The City of Tamarac is pleased to provide you with the 2018 annual Water Quality Report. This report contains important information about the City's water source, water supply, the treatment process and the contents of your drinking water.

The Environmental Protection Agency’s (EPA) Safe Drinking Water Act requires the City of Tamarac to provide water customers with a summary report of laboratory tests taken throughout the year. Except where indicated otherwise, this report is based on test results for the period of January 1, 2018 to December 31, 2018. Data obtained before January 1, 2018, and presented in this report, are from the most recent testing done in accordance with the laws, rules, and regulations. For more information about this report or to obtain copies, please call (954) 597-3790.

**DRINKING WATER SOURCES AND 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:

- **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.

To ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amounts 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.

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 (800) 426-4791.

**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/Center for Disease Control (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 at (800) 426-4791.
WHERE YOUR WATER COMES FROM

The City of Tamarac (EAST) gets its water from City of Fort Lauderdale wells that draw water from the Biscayne Aquifer, which is an underground water supply. Before it reaches your faucet, your water travels from the Biscayne Aquifer to one of two City of Fort Lauderdale water treatment plants – Fiveash, a lime softening plant, or Peele Dixie, a nanofiltration membrane plant.

At the treatment plants, the water is softened, fluoridated, filtered, aerated, cleaned, and disinfected to remove naturally occurring minerals, particles, dissolved gasses, and most of the color. Once the water is treated, it is routinely monitored and tested before it is pumped to storage tanks or through the distribution system to your faucet.

TERMS AND DEFINITIONS

The following definitions explain abbreviations and information found in the 2018 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 Average Annual (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 (ug/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.

**Initial Distribution System Evaluation (IDSE):** An important part of the Stage 2 Disinfection By-Products Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs).

READING THE WATER QUALITY TABLE

The EPA requires the City of Tamarac and all water suppliers in the United States to provide an annual report on laboratory tests taken on its drinking water. The 2018 Water Quality Table provides a summary of thousands of test results and shows that the City’s water meets or exceeds all primary drinking water standards.

SOURCE WATER ASSESSMENT

In 2018 the Florida Department of Environmental Protection performed a Source Water Assessment for the City of Ft. Lauderdale. The assessment results are available on the FDEP SWAPP website at https://fldep.dep.state.fl.us/swapp/ or they can be obtained by calling (954) 597-3790.

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 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 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 from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.
### 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 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>Chloramines (ppm)</td>
<td>1/18 - 12/18</td>
<td>N</td>
<td>1.76</td>
<td>0.6 - 3.0</td>
<td>MRDLG = 4</td>
<td>MRDL = 4.0</td>
<td>Water additive used to control microbes</td>
</tr>
<tr>
<td>Haloacetic Acids (five) (HAA5) (ppb)</td>
<td>1/18, 6/18, 9/18, 12/18</td>
<td>N</td>
<td>38.5</td>
<td>30.6 - 41.5</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>1/18, 6/18, 9/18, 12/18</td>
<td>N</td>
<td>75.5</td>
<td>33.2 - 91.2</td>
<td>N/A</td>
<td>MCL = 80</td>
<td>By-product of drinking water disinfection</td>
</tr>
</tbody>
</table>

Two samples from two sites during 2018 had a TTHM result which exceeded the MCL of 80 ppb. However, the system did not incur an MCL violation because all annual average results at all sites were at or below the MCL. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

**IDSE 1E TTHM [Total trihalomethanes] (ppb)**

- 1/18, 6/18, 9/18, 12/18
- N
- 75.4
- 33.2 – 87.2
- N/A
- MCL = 80
- By-product of drinking water disinfection

**IDSE 2E TTHM [Total trihalomethanes] (ppb)**

- 1/18, 6/18, 9/18, 12/18
- N
- 75.5
- 34.2 – 91.2
- N/A
- MCL = 80
- By-product of drinking water disinfection

IDSE 1E is a pump station (PS1E) near the intersection of 17 Ave and 46 St. IDSE 2E is a sampling port on Prospect Road at Caporella Park.

