Our water source is Lake Michigan

We boast about our pre-filtered water and consider it the best source in West Michigan.

Water is collected through submerged intakes located several feet under the bottom of Lake Michigan and is pre-filtered as it enters the treatment facility. The natural sand above the intakes provide the pre-filter barrier which compliments the plant’s direct filtration process.

We are pleased to report that your drinking water is safe and meets the Federal and State of Michigan drinking water health standards. The Northwest Ottawa Water System (NOWS) treatment plant and Grand Haven Charter Township routinely monitor for a variety of dissolved mineral and organic substances in your drinking water pursuant to state and federal laws.

This report is designed to give you detailed information which will ensure you of the quality of your drinking water. The tables in this brochure show the results of this monitoring from January 1st through December 31st, 2015.

GRAND HAVEN, MI 49417
13300 168TH AVENUE
GRAND HAVEN CHARTER TOWNSHIP
U.S. POSTAGE
PAID
GRAND RAPIDS, MI
PERMIT NO. 1

Continued on back page

2015 Annual Drinking Water Quality Report
Northwest Ottawa Water System—Grand Haven Charter Township, City of Grand Haven, Village of Spring Lake, City of Ferrysburg, Spring Lake Township and Crockery Township

Grand Haven Charter Township is pleased to present this year’s Drinking Water Quality Report. This report is designed to inform you about the quality of the water we deliver to you everyday. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your drinking water.

If you have any questions about this report or your drinking water, please contact the Water Facilities Manager Joe VanderStel at 847-3487 or jvanderstel@grandhaven.org.

Moreover, to provide you with an opportunity for public participation in decisions, some of which might affect drinking water quality, the public is invited to attend the bi-monthly NOWS Administrative Committee meetings held at the Water Plant Conference Room. You may call Grand Haven Charter Township for an up-to-date meeting schedule.

All drinking water, including bottled water, may be reasonably expected to contain at least a small amount of some contaminants. It’s important to remember that the presence of these substances does not necessarily indicate that the water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline at 1-800-426-4791

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer 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 guidelines on appropriate means to lessen the risk of cryptosporidium and other microbial contaminants are also available from the Safe Drinking Water Hotline.

The sources of drinking water (both tap and bottled water) include rivers, streams, lakes, ponds, reservoirs, and springs. 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.

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MCLG’s allow for a margin of safety. The next scheduled testing period is 2016.

### REGULATED MONITORING AT THE TREATMENT PLANT

#### Substances

<table>
<thead>
<tr>
<th>Substance</th>
<th>Unit Measurement</th>
<th>Range of Detection</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>ppb</td>
<td>0 — 7</td>
<td>AL=15</td>
<td>Corrosion of household plumbing systems</td>
</tr>
<tr>
<td>Copper</td>
<td>ppb</td>
<td>0 — 118</td>
<td>AL=1,300</td>
<td>Water additive that promotes strong teeth</td>
</tr>
</tbody>
</table>

### UNREGULATED CONTAMINANTS MONITORING RULE (UCMR3)

As your supplier we found it necessary to inform our customers that the required “unregulated contaminants monitoring” round 3 results for 2014 (Assessment Monitoring) are available.

This monitoring series concludes in July 2015. The intent of this rule is to provide baseline occurrence data to help EPA combine with toxicological research to make decisions about potential future drinking water regulations. For more information concerning these “unregulated contaminants” please feel free to contact our water plant staff at 847-3487.

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

The Northwest Ottawa Water System did not meet the treatment requirements. The water filtration plant violated a regulatory operational process. As our customers you have a right to know what happened, what you should do and what we did to correct this situation.

The water filtration plant is required by regulation to add a compound (coagulant) to our pre-filtered Lake Michigan source water to aid in the removal of impurities through filtration while the plant is in operation. On December 31, 2015 and January 1, 2016 that compound (coagulant) was not added due to a mechanical failure. Since this mixture was missing, these impurities could potentially pass through the filtration process carrying disease-causing organisms.

What should you do? There is nothing you need to do at this time. The problem was corrected and repaired on January 2, 2016. The water continued to be monitored throughout the event, and none of the routine sampling indicated anything out of the ordinary. We do not know of any contamination, and none of our testing has shown disease-causing organisms in the drinking water.

