The City of Tamarac is proud to provide our citizens with the cleanest, best tasting water possible. The City routinely monitors for contaminants in the drinking water according to federal and state laws, rules and regulations. We test the water more than 6,200 times each month. We test for compounds that affect the aesthetics of the water – color, smell, taste and clarity – and compounds that cause an adverse health effect. Except where indicated otherwise, this report is based on the results of monitoring for the period of January 1, 2016 to December 31, 2016. Data obtained before January 1, 2016 and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

Permanent Water Restrictions are in Effect!

Restrictions apply to all traditional sources of water – from a utility, a private well or withdrawals from a canal, lake or pond. Low-volume systems such as drip, bubble and micro-jet systems that apply water directly to root plant zones may be used any time.

Landscape irrigation for all property types and sizes is allowed two days a week on this schedule.

- ODD-number address: Wednesday and Saturday
- EVEN-number address, no street address, both odd and even addresses within the same zones: Thursday and Sunday

Watering is not allowed between 10 a.m. and 4 p.m.

Water restrictions are subject to change depending on water conditions.

Please watch the news or your water bill for changes.

The Treatment Process: Getting You Water

- The water starts with a safe, reliable source – the Biscayne Aquifer. Rain seeps through layers of sand, clay, and limestone that filters and purifies the water.
- The first step takes place in a huge mixing unit called a clarifier. Here, lime and coagulants are added to remove some hardness and make the water aesthetically pleasing.
- Filtration follows to remove any sediment in the water.
- Chlorine and ammonia are added as a disinfectant to prevent growth of bacteria.
- Finally, fluoride is added to promote dental health.
- When the process is completed, clean drinking water is delivered to our customers through an underground pipe system.

Este informe contiene información muy importante sobre su agua potable. Para información en español, por favor llamar al teléfono (954) 597-3790.
SOURCE WATER ASSESSMENT

In 2016, the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment (SWA) on the City of Tamarac's system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of the City's wells. There are nine potential sources of contamination with only one affecting two wells with a moderate susceptibility level of concern. The assessment results are available in the DEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

HOW HEALTHY IS 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 the 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 at 1-800-426-4791.

GET THE FACTS: WHERE DOES THE WATER COME FROM?

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:

- **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 such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, 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.

In order to ensure that tap water is safe to drink, the 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.

SPECIAL HEALTH CONCERNS

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 infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.

TERMS AND DEFINITIONS

The following definitions explain abbreviations and information found in the 2016 Water Quality Table:

- **Action Level (AL)** – The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Locational Running Annual Average (LRAA)** – The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.
- **Parts per billion (ppb) or Micrograms per liter (µg/l)** – One part by weight of analyte to 1 billion parts by weight of the water sample.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** – One part by weight of analyte to 1 million parts by weight of the water sample.
- **Maximum Contaminant Level or MCL** – 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.
- **Maximum Contaminant Level Goal or MCLG** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum residual disinfectant level or MRDL** – 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.
- **Maximum residual disinfectant level goal or MRDLG** – 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.
- **Not Detected (ND)** – Indicates that the substance was not found by laboratory analysis.
- **Picocurie per liter (pCi/l)** – Measure of the radioactivity in water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
## WATER QUALITY REPORT CARD 2016

### RADIOACTIVE CONTAMINANTS

<table>
<thead>
<tr>
<th>Contaminant and Unit of Measurement</th>
<th>Dates of sampling (mo./yr.)</th>
<th>MCL Violation Y/N</th>
<th>Level Detected</th>
<th>Range of Results</th>
<th>MCLG</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radium 226 + 228 or combined radium (pCi/L)</td>
<td>6/11</td>
<td>N</td>
<td>1.41</td>
<td>N/A</td>
<td>0</td>
<td>5</td>
<td>Erosion of natural deposits</td>
</tr>
</tbody>
</table>

### INORGANIC CONTAMINANTS

<table>
<thead>
<tr>
<th>Contaminant and Unit of Measurement</th>
<th>Dates of sampling (mo./yr.)</th>
<th>MCL Violation Y/N</th>
<th>Level Detected</th>
<th>Range of Results</th>
<th>MCLG</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoride (ppm)</td>
<td>12/14</td>
<td>N</td>
<td>0.73</td>
<td>N/A</td>
<td>4</td>
<td>4.0</td>
<td>Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additive which promotes strong teeth when at optimum levels of 0.7 ppm</td>
</tr>
<tr>
<td>Sodium (ppm)</td>
<td>12/14</td>
<td>N</td>
<td>41.9</td>
<td>N/A</td>
<td>N/A</td>
<td>160</td>
<td>Salt water intrusion, leaching from soil</td>
</tr>
</tbody>
</table>

