

WORKING HARD FOR YOU

Under the Safe Drinking Water Act (SDWA), USEPA is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. In California, each system continually monitors for these substances and reports directly to the State Water Resources Control Board (SWRCB) if they were detected in the drinking water. USEPA uses this data to ensure that consumers are receiving good water and to verify that states are enforcing the laws that regulate drinking water.

This publication conforms to the regulation under SDWA requiring water utilities to provide detailed water quality information to each of their customers annually. We are committed to providing you with this information about your water supply because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

COMMUNITY PARTICIPATION

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet on the first and third Tuesday of every month beginning at 6:00 p.m. at the City Council Chambers, 383 Main Street, Brawley, CA

Este reporte contiene información sobre su agua potable. Si usted no lo entendió, pida que sea traducido por un amigo o alguien que lo entienda.

QUESTIONS?

EPA Call U.S. EPA's Safe Drinking Water Hotline at 1-800-426-4791

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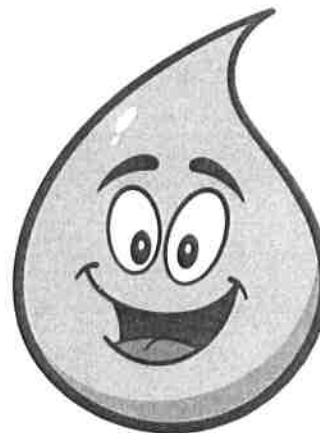
City of Brawley Water Treatment Plant
760 Willard Avenue
Brawley, CA 92227

2018 Water Quality Report



Proudly Prepared By
City of Brawley

Conserve Water



Where Does My Water Come From?

The City of Brawley customers are fortunate because we enjoy an abundant water supply from the Colorado River. The Water Treatment Plant receives water from the Central Main Canal via the All American Canal.



Substances Expected to be in Drinking Water

The resources 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, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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, that 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, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems, agriculture application.

Radioactive Contaminants, that 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 U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWRCB regulations also establish limits for contaminants in bottled water, they 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 (1-800-426-4791).

Special Health Information

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 from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC (Centers 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)



Mark of Excellence

Since the beginning, City of Brawley's goal has been to produce the highest quality drinking water for all its customers. We are proud of our history of quality service. To maintain our commitment to you, our water treatment staff routinely collects and test water samples every step of the way - from the water source right into the distribution system and into your home checking purity and identifying potential problems. Our Water Treatment Division constantly maintains, evaluates and stays abreast of advances in technology, health science and government regulations. Staffed by trained technicians, the lab has the latest, most sophisticated instruments, and can measure some substances down to one part per billion. In addition, the City has a comprehensive Cross-Connection Control Program. This program ensures that your water is free from cross contamination from backflow or back siphonage. Through foresight and planning, efficiency in operations, and focus on excellence in customer service, we will provide you the best quality drinking water at an economical price.

For more information about this report, or for any questions relating to your drinking water, please call Rodolfo Nunez, Water Treatment Plant Chief, at 760-344-2698

What's Inside?

This report outlines the processes involved in delivering to you the highest quality drinking water available. In it, we will answer two important questions:

- *Where does my water come from?
- *What is in my drinking water?

Also, we will provide you with information about available resources that will answer other questions on water quality and health effects.



What's In My Water?

The City of Brawley is pleased to publish the 2018 Water Quality Report. The water delivered to your home or business this past year complied with all State and Federal drinking water requirements. For your information, we have compiled the information in the table below. The City wants you to know exactly what was detected in the water supply and how much of each substance was present. The State of California requires the City to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently.



