Toilet Leaks

Toilet problems can be easy to detect. If your toilet runs all of the time or runs in the middle of the night, you are wasting water. Sometimes toilet leaks are “silent.” If you think your toilet may be leaking, there is a simple procedure to test for a leak.

Remove the toilet tank lid from the back of the toilet. Add a colored liquid such as coffee or a few drops of food coloring to the water. Wait 30 minutes and check to see if the water in the toilet bowl has changed color. If so, there’s a toilet leak.

Another way to detect water loss is to shut off the water supply to the toilet. Remove the lid from the toilet tank and draw a line with a pencil at the water level. Leave the toilet out for one hour or after the hour and see if the water level has changed. If so, there’s a leak.

If you have more than one toilet, make sure that you’ve checked all of them.

Leak Detection

A drip the size of the tip of a ballpoint pen (1/16”) wastes 74,000 gallons a quarter. The cost of that could add over $200.00 to your quarterly bill. A household with four toilets that “keeps running” could waste 296,000 gallons a quarter amounting to an extra $800.00 on your quarterly bill. A water meter shows any water using that is not being used. If your water bill is not the same as your water use, there may be wasted water.

The Grand Rapids City Commission, which sets policies for the Water System, meets on Tuesdays for meetings and dates and times, call 456-3106. This report is available on the internet through the City’s website at:

http://www.grcity.us

Our job is to provide quality water with the overall quality of life.

Leakage

When toilets and faucets are not operated properly, they can leak. Leaks can cause a waste of water that can be seen or heard, but some may not be so obvious. If you are unsure whether you have a leak, the easiest way to detect one is to use your water meter. In most cases, the water meter is located in the basement near the front of your home. Find a time when the house will be empty for two or more hours or before going to bed when no water will be used. Write down all the numbers from the inside water meter. When you return home or wake in the morning, before any water is used, write down all the numbers from the meter again. Compare the numbers. If the numbers have changed, there is a leak somewhere. If the numbers are the same, you are using all of the water that you are being billed and do not have a leak.

We’re Here to Protect Your Water and Help You Conserve

The Grand Rapids Water System is not a “for profit” organization. Our job is to provide quality water with quality service. No customer pays a larger than normal bill due to an undetected leak. Nor do we want to see any of our most precious commodities—water wasted.

Most billing cycles are three months long. Our staff does monitor for higher than normal water usage and may include a message at the bottom of your water bill indicating an increase in usage. However, if you have not increased your normal water use and you receive a higher than expected bill, it would be wise to check for a leak.

Should you realize you have a leak and have it repaired, we will work with you to adjust your bill. Please contact a customer service representative to discuss whether you qualify for a leak adjustment on your billed water consumption.

While we safeguard your water, you must safeguard your meter and pipes. You may have your water shut off the water supply to the faucet and removing the handle. If the faucet still leaks, it could be the result of a bad rubber washer. The washer on a sink faucet is an easy repair. The washer on a bathtub faucet is a bit more difficult. If the leak persists, you will need to call a plumber for help. In many cases, the cost of a repair may not be greater than the money you save and the amount of water you won’t waste may be “priceless.”

Grand Rapids Water System

Mission Statement

Produce and deliver excellent water to our customers that will protect public health, support the economy, protect life and property from the threat of fire and contribute to overall quality of life. 

Water Quality Report

Water is a basic human need and quality water is required to protect health as well as promote economic growth. The Water System’s core responsibility is to continuously provide excellent drinking water. The City of Grand Rapids Water System provides water quality information to its customers through its annual Water Quality Report. This information is provided in compliance with the Safe Drinking Water Act.

In order to safeguard our drinking water, our committed, trained and qualified staff operators and monitors the Water System 24 hours a day, seven days a week. Thousands of samples are confirmed on samples drawn from our distribution system throughout the service area. Our goal is to be certain that your water quality meets all the requirements mandated by the Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (MDEQ). We use meter. Most customers have their homes during the winter to enjoy a warmer weather. During your absence, Michigan temperatures dip. No one wants to return to a house that has flooded due to frozen water pipes and/ or water meter. If your house will be vacant for a length of time, please call a customer service representative prior to leaving town to discuss the different options you have to help ensure that the meter and pipes are in proper working order upon your return.

You know whether you have a drippy faucet or running toilet. Most leaks can be found. Upon your return home or wake in the morning, write down all the numbers from the meter again. Compare the numbers. If the numbers have changed, there is a leak somewhere. If the numbers are the same, you are using all of the water that you are being billed and do not have a leak.

