City of
La Palma
Community Services
Department

2022 Water Quality Report

DATA COLLECTED IN 2021

Your 2022 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 2021 drinking water quality testing and reporting.** Your City of La Palma Community Services Department (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.

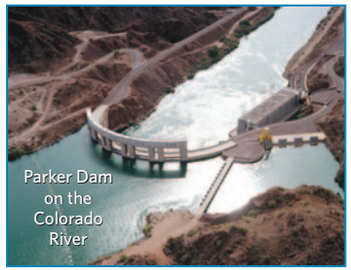
In some cases, the City goes beyond what is required by testing for unregulated chemicals that may have known health risks but do not have drinking water standards. For example, the Orange County Water District (OCWD), which manages the ground water basin, and the City of Cerritos, which supplies limited groundwater, 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, the City of Cerritos for limited imported groundwater, the Metropolitan Water District of Southern California (MWDSC) for treated surface water, and the City for the water distribution system, your drinking water is constantly monitored from source to tap for regulated and unregulated contaminants.

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of our data, though representative, is more than one year old.

Constant Monitoring Ensures Continued Excellence

Sources of Supply


Parker Dam on the Colorado River

The City's water supply is groundwater managed by the Orange County Water District (OCWD), limited groundwater imported from the City of Cerritos, and MWDSC treated surface water from Northern California and the Colorado River. OCWD's groundwater comes from a natural underground aquifer that is replenished with water from the Santa Ana River, local rainfall, and imported water. The groundwater basin is 350 square miles and lies beneath north and central Orange County from Irvine to the Los Angeles County border and from Yorba Linda to the Pacific Ocean. More than 20 cities and retail water districts draw from the basin to provide water to homes and businesses.

Orange County's Water Future

For years Orange County has enjoyed an abundant and seemingly endless supply of high-quality water. However, as water demand continues to increase statewide, we must be even more conscientious about our water supply and maximize the efficient use of this precious natural resource.

OCWD and the Municipal Water District of Orange County (MWDOC) work cooperatively to evaluate new and innovative water management and supply development programs, including water reuse and recycling, wetlands expansion, recharge facility construction, ocean and brackish water desalination, surface storage, and water use efficiency programs. These efforts are helping to enhance long-term countywide water reliability and water quality.

A healthy water future for Orange County rests on finding and developing new water supplies, as well as protecting and improving the quality of the water that we have today. Your local and regional water agencies are committed to making the necessary investments today in new water management projects to ensure an abundant and high-quality water supply for our future.

Basic Information About Drinking Water Contaminants

The sources of drinking water (both tap 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.
- **Inorganic contaminants**, such as salts and metals, can be naturally occurring or result from urban storm 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.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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.

Immunocompromised People

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

We Invite You to Learn More About Your Water's Quality

For information about this report, or your water quality in general, please contact the Community Services Department at (714) 690-3310.

The City Council meets only on the 1st Tuesday of every month at 6:30 p.m. in the City Council Chambers located at 7822 Walker Street, La Palma, California 90623. 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.

To Safeguard Against Issues that May Affect Your Health

We Comply with All State & Federal Water Quality Regulations

Disinfectants and Disinfection Byproducts

Disinfection of drinking water was one of the major public health advances in the 20th century. Disinfection was a major factor in reducing waterborne disease epidemics caused by pathogenic bacteria and viruses, and it remains an essential part of drinking water treatment today.

Chlorine disinfection has almost completely eliminated from our lives the risks of microbial waterborne diseases. Chlorine is added to your drinking water at the source of supply. Enough chlorine is added so that it does not completely dissipate through the distribution system pipes. This "residual" chlorine helps to prevent the growth of bacteria in the pipes that carry drinking water from the source into your home.

However chlorine can react with naturally-occurring materials in the water to form

Chart Legend

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 standards:

- **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.
- **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.
- **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.

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.

How are Contaminants Measured?

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)

