

*RE: 2015 Consumer Confidence Report Correction Notice*

*Dear Water Customer;*

*The annual Consumer Confidence Report (CCR) containing water quality information for 2015 was published and sent out in June of 2016. This report has been amended to provide the corrected 2014 Lead and Copper Monitoring 90<sup>th</sup> percentile values. Lead was reported as 2ppb, but should have been listed as 1.2ppb. Copper was reported as 0.09ppm, but should have been listed as 0.114ppm. These 90<sup>th</sup> percentiles values are still well below the health standards for both lead and copper as listed in the report. This information is being sent to you to meet Michigan Department of Environmental Quality and EPA reporting requirements. The method used to calculate the 90<sup>th</sup> percentile value was in error and has been corrected. We apologize for the error.*

*Regards,  
Operation & Maintenance Department  
Division of Water & Waste Services*

The Genesee County Drain Commissioner – Division of Water and Waste Services (GCDC-WWS) is pleased to present its 2015 Consumer Confidence Report.

For the past 43 years, Genesee County and its 19 local communities have been customers of the Great Lakes Water Authority (GLWA) “formerly DWSD”, receiving our water supply from Lake Huron. We will continue to be on this system until our new treatment facility is fully operational in approximately one year, and at that point we will continue utilizing Lake Huron water via the Karegnondi Water Authority (KWA).

**We will see a 17% increase in the cost of water purchased from Detroit this year. This rate increase is solely to cover the added costs from Detroit. The county will not be adding any additional costs to the rate increase. The increase will be effective on your September, 2016 bill.**

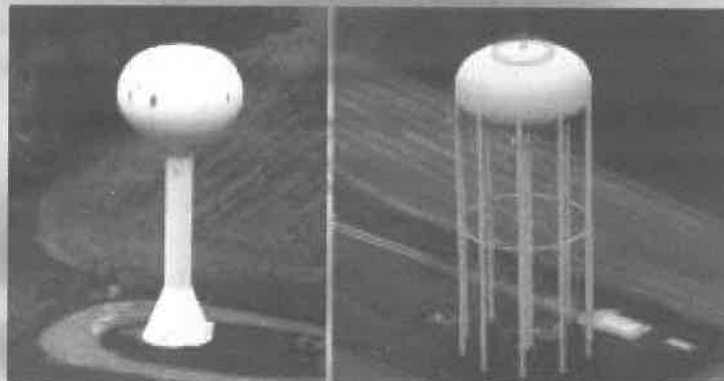
The KWA raw water supply system will be operational later this year. The Genesee County Drain Commissioner’s (GCDC) water treatment plant is scheduled to be operational in June 2017. GCDC will operate the water treatment plant for several months prior to switching systems. The purpose of this period is to prove consistent treatment techniques prior to the switch to KWA.

Please review the information provided.

We appreciate your continued support and should you have any questions, please contact us at the Division of Water and Waste Services at 810-732-7870.

Sincerely,

Jeff Wright, Drain Commissioner  
John F. O’Brien, Director, Division of Water and Waste Services  
Tim Davidek, Assistant Director, Division of Water and Waste Services  
Kevin VanSickle, Water Treatment Plant Superintendent



# 2015 Consumer Confidence Report

(AMENDED JANUARY 2017)

This report contains our water quality data for 2015 required by the United States Environmental Protection Agency

## Water Source

GCDC-WWS is supplied water via the Great Lakes Water Authority, which draws its water from Lake Huron. We distribute that water to nineteen communities within Genesee county. Routine samples are taken from the water distribution system monthly and at various times throughout the year. MDEQ/EPA required tests are performed to ensure safe and reliable drinking water.

## Additional Information

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food & Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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 Safe Drinking Water Hotline (800-426-4791).

The sources for 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 waters 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, or farming.
- Pesticides and herbicides, which may come from a variety of sources including agriculture, urban stormwater runoff and residential use.
- Organic chemical contaminants, including synthetic and volatile organics, 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.

## People with Special Health Concerns

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised persons, such as persons with cancer, who are 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 (Communicable Disease Center) establishes guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants. These are available from the Safe Drinking Water Hotline (800-425-4791).