### 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>Arsenic (ppb)</td>
<td>6/17</td>
<td>N</td>
<td>1.70</td>
<td>1.40 - 1.70</td>
<td>0</td>
<td>10</td>
<td>Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes</td>
</tr>
<tr>
<td>Barium (ppm)</td>
<td>6/17</td>
<td>N</td>
<td>0.0038</td>
<td>0.0014 - 0.0038</td>
<td>2</td>
<td>2</td>
<td>Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits</td>
</tr>
<tr>
<td>Fluoride (ppm)</td>
<td>6/17</td>
<td>N</td>
<td>0.548</td>
<td>0.489 - 0.548</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 the optimum level of 0.7 ppm</td>
</tr>
<tr>
<td>Nitrate (as Nitrogen) (ppm)</td>
<td>6/18</td>
<td>N</td>
<td>0.0501</td>
<td>0.0198-0.0501</td>
<td>10</td>
<td>10</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits</td>
</tr>
<tr>
<td>Nitrite (as Nitrogen) (ppm)</td>
<td>6/18</td>
<td>N</td>
<td>0.0486</td>
<td>ND-0.0486</td>
<td>10</td>
<td>10</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits</td>
</tr>
<tr>
<td>Sodium (ppm)</td>
<td>6/17</td>
<td>N</td>
<td>33.8</td>
<td>26.6 – 33.8</td>
<td>N/A</td>
<td>160</td>
<td>Salt water intrusion, leaching from soil</td>
</tr>
</tbody>
</table>
Lead and Copper (Tap Water)

Lead and Copper sampling is being conducted again in Summer 2021.

### Contaminant and Unit of Measurement

<table>
<thead>
<tr>
<th>Contaminant and Unit of Measurement</th>
<th>Dates of sampling (mo./yr.)</th>
<th>AL Exceeded Y/N</th>
<th>90th Percentile Results</th>
<th>No. of sampling sites exceeding the AL</th>
<th>MC</th>
<th>AL (Action Level)</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (tap water) (ppm)</td>
<td>9/18</td>
<td>N</td>
<td>0.044</td>
<td>0 (0 out of 10)</td>
<td>1.3</td>
<td>1.3</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives</td>
</tr>
<tr>
<td>Lead (tap water) (ppb)</td>
<td>9/18</td>
<td>N</td>
<td>2.7</td>
<td>0 (0 out of 10)</td>
<td>0</td>
<td>15</td>
<td>Corrosion of household plumbing systems, erosion of natural deposits</td>
</tr>
</tbody>
</table>

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Stay Informed:

The City uses a variety of tools to share news and information with the community. Following are some of the ways you can communicate with us and stay informed.

- **CodeRED**: Register to receive emergency calls, emails and/or texts by clicking “Emergency Notifications” at [www.Tamarac.org](http://www.tamarac.org).

- **Follow us on Facebook, Twitter, Instagram and Nextdoor**: Get real-time updates about City news, events and more.

- **Take Tamarac to Go**: Download the City’s official mobile app for easy, 24/7 access to non-emergency services and information.

- **How can We Help**: Use this feature to make requests and report concerns from the City’s website [www.Tamarac.org](http://www.tamarac.org) or the Tamarac to Go mobile app.

- **Stay Connected**: Sign up for targeted notifications based on your interests at [www.Tamarac.org](http://www.tamarac.org).

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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


Residents west 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 p.m.) and fourth (morning, 9 a.m.) Wednesday of each month, in the Commission Chambers, Tamarac City Hall.

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

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Michele J. Gomez
Mayor

Debra Placko
Vice Mayor, District 4

Marlon D. Bolton
Commissioner, District 1

Mike Gelin
Commissioner, District 2

Julie Fishman
Commissioner, District 3

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