



Annual Water Quality Consumer Confidence Report 2018



An Overview of Your 2018 Consumer Confidence Report

Each year, the City of Needles Water Department prepares our annual Consumer Confidence Report. This report identifies what we test our water for, what was present and provides a snapshot of the water quality requirements set by the California State Water Resources Control Board (State Board) and the United States Environmental Protection Agency (USEPA).

To ensure our water meets all State and Federal regulatory standards, we sample and test our water system regularly and send these samples to an independent lab for processing. We test for a variety of contaminants on a regular basis. Contaminants are things that might be present in the water and could compromise its safety. Many contaminants that we test for are naturally occurring, but depending on the amount, could cause health concerns.

Within this Consumer Confidence Report, we have provided data tables that show what we test for, if there was a detection, and if so, at what level. It's important to remember that if there is a detection, that doesn't mean the water is not safe to drink. Many naturally occurring elements found in water are detected at low levels but are only known to have an adverse health affect at very high levels, over a long period of time. Ensuring water quality is a complex process and the information we provide may seem complicated. We want to make sure to answer any questions or concerns you may have. If you have any questions, please contact the City of Needles at 760-326-5700.



Do you know where your water comes from?

*One hundred percent of our water supply in
the City of Needles comes from groundwater!*

Water Saving Tips



Find and Fix Leaks

Check toilets and faucets for leaks, and repair them promptly.



Take Shorter Showers

Shortening your shower by 1-2 mins. can save up to 700 gallons per year!



Wash Full Loads (Clothes & Dishes)

Only run your dishwasher and clothes washer when they're full.



Avoid Watering Mid-Day

Water only in the early mornings or late evenings to minimize evaporation and wind.



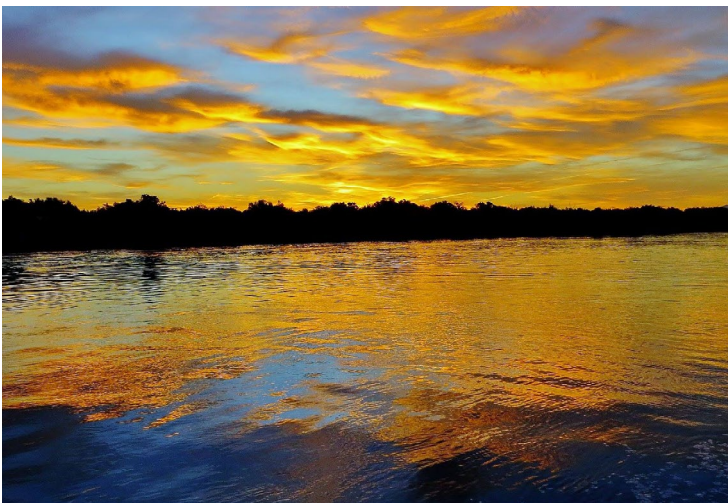
Choose the Right Plants

Replace a portion of your lawn with native and CA Friendly plants that use less water.



Install Smart Sprinklers

Use water efficient technology like drip irrigation, rotating sprinkler nozzles, and



Message from the United States Environmental Protection Agency

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, 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 stormwater 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, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

To ensure that tap water meets all Federal and State parameters, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations also establish limits for contaminants in bottled water that 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. For more information about contaminants and potential health effects, please call the USEPA's Safe Drinking Water Hotline (800-426-4791).

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. USEPA/Centers for Disease Control (CDC) 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).





2018 Water Quality Test Results

Last year, as in years past, your tap water met all U.S. EPA and State drinking water health standards. The City of Needles vigilantly safeguards its water supplies and once again, we are proud to report that our system has not violated a maximum contaminant level 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 State standards. We are committed to providing you with information because informed customers are our best allies.

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.



DETECTED CONSTITUENTS

YEAR TESTED 2015/2017

INORGANIC CONSTITUENTS

| Chemical Constituent | Unit of Measure | State MCL | MCL Goal / PHG | Needles Range | Needles Average | Typical Source of Contamination |
|------------------------|-----------------|-----------|----------------|---------------|-----------------|---------------------------------|
| Hardness | mg/L | ns | ns | 350 - 820 | 520 | Erosion of Natural Deposits |
| Calcium | mg/L | ns | ns | 85 - 200 | 128.3 | Erosion of Natural Deposits |
| Sulfate | mg/L | 500 | ns | 280 - 610 | 372.5 | Erosion of Natural Deposits |
| Chloride | ug/L | 600 | ns | 120 - 320 | 200 | Erosion of Natural Deposits |
| Nitrate* | mg/L | 45 | 45 | NS | NS | Erosion of Natural Deposits |
| Nitrate (NO3) | mg/L | 10 | 10 | ND - 2.3 | 0.817 | Erosion of Natural Deposits |
| Fluoride | ug/L | 2 | 1 | 0 - 1.9 | 1.26 | Erosion of Natural Deposits |
| Specific Conductance | Umho/cm | 1600 | n/a | 1000 - 2100 | 1425 | Erosion of Natural Deposits |
| Total Dissolved Solids | mg/L | 1000 | n/a | 720 - 1600 | 1050 | Erosion of Natural Deposits |
| Turbidity | NTU | 5 | n/a | 0 - 4.6 | 1.69 | Erosion of Natural Deposits |
| Iron | ug/L | 300 | n/a | 0 - 79 | 75.5 | Erosion of Natural Deposits |