You know whether you have a dripping faucet or running toilet. Most leaks can be found. Upon your return home or wake in the morning, write down all the numbers from the meter again. Compare the numbers. If the numbers have changed, there is a leak somewhere. If the numbers are the same, you are using all of the water that you are being billed and do not have a leak.
Toilet Leaks

Toilet problems can be easy to detect. If your toilet runs all the time or the middle of the night, you are wasting water. Sometimes toilet leaks are “silent”. If you think your toilet may be leaking, there is a simple procedure to test for a leak:

Remove the toilet tank lid from the back of the toilet. Add a colored liquid such as coffee or a few drops of food coloring to change the color of the water. Wait 30 minutes and check to see if the water in the toilet bowl has changed color. If so, there's a leak.

Another way to detect water loss is to shut off the water supply to the toilet. Remove the lid from the toilet tank and draw a line with a pencil at the water level in the tank. Leave the toilet for one hour. Go back after the hour and see if the water level has changed. If so, there’s a leak.

If you have more than one toilet, make sure that you’ve checked all of them. Sometimes more than one toilet may be leaking. A leaking toilet leak problem is the rubber flapper in the base of the toilet. The replacement gasket is easily installed and not very costly.

Faucet Leaks

A drip the size of the tip of a ballpoint pen (1/16") wastes 74,000 gallons a quarter. The cost of that could add over $200.00 to your quarterly bill. A continuous stream of water equal to 1/8” would waste 296,000 gallons a quarter amounting to an increase in usage. So if you have not increased your normal water use and you receive a bill higher than expected bill, it would be wise to check for a leak.

Should you realize you have a leak and have it repaired, we will work with you to adjust your bill. Please contact a customer service representative to discuss whether you qualify for a leak adjustment on your billed water consumption.

While we safeguard your water, you must safeguard your meter and pipes. Sometimes, through no fault of your own, there are other sources of leaks. If you determine your leak is not from toilets or faucets, then you should consider contacting a plumber. Though you may have to pay a plumber to fix your leak, the cost is less than the amount you may pay for the water lost. 

There are other places where leaks may be seen or heard, but some may not be so obvious. If you are unsure whether you have a leak, the easiest way to detect one is to use your water meter. In most cases, the water meter is located in the basement near the front of your home. Find a time when the house will be empty for two or more hours or before going to bed when no water will be used. Write down all the numbers from the inside water meter. When you return home or wake in the morning, compare the numbers. If the numbers have changed, there is a leak somewhere. If the numbers are the same, you are using all of the water that you are being billed and do not have a leak.

Other Places to Look

While toilets and faucets are the most common causes of leaks, they can occur from other sources. If you determine your leak is not from toilets or indoor faucets. Other places you may check are your yard, aboveground, water heaters, furnace humidifier, ice cube maker, outside faucets, water softeners, water purifiers, lawn irrigation systems and crawl spaces. Locating a leak may take time and the cost of a repair may not be covered by your insurance policy, but the money you save and the amount of water you won't waste may be "priceless".

Grand Rapids Water System

Mission Statement

Produce and deliver excellent water to our customers that will protect public health, support the economy, protect life and property from the threat of fire and contribute to overall quality of life.

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In order to safeguard our drinking water, our committed, trained and qualified staff operators and maintenance personnel monitor the Water System functions 24 hours a day, seven days a week. Thousands of routine tests are performed on samples drawn from our distribution system throughout the service area. Our goal is to be certain that your water quality meets all the requirements mandated by the Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (MDEQ). We are pleased to inform you that we have reached that goal! Our customers continue to receive the safe and quality water you expect from your tap.

The data table, within this report, contains the monitoring results for regulated samples collected and analyzed in 2007. The Grand Rapids Water System monitors many regulated substances more frequently than required, and as a consequence, these results are not included in the table. These values are not typical water quality values for the Grand Rapids Water System.

Drip, Drip, Drip

Water is a precious commodity. While water may not be something you think about constantly, it costs less than one cent per gallon, doesn’t waste or your money by not fixing a leak. Your water is billed on a unit basis. One unit equals 100 cubic feet or 748 gallons. A slow drip of water can add up quickly to gallons. Thousands of gallons of water can be wasted from a leak that “keeps running” after you flush or a sink that drips after it is turned off. Many leaks are costly to repair, and a few bad habits could be the difference between a few dollars you may pay for wasted water. Your local home improvement store or hardware can offer you advice or provide replacement parts for many repairs.