What happened? What was done? A pump that supplies this compound (coagulant) to our source water was unable to deliver the mixture due to a blockage in a supply line. Plant staff repaired the line and returned the process back to normal, adding the proper substance that produces coagulation. Staff monitored the application process before and after the repairs and confirmed that the Northwest Ottawa Water System continues to receive safe and reliable drinking water.

For more information, please contact: Mr. Joe VanderStel Water Facilities Manager (616) 847-3487 or Mr. Mark VerHerkens Grand Haven Township Public Services Director (616) 604-6131.

### REGULATED MONITORING AT THE CUSTOMER TAP

#### Substances

<table>
<thead>
<tr>
<th>Substance</th>
<th>Violation</th>
<th>Highest Level Detected</th>
<th>Unit Measurement</th>
<th>Range of Detection</th>
<th>MCL</th>
<th>MCLG</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>No</td>
<td>0</td>
<td>ppb</td>
<td>0 — 7</td>
<td>AL=15</td>
<td>0</td>
<td>Corrosion of household plumbing systems</td>
</tr>
<tr>
<td>Copper</td>
<td>No</td>
<td>46.1</td>
<td>ppb</td>
<td>0 — 118</td>
<td>AL=1,300</td>
<td>1,300</td>
<td>Water additive that promotes strong teeth</td>
</tr>
</tbody>
</table>

### REGULATED AND UNREGULATED MONITORING AT THE TREATMENT PLANT AND DISTRIBUTION SYSTEM

#### Substances

<table>
<thead>
<tr>
<th>Substance</th>
<th>Violation</th>
<th>Highest Level Detected</th>
<th>Unit Measurement</th>
<th>Range of Detection</th>
<th>MCL</th>
<th>MCLG</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform Bacteria</td>
<td>No</td>
<td>0% System Wide</td>
<td>Presence or absence</td>
<td>Never Detected</td>
<td>5% of monthly samples</td>
<td>Naturally present</td>
<td></td>
</tr>
</tbody>
</table>

#### Turbidity

- **3 NTU in 95% of the samples every month**
- **Soil runoff (Turbidity is a measure of the cloudiness of the water.)**
- **Water additive that promotes strong teeth**

#### Chlorides

- **0.12 — 1.90** ppm
- **Not Detected**

#### Regulated and Unregulated Monitoring at the Treatment Plant and Distribution System

<table>
<thead>
<tr>
<th>Substance</th>
<th>Unit Measurement</th>
<th>Range of Detection</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorides</td>
<td>ppm</td>
<td>1 sample/year</td>
<td>0.2</td>
<td>Discharge from metal factories; discharge from plastic and fertilizer factories</td>
</tr>
</tbody>
</table>

### DEFINITIONS

- **Parts per million (ppm)** - A measurement of concentration. One part per million corresponds to one minute in 2 years.
- **Parts per billion (ppb)** - A measurement of concentration. One part per billion corresponds to one minute in 2000 years.
- **Maximum Contaminant Level (MCL)** - The “maximum allowed” (MCL) is the highest level of contaminant that is allowed in drinking water. MCL’s are set close to the MCLG’s as feasible using the best available treatment technology.
- **Action Level (AL)** - The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.
- **Maximum Contaminant Level Goal (MCLG)** - The “Goal” (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG’s allow for a margin of safety.
- **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **NTU** - Nephlometric Turbidity Unit. Turbidity level shall not exceed 0.3 NTU in 95% of the samples every month. This is the measurement of suspended material that is found in water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
- **pCi/L** - pico curies per liter (a measure of radioactivity).
- **Unregulated Monitoring** - Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where these contaminants occur and whether it needs to regulate them.
- **Gross Alpha emitters, Radium 226 & 228** - Radionuclide contaminants that give off ionizing radiation. The state allows NOWS to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All data is representative of the water quality, but some are more than one year old.
- **Maximum Residual Disinfectant Level Goal** - Means the level of drinking water disinfectant below which there is no known or expected risk to health (MDRLG). MRDLGs do not reflect the benefits of the use of disinfectant to control microbial contaminants.

Listed below are contaminants/substances detected in the Northwest Ottawa Water System. (Not listed are the hundreds of other contaminants for which we tested and that were not detected.)