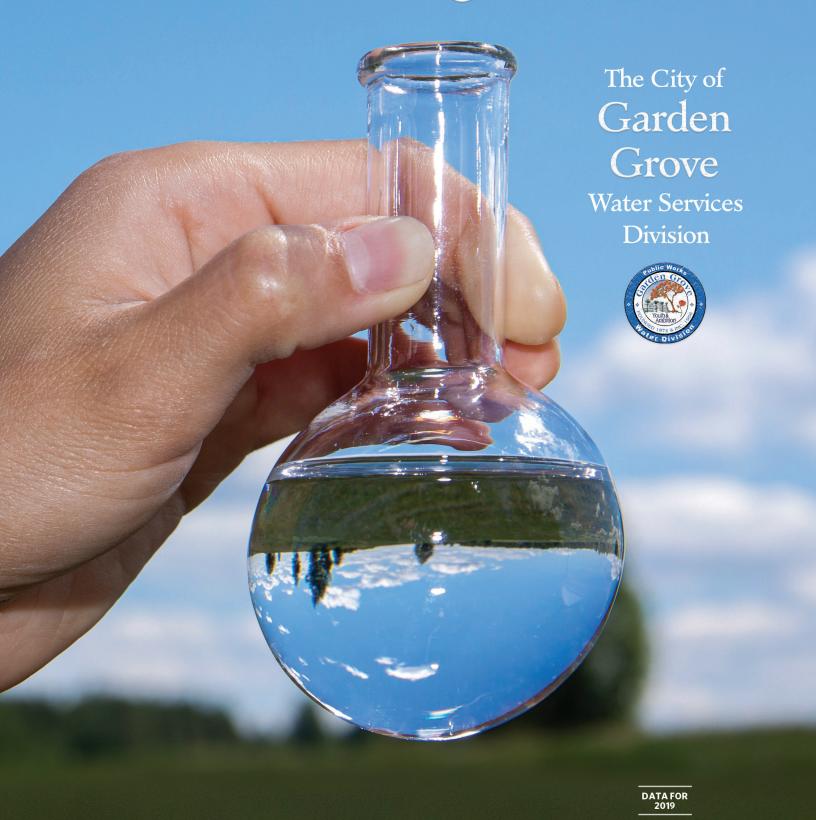
# 2020 Drinking Water Quality Report



# Your 2020 Water Quality Report

Since 1990, California public water utilities have been providing an annual Water Quality Report to their customers. This year's report covers calendar year 2019 drinking water quality testing and reporting.

The City of Garden Grove Water Services Division (City) vigilantly safeguards its water supply and, as in years past, the water delivered to your home meets the quality standards required by federal and state regulatory agencies. The U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board, Division of Drinking Water (DDW) are the agencies responsible for establishing and enforcing drinking water quality standards.



In some cases, the City goes beyond what is required by testing for unregulated chemicals that may have known health risks but do not have drinking water standards. For example, the Orange County Water District (OCWD), which manages the groundwater basin, and the Metropolitan Water District of Southern California (MWDSC), which supplies imported treated surface water to the City test for unregulated chemicals in our water supply. Unregulated chemical monitoring helps USEPA and DDW determine where certain chemicals occur and whether new standards need to be established for those chemicals to protect public health.

Through drinking water quality testing programs carried out by OCWD for groundwater, MWDSC for treated

## Your Water: Always Available, Always Assured

The Diemer Water Treatment Plant, located in the hills above Yorba Linda, processes up to 520 million gallons of clean water per day — enough to fill the Rose Bowl every 4 hours. The water is a blend from both the Colorado River Aqueduct and the

State Water Project. At 212-acres, it's one of the largest water treatment plants in the U.S. It provides nearly half of Orange County's total water supply.

Water

**Project** 

Water flowing from Diemer meets — or exceeds — all state



and federal regulations. And it is kept safe from the treatment plant to your tap by constant testing throughout the distribution network. The City of Garden Grove Water Services Division monitors the water quality at all sources, reservoirs, and various points on the distribution system. In addition, the Orange County Water District performs testing on the City's groundwater wells by analyzing for hundreds of compounds, many more than are required by state and federal laws and regulations. This constant surveillance ensures your drinking water stays within the requirements mandated by the federal Safe Drinking Water Act.

surface water and the City for the water distribution system, your drinking water is constantly monitored from source to tap for regulated and unregulated constituents. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Some of our data, though representative, are more than one year old.