Leak Detection

You know whether you have a dripping faucet or running toilet. Most leaks can be seen or heard, but some may not be so obvious. If you are unsure whether you have a leak, the easiest way to detect one is to use your water meter. In most cases, the water meter is located in the basement near the front of your home. Find a time when the house will be empty for two or more hours or before going to bed when no water will be used. Write down all the numbers from the inside water meter. When you return home or wake in the morning, compare the numbers. If the numbers have changed, there is a leak somewhere. If the numbers are the same, you are using all of the water that you are being billed and do not have a leak.
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Remove the toilet tank lid from the back of the toilet. Add a colored liquid such as coffee or a few drops of food coloring to change the color of the water. Wait 30 minutes and check to see if the water in the toilet bowl has changed color. If so, there's a toilet leak.

Another way to detect water loss is to shut off the water supply to the toilet. Remove the lid from the toilet tank and draw a line with a pencil at the water level in the tank. Leave the toilet for one hour. Go back after the hour and see if the water level has changed. If so, that's a leak.

If your house has more than one toilet, make sure that you've checked all of them. Sometimes more than one toilet may be leaking. The most common toilet leak problem is the rubber flapper in the base of the toilet. The replacement gasket is easily installed and not very costly.

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Toilet Leaks

Toilet problems can be easy to detect. If your toilet runs all the time or runs in the middle of the night, you are losing money. Fix it quickly and you will save money.

A leaky toilet is a water waster. It is not hard to detect. If you feel comfortable doing the repair yourself, contact a customer service representative prior to leaving town to discuss the different options available to you.

If you have questions regarding leaks or other service related issues, please call our customer service representative at 456-3200. A message at the bottom of your water bill indicating an increase in usage may serve as a warning that your water bill will increase of over $800.00 on your quarterly bill.

A drip the size of the tip of a ballpoint pen (1/16") wastes 74,000 gallons a quarter. The cost of that could add over $200.00 to your quarterly bill. A drip of water can add up quickly to gallons. Thousands of gallons of water can be wasted from a toilet that “keeps running” after you flush or a sink that drips after it is turned off. Many customers do not know that this is happening.

If you don’t feel comfortable doing the repair yourself, contact a plumber. Your local home improvement store or hardware can offer you the repair service. Repairing a leak is less costly than the amount you may pay for wasted water. Your local home improvement store or hardware can offer you the repair service.

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We're Here to Protect Your Water and Help You Conserve

The Grand Rapids Water System is not a “for profit” organization. Our job is to provide quality water with quality service. No customer wants a larger than normal water bill due to an undetected leak.

Not all leaks are easily detected. Some leaks are located inside faucets. Other places you may check are your tub, shower head, water purifiers, lawn irrigation systems and crawl spaces. Locating a leak may take time and the cost of a repair may not be on the top of your priority list, but the money you save and the amount of water you won’t waste may be “priceless.”
**About Contaminants:**

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: microbials, inorganic contaminants, organic contaminants and pesticides, polycyclic aromatic hydrocarbons, radionuclides, and by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water and sanitary sewer systems, and Radioactive contaminants can be naturally-occurring or be the result of oil and gas production and mining activities.

**Turbidity - Nephelometric Turbidity Unit:**

Measurements of the minute suspended particles. An indicator of the effectiveness of our filtration system. A measure of the clarity of the water. We monitor it because it is a good indicator of the quality of the treatment we use. Turbidity is expressed as Nephelometric Turbidity Units (NTU). A reading of zero is perfect clarity; one or more units shows that the water is cloudy.

**Parts per Billion:**

Your rich uncle passes away and leaves you $10 million. However, you're still only one hundred dollars poorer. That's 1 ppm.

**Parts per Million:**

You win a one million-dollar lottery. You give a friend one cent. That's 1 ppm.

**Maximum Residual Disinfectant Level Goal:**

The level of drinking water disinfectant required to control microbial contaminants.

**Maximum Residual Disinfectant Level:**

The highest level of disinfectant allowed in drinking water.

**Maximum Contaminant Level Goal:**

The level of a substance in drinking water allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level:**

This is the highest level of a substance that is allowed in drinking water.

**Treatment Technique:**

A required process intended to reduce the level of a substance in drinking water. These are often technologies that have been proven effective in the control of microbial contaminants.

**Action Level:**

The amount of a substance when exceeded requires a treatment or other response by a water system.

