

### **Water Treatment Plant - (810)-787-6537**

Request a water test.

Request a tour of the Plant.

Ask questions about water quality.

### **Water Service Center - (810)-766-7202**

Report a water leak or other system issues.

### **Water Pollution Control - (810)-766-7210**

Inquiries related to wastewater treatment.

Inquiries related to converting methane gas into energy.

### **Customer Service – (810)-766-7015**

Questions about your water & sewer bill.

### **Water Filters – 211**

Questions about water filters.

## 2015 3<sup>rd</sup> Quarter Regulated Detected Contaminants – Flint River as Source

Inorganic & Organic Chemicals, Metals, and Pesticides – Monitored at treatment plant						
Regulated Contaminant	Unit of Measure	MCLG	MCL	Highest Level Detected	Range of Detection	Violation
<b>Inorganic Chemicals</b>						
Fluoride	mg/L	4	4	0.84	0.64 – 0.84	No
Nitrate	mg/L	10	10	N.D.	N/A	No
<b>Metals</b>						
Barium	mg/L	2	2	0.02	N/A	No

More than 100 other chemicals were monitored from July through September that were not detected.

The various classification groups of these chemicals include metals, carbamates, herbicides, pesticides, organics, and radiologicals.

Total Organic Carbon, TOC - Monitored at treatment plant			
Regulated Contaminant	Required Monthly % Removal	Minimum Monthly % Removal	Monthly % Removal Ranges
Total Organic Carbon	50	60	60 - 87

Turbidity - Monitored at treatment plant		
Highest Single Measurement (Cannot exceed 1NTU)	Lowest Monthly % of Samples Meeting Turbidity Limit (0.3 NTU in 95% of samples)	Violation
0.18	100 %	No

Disinfectant Residuals – Monitored in the distribution system						
Regulated Contaminant	Unit of Measure	MCLG	MCL	Highest Level Detected	Range of Detection	Violation
Total Chlorine Residual	mg/L	4.0	4.0	4.0	0.2 – 4.0	No

Microbiological Contaminants - Monitored in the distribution system				
Regulated Contaminant	MCLG	MCL	Highest Number detected (in 1 month)	Violation
Total Coliform bacteria	0	The presence of coliform bacteria in > 5% of monthly samples	1	No
<i>E. coli</i> Bacteria	0	0	0	No

Lead & Copper – Monitored from consumers tap					
Regulated Contaminant	Unit of Measure	MCLG	Action Level AL	Number of samples over AL	Total # of Samples Tested from January - September
Lead	ug/L	0	15	16	189
Copper	mg/L	1.3	1.3	0	189

Disinfection By-Products - Monitored in the distribution system and from treatment plant						
Regulated Contaminant	Unit of Measure	MCLG	MCL	Highest Level Detected	Range of Detection	Violation
Total Trihalomethanes (TTHM)	ug/L	n/a	80	90.3	42.6 – 90.3	N/A*
Haloacetic Acids (HAA)	ug/L	n/a	60	15.0	2.0 – 15.0	N/A*
Bromate	ug/L	10	10	N.D.	N/A	N/A*

\*Violation based on locational running annual average for TTHM & HAA5, violation for bromate based on yearly average.

<b>Key to the Detected Contaminant Tables</b>		
<b>Symbol</b>	<b>Abbreviation for</b>	<b>Definition/Explanation</b>
>	Greater than	
AL	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
HAA5	Haloacetic Acids	HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total .
LRAA	Locational Running Annual Average	
MCL	Maximum Contaminant Level	The highest level of a contaminant that is allowed in water. MCLs are set as close to the MCLG's as feasible using the best available treatment technology.
MCLG	Maximum Contaminant Level Goal	The level of contaminant in drinking water below which there is no known or expected risk to health.
mg/L	Milligrams per Liter	A milligram = 1/1000 gram 1 milligram per liter is equal to 1ppm
MRDL	Maximum Residual Disinfectant Level	The highest level of 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 risk to health. MRLDG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
n/a	Not Applicable	
ND	Not Detected	
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water.
pCi/L	Picocuries per Liter	A measure of radioactivity. Picocurie (pCi) means the quantity of radioactive material producing 2.22 nuclear transformations per minute.
ppb	Parts Per Billion (one in one billion)	The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram.
ppm	Parts Per Million (one in one million)	The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.
RAA	Running Annual Average	
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
TTHM	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane and bromoform. Compliance is based on total.
ug/L	Micrograms per Liter	A microgram = 1/1,000,000 gram 1 microgram per liter is equal to 1ppb