| Chemical or Constituent (Unit of Measurement) | Sample Date | Avg. Level Detected | Range of Results | Sample Date | Avg. Level Detected | Range of Results | MCL [MRDLG] | PHG [MCLG] [MRDLG] | Violation | Typical Source of Contaminant |
|--|-----------------------------|-------------------------|---------------------------------------|----------------------------|---------------------|------------------|---|--------------------|-----------|--|
| | | | | | | | | | | |
| DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD regulated to protect against possible health effects. | | | | | | | | | | |
| Aluminum (ppb) | 4 quarterly samples in 2018 | 288 | 160-620 | 12 monthly samples in 2018 | ND | 0-25 | 1000 | 600 | N/A | Erosion of natural deposits, residue from some surface water treatment processes |
| Arsenic (ppm) | 2018 | 0.002 | N/A | N/A | N/A | N/A | 0.01 | 0 | N/A | Erosion of natural deposits |
| Barium (ppm) | 2018 | 0.11 | N/A | N/A | N/A | N/A | 1 | 2 | N/A | Discharge of oil drilling wastes and from metal refineries, erosion of natural deposits |
| Fluoride (ppm) | 2018 | 0.00046 | N/A | N/A | N/A | N/A | 2 | 1 | N/A | Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories |
| Turbidity (ntu) | 10/25/2018 | 5.5 | N/A | 2018 | 04/100% | N/A | TT=1NTU/TT=95% of samples<0.3ntu | N/A | N/A | Soil runoff |
| Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements. | | | | | | | | | | |
| DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD regulated to protect the odor, taste and appearance of drinking water. | | | | | | | | | | |
| Chemical or Constituent (Unit of Measurement) | Sample Date | Avg. Level Detected | Range of Results | Sample Date | Avg. Level Detected | Range of Results | MCL [MRDLG] | PHG [MCLG] [MRDLG] | Violation | Typical Source of Contaminant |
| | | | | | | | | | | |
| Aluminum (ppb) | 4 quarterly samples in 2018 | 288 | 160-620 | 12 monthly samples in 2018 | <25 | 0-25 | 200 | N/A | N/A | Erosion of natural deposits, residue from some surface water treatment processes |
| Iron (ppb) | 4 quarterly samples in 2018 | 300 | 160-570 | 12 monthly samples in 2018 | 29.5 | 2.0-177 | 300 | N/A | N/A | Leaching from natural deposits, industrial wastes |
| Color (unfiltered) | 2018 | 10 | N/A | N/A | N/A | N/A | 15 | N/A | N/A | Naturally-occurring organic materials |
| Turbidity (ntu)w/p | 2018 | 6.22 | 2.32-12.60 | N/A | N/A | N/A | 5 | N/A | N/A | Soil runoff |
| Chloride (ppm) | 2018 | 110 | N/A | N/A | N/A | N/A | 500 | N/A | N/A | Naturally-occurring organic materials |
| Odor Threshold units (TON) | 2018 | 2 | N/A | N/A | N/A | N/A | 3 | N/A | N/A | Naturally-occurring organic materials |
| Specific Conductance (umhos/cm) | 2018 | 1100 | N/A | N/A | N/A | N/A | 1600 | N/A | N/A | Substances that form ions when in water, seawater influence |
| Sulfate (ppm) | 2018 | 280 | N/A | N/A | N/A | N/A | 500 | N/A | N/A | Runoff/leaching from natural deposits, industrial wastes |
| Total Filterable Residue (Tds) (ppm) | 2018 | 730 | N/A | N/A | N/A | N/A | 1000 | N/A | N/A | Runoff/leaching from natural deposits |
| DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS | | | | | | | | | | |
| Chemical or Constituent (Unit of Measurement) | Sample Date | Avg. Level Detected | Range of Results | Sample Date | Avg. Level Detected | Range of Results | MCL [MRDLG] | PHG [MCLG] | Violation | Typical Source of Contaminant |
| | | | | | | | | | | |
| Chlorine (ppm) | N/A | N/A | N/A | 2018 | 1.26 | 1.18-1.38 | [4] | [4] | N/A | Drinking water disinfectant added for treatment |
| TTHM (ppb) | N/A | N/A | N/A | 2018 | 52 (Highest LRAA) | 28-65.8 | 80 | N/A | N/A | Byproduct of drinking water disinfection sampled quarterly |
| HAAS (ppb) | N/A | N/A | N/A | 2018 | 43 (Highest LRAA) | 14.3-22.3 | 60 | N/A | N/A | Byproduct of drinking water disinfection sampled quarterly |
| LEAD AND COPPER (Tap water samples were collected from 30 homes in the service area) | | | | | | | | | | |
| SUBSTANCE (unit of measurement) | YEAR SAMPLED | REGULATORY ACTION LEVEL | PHG | AMOUNT DETECTED | HOMEABOVE RAL | VIOLATION | TYPICAL SOURCE | | | |
| COPPER (ppm) | 2017 | 1.3 | 0.3 | 0.080 | 0 | NO | Internal corrosion of household water plumbing systems, erosion of natural deposits, leaching from wood preservatives | | | |
| Lead (ppb) | 2017 | 15 | 0.2 | 0 | 0 | NO | Internal corrosion of household water plumbing systems, discharge from industrial manufacturers, erosion of natural | | | |
| VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT | | | | | | | | | | |
| Violation | Explanation | Duration | Action Taken to Correct the Violation | Health Effects | | | | | | |

