

# Consumer Confidence Report 2018

The City of Fortuna is pleased to provide you with the 2018 Consumer Confidence Report as required by the Safe Drinking Water Act. The City of Fortuna values our customers and wants to keep you informed about the quality of your water and our effort to provide a safe and dependable supply of drinking water. We hope this report will help our customers make informed choices that affect the health of themselves and their families. We are proud our drinking water meets or exceeds all State and Federal standards.

*Este informe contiene la información muy importante con respecto a su agua potable. Si usted necesita una copia de este informe en español, por favor ciudad pasillo de Fortuna del contacto en (707) 725-7600.*

Often we take our water for granted. Providing safe drinking water is a very intricate business that takes a dedicated staff of professionals to maintain the system throughout the year. State and Federal law requires all water suppliers to provide information to their customers annually regarding the source and quality of their water. This report, called the Consumer Confidence Report, provides you with information about the location of your water source, what is in your water and how your water quality compares with State Standards and contaminant levels set by the United States Environmental Protection Agency (EPA).

## Definitions of Terms That May Be Used in This Report:

**MCL: Maximum Contaminant Level.** The highest level of a contaminant that is allowed in the drinking water. Primary MCL's are set as close to the PHG's (or MCLG's) as is economically and technologically feasible. Secondary MCL's are set to protect the odor, taste, and appearance of drinking water.

**MCLG: Maximum Contaminant Level Goal.** The level of a contaminant in the drinking water below which there is no known or expected risk to health. MCLG's are set by the EPA.

**PHG: Public Health Goal.** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California EPA.

**PDWS: Primary Drinking Water Standards.** MCL's and MRDL's for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

**SDWS: Secondary Drinking Water Standards.** MCL's for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWS's do not affect the health at the MCL levels.

**MRDL: Maximum Residual Disinfectant Level.** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

**MRDLG: Maximum Residual Disinfectant Level Goal.** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLG's are set by the EPA.

**TT: Treatment Technique.** A required process intended to reduce the level of a contaminant in the drinking water.

**AL: Regulatory Action Level.** The concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements that a water system must follow.

**NTU: Nephelometric Turbidity Units.** A measure of the clarity of water. Turbidity of 5 NTU is just noticeable to the average person.

**Variations and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ppt:** parts per trillion or nanograms per liter (ng/L).

**pCi/L:** picocuries per liter (a measure of radiation).

**ND:** Not detectable at the testing limit.

**ppm:** parts per million or milligrams per liter (mg/L).

**ppb:** parts per billion or micrograms per liter (ug/L).

## About Our Water

The City of Fortuna provides water to approximately 12,000 individuals in our service area. The City's water distribution system includes 40 miles of waterline, 7 reservoirs which store a total of 7.5 million gallons of water and 8 pump stations which provide a constant supply of water to our 4,467 service connections.

The water being delivered to you by the City originates from groundwater sources known as wells, located on Eel River Drive between Drake Hill Road and Kenmar Road. These wells are known as Well #1, Well #2, Well #3, Well #4, and Well #5. Last year we produced approximately 419 million gallons of drinking water. An assessment of the drinking water sources for the City of Fortuna was completed in April, 2015. The source is considered most vulnerable to human and animal activity. In addition, the source is considered most vulnerable to these activities: mining operations (sand/gravel), recreational areas, automobiles (gas stations) and septic systems.

## How Our Water is Treated

The City of Fortuna's water supply is being treated to raise the pH and make the water less corrosive to comply with State and Federal requirements for lead and copper. This treatment process makes the water less acidic by aerating and removing carbon dioxide gas which is naturally dissolved in the water. Carbon dioxide is the same chemical that is added to beer and soft drinks to make it "fizz". As required by the California Department of Public Health, after the water is aerated, it is then chlorinated to prevent any bacteriological contamination of the water.

## Reservoirs and Pump Stations

The 7 City owned reservoirs and 8 pump stations are inspected on a daily basis. In addition to inspections and maintenance of the reservoirs, City staff regularly lower and fill these reservoirs to ensure the freshest water is available to customers. The City has recently completed one major construction project and is currently working on two other major projects designed to insure a safe and reliable drinking water system into the future.

## Cross Connection Control Program

The Cross Connection Control Program protects the public water system from contamination due to backflow. A backflow condition is created when water from the consumer's plumbing flows back into the City

water mains. The California Department of Health Services and Fortuna City Code both require backflow prevention assemblies to be installed at all actual or potential sources of contamination. Such sources of contamination include hospitals, mortuaries, fire sprinkler systems, sewage treatment plants and customers with their own water system such as a well. These assemblies are required to be tested annually to ensure proper operation.

## Water Quality Monitoring Results

The City of Fortuna routinely monitors for constituents in your drinking water according to state and federal laws. The data in the following tables are from the most recent sampling for these constituents.