 $\sim$ 

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Báo cáo này chứa thông tin quan trọng về nước uống của quý vị. Hãy dịch báo cáo, hoặc nói chuyện với một người hiểu báo cáo này.

> 본 보고는 귀하의 식수에 관한 중요한 정보를 가지고 있습니다. 번역, 또는 이 보고를 이해하는 사람에게 물어보십시오.

~ 2 ~

## The Quality of Your Water Is Our Primary Concern

#### Sources of Supply

Your drinking water is a blend of mostly groundwater from 12 wells in the Orange County groundwater basin and also surface water imported by MWDSC. MWDSC's imported water sources are a blend of State Water Project water from Northern California and water from the Colorado River Aqueduct. Your groundwater comes from a natural underground reservoir managed by the Orange County Water District (OCWD) that stretches from the Prado Dam and fans across the northwestern portion of Orange County, excluding the communities of Brea and La Habra, and stretching as far south as the El Toro 'Y.'

Last year, as in years past, your tap water met all USEPA and state drinking water health standards. The City vigilantly safeguards its water supplies and once again, we are proud to report that our system has never violated a maximum contaminant level (MCL) or any other water quality standard. This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to federal and state standards.

# Basic Information About Drinking Water 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 land or through the layers of the ground it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal and 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.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- 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 and farming.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production or mining activities.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban stormwater runoff, agricultural application and septic systems.

In order to ensure that tap water is safe to drink, USEPA and the DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that 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 water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791.

### **Drinking Water Fluoridation**

Fluoride has been added to U.S. drinking water supplies since 1945. Of the 50 largest cities in the U.S., 43 fluoridate their drinking water.

In December 2007, MWDSC joined a majority of the nation's public water suppliers in adding fluoride to drinking water in order to prevent tooth decay. MWDSC was in compliance with all provisions of the State's fluoridation system requirements. Our local water is not supplemented with fluoride. Fluoride levels in drinking water are limited under California state regulations at a maximum dosage of 2 parts per million.

# Questions about your water? Contact us for answers.

For information about this report, or your water quality in general, please contact the Water Quality Staff at (714) 741-5395.

Public City Council meetings are held on the second and fourth Tuesdays of each month at 6:45 p.m. in the Council Chambers at the Community Meeting Center, 11300 Stanford Avenue, Garden Grove, California. You may also contact our City Clerk's Office, Garden Grove City Hall, 11222 Acacia Parkway, Garden Grove, CA 92840 or call (714) 741-5040 for information about Garden Grove City Council meetings. Please feel free to participate in these meetings.

For more information about the health effects of the listed contaminants in the following tables, call the USEPA hotline at (800) 426-4791.

## Federal and State Water Quality Regulations

## — Water Quality Issues that Could Affect Your Health —

## About Lead in Tap Water

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 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, (800) 426-4791, or at: www.epa.gov/safewater/lead

## Cryptosporidium

Cryptosporidium is a microscopic organism that, when ingested, can cause diarrhea, fever, and other gastrointestinal symptoms. The organism comes from animal and/or human wastes and may

be in surface water. MWDSC tested its source water and treated surface water for *Cryptosporidium* in 2019, but did not detect it. If it ever is detected, *Cryptosporidium* is eliminated by an effective treatment combination including sedimentation, filtration, and disinfection.

The USEPA and the federal Centers for Disease Control guidelines on appropriate means to

lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from USEPA's Safe Drinking Water Hotline at (800) 426-4791, or you may visit them on the web at: www.epa.gov/safewater

#### Nitrate Advisory

At times, nitrate in your tap water may have exceeded one-half the MCL, but it was never greater than the MCL of 10 milligrams per liter (mg/L). Nitrate in your drinking water in 2019 ranged from 2.2 to 6.1 mg/L. The following advisory is issued because in 2019 we recorded nitrate

measurements in the drinking water supply which exceeded onehalf the nitrate MCL.

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

#### Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as those with cancer who are undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons, and infants can be particularly at risk to infection. These people should seek advice about drinking water from their health care providers.