## How Do I Read This Chart?

It's easy! Our water is tested to assure that it is safe and healthy. These tables are based on tests conducted by GCDC-WWS and the City of Detroit within the last five (5) calendar years. We conduct many tests throughout the year, however, only tests that show the presence of a contaminant are shown here. The table on this page is a key to the terms used in the following tables. Sources of Contaminants show where this substance usually originates.

Key to Detected Contaminants Tables		
Symbol	Abbreviation for	Definition/Explanation
<b>LRAA</b>	Locational Running Annual Average	
<b>MCLG</b>	Maximum Contaminant Level Goal	The level of a contaminant in drinking water below which there is no known or expected risk to health.
<b>MCL</b>	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.
<b>ug/L</b>	Micrograms per liter	A microgram = 1/1000 milligrams • 1 microgram per liter is equal to 1 part per billion (ppb).
<b>MRDLG</b>	Maximum Residual Disinfectant 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.
<b>MRDL</b>	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.
<b>ppb</b>	Parts per Billion (one in one billion)	The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligrams.
<b>ppm</b>	Parts per million (one in one million)	The ppm is equivalent to milligrams per liter. A milligram = 1/1000 grams.
<b>NTU</b>	Nephelometric Turbidity Units	Measures the cloudiness of water.
<b>TT</b>	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
<b>AL</b>	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
<b>HAA5</b>	Haloacetic acids	HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.
<b>TTHM</b>	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane, and bromoform. Compliance is based on the total.
<b>N/D</b>	Not Detected	
<b>pCi/l</b>	picocuries per liter	A measure of radioactivity.
<b>n/a</b>	not applicable	
<b>&gt;</b>	Greater Than	
<b>RAA</b>	Running Annual Average	

## Genesee County Water and Waste Services Detected Contaminants Tables

Regulated Contaminant	Units	Health Goal MCLG	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation yes/no	Major Sources in Drinking Water
<b>2015 INORGANIC Chemicals - Monitoring at the Plant Finished Water Tap</b>							
Fluoride	ppm	4	4	0.43	n/a	no	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	ppm	10	10	0.30	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium (optional)	ppm	n/a	n/a	4.00	n/a	no	Erosion of natural deposits.
<b>2015 DISINFECTION Residual &amp; By-Product Monitoring in Distribution System/Organic Carbon/Turbidity</b>							
Total TriHalonmethanes (TTHM)	ppb	n/a	80	LRAA 26.5	10.9 to 34.4	no	By-product of drinking water chlorination.
Haloacetic Acids (HAA5)	ppb	n/a	60	LRAA 12.5	6 to 17	no	By-product of drinking water disinfection.
Disinfectant (Total Chlorine residual)	ppm	MRDGL 4	MRDL 4	RAA 0.93		no	Water additive used to control microbes.
Total Organic Carbon	Treatment Technique: The Total Organic Carbon (TOC) removal is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC was measured each month and because the level was low, there is no requirement for TOC removal.						Erosion of natural deposits.
Turbidity (NTU)	100% of Samples Meet Turbidity Limit of 0.3 NTU 0.20 NTU (Minimum 95%)					no	Soil Run Off .
Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.							
<b>2015 MICROBIOLOGICAL CONTAMINANTS - Monthly Monitoring in Distribution System</b>							
Total Coliform Bacteria (% positive samples/month)	%	0	>5% of monthly samples	1.1	n/a	no	Naturally present in the environment.
E.coli Bacteria (# positive samples)	#	0	0	none	n/a	no	Human and animal fecal waste.
A violation occurs when a routine sample and repeat sample, in any given month, are total coliform positive, and one is also E-coli positive.							

### 2014 LEAD AND COPPER MONITORING at CUSTOMERS' TAP

Regulated Contaminants	Test Date	Unit	Health Goal MCLG	Action Level AL	90th Percentile Value	Number of Samples Over AL	Violation Yes/No	Major Sources in Drinking Water
Lead	2014	ppb	0	15	1.2	0	no	Corrosion of Household Plumbing Erosion of natural deposits.
Copper	2014	ppm	1.3	1.3	0.114	0	no	Corrosion of Household Plumbing System; Erosion of natural deposits; leaching wood preservatives.
Combined Radium, 5/23/2014 Radium 226 & 228		pCi/L	0	5		Level Detected 0.86+ or -0.55	no	Erosion of natural deposits.