2021 City of La Palma Drinking Water Quality
Local Groundwater and Imported Water

Chemical	MCL	Average PHG (MCLG)	Average Local Groundwater	Average Imported Water: Cerritos Groundwater	Average Imported Water: MWD Surface Water	Range of Detections	MCL Violation?	Typical Source of Contaminant
Radiologicals – Tested in 2017, 2019, 2020, and 2021								
Gross Alpha (pCi/L)	15	(0)	3.89	ND	ND	ND – 4.05	No	Erosion of Natural Deposits
Gross Beta (pCi/L)	50	(0)	NR	NR	5	4 – 6	No	Decay of Natural and Man-made Deposits
Uranium (pCi/L)	20	0.43	ND	<1	2	ND – 3	No	Erosion of Natural Deposits
Organic Chemicals – Tested in 2021								
1,1-Dichloroethylene (ppb)	6	10	ND	<0.5	ND	ND – 1.4	No	Discharge from Metal Degreasing Sites and Other Industries
Trichloroethylene (ppb)	5	1.7	ND	<0.5	ND	ND – 1.6	No	Discharge from Metal Degreasing Sites and Other Industries
Inorganic Chemicals – Tested in 2020 and 2021								
Aluminum (ppm)	1	0.6	ND	ND	0.141	ND – 0.21	No	Treatment Process Residue, Natural Deposits
Arsenic (ppb)	10	0.004	6.3	7	ND	ND – 11	No	Erosion of Natural Deposits
Barium (ppm)	1	2	<0.1	0.11	0.111	ND – 0.17	No	Oil Drilling Waste & Metal Refinery Discharge; Erosion of Natural Deposits
Bromate (ppb)	10	0.1	NR	NR	ND	ND – 4.6	No	Byproduct of Drinking Water Ozonation
Fluoride (ppm) - naturally-ocurring	2	1	0.44	0.28	NR	0.27 – 0.46	No	Erosion of Natural Deposits
Fluoride (ppm) - treatment-related	2	1	NR	NR	0.7	0.6 – 0.9	No	Water Additive for Dental Health
Nitrate as N (ppm)	10	10	ND	<0.4	ND	ND – 0.5	No	Fertilizers, Septic Tanks, Natural Erosion
Secondary Standards* – Tested in 2020 and 2021								
Aluminum (ppb)	200*	600	ND	ND	141	ND – 210	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	15.9	37	96	13.9 – 97	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	ND	ND	1	ND – 1	No	Naturally-occurring Organic Materials
Manganese (ppb)	50*	n/a	39	**56****	ND	ND – 60	No	Erosion of Natural Deposits
Odor (threshold odor number)	3*	n/a	1	ND	2	ND – 2	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	476	580	958	459 – 965	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	48.4	68	214	42.4 – 215	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	307	360	597	290 – 597	No	Runoff or Leaching from Natural Deposits
Turbidity (NTU)	5*	n/a	0.2	0.1	ND	ND – 0.2	No	Runoff or Leaching from Natural Deposits
Unregulated Chemicals – Tested in 2020 and 2021								
Alkalinity, total as $CaCO_3$ (ppm)	Not Regulated	n/a	165	180	125	124 – 190	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	41.9	61	66	41.5 – 76	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (ppm)	Not Regulated	n/a	141	190	274	138 – 276	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gallon)	Not Regulated	n/a	8.2	11	16	8.1 – 16	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	8.9	9.5	25	7.8 – 26	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	8	7.8	8.1	7.8 – 8.1	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	2.1	2.9	4.4	2 – 4.6	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	50.2	45	94	28 – 95	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	NR	NR	2.4	1.9 – 2.8	n/a	Various Natural and Man-made Sources

ppb = parts-per-billion; **ppm** = parts-per-million; **pCi/L** = picoCuries per liter; **NTU** = nephelometric turbidity units; **µmho/cm** = micromhos per centimeter; **ND**= not detected;
< = average is less than the detection limit for reporting purposes; **n/a** = not applicable; **TT** = treatment technique;
MCL = Maximum Contaminant Level; **(MCLG)** = federal MCL Goal; **PHG** = California Public Health Goal;
*Contaminant is regulated by a secondary standard.
**Manganese was found at levels that exceed the secondary MCL of 50 ppb. The manganese secondary MCL was set to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. The high manganese levels are due to leaching of natural deposits.

Turbidity – combined filter effluent Metropolitan Water District Diemer Filtration Plant	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source of Contaminant
1) Highest single turbidity measurement (NTU)	0.3	0.03	No	Soil run-off
2) Percentage of samples less than or equal to 0.3 NTU	95%	100%	No	Soil run-off

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. **NTU** = nephelometric turbidity units
Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a "treatment technique" (TT).
A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.

Unregulated Chemicals Requiring Monitoring

Chemical	Notification Level	PHG (MCLG)	Average Local Groundwater	Average MWD Surface Water	Range of Detections	Most Recent Sampling Date
Bromide (ppm)	Not Regulated	n/a	0.05	NR	0.043 – 0.052	2019
Germanium (ppb)	Not Regulated	n/a	ND	0.1	ND – 0.4	2019
Manganese (ppb)***	SMCL = 50	n/a	30	1.7	<0.4 – 47.5	2019
Total Organic Carbon (Unfiltered) (ppm)	Not Regulated	n/a	0.32	NR	0.24 – 0.4	2019

SMCL = Secondary MCL ***Manganese was included as part of the unregulated chemicals requiring monitoring.

unintended chemical byproducts, called disinfection byproducts (DBPs), which may pose health risks. A major challenge is how to balance the risks from microbial pathogens and DBPs. It is important to provide protection from these microbial pathogens while simultaneously ensuring decreasing health risks from disinfection byproducts. The Safe Drinking Water Act requires the USEPA to develop rules to achieve these goals.