#### Covid-19

The Coronavirus (Covid-19) does not present a threat to our water supply. We continually monitor and test the quality of your water and are committed to ensuring its safety. Providing a safe, clean, reliable supply of water for you and your family is our highest priority. Additional information about Covid-19 and your water supply is available from the California State Water Boards at:

www.waterboards.ca.gov/publications\_forms/ publications/factsheets/docs/covid-19/ covid19\_drinking\_water\_factsheet\_english.pdf

#### **PFAS**

PFOA and PFOS are a group of man-made chemicals that may pose a hazard to health. They have been widely used in a variety of products and are resistant to heat, water, oils and stains. Though no Standards have been set, their impact is under investigation. Additional information is available at:

www.waterboards.ca.gov/pfas/

| Constituent                                  | MCL                 | PHG | Average<br>Amount | Range of<br>Detections | MCL<br>Violation? | Typical Source of Constituent                     |
|--|---------------------|-----|-------------------|------------------------|-------------------|---|
| Inorganic Constituents – Testo               | ed in 2019          |     |                   |                        |                   |   |
| Aluminum (ppm)                               | 1                   | 0.6 | 0.124             | ND - 0.065             | No                | Treatment Process Residue, Natural Deposits       |
| Bromate (ppb)                                | 10                  | 0.1 | 2                 | ND - 5.9               | No                | Byproduct of Drinking Water Ozonation             |
| Fluoride (ppm)                               | 2                   | 1   | 0.7               | 0.1 – 0.9              | No                | Water Additive for Dental Health                  |
| Nitrate as N (ppm)                           | 10                  | 10  | 0.5               | 0.5                    | No                | Fertilizers, Septic Tanks, Natural Deposits       |
| Secondary Standards* – Teste                 | ed in 2019          |     |                   |                        |                   |   |
| Aluminum (ppb)                               | 200*                | 600 | 124               | ND - 65                | No                | Treatment Process Residue, Natural Deposits       |
| Chloride (ppm)                               | 500*                | n/a | 56                | 53 – 58                | No                | Runoff or Leaching from Natural Deposits          |
| Color (color units)                          | 15*                 | n/a | ND                | ND - 1                 | No                | Naturally-occurring Organic Materials             |
| Odor (threshold odor number)                 | 3*                  | n/a | ND                | ND - 1                 | No                | Naturally-occurring Organic Materials             |
| Specific Conductance (µmho/cm)               | 1,600*              | n/a | 514               | 508 - 521              | No                | Substances that Form Ions in Water                |
| Sulfate (ppm)                                | 500*                | n/a | 91                | 89 – 93                | No                | Runoff or Leaching from Natural Deposits          |
| Total Dissolved Solids (ppm)                 | 1,000*              | n/a | 304               | 296 – 312              | No                | Runoff or Leaching from Natural Deposits          |
| Unregulated Constituents – T                 | ested in 2018 and 2 | 019 |                   |                        |                   |   |
| Alkalinity, total as CaCO <sub>3</sub> (ppm) | Not Regulated       | n/a | 72                | 69 – 74                | n/a               | Runoff or Leaching from Natural Deposits          |
| Boron (ppm)                                  | NL = 1              | n/a | 0.12              | 0.12                   | n/a               | Runoff or Leaching from Natural Deposits          |
| Calcium (ppm)                                | Not Regulated       | n/a | 30                | 29 – 30                | n/a               | Runoff or Leaching from Natural Deposits          |
| Germanium (ppb)                              | Not Regulated       | n/a | 0.1               | ND - 0.4               | n/a               | Erosion of Natural Deposits; Industrial Discharge |
| Hardness, total as CaCO <sub>3</sub> (ppm)   | Not Regulated       | n/a | 127               | 124 – 130              | n/a               | Runoff or Leaching from Natural Deposits          |
| Hardness, total (grains/gallon)              | Not Regulated       | n/a | 7.4               | 7.3 – 7.6              | n/a               | Runoff or Leaching from Natural Deposits          |
| Magnesium (ppm)                              | Not Regulated       | n/a | 14                | 13 – 14                | n/a               | Runoff or Leaching from Natural Deposits          |
| Manganese (ppb)**                            | 50*                 | n/a | 2.23              | 0.8 – 3.3              | n/a               | Runoff or Leaching from Natural Deposits          |
| Perfluorohexanoic Acid (ppt)                 | Not Regulated       | n/a | 2.3               | 2.2 – 2.3              | n/a               | Industrial Discharge                              |
| pH (pH units)                                | Not Regulated       | n/a | 8.4               | 8.4 – 8.5              | n/a               | Hydrogen Ion Concentration                        |
| Potassium (ppm)                              | Not Regulated       | n/a | 2.8               | 2.6 – 2.9              | n/a               | Runoff or Leaching from Natural Deposits          |
| Sodium (ppm)                                 | Not Regulated       | n/a | 56                | 54 – 57                | n/a               | Runoff or Leaching from Natural Deposits          |
| Total Organic Carbon (ppm)                   | TT                  | n/a | 2.4               | 1.8 – 2.6              | n/a               | Various Natural and Man-made Sources              |

ppb = parts per billion; ppm = parts per million; ppt = parts per trillion; µmho/cm = micromhos per centimeter; ND = not detected;