## Description and Origin of Drinking Water Contaminants

The source of drinking water (both tap water and bottled water) includes 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 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 that may come from septic systems, agricultural livestock operations, wildlife and wastewater treatment plants.
- **Inorganic Contaminants:** Such as salts and metals that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and Herbicides:** May come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Organic Chemical Contaminants:** Can include synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff, agriculture application, and septic systems.
- **Radioactive Contaminants:** Can be naturally-occurring or be the result of oil and gas production and mining activities.

## Safe Drinking Water

In order to ensure that tap water is safe to drink the EPA and the California Department of Public Health set water quality standards and establish testing methods and monitoring requirements for water utilities. These agencies also prescribe regulations that limit the amount of certain contaminants in water provided by public water systems and require utilities to give public notice whenever a violation occurs. 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 U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

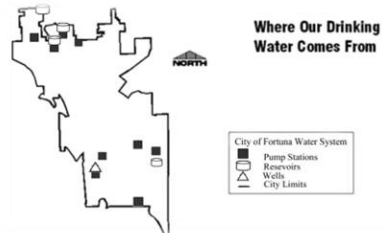
Primary drinking water standards are set to protect public health from substances in water that may be immediately harmful to humans or affect their health if consumed for long periods of time. The primary drinking water standards are defined by maximum contaminant levels (MCL's) for contaminants that affect health along with their monitoring and reporting requirements and surface water treatment requirements. Secondary standards govern aesthetic qualities such as taste, mineral content, odor or clarity. These standards specify limits for substances that may influence consumer acceptance of the water and do not affect health at MCL Levels.

**Important Health Information**

**Especially Important for Vulnerable Population**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 for infections.

These people should seek advice about drinking water from their health care providers. USEPA/CDC (Center for Disease Control) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking water Hotline (1-800-426-4791) or at their website at: <http://www.epa.gov/safewater>



**SODIUM**

We recognize that the addition of sodium to drinking water may be of concern to some customers. In 2005, after treatment, the water contains approximately 12 ppm of sodium. The U.S. EPA considers servings of less than 35 ppm to be very low sodium. The Food and Drug Administration states that most American adults tend to eat between 4,000 and 6,000 ppm of sodium per day; There is currently no drinking water standard for sodium.

**HARDNESS**

Water in the City of Fortuna is considered to be moderately hard at an average detected level of 180 ppm. Water that is too soft, below 30 ppm, can be corrosive to plumbing pipes and water that is too hard, above 300 ppm, causes scale to form on plumbing fixtures and cooking utensils.

**FOR MORE INFORMATION:**

You may attend the City of Fortuna Council meetings which are held the 1<sup>st</sup> and 3<sup>rd</sup> Monday of the month at 6:00PM. These meetings are located in the City Hall Council Chambers at 621 11<sup>th</sup> Street, Fortuna, CA 95540 ■ (707) 725-7600 ■ FAX (707) 725-7610 ■ You may also access the agenda on the web at [www.friendlyfortuna.com](http://www.friendlyfortuna.com)

**FLUORIDE**

The City of Fortuna **does not** add additional fluoride to the water supply. Fluoride is a naturally-occurring trace element in groundwater and at low levels, helps prevent dental cavities. The U.S. Public Health Service considers optimal levels of fluoride to be 0.7 to 1.2 ppm for drinking water. The City's average fluoride level of 0.15 ppm is considered to be lower than optimal for helping prevent tooth decay. You may want to consider consulting your dentist about ways to prevent tooth decay.