**Key:**

- AL = Action Level
- n/a = Not applicable
- ND = not detected
- ppm = parts per million
- ppb = parts per billion
- % = Percent
- NTU = Nephelometric Turbidity Units
- MCL = Maximum Contaminant Level Goal
- MCLG = Maximum Contaminant Level Goal
- MRDL = Maximum Residual Disinfection Level Goal
- MRDLG = Maximum Residual Disinfection Level Goal
- ppb = parts per billion
- % = Percent
- NTU = Nephelometric Turbidity Units
- MCL = Maximum Contaminant Level Goal
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**Water Quality Table Key and Definitions**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>Range of Detections</th>
<th>Highest Level Detected</th>
<th>MCL or MRDL</th>
<th>MCLG or MRDLG</th>
<th>Violations</th>
<th>Likely Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>ppm</td>
<td>0.004 - 0.115</td>
<td>0.015</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>Lead</td>
<td>ppm</td>
<td>0.017 - 0.15</td>
<td>0.05</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>Sodium</td>
<td>ppm</td>
<td>7 - 10</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>None</td>
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</tbody>
</table>

**Unregulated Contaminants**

Substance | Units | Range of Detections | Violations | Likely Sources |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pesticides and herbicides</td>
<td>n/a</td>
<td>not detected</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Microbial contaminants</td>
<td>n/a</td>
<td>not detected</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Radioactive contaminants</td>
<td>n/a</td>
<td>not detected</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Water Quality Data**

**Regulated at the Treatment Plant**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>Range of Detections</th>
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<th>MCLG or MRDLG</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform</td>
<td>NTU</td>
<td>0.013 - 0.111</td>
<td>0.111</td>
<td>TT</td>
<td>n/a</td>
<td>No</td>
<td>Soil runoff</td>
</tr>
</tbody>
</table>

**Regulated in the Distribution System**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>Range of Detections</th>
<th>Maximum Running Annual Average</th>
<th>MCL or MRDL</th>
<th>Violations</th>
<th>Likely Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine Residual</td>
<td>ppm</td>
<td>0.0 - 1.0</td>
<td>1.0</td>
<td>No</td>
<td>n/a</td>
<td>No water additive used to control microbes</td>
</tr>
</tbody>
</table>

**Regulated at the Customer’s Tap**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>Range of Detections</th>
<th>90th Percentile</th>
<th>AL</th>
<th>MCL</th>
<th>% of Samples exceeding AL</th>
<th>Likely Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbidity*</td>
<td>NTU</td>
<td>0.013 - 0.111</td>
<td>0.111</td>
<td>TT</td>
<td>n/a</td>
<td>No Soil runoff</td>
<td></td>
</tr>
</tbody>
</table>

**Water Quality Data**

**Regulated at the Treatment Plant**

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<th>Highest Level Detected</th>
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<tbody>
<tr>
<td>Chlorine Residual</td>
<td>ppm</td>
<td>0.0 - 1.0</td>
<td>1.0</td>
<td>No</td>
<td>n/a</td>
<td>No water additive used to control microbes</td>
</tr>
</tbody>
</table>

**Regulated at the Customer’s Tap**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>Range of Detections</th>
<th>90th Percentile</th>
<th>AL</th>
<th>MCL</th>
<th>% of Samples exceeding AL</th>
<th>Likely Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbidity*</td>
<td>NTU</td>
<td>0.013 - 0.111</td>
<td>0.111</td>
<td>TT</td>
<td>n/a</td>
<td>No Soil runoff</td>
<td></td>
</tr>
</tbody>
</table>

**Unregulated Contaminants**

Substance | Units | Range of Detections | Violations | Likely Sources |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pesticides and herbicides</td>
<td>n/a</td>
<td>not detected</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Microbial contaminants</td>
<td>n/a</td>
<td>not detected</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Radioactive contaminants</td>
<td>n/a</td>
<td>not detected</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>
About Contaminants:

The sources of drinking water (both tap water and bottled water) include 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: microbial contaminants such as viruses and bacteria which may come from sewage treatment plants, storm sewers, agricultural activities, and wildlife; inorganic contaminants such as salts and metals which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, mining, or farming; and pesticides and herbicides which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. Chemical contaminants are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water, septic systems, and spills. Radionuclide contaminants can be naturally occurring or be the result of oil and gas production and mining activities.

### Water Quality Table Key and Definitions

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>Range of Detections</th>
<th>Average</th>
<th>Likely Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To Total Organic Carbon</strong></td>
<td>ppm</td>
<td>7 - 10</td>
<td>8</td>
<td>Mineral and natural</td>
</tr>
</tbody>
</table>

