



2021 Consumer Confidence Report

Water System Name: PATTERSON, CITY OF Report Date: March 2022

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2021.

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

Type of water source(s) in use: According to SWRCB records, this Source is Groundwater. This Assessment was done using the Default Groundwater System Method.

Your water comes from 7 source(s): Well 02 - North 5th St, Well 05 - Hartley St, Well 06 - Poppy Ave, Well 07- Well 08 - Orange Ave, Well 09 - Orange Ave and Well 11 - Sycamore Ave. and from 13 treated locations:

The public can participate in decisions that affect drinking water by attending City Council meetings on the 1st and 3rd Tuesday of every month at 7:00pm. For more information about this report or any questions related to your drinking water, please call (209) 895-8060 and ask for Maria Encinas or visit our website at www.ci.patterson.ca.us.

MEMBERS OF THE PUBLIC MAY PARTICIPATE IN THE MEETINGS IN PERSON OR VIA TELECONFERENCE BY CALLING 1-669-900-9128, MEETING ID: 693 538 4239, PASSWORD: 20995363 AND WILL BE GIVEN THE OPPORTUNITY TO PROVIDE PUBLIC COMMENT. JOIN FROM A PC, MAC, IPAD, IPHONE, OR ANDROID DEVICE BY USING THIS URL:

<https://us02web.zoom.us/j/6935384239?pwd=ZmZwMfFjYjR5TjJlKTRnNTAmZCZlWmZlZDZ09>

THE MEETINGS WILL BE TELEVIEWED OR AVAILABLE FOR PUBLIC VIEWING ON COMCAST CABLE CHANNEL 7 ON THE FOLLOWING DAYS: WEDNESDAY AT 3:00 P.M., FRIDAY AT 8:00 P.M. AND SATURDAY AT 12:00 P.M. OR WATCH ON INTERNET VIMEO LINK: <https://vimeo.com/channels/patterson/>

Tables 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Water Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

Table 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

| Microbiological Contaminants | Highest No. of Detections | No. of Months in Violation | MCL | MCLG | Typical sources of contaminant |
|------------------------------|---------------------------|----------------------------|--|------|--------------------------------------|
| Total Coliform Bacteria | 10/year (2021) | 3 | No more than 1 positive monthly sample | 0 | Naturally present in the environment |

Table 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

| Lead and Copper | Sample Date | No. of Samples | 90th percentile level detected | No. Sites Exceeding AL | AL | PHG | Typical Sources of contaminant |
|-----------------|-------------|----------------|--------------------------------|------------------------|-----|-----|---|
| Lead (ug/L) | (2021) | 30 | 0 | 0 | 15 | 0.2 | Internal corrosion of household water plumbing systems; discharges from industrial manufactures erosion of natural deposits |
| Copper (mg/L) | (2021) | 30 | 0.07 | 0 | 1.3 | .3 | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

Table 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

| Constituent (Unit of Measure) | Sample Date | Average | Range | MCL | PHG (MCLG) | Typical sources of contaminant |
|-------------------------------|---------------|---------|---------|------|------------|--|
| Sodium (mg/L) | (2019 – 2020) | 111 | 70-141 | none | none | Salt present in the water is generally naturally occurring |
| Hardness (mg/L) | (2019 – 2020) | 387 | 258-481 | none | none | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring |

Table 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

| Constituent (Unit of Measure) | Sample Date | Average | Range | MCL (MRDL) | PHG(MCLG) (MRDLG) | Typical sources of contaminant |
|----------------------------------|---------------|---------|-----------|------------|-------------------|---|
| Arsenic (ug/L) | (2019 – 2021) | 3 | 2 - 5 | 10 | 0.004 | Erosion of natural deposits; runoff from orchards, glass and electronics production wastes |
| Chromium (ug/L) | (2019 – 2020) | 20 | 17 - 28 | 50.0 | n/a | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits |
| Hexavalent Chromium (ug/L) | (2017 – 2021) | 19.5 | 14.2-26.3 | | 0.02 | Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, textile manufacturing facilities; erosion of natural deposits |
| Fluoride (mg/L) | (2019 – 2020) | 0.1 | ND – 0.4 | 2 | 1 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate as N (mg/L) | (2019 – 2021) | 4.7 | 1.1 – 8.2 | 10 | 10 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| Nitrate + Nitrite as N (mg/L) | (2019 – 2020) | 3.1 | 1.4 – 7.5 | 10 | 10 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| Selenium (ug/L) | (2019 – 2020) | 8 | 5 – 11 | 50 | 30 | Discharge from petroleum, glass, metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock |
| Gross Alpha (pCi/L) | (2015 – 2021) | 3.66 | ND – 5.38 | 15 | (0) | Erosion of natural deposits |
| Uranium (pCi/L) | (2013 – 2021) | 2.193 | ND – 3.57 | 20 | 0.43 | Erosion of natural deposits |
| Tetrachloroethylene (PCE) (ug/L) | (2019 – 2021) | 1.1 | ND – 3.6 | 5 | 0.06 | Discharge from factories, dry cleaners, and auto shops (metal degreaser) |

