



# Water Quality Report

**website <http://www.twp.grand-blanc.mi.us>.**

## **Dear Grand Blanc Township Resident:**

We are proud to send you a copy of the 2005 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.

Among the key projects that will be under construction in the near future is an elevated storage tank at Baldwin Road / Interstate 75 to serve the southeast area of the Township and upgrades to the emergency back-up wells that provide water for the entire Township in the event that there is a disruption in water service.

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

Should you have any questions about your public water, please contact our offices at 810-424-2600 and ask for any of the individuals listed below.

Jeffrey Zittel - Township Supervisor

Wm. Roger Buell, P.E. - Director of Public Services

David Hobson - Assistant Superintendent of Public Works

## 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

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes limits on the amount of certain contaminants in water provided by public water systems. Food & Drug Administration (FDA) regulations establish limits for contaminants in bottled 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 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 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 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.
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.
n/a	Not applicable	
≥	More than or equal to	

## Lake Huron Water Treatment Plant • 2005 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
<b>Inorganic Chemicals - Annual Monitoring at Plant Finished Water Tap</b>								
Fluoride	8/9/2005	ppm	4	4	1.41	n/a	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	8/9/2005	ppm	10	10	0.41	n/a	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

<b>Disinfectant Residuals and Disinfection By-Products - Monitoring in Distribution System</b>								
Total Trihalomethanes (TTHM)	Feb-Dec 2005	ppb	n/a	80	19.9	10..7-23.2	No	By-product of drinking chlorination
Haloacetic Acids (HAA5)	Feb-Dec 2005	ppb	n/a	60	16.2	5.7-13.8	No	By-product of drinking water disinfection
Disinfectant (Total Chlorine residual)	Jan-Dec 2005	ppm	MRDGL 4	MRDL 4	0.75	0.53-0.75	No	Water additive used to control microbes

<b>Radioactive Contaminants-Plant Finished Water Tap</b>								
Alpha Emitters	11/16/2001	pCi/l	0	15	3.19	n/a	No	Erosion of Natural Deposits

<b>2005 Turbidity - Monitored every 4 hours at Plant Finished Water Tap</b>								
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	
0.15 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 requirements for TOC removal.				Erosion of natural deposits

### 2005 Special Monitoring

Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Contaminant	MCLG	MCL	Level Detected	Source of Contamination
Sodium (ppm)	n/a	n/a	4.47	Erosion of natural deposits

### Grand Blanc Township Monitoring

<b>2005 Microbiological Contaminants - Monthly Monitoring in Distribution System</b>					
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	<b>in one month - 0</b>	No	Naturally present in the environment.
<i>E.coli</i> or fecal coliform bacteria	0	A routine sample and a repeat sample are total coliform positive, and one is also fecal or <i>E.coli</i> positive.	<b>entire year - 0</b>	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	2004	ppb	0	0.015	.002	0	No	Corrosion of household plumbing system; Erosion of natural deposits.
Copper	2004	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
<b>Disinfectant Residuals and Disinfection By-Products - Monitoring in Distribution System</b>								
Total Trihalomethanes (TTHM)	Sept-Dec 2005	ppb	n/a	40	21.5	9.1-26.0	No	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	Sept-Dec 2005	ppb	n/a	30	12.5	9.0-15.0	No	By-product of drinking water disinfection
Disinfectant (Total Chlorine residual)	Jan-Dec 2005	ppm	MRDGL 4	MRDL 4	0.96	0.45-1.17	No	Water additive used to control microbes

## **Guideline for Water Advisories issued by Grand Blanc Township:**

### **Water Conservation Program**

The Township's Water Conservation Program allows outdoor water use on Tuesday, Thursday and Saturday from Memorial Day to Labor Day.

#### **Low Pressure Notice:**

This would be issued during periods of high demand where water pressure falls below the optimum water pressure levels but maintains pressure above the minimum allowed.

During times of low or reduced pressure all commercial and residential users are required to conserve water by limiting their water use.

#### **Total Water Bans:**

Total Water Bans are issued for several reasons, some of the most common are: extensive power outages, interruption of service from the main supply line or system demands that are greater than the system can supply. During times of Total Water Bans, commercial and residential users are required to limit their water use and suspend all outdoor water use.

#### **Boil Water Notice:**

A Boil Water Notice would be issued as a result of the system water pressure falling below the minimum pressure allowed. If pressure is zero (0) or below, it can allow contamination - particularly microbiological contamination of the system.

If this notice is issued, residents on the public water system must boil water for 10 minutes (rolling boil) and allowed to cool before drinking. This will destroy or deactivate pathogens.

An option in lieu of boiling water from the public water supply system would be to use commercially bottled water and commercially bagged ice for consumption.

Also, follow these basic precautions:

- Discard all beverages, food, and ice made with questionable water.
- Water may be used for showering, general cleaning purposes, washing hands, washing dishes and utensils, and flushing toilets.
- Use hot water when washing dishes or cooking utensils.
- Use boiled water or commercial bottled water for brushing teeth, consumption, feeding pets, and washing foods.
- Once your water service is restored and deemed safe to drink by the supplier or your public health department, open all your faucets and flush your plumbing system for 15 minutes.
- Food Service Facilities must contact their local health department immediately.

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

The Flint River Watershed Coalition seeks to protect, preserve and improve the quality of our water - and the watershed. FRWC is involved in educational programs, including Earthforce Project GREEN, the Phase II Stormwater Project and a Watershed Short Course. These programs, and others, are all directed at reducing pollution and helping others to understand how they can utilize good environment practices to enhance our water quality. A speaker's bureau is available to your service club or organization.

**For additional information about these or other programs to improve water quality, please visit our website at <[flinriver.org](http://flinriver.org)> or call us at (810) 767-6490.**

## **Important Health Information - Lead**

Since 1992, with the cooperation of many residents, Grand Blanc Township has been testing homes with plumbing systems that may contribute lead to the household water supply. If your home has a lead service line or piping that has lead soldered joints, you can take the following precautions to minimize your exposure to lead that may have leached into your drinking water from your pipes.

Run your water for 30 to 60 seconds, or until it feels cold. This practice should be followed anytime your water has not been used for more than 6 hours.

Always use cold water for drinking, cooking or making baby formula.

Use faucets and plumbing materials that are either lead-free or will not leach unsafe levels of lead into your water.

## **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) guidelines on appropriate means to lessen the risk of infection are available from the Safe Drinking Water Hotline (800-426-4791).

## **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 Grand Blanc Township 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 Board Meetings occur on the second Thursday of every month, at 5371 South Saginaw Street, Grand Blanc, Michigan at 7:30 P.M. The public is welcome.

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

We'll be happy to answer any questions about Grand Blanc Township Services and our water quality. Please call any of the individuals previously noted in this publication. You may also visit our website <http://www.twp.grand-blanc.mi.us>.