### Regulated at the Treatment Plant

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>Range of Detections</th>
<th>Highest Level Detected</th>
<th>MCL</th>
<th>MCLG</th>
<th>Violations</th>
<th>Likely Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chlorinated Solvents</strong></td>
<td>ppt</td>
<td>200 - 0.9</td>
<td>0.9</td>
<td>TT</td>
<td>n/a</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td><strong>Haloacids</strong></td>
<td>ppm</td>
<td>4.8 - 3.0</td>
<td>0.9</td>
<td>TT</td>
<td>n/a</td>
<td>No</td>
<td>Producers of drinking water chlorine</td>
</tr>
<tr>
<td><strong>Barium</strong></td>
<td>ppm</td>
<td>0.037 - 0.023</td>
<td>0.023</td>
<td>TT</td>
<td>n/a</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td><strong>Sodium</strong></td>
<td>ppm</td>
<td>7 - 10</td>
<td>8</td>
<td>TT</td>
<td>n/a</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
</tbody>
</table>

### Regulated in the Distribution System

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>Range of Detections</th>
<th>Maximum Running Annual Average</th>
<th>MCL</th>
<th>MCLG</th>
<th>Violations</th>
<th>Likely Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chlorophyll-a</strong></td>
<td>n/a</td>
<td>0.004 - 0.155</td>
<td>0.015</td>
<td>TT</td>
<td>n/a</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
</tbody>
</table>

### Unregulated Contaminants

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>Range of Detections</th>
<th>Average</th>
<th>Likely Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pesticides and herbicides</strong></td>
<td>ppt</td>
<td>0.004 - 0.155</td>
<td>0.015</td>
<td>TT</td>
</tr>
</tbody>
</table>

### Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include 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.
About Contaminants:
The sources of drinking water (both tap water and bottled water) include 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: Microbial contaminants such as viruses and bacteria which may come from septic systems, agricultural livestock operations and wildlife, Inorganic contaminants such as salts and metals which can be naturally occurring or result from urban storm water runoff, industrial or domestic waste sources, mining or farming, Pesticides and herbicides which may come from a variety of sources such as agriculture, urban storm water runoff and residential use, Organic chemical contaminants and by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water drainage systems, and Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities.

**Water Quality Table Key and Definitions**

MCL - Maximum Contaminant Level: This is the highest level of a substance that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG - Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

MRDL or MRDLG - Maximum Residual Disinfectant Level or Maximum Residual Disinfectant Level Goal: The level of drinking water disinfectants that is necessary for control of microbial contaminants.

MRDLG - Maximum Residual Disinfectant Level Goal: The level of disinfectant allowed in drinking water. There is evidence that disinfectants are necessary for control of microbial contaminants.

Turbidity*: NTU = Nephelometric Turbidity Units AL = Action Level

Unregulated Contaminants

Substance Units Range of Detections Highest Level Detected MCL or MRDL MCLG or MRDLG Violations Likely Sources

**No Cryptosporidium Detected**

No detections in drinking water provided by public water systems. Sources of drinking water worldwide (both tap and bottled) may reasonably be expected to contain at least small amounts of some contaminants. Though contaminants are present, it does not necessarily indicate that the water poses a health risk. We treat our water according to EPA regulations.

EPA's health-based standards for drinking water are generally safe, but some people may be more vulnerable to contaminants in drinking water than the general population. Some infants, children or elderly individuals, or those who have undergone organ transplants, people with HIV/AIDS or persons receiving chemotherapy can be at risk for infections. These people should seek advice from their health care providers. More information on potential health effects and potential steps you can take to minimize exposure is available by contacting the EPA's Safe Drinking Water Hotline at 1(800) 426-4791 or their website at http://www.epa.gov/safewater.

**SOURCE WATER ASSESSMENT**

Lake Michigan is the sole source of water treated for the Grand Rapids Water System. This is considered a surface water source. The MDEQ completed a Source Water Assessment for the City of Grand Rapids water supply in 2005. This assessment evaluates the potential risk of contamination based on several factors including geology, hydrogeology, water chemistry and contaminant sources. Risk assessment is critical in protecting the source water from future contamination. Environment contamination is not likely to occur when potential contaminants are used and applied properly.

The Grand Rapids Water Treatment Plant routinely and consistently monitors the water for a variety of chemicals to assure safe drinking water. Industrial chemicals that have not been detected in our source or treated water. The Grand Rapids Water System continues to be involved in and supports wastewater protection efforts. Anyone wanting additional information about the Source Water Assessment or has questions concerning the water quality testing results in this report may contact:

John Allen, Filtration Plant Superintendent
(616) 456-3700 or jallen@grpw.us
Patty Chapman, Chemist II
(616) 456-3700 or pchapman@grpw.us

**YOUR PLUMBING SYSTEM**

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, not from the water itself. Lead is not removed by conventional treatment technologies. The Grand Rapids Water System 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 cooking or drinking. If you are concerned about possible 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 at (800) 426-4791 or their website at http://www.epa.gov/safewater.