Table 5 – TREATED DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

| Constituent (Unit of Measure) | Sample Date | Average | Range | MCL (MRDL) | PHG(MCLG) (MRDLG) | Typical sources of contaminant |
|-------------------------------|-------------|---------|-----------|------------|-------------------|---|
| Chromium (ug/L) | (2016) | 24 | 19 – 30 | 50.0 | n/a | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits |
| Hexavalent Chromium (ug/L) | (2016) | 17.3 | ND – 25.9 | 10 | 0.02 | Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits |
| Nitrate as N (mg/L) | (2016) | 4 | 3.3 – 4.7 | 10 | 10 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |

Table 6 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

| Constituent (Unit of Measure) | Sample Date | Average | Range | MCL | PHG (MCLG) | Typical sources of contaminant |
|---------------------------------|---------------|---------|------------|------|------------|---|
| Chloride (mg/L) | (2019 - 2020) | 135 | 32 – 255 | 500 | n/a | Runoff/leaching from natural deposits; seawater influence |
| Iron (ug/L) | (2019 – 2021) | 209 | ND – 1350 | 300 | n/a | Leaching from natural deposits; Industrial wastes |
| Odor Threshold at 60 °C (TON) | (2019 – 2020) | ND | ND – 2 | 3 | n/a | Naturally-occurring organic materials |
| Specific Conductance (umhos/cm) | (2019 – 2021) | 1444 | 866 – 1810 | 1600 | n/a | Substances that form ions when in water; seawater influence |
| Sulfate (mg/L) | (2019 – 2020) | 305 | 210 – 416 | 500 | n/a | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids (mg/L) | (2019 – 2021) | 929 | 530 – 1150 | 1000 | n/a | Runoff/leaching from natural deposits |
| Turbidity (NTU) | (2019 – 2020) | 0.5 | ND – 1.4 | 5 | n/a | Soil runoff |

Table 7 – TREATED DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

| Constituent (Unit of Measure) | Sample Date | Average | Range | MCL | PHG (MCLG) | Typical sources |
|-------------------------------|-------------|---------|-------------|------|------------|---------------------------------------|
| Total Dissolved Solids (mg/L) | (2016) | 1107 | 1060 – 1170 | 1000 | n/a | Runoff/leaching from natural deposits |

Table 8 - DETECTION OF UNREGULATED CONTAMINANTS

| Constituent (and reporting units) | Sample Date | Average | Range | Notification Level | Typical Sources of Contaminant |
|-----------------------------------|---------------|---------|-----------|--------------------|---|
| Boron (mg/L) | (2019 – 2021) | 0.4 | 0.3 – 0.6 | 1 | Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats. |

Table 9 – ADDITIONAL DETECTIONS

| Constituent (Unit of Measure) | Sample Date | Average | Range | Notification Level | Typical sources of contaminant |
|-------------------------------|---------------|---------|-------------|--------------------|--------------------------------|
| Calcium (mg/L) | (2019 – 2020) | 68 | 44 – 89 | n/a | n/a |
| Magnesium (mg/L) | (2019 – 2020) | 53 | 35 – 63 | n/a | n/a |
| pH (units) | (2019 – 2020) | 7.7 | 6.8 – 9.5 | n/a | n/a |
| Alkalinity (mg/L) | (2019 – 2020) | 153 | 110 – 200 | n/a | n/a |
| Aggressiveness Index | (2019 – 2020) | 12.1 | 11.3 – 13.8 | n/a | n/a |
| Langlier Index | (2019 – 2020) | 0.2 | -0.6 – 1.9 | n/a | n/a |

Table 10 – DETECTION OF DISINFECTANT/DISINFECTANT BYPRODUCT RULE

| Constituent (Unit of Measure) | Sample Date | Average | Range | MCL (MRDL) | PHG (MCLG) | Violation | Typical sources of contaminant |
|--------------------------------------|-------------|---------|--------|------------|------------|-----------|---|
| Total Trihalomethanes (TTHMs) (ug/L) | (2021) | 17 | 1 – 23 | 80 | n/a | No | By-product of drinking water disinfectant added for treatment |
| Chloride (mg/L) | (2021) | 0.00 | n/a | 4.0 | 4.0 | No | Drinking water disinfectant added for treatment |
| Haloacetic Acids (5) (ug/L) | (2021) | 2.5 | ND – 3 | 60 | n/a | No | By-product of drinking water disinfection |

Any violation of MCL, AL or MRDL is highlighted.

Lead Specific Language for Community Water Systems: 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 the service lines and home plumbing.

City of Patterson Drinking Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/lead>.

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.

In order to ensure that tapwater is safe to drink, the USEPA and the State Water Resource Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Water Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically 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 (USEPA).

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.

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.

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

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

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

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

Level 1 Assessment: Study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: Detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

mg/L: milligrams per liter or parts per million (ppm) ug/L: micrograms per liter or parts per billion (ppb) pCi/L: picocuries per liter (a measure of radiation)



Visit us on the web!

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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).