METALS - OTHER

| Chemical Constituent | Unit of Measure | State MCL | MCL Goal / PHG | Needles Range | Needles Average | Typical Source of Contamination |
|----------------------|-----------------|-----------|----------------|---------------|-----------------|---------------------------------|
| Arsenic | ug/L | 10 | 0.004 | 0 - 3.3 | 3.3 | Erosion of Natural Deposits |
| Manganese | ug/L | 50 | nl=500 | 27-54 | 40.5 | Erosion of Natural Deposits |
| Magnesium | mg/L | ns | ns | .63 - 43 | 29.9 | Erosion of Natural Deposits |
| Sodium | mg/L | ns | ns | 160 - 420 | 262.5 | Erosion of Natural Deposits |
| Chromium | ug/L | 50 | 100 | ND - 2.1 | 2.1 | Erosion of Natural Deposits |
| Bicarbonate | mg/L | ns | ns | 170 - 260 | 202.5 | Erosion of Natural Deposits |
| pH | units | n/s | ns | 7.55 - 7.87 | 7.7 | Erosion of Natural Deposits |
| Barium | ug/L | 1000 | 2000 | 20 - 49 | 33 | Erosion of Natural Deposits |
| Selenium | ug/L | 50 | 30 | 0 - 3.2 | 2.9 | Erosion of Natural Deposits |
| MTBE | ug/L | 13 | 13 | < 3 | < 3 | Leaking Underground Tanks |

RADIOACTIVE CONSTITUENTS – 2015 and 2016

| Radioactive | Unit of Measure | MCL | MCL Goal / PHG | Range | Average | Typical Source of Contamination |
|-------------|-----------------|-----|----------------|-------------|---------|---------------------------------|
| Gross Alpha | pCi/L | 15 | 0 | .856 - 7.23 | 4.5 | Erosion of Natural Deposits |

**In 2018, the City failed to monitor for nitrate as required and thus was in violation of the regulations. This failure did not constitute an emergency and the situation has been rectified. The water was tested for nitrate twice in 2019 and the nitrate levels were well within acceptable range.*

LEAD & COPPER

| (units) | ACTION LEVEL | PHG (MCLG) | Range of Detection | 90 th % Level | MCL Violation? | Most Recent Sampling Date | Typical Source of Constituent |
|---------------|--------------|------------|--------------------|--------------------------|----------------|---------------------------|--|
| Copper (mg/L) | 1.3 | 0.3 | .013 - .36 | 0.28 | No | 2016 | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preserv-atives. No samples collected exceeded the action level. |
| Lead (mg/L) | 15 | 0.2 | 0 - .013 | 0.004 | No | 2016 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers, erosion of natural deposits. No samples collected exceeded the action level. |

Water Quality Terms

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

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 the U.S. Environmental Protection Agency.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known/expected risk to health. PHGs are set by the CA Environmental Protection Agency.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring, reporting, and water treatment requirements.

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 contaminants.

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.

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

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



List of Acronyms

DLR: Detection Limit for Purposes of Reporting

GWUI: Ground Water Under the Influence of Surface Water

mg/L: Milligrams per Liter or Parts Per Million (PPM) -

Equivalent to 1 second in 11.5 days

ng/L: Nanograms per liter or Parts Per Trillion (PPT) -

Equivalent to 1 second in nearly 32,000 years

NA: Not Applicable **NC:** Not Collected **ND:** Not Detected

NL: Notification Level **NS:** Not Sampled

NTU: Nephelometric Turbidity Units (Suspended Material)

pCi/L: Pico Curies per Liter

pg/L: Picograms per liter or Parts Per Quadrillion (PPQ) -

Equivalent to 1 second in nearly 32,000,000 years

Sequestration: Phosphates Used in Water Treatment to Control Metal Releases

uS/cm: MicroSeimen per Centimeter

µg/L: Micrograms per Liter or Parts Per Billion (PPB) -

Equivalent to 1 second in nearly 32 years



City of Needles Water Department
City Utility Services Office
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Needles, CA 92363
Phone: 760-326-5700

Coupon for \$100 Toilet Rebate

Present this coupon to City of Needles Customer Service Staff to receive a rebate of up to \$100 when you purchase a new WaterSense approved toilet. Residential accounts can apply for up to two rebates, and commercial accounts can receive up to four rebates. To qualify, your proof of purchase must also be submitted.