MCL = Maximum Contaminant Level; PHG = California Public Health Goal; NL = Notification Level; n/a = not applicable; TT = treatment technique

<sup>\*\*</sup>Manganese is regulated with a secondary standard but was not detected, based on the detection limit for purposes of reporting of 20 ppb. Manganese was included as part of the unregulated constituents requiring monitoring.

| Turbidity – combined filter effluent<br>Metropolitan Water District Diemer Filtration Plant | Treatment<br>Technique | Turbidity<br>Measurements | TT<br>Violation? | Typical Source of Constituent |
|---|------------------------|---------------------------|------------------|-------------------------------|
| 1) Highest single turbidity measurement   | 0.3 NTU                | 0.05                      | No               | Soil Runoff                   |
| 2) Percentage of samples less than 0.3 NTU  | 95%                    | 100%                      | No               | Soil Runoff                   |

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a "treatment technique" (TT).

NTU = nephelometric turbidity units

A treatment technique is a required process intended to reduce the level of constituents in drinking water that are difficult and sometimes impossible to measure directly

#### What are Water Quality Standards?

Drinking water standards established by USEPA and DDW set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The charts in this report show the following types of water quality

- Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. How are Contaminants Measured? Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.
- Maximum Residual Disinfectant Level (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
- Secondary MCLs: Set to protect the odor, taste, and appearance of drinking water.

- Primary Drinking Water Standard: MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.
- Regulatory Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

Water is sampled and tested throughout the year. Contaminants are measured in:

- parts per million (ppm) or milligrams per liter (mg/L)
- parts per billion (ppb) or micrograms per liter (µg/L)
- parts per trillion (ppt) or nanograms per liter (ng/L)

#### What is a Water Quality Goal?

In addition to mandatory water quality standards, USEPA and DDW have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The charts in this report include three types of water quality goals:

- Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by USEPA.
- Maximum Residual Disinfectant Level Goal (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.
- Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

<sup>\*</sup>Constituent is regulated by a secondary standard.