**2018 Table of Chemicals or Constituents**

| ■ COLIFORM BACTERIA(Required Annually)                                             |                         |                          |                                                                                                                     |                               |                                                 |                                                                                                                                                           |
|------------------------------------------------------------------------------------|-------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| MICROBIOLOGICAL CONTAMINANTS                                                       | HIGHEST # OF DETECTIONS | # OF MONTHS IN VIOLATION | MCL                                                                                                                 | PHG (MCLG)                    | TYPICAL SOURCE OF CONTAMINANT                   |                                                                                                                                                           |
| Total Coliform Bacteria                                                            | 0                       | 0                        | More than 1 sample in a month with a detection                                                                      | 0                             | Naturally present in the environment            |                                                                                                                                                           |
| Fecal Coliform and E. Coli                                                         | 0                       | 0                        | A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E. Coli | 0                             | Human and animal fecal waste                    |                                                                                                                                                           |
| ■ DISINFECTANT BYPRODUCTS (Required Annually)                                      |                         |                          |                                                                                                                     |                               |                                                 |                                                                                                                                                           |
| CONSTITUENT                                                                        | SAMPLE DATE             | Average Level Detected   | RANGE OF DETECTIONS                                                                                                 | MCL                           | TYPICAL SOURCE OF CONTAMINANT                   |                                                                                                                                                           |
| Total Trihalomethanes TTHM (ppb)                                                   | 2018                    | 11                       | 4.7-17                                                                                                              | 80                            | By-product of drinking water chlorination       |                                                                                                                                                           |
| Haloacetic Acids(ppb)                                                              | 2018                    | ND                       | 1-1.8                                                                                                               | 60                            | By-product of drinking water chlorination       |                                                                                                                                                           |
| CONSTITUENT                                                                        | SAMPLE DATE             | LEVEL DETECTED           | MCL                                                                                                                 | TYPICAL SOURCE OF CONTAMINANT |                                                 |                                                                                                                                                           |
| Chlorine CL <sub>2</sub> (ppm)                                                     | 2018                    | 0.5                      | 0.0-0.8                                                                                                             | 4.0                           | Drinking water disinfectant added for treatment |                                                                                                                                                           |
| ■ LEAD & COPPER TESTING (Required every 2 years, last done in 2017)                |                         |                          |                                                                                                                     |                               |                                                 |                                                                                                                                                           |
| LEAD AND COPPER                                                                    | # OF SAMPLES            | 90th PERCENTILE          | # OF SITES EXCEEDING AL                                                                                             | AL                            | PHG (MCLG)                                      | TYPICAL SOURCE OF CONTAMINANT                                                                                                                             |
| Lead (ppb)                                                                         | 36                      | 5.05                     | 0                                                                                                                   | 15                            | 2                                               | Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits                                   |
| Copper (ppb)                                                                       | 36                      | 325                      | 0                                                                                                                   | 1.3 mg/L                      | 17                                              | Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits; leaching from wood preservatives |
| ■ CONSTITUENTS WITH A PRIMARY DRINKING WATER STANDARD - (Required every 9 years)   |                         |                          |                                                                                                                     |                               |                                                 |                                                                                                                                                           |
| CHEMICAL OR CONSTITUENT                                                            | SAMPLE DATE             | Average Level Detected   | RANGE OF DETECTIONS                                                                                                 | MCL                           | PHG (MCLG)                                      | TYPICAL SOURCE OF CONTAMINANT                                                                                                                             |
| Gross Beta Particle Activity (pCi/L)                                               |                         | 0.88                     | 0.88                                                                                                                | 15                            | 0                                               | Decay of natural and man-made deposits                                                                                                                    |
| Barium (ppb)                                                                       | 2014                    | 200                      | 180                                                                                                                 | 1000                          | 2000                                            | Discharges of oil drilling wastes and metal refineries; erosion of natural deposits                                                                       |
| Fluoride (ppm)                                                                     | 2014                    | 0.15                     | 0.15                                                                                                                | 2.0                           | 1.0                                             | Erosion of natural deposits; water additive that promotes strong teeth; discharge from aluminum and fertilizer factories                                  |
| Nitrate (ppm)                                                                      | 2018                    | 3.5                      | 14                                                                                                                  | 45                            | N/A                                             | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits                                               |
| ■ CONSTITUENTS WITH A SECONDARY DRINKING WATER STANDARD - (Required every 9 years) |                         |                          |                                                                                                                     |                               |                                                 |                                                                                                                                                           |
| CHEMICAL OR CONSTITUENT                                                            | SAMPLE DATE             | LEVEL DETECTED           | RANGE OF DETECTIONS                                                                                                 | MCL                           | PHG (MCLG)                                      | TYPICAL SOURCE OF CONTAMINANT                                                                                                                             |
| Chloride (ppm)                                                                     | 2014                    | 11                       | 12                                                                                                                  | 500                           | N/A                                             | Runoff / leaching from natural deposits; seawater influence                                                                                               |
| Manganese (ppb)                                                                    | 2014                    | 27                       | 30                                                                                                                  | 50                            | N/A                                             | Leaching from natural deposits; industrial wastes                                                                                                         |
| Sulfate (ppm)                                                                      | 2014                    | 17                       | 14                                                                                                                  | 500                           | N/A                                             | Runoff / leaching from natural deposits; industrial wastes                                                                                                |
| Total Dissolved Solids TDS (ppm)                                                   | 2014                    | 250                      | 250                                                                                                                 | 1000                          | N/A                                             | Runoff / leaching from natural deposits                                                                                                                   |
| Iron (ppb)                                                                         | 2014                    | ND                       | 15                                                                                                                  | 300                           | N/A                                             | Leaching from natural deposits; industrial wastes                                                                                                         |
| Turbidity (NTU's)                                                                  | 2014                    | 0.11                     | 0.24                                                                                                                | 5                             | N/A                                             | Soil runoff                                                                                                                                               |
| ■ ADDITIONAL CONSTITUENTS - (Required every 9 years)                               |                         |                          |                                                                                                                     |                               |                                                 |                                                                                                                                                           |
| CONSTITUENT                                                                        | SAMPLE DATE             | Average Level Detected   | RANGE OF DETECTIONS                                                                                                 | MCL                           | PHG                                             | TYPICAL SOURCE OF CONTAMINANT                                                                                                                             |
| Sodium (ppm)                                                                       | 2014                    | 9.4                      | 12                                                                                                                  | NONE                          | NONE                                            | Generally found in ground and surface water                                                                                                               |
| Hardness (ppm)                                                                     | 2014                    | 210                      | 160                                                                                                                 | NONE                          | NONE                                            | Generally found in ground and surface water                                                                                                               |