#### 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 the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Before EPA Regulates a contaminant, it considers adverse health effects, the occurrence of the contaminant in drinking water, and whether the regulation would reduce health risk. GCDC began monitoring for 28 unregulated contaminants in 2013. The following tables list the unregulated substances detected during the 2013 & 2014 calendar years.

#### 2013-2014 Unregulated Contaminants - Monitoring at the Source

Contaminant	Unit	Range	Source
Strontium	ppb	88.3-110	Erosion of natural deposits.
Hexavalent Chromium	ppb	0.076-0.13	Discharge from steel and pulp mills; Erosion of natural deposits.
Total Chromium	ppb	0.23-0.46	Discharge from steel and pulp mills; Erosion of natural deposits.
Vanadium	ppb	ND-0.32	Erosion of natural deposits.

#### 2013-2014 Unregulated Contaminants - Monitoring at the Distribution Source

Contaminant	Unit	Range	Source
Strontium	ppb	97.2-106	Erosion of natural deposits.
Hexavalent Chromium	ppb	0.082-0.1	Discharge from steel and pulp mills; Erosion of natural deposits.
Total Chromium	ppb	0.22-0.34	Discharge from steel and pulp mills; Erosion of natural deposits.
Vanadium	ppb	ND-0.23	Erosion of natural deposits.



**Jeff Wright,**  
**Genesee County**  
**Drain Commissioner**  
Water & Waste Services  
G-4610 Beecher Rd.  
Flint, MI 48532



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#### **Important Health Information - 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. Genesee County Water and Waste Services 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 (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.

#### **Opportunities for Public Participation**

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Advisory Board Meetings occur on the third Wednesday of every month, at G-4610 Beecher Road, Flint, Michigan at 9:00 A.M. The public is welcome.

#### **National Primary Drinking Water Regulation Compliance**

We'll be happy to answer any questions about Genesee County Division of Water and Waste Services and our water quality. Call Rich Bysko or Jim Thompson at (810) 732-7870. You may also visit our website <http://www.gdcwsws.com>.

#### **A Message from the Flint River Watershed Coalition (FRWC)**

The mission of the Flint River Watershed Coalition is to protect, preserve, and improve the 142 miles of the Flint River and the 1400 square miles of the watershed. FRWC efforts include educational programs such as Flint River GREEN, recreational activities such as canoe trips, outreach programs, and a speaker's bureau that is available to service clubs and community organizations. These programs are focused on helping residents understand how we can all work to enhance water quality in the Flint River, and providing opportunities to enjoy this local natural resource.

For additional information about Flint River Watershed Coalition, please visit the FRWC website at [www.FlintRiver.org](http://www.FlintRiver.org). You can also find the Coalition on Facebook and Flickr.

#### **Lake Huron Plant Source Water Assessment**

Your source water comes from the lower Lake Huron watershed. The watershed includes numerous short, seasonal streams that drain to Lake Huron. The Michigan Department of Environmental Quality in partnership with the U.S. Geological Survey, the Detroit Water and Sewerage Department, and the Michigan Public Health Institute performed a source water assessment in 2004 to determine the susceptibility to potential contamination. The susceptibility rating is a seven-tiered scale ranging from "very low" to "very high" based primarily on geologic sensitivity, water chemistry, and contaminant sources. The Lake Huron source water intake is categorized as having a moderately low susceptibility to potential contamination. The Lake Huron water treatment plant has historically provided satisfactory treatment of this source water to meet drinking water standards.

In 2015, DWSD received a grant from The Michigan Department of Environmental Quality to develop a source water protection program of the Lake Huron water treatment plant intake. The program includes seven elements that include the following: roles and duties of government units and water supply agencies, delineation of a source water protection area, identification of potential of source after protection area, management approaches for protection, contingency plans, siting of new sources and public participation. If you would like to know more information about the Source Water Assessment report or a complete copy of this report, please contact your water department 810-732-7870.

#### **Reporting Requirements 2014**

We are required to report monitoring results to the DEQ within 3 months after completing the samples. This office was procedurally deficient in the submittal of the 2014 consumer notice of lead form in a timely manner. All the monitoring results were below the action level. The notices have since been submitted.