| 2019 City of Garden Grove Groundwater Quality |               |               |                   |                        |                   |                              |  |
|---|---------------|---------------|-------------------|------------------------|-------------------|------------------------------|--|
| Constituent                                   | MCL           | PHG<br>(MCLG) | Average<br>Amount | Range of<br>Detections | MCL<br>Violation? | Most Recent<br>Sampling Date | Typical Source of Constituent                    |
| Radiologicals                                 |               |               |                   |                        |                   |                              |  |
| Gross Alpha (pCi/L)                           | 15            | (0)           | <3                | ND - 5.2               | No                | 2018                         | Runoff or Leaching from Natural Deposits         |
| Uranium (pCi/L)                               | 20            | 0.43          | 9.02              | 5.39 – 13.5            | No                | 2018                         | Runoff or Leaching from Natural Deposits         |
| Inorganic Constituents                        |               |               |                   |                        |                   |                              |  |
| Arsenic (ppb)                                 | 10            | 0.004         | <2                | ND - 2.4               | No                | 2019                         | Runoff or Leaching from Natural Deposits         |
| Barium (ppm)                                  | 1             | 2             | <1                | ND - 0.112             | No                | 2019                         | Runoff or Leaching from Natural Deposits         |
| Fluoride (ppm)                                | 2             | 1             | 0.44              | 0.41 - 0.49            | No                | 2019                         | Runoff or Leaching from Natural Deposits         |
| Nitrate (ppm as N)                            | 10            | 10            | 4                 | 2.2 – 6.1              | No                | 2019                         | Fertilizers, Septic Tanks                        |
| Nitrate+Nitrite (ppm as N)                    | 10            | 10            | 4                 | 2.2 – 6.1              | No                | 2019                         | Fertilizers, Septic Tanks                        |
| Perchlorate (ppb)                             | 6             | 1             | <4                | ND - 4.1               | No                | 2019                         | Industrial Discharge                             |
| Secondary Standards*                          |               |               |                   |                        |                   |                              |  |
| Chloride (ppm)                                | 500*          | n/a           | 77.7              | 38 – 119               | No                | 2019                         | Runoff or Leaching from Natural Deposits         |
| ron (ppb)                                     | 300*          | n/a           | <100              | ND – 206               | No                | 2019                         | Runoff or Leaching from Natural Deposits         |
| Manganese (ppb)                               | 50*           | n/a           | <20               | ND - 20.8              | No                | 2019                         | Runoff or Leaching from Natural Deposits         |
| Specific Conductance (µmho/cm)                | 1,600*        | n/a           | 886               | 608 – 1,200            | No                | 2019                         | Runoff or Leaching from Natural Deposits         |
| Sulfate (ppm)                                 | 500*          | n/a           | 126               | 75.5 – 174             | No                | 2019                         | Runoff or Leaching from Natural Deposits         |
| Total Dissolved Solids (ppm)                  | 1,000*        | n/a           | 565               | 368 – 746              | No                | 2019                         | Runoff or Leaching from Natural Deposits         |
| Turbidity (NTU)                               | 5*            | n/a           | 0.13              | ND - 0.8               | No                | 2019                         | Runoff or Leaching from Natural Deposits         |
| Unregulated Constituents                      |               |               |                   |                        |                   |                              |  |
| Alkalinity, total as CaCO <sub>3</sub> (ppm)  | Not Regulated | n/a           | 185               | 164 – 234              | n/a               | 2019                         | Runoff or Leaching from Natural Deposits         |
| Boron (ppm)                                   | NL = 1        | n/a           | <0.1              | ND - 0.26              | n/a               | 2019                         | Runoff or Leaching from Natural Deposits         |
| Bromide (ppm)                                 | Not Regulated | n/a           | 0.22              | 0.104 - 0.62           | n/a               | 2019                         | Industrial Discharge                             |
| Calcium (ppm)                                 | Not Regulated | n/a           | 103               | 72.6 – 124             | n/a               | 2019                         | Runoff or Leaching from Natural Deposits         |
| Chromium, Hexavalent (ppb)                    | Not Regulated | 0.02          | 1.4               | ND - 1.8               | n/a               | 2019                         | Erosion of Natural Deposits; Industrial Discharg |
| Germanium (ppb)                               | Not Regulated | n/a           | 0.02              | ND - 0.3               | n/a               | 2019                         | Erosion of Natural Deposits; Industrial Discharg |
| Hardness, total as CaCO <sub>3</sub> (ppm)    | Not Regulated | n/a           | 333               | 233 – 413              | n/a               | 2019                         | Runoff or Leaching from Natural Deposits         |
| Hardness, total (grains/gallon)               | Not Regulated | n/a           | 19                | 14 – 24                | n/a               | 2019                         | Runoff or Leaching from Natural Deposits         |
| Magnesium (ppm)                               | Not Regulated | n/a           | 18.5              | 12.6 – 24.9            | n/a               | 2019                         | Runoff or Leaching from Natural Deposits         |
| Manganese (ppb)**                             | 50*           | n/a           | 0.14              | ND - 1.8               | n/a               | 2019                         | Runoff or Leaching from Natural Deposits         |
| Perfluoro octanoic acid (PFOA) (ppt)          | NL = 5.1      | n/a           | 16.4              | 6.3 – 30.6             | n/a               | 2019                         | Industrial Discharge                             |
| Perfluoro octane sulfonic acid (PFOS) (ppt)   | NL = 6.5      | n/a           | 37.4              | 16.7 – 53.9            | n/a               | 2019                         | Industrial Discharge                             |
| pH (pH units)                                 | Not Regulated | n/a           | 7.8               | 7.7 – 7.9              | n/a               | 2019                         | Hydrogen Ion Concentration                       |
| Potassium (ppm)                               | Not Regulated | n/a           | 3.9               | 3.1 – 5.5              | n/a               | 2019                         | Runoff or Leaching from Natural Deposits         |
| Total Organic Carbon (Unfiltered) (ppm)       | Not Regulated | n/a           | 0.28              | 0.17 - 0.48            | n/a               | 2019                         | Various Natural and Man-made Sources             |
| Sodium (ppm)                                  | Not Regulated | n/a           | 54.1              | 35.4 – 90.4            | n/a               | 2019                         | Runoff or Leaching from Natural Deposits         |
| Vanadium, Total (ppb)                         | NL=50         | n/a           | <3                | ND - 4.2               | n/a               | 2019                         | Erosion of Natural Deposits; Industrial Discharg |

**ppb** = parts-per-billion; **ppm** = parts-per-million; **ppt** = parts per trillion; **pCi/L** = picoCuries per liter; **NTU** = nephelometric turbidity units; **ND** = not detected; **NL** = Notification Level; **n/a** = not applicable; <= average is less than the detection limit for reporting purposes; **MCL** = Maximum Contaminant Level; **(MCLG)** = federal MCL Goal; **PMG** = California Public Health Goal; **pmho/cm** = micromhos per centimeter \*Constituent is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color). \*\*Manganese was included as part of the unregulated constituents requiring monitoring.