### STAGE 1 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

<table>
<thead>
<tr>
<th>Disinfectant or Contaminant and Unit of Measurement</th>
<th>Dates of sampling (mo./yr.)</th>
<th>MCL or MRDL Violation Y/N</th>
<th>Level Detected</th>
<th>Range of Results</th>
<th>MCLG or MRDLG</th>
<th>MCL or MRDL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloramines (ppm)</td>
<td>1/1/16 - 12/31/16</td>
<td>N</td>
<td>2.9</td>
<td>0.57 - 4.00</td>
<td>MRDLG = 4</td>
<td>4.0</td>
<td>Water additive used to control microbes</td>
</tr>
</tbody>
</table>

### STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

<table>
<thead>
<tr>
<th>Disinfectant or Contaminant and Unit of Measurement</th>
<th>Dates of sampling (mo./yr.)</th>
<th>MCL or MRDL Violation Y/N</th>
<th>Level Detected (LRAA)</th>
<th>Range of Results</th>
<th>MCLG or MRDLG</th>
<th>MCL or MRDL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloacetic Acids (five) (HAAS) (ppb)</td>
<td>2/16, 5/16, 8/16, 10/16</td>
<td>N</td>
<td>32.4</td>
<td>22.5 - 44.3</td>
<td>N/A</td>
<td>MCL = 60</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>TTHM [Total trihalomethanes] (ppb)</td>
<td>2/16, 5/16, 8/16, 10/16</td>
<td>N</td>
<td>64.9</td>
<td>38.7 - 73.0</td>
<td>N/A</td>
<td>MCL = 80</td>
<td>By-product of drinking water disinfection</td>
</tr>
</tbody>
</table>

### LEAD AND COPPER (TAP WATER)

| Contaminant and Unit of Measurement | Dates of sampling (mo./yr.) | AL Violation Y/N | 90th Percentile Result | No. of Sampling Sites Exceeding the AL | MCLG | AL (Action Level) | Likely Source of Contamination |
|------------------------------------|-----------------------------|-----------------|------------------------|--------------------------------------|------|----------------||-------------------------------|
| Copper (tap water) (ppm): | 8/14 | N | 0.0474 | All 29 samples below the action level for copper | 1.3 | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (tap water) (ppb) | 8/14 | N | 3.3 | 1 sample of 29 above the action level for lead | 0 | 15 | Corrosion of household plumbing systems; erosion of natural deposits |

We failed to collect the required number of samples for tap water lead and copper, therefore the City of Tamarac is in violation of monitoring and reporting requirements. The monitoring period was from June 2014 – September 2014. Thirty samples were required, however only 29 samples were obtained. Since we did not take the required number of samples, we did not know whether the contaminants were present in the 30th sample, and we are unable to tell you whether your health was at risk during that time. In 2017, when the next sampling is required, we are considering incentives to improve customer participation.

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**About 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. The City of Tamarac is responsible for providing 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 your 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 by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791 or visiting the EPA’s website at www.epa.gov/safewater/lead.
The City shares news and information with the community in a variety of formats. To stay connected, just visit www.tamarac.org. From there you can:

- **Follow us on Facebook and Twitter:** Get real-time updates about City news, event pictures and more
- **Register for Notifications:** Sign up for targeted notifications based on your interests
- **Report a Concern:** Use this feature to make requests and report concerns
- **Participate in an Online Forum:** Join the discussion on Open City Hall
- **Access Publication:** View back issues of Tam-A-Gram and City brochures

For more information or questions about this report, please contact the City of Tamarac Water Treatment Facility.

**Gary Meyer**
Senior Chemist, City of Tamarac
Water Treatment Facility (954) 597-3790

This report is also available on the City’s website at

Residents west of State Road 7/US 441

Residents east of State Road 7/US 441

For Utilities Customer Billing Questions:

**Customer Service (954) 597-3590**

For Water Service questions:

**Public Services Department (954) 597-3750**

Commission meetings are held the second (evening, 7 pm) and forth (morning, 9 am) Wednesday of each month, in the Commission Chambers, Tamarac City Hall

For more information go to [www.tamarac.org](http://www.tamarac.org).