

Dear Grand Blanc Township Resident:

We are proud to send you a copy of the 2010 Consumer Confidence Report (CCR) for the Grand Blanc Township Water Supply System. You can be confident that the water you use and drink surpasses all Federal, State and Local requirements for public consumption. Grand Blanc Township has always met safe drinking water regulations and did not exceed any maximum contaminant levels during this period.

Our current Water System Plan provides for the necessary infrastructure to provide the Township residents with a reliable and safe water supply system. Several key projects are in the works from both the Township level and the City of Detroit to provide the Township with the highest quality of fresh water at the least amount of cost. As always we continue to upgrade the overall system to provide you water that you can rely on.

Please review this report and feel confident that Grand Blanc Township is providing you with a safe, reliable water supply.

Should you have any questions about your public water, please contact our offices at 810-424-2640 and ask for any of the individuals listed below or visit our web site at www.twp.grand-blanc.mi.us.

Marilyn "Micki" Hoffman - Township Supervisor

Richard Dunnill - Township Manager

Kirk Richardson - Director - Public Works

David Hobson - Assistant Superintendent

website: www.twp.grand-blanc.mi.us.

Water Source

Grand Blanc Township is supplied water from GCDC-WWS, who is supplied water through the City of Flint by the Detroit Water and Sewerage Department, which draws its water from Lake Huron.

Additional Information

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 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:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) 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.
- (C) Pesticides and herbicides, which may come from a variety of sources, such as agriculture, urban stormwater runoff and residential uses.
- (D) 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.
- (E) Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

(In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.)

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 Grand Blanc Township, 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. The column marked Highest Detected Level shows the highest test results during the year. Sources of Contaminant show where this substance usually originates.

Key to Detected Contaminants Tables

Symbol	Abbreviation for	Definition/Explanation
MCLG	Maximum Contaminant Level Goal	The level of contaminant in drinking water below which there is no known or expected risk to health.
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.
MRDLG	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.
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.
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.
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water.
ND	Not Detected	
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
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.
TTHM	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane, and bromoform. Compliance is based on the total.
pCi/l	picocuries per liter	A measure of radioactivity.
n/a	not applicable	
>	Greater Than	

Lake Huron Water Treatment Plant • 2010 Regulated Detected Contaminants Tables

Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level MCL	Level Detected	Range of Detection	Violation yes/no	Major Sources in Drinking Water								
Inorganic Chemicals - Annual Monitoring at Plant Finished Water Tap																
Fluoride	8/2010	ppm	4	4	1.40	0.56-1.40	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.								
Nitrate	8/23/10	ppm	10	10	0.32	n/a	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits								
Barium	6/9/2008	ppm	2	2	0.01	n/a	No	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.								
Disinfectant Residuals and Disinfection By-Products - Monitoring in Distribution System																
Total Trihalomethanes (TTHM)	Feb-Nov 2010	ppb	n/a	80	18.5	9.2-40.1	No	By-product of drinking water chlorination								
Haloacetic Acids (HAA5)	Feb-Nov 2010	ppb	n/a	60	10.1	6.0-17.1	No	By-product of drinking water disinfection								
Disinfectant (Total Chlorine residual)	Jan-Dec 2010	ppm	MRDGL ₄	MRDL ₄	0.78	0.70-0.88	No	Water additive used to control microbes								
2010 Turbidity - Monitored every 4 hours at Plant Finished Water Tap																
Highest Single Measurement Cannot exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)					Violation yes/no	Major Sources in Drinking Water									
0.09 NTU	100%					No	Soil Runoff									
Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.																
Regulated Contaminant	Treatment Technique	Running annual average	Monthly Ratio Range	Violation yes/no	Typical Source of Contaminant											
Total Organic Carbon (ppm)	The Total Organic Carbon (TOC) removal ratio 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										
2010 Special Monitoring																
Contaminant	MCLG	MCL	Level Detected			Source of Contamination										
Sodium (ppm)	n/a	n/a	4.45			Erosion of natural deposits										
Grand Blanc Township Monitoring																
2010 Microbiological Contaminants - Monthly Monitoring in Distribution System																
Contaminant	MCLG	MCL		Highest Number Detected	Violation yes/no	Major Sources in Drinking Water										
Total Coliform Bacteria	0	Presence of Coliform bacteria > 5% of monthly samples		in one month - 0	No	Naturally present in the environment.										
E.coli or fecal coliform bacteria	0	A routine sample and a repeat sample are total coliform positive, and one is also fecal or E.coli positive.		entire year - 0	No	Human waste and animal fecal waste.										
Lead and Copper Monitoring at Customer's Tap																
Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level AL	90th Percentile Value*	Number of Samples Over AL	Violation yes/no	Major Sources in Drinking Water								
Lead	2010	ppb	0	0.015	.002	0	No	Corrosion of household plumbing system; Erosion of natural deposits.								
Copper	2010	ppm	1.3	1.3	0.18	0	No	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives.								
*The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.																
Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation yes/no	Major Sources in Drinking Water								
Disinfectant Residuals and Disinfection By-Products - Monitoring in Distribution System																
Total Trihalomethanes (TTHM)	Jan-June 2007	ppb	n/a	80	15.6	6.5-11.0	No	By-product of drinking water chlorination								
Haloacetic Acids (HAA5)	Jan-June 2007	ppb	n/a	60	12.9	8.0-10.0	No	By-product of drinking water disinfection								
Disinfectant (Total Chlorine residual)	Jan-Dec 2010	ppm	MRDGL ₄	MRDL ₄	.95	0.36-1.52	No	Water additive used to control microbes								

Cryptosporidium

Cryptosporidium is a disease-causing parasite that lives in the intestinal tract of many animals, including dogs and cats. Symptoms of infection include diarrhea, abdominal cramps, headaches, nausea, and vomiting. The disease is typically spread through contact with feces of an infected animal or person and by consuming contaminated food or water. Cryptosporidium can be introduced into bodies of water by way of surface water runoff containing animal waste and sewage discharge. The water supplied to the Genesee County Division of Water and Waste Services has been tested for Cryptosporidium since 1994 and has never been detected in any water supply samples.

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.gcdwws.com>

A Message from the Flint River Watershed Coalition (FRWC)

The Flint River Watershed Coalition's mission is to protect, preserve, and improve our watershed. FRWC efforts include educational programs such as Flint River GREEN, activities such as canoe trips and river walks, and outreach programs such as a speaker's bureau that is available for your service club or organization. These programs, and others, focus on reducing pollution and helping residents understand how we can all work to enhance our water quality.

For additional information about FRWC programs, please visit our website at www.FlintRiver.org. You can also find the Coalition on FaceBook, MySpace, Live Journal, Flickr, and Twitter.

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 Environment 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 of 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 contaminant sources. The Lake Huron water treatment plant has historically provided satisfactory treatment of this source water to meet drinking water standards.

If you would like to have more information about this report or a complete copy of this report, please contact your water department at 810-732-7870.