#### 2019 City of Garden Grove Distribution System Water Quality Disinfection Average Range of MCL **Typical Source** (MRDL/MRDLG) **Detections** Violation? of Constituent **Byproducts Amount** Total Trihalomethanes (ppb) 80 15 0.1 - 25No Byproducts of Chlorine Disinfection 9 Haloacetic Acids (ppb) 60 ND - 12 Nο Byproducts of Chlorine Disinfection Chlorine Residual (ppm) (4 / 4)0.89 0.2 - 2.57No Disinfectant Added for Treatment **Aesthetic Quality** 15\* 0.35 No **Erosion of Natural Deposits** Color (color units) ND - 23Turbidity (NTU) < 0.1 ND - 4.1**Erosion of Natural Deposits**

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; thirty-three locations are tested each month for color, odor and turbidity. Odor was not detected in 2019. MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal;

NTU = nephelometric turbidity units; ND = not detected \*Constituent is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

| Lead and Copper Action Levels at Residential Taps |                      |                       |                                      |   |                  |                                 |  |
|---|----------------------|-----------------------|--------------------------------------|---|------------------|---------------------------------|--|
|   | Action Level<br>(AL) | Public<br>Health Goal | 90 <sup>th</sup> Percentile<br>Value | Sites Exceeding AL /<br>Number of Sites | AL<br>Violation? | Typical Source of Constituent   |  |
| Lead (ppb)  | 15                   | 0.2                   | ND<5                                 | 0 / 50                                  | No               | Corrosion of Household Plumbing |  |
| Copper (ppm)                                      | 1.3                  | 0.3                   | 0.19                                 | 0 / 50                                  | No               | Corrosion of Household Plumbing |  |

Every three years, at least 50 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2019.

Lead was not detected. Copper was detected above the reporting level in 38 samples, but none of the samples exceeded the copper Action Level.

A regulatory Action Level is the concentration of a constituent which, if exceeded, triggers treatment or other requirements that a water system must follow. In 2019, no school submitted a request to be sampled for lead.

| Unregulated Constituents Requiring Monitoring |                       |     |                   |                        |                              |  |
|---|-----------------------|-----|-------------------|------------------------|------------------------------|--|
| Constituent                                   | Notification<br>Level | PHG | Average<br>Amount | Range of<br>Detections | Most Recent<br>Sampling Date |  |
| Dibromoacetic Acid (ppb)                      | n/a                   | n/a | 0.64              | 0.4 – 1.2              | 2019                         |  |

#### Source Water Assessments

#### Imported (MWDSC) Water Assessment

Every five years, MWDSC is required by DDW to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters.

> The most recent watershed sanitary surveys of its source water supplies from the Colorado River was updated in 2015 and the State Water Project was updated in 2016.

Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban/stormwater runoff, increasing urbanization in the watershed, and wastewater. Water supplies from Northern California's State Water Project are most vulnerable to contamination from urban/stormwater runoff,

wildlife, agriculture, recreation, and wastewater.

USEPA also requires MWDSC to complete one Source Water Assessment (SWA) that utilizes information collected in the watershed sanitary surveys. MWDSC completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed.

A copy of the most recent summary of either Watershed Sanitary Survey or the SWA can be obtained by calling MWDSC at (800) CALL-MWD (225-5693).

#### Groundwater Assessment

An assessment of the drinking water sources for the City was completed in December 2002. The groundwater sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: known contaminant plumes, historic agricultural activities and application of fertilizers, and parks. The groundwater sources are considered most vulnerable to the following activities not associated with detected contaminants: confirmed leaking underground storage tanks, dry cleaners, gas stations, and photo processing/printing.

A copy of the complete assessment is available at State Water Resources Control Board, Division of Drinking Water, 2 MacArthur Place, Suite 150, Santa Ana, California 92707.

You may request a summary of the assessment by contacting the City at (714) 741-5395