NO VIOLATIONS.

| SUBSTANCE | YEAR SAMPLED | AMOUNT DETECTED IN SOURCE WATER | Typical Source |
|----------------------|--------------|---------------------------------|--|
| Vanadium (ppm) | 2018 | 0.2033 | Leaching from natural deposits |
| Sodium (ppm) | 2018 | 110 | Leaching from natural deposits |
| Potassium (ppm) | 2018 | 5.2 | Runoff/leaching from natural deposits |
| Ph (unfiltered) | 2018 | 8.8 | Is a measure of the ability and alkalinity |
| Calcium (ppm) | 2018 | 82 | Runoff/leaching from natural deposits |
| Total Hardness (ppm) | 2018 | 213 | Runoff/leaching from natural deposits |
| Alkalinity (ppm) | 2018 | 100 | Is a measure of the ability of a substance to neutralize acids |
| Magnesium (ppm) | 2018 | 23 | Naturally occurring mineral |
| Bicarbonate (ppm) | 2018 | 130 | Naturally occurring mineral |
| Boron (ppm) | 2018 | 0.17 | Runoff/leaching from natural deposits |

DEFINITIONS TABLE:

| | |
|--|---|
| NTU: | (Nephelometric Turbidity Unit): Measurement of the clarity, or turbidity, of water. |
| ppb: | (parts per billion) One part per billion (or micrograms per liter) |
| ppm: | (parts per million) One part per million (or milligrams per liter) |
| pp/L: | (parts per liter) (a measure of alkalinity) |
| MRDL: | (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants. |
| MCLG: | (Maximum Contaminant Level Goal): The level of drinking water that would protect against health risks that are known or expected to occur. MCLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. |
| LRAA: | Location Reporting Annual Average |
| ND: | Not Detected |
| NS: | Not Standard |
| RAL: | (Regulatory Action Level): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow. |
| MCL: | (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHG (or MCLG) as economically and technologically feasible. Secondary MCLs (2nd MCL) are set to protect the odor, taste and appearance of drinking water. |
| MCLG: | (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA. |
| PHG: | (Public Health Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the CEQA. |
| Primary Drinking Water Standard or PDWS: | MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements. |
| TT: | (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water. |
| NA: | Not applicable |
| NL: | Notification Level. |

DISINFECTION BYPRODUCTS

Public water systems using chlorine as their primary disinfectant are required by the USEPA and SWRCB to monitor for disinfection by-products (DBPs). These disinfectants react with natural occurring organic material in the water to produce a variety of DBPs. Among these DBPs are TTHMs and HAAS. Our quarterly sample analysis has shown results below the MCL. If you would like more information or have concerns, please contact our office.

A source water assessment was conducted for the CENTRAL MAIN CANAL of the City of Brawley water system in October, 2017. This source is considered most vulnerable to these activities for which no associated contaminant has been detected: concentrated animal feeding operations, agricultural activities such as pesticide use and farm chemical distribution, mining, geothermal wells, landfills/dumps, and illegal dumping. A copy of the assessment may be viewed at our Water Treatment Plant Facility located at 760 Willard Avenue, Brawley, CA.

LEAD IN DRINKING WATER

In 2017, the City of Brawley was required to sample 30 homes for lead and copper. The results of these samples showed levels below the Regulatory Action Level set by the EPA and Water Boards. 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 Brawley 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.

The City of Brawley received a written request from Brawley elementary school district to test for lead on 5 of their elementary schools. 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 Website: www.epa.gov/safewater/lead.

INFORMATION ON THE INTERNET

Web sites provide a substantial amount of information on many issues relating to water resources. Water Boards has a web site (www.swrcb.ca.gov) that provides complete and current information on water issues in our state. For additional water conservation information you can visit the City of Brawley website at: <http://www.brawley-ca.gov>