Trihalomethanes (THMs) and Haloacetic Acids (HAAs) are the most common and most studied DBPs found in drinking water treated with chlorine. In 1979, the USEPA set the maximum amount of total THMs allowed in drinking water at 100 parts per billion as an annual running average. Effective in January 2002, the Stage 1 Disinfectants/ Disinfection Byproducts Rule lowered the total THM maximum annual average level to 80 parts per billion and added HAAs to the list of regulated chemicals in drinking water. Your drinking water complies with the Stage 1 Disinfectants/Disinfection Byproducts Rule.

Stage 2 of the regulation was finalized by USEPA in 2006, which further controls allowable levels of DBPs in drinking water without compromising disinfection itself. A required distribution system evaluation was completed in 2008 and a Stage 2 monitoring plan has been approved by DDW. Full Stage 2 compliance began in 2012.

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 or on the internet at: www.epa.gov/safewater/lead.

Arsenic Advisory

While your drinking water meets the federal and state standard for arsenic of 10 micrograms per liter, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Additional information on arsenic is available from the EPA website, www.epa.gov/safewater/arsenic.

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 surveys for MWDSC's source waters are the Colorado River Watershed Sanitary Survey – 2020 Update, and the State Water Project Watershed Sanitary Survey – 2016 Update.

Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban/storm-water 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 not associated with detected contaminants: body shops, chemical/petroleum processing/storage, electrical/electronic manufacturing, gas stations, historic gas stations, known contaminant plumes, machine shops, metal plating/finishing/ fabricating, photo processing/ printing, repair shops, sewer collection systems, wastewater treatment and disposal facilities.

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, CA 92707. You may request a summary of the assessment by contacting the City at (714) 690-3313.

In 2013, the DDW completed an assessment of the City of Cerritos' groundwater supplies. The assessment established that the groundwater supplies are most vulnerable to automobile gas stations, chemical/petroleum processing/storage, known contaminant plumes, contractor or government agency equipment storage yards, parks, freeway/state highways transportation corridors, herbicide use in road rights-of-way, water wells, dry cleaners, metal plating/finishing/fabricating, automobile repair shops, utility station maintenance areas, and wastewater treatment plants.

Further information, as well as a summary of the assessments, is available by contacting the City of La Palma at (714) 690-3310.

2021 City of La Palma Distribution System Water Quality

Disinfection Byproducts	MCL (MRDL/MRDLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant
Total Trihalomethanes (ppb)	80	13	3.4 – 18	No	Byproducts of chlorine disinfection
Haloacetic Acids (ppb)	60	2	ND – 6.6	No	Byproducts of chlorine disinfection
Chlorine Residual (ppm)	(4 / 4)	0.59	0.05 – 1.3	No	Disinfectant added for treatment
Aesthetic Quality					
Color (color units)	15*	9	ND – 11	No	Erosion of natural deposits
Odor (threshold odor number)	3*	1	1 – 2	No	Erosion of natural deposits
Turbidity (NTU)	5*	0.3	ND – 1.44	No	Erosion of natural deposits

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; five locations are tested weekly for color, odor and turbidity.

MRDL = Maximum Residual Disinfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal

*Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Lead and Copper Action Levels at Residential Taps

	Action Level (AL)	Public Health Goal	90th Percentile Value	Sites Exceeding AL / Number of Sites	AL Violation?	Typical Source of Contaminant
Lead (ppb)	15	0.2	ND	0 / 30	No	Corrosion of household plumbing
Copper (ppm)	1.3	0.3	0.15	0 / 30	No	Corrosion of household plumbing

Thirty residences were tested for lead and copper at-the-tap during 2021. Lead was detected in 1 home; none exceeded the regulatory Action Level. Copper was detected in 19 homes; none exceeded the AL. A regulatory AL is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

In 2021, no school submitted a request to be sampled for lead.

Unregulated Chemicals Requiring Monitoring in the Distribution System

Chemical	Notification Level	PHG	Average Amount	Range of Detections	Most Recent Sampling Date
Bromochloroacetic Acid (ppb)	n/a	n/a	0.7	0.5 – 1.2	2020
Bromodichloroacetic Acid (ppb)	n/a	n/a	0.3	ND – 0.6	2020
Chlorodibromoacetic Acid (ppb)	n/a	n/a	0.6	0.5 – 0.8	2020
Dibromoacetic Acid (ppb)	n/a	n/a	0.9	0.6 – 1.6	2020
Dichloroacetic Acid (ppb)	n/a	MCLG = 0	0.4	0.3 – 0.7	2020

How to Read Your Water Meter

Your water meter is usually located between the sidewalk and curb under a cement cover. Remove the cover by inserting a screwdriver in the hole in the lid and then carefully lift the cover. The meter reads straight across, like the odometer on your car. Read only the black numbers (075.50).

If you are trying to determine if you have a leak, turn off all the water in your home, both indoor and outdoor faucets, and then check the leak indicator faucet icon. If the icon is illuminated, that indicates a leak between the meter and your plumbing system.

To activate the Neptune E-Coder water meter ~ After the cover is opened, shine a flashlight on the photoelectric eye to activate the screen.

A Water Meter Reading ~ The number shown indicates all water that has passed through the meter in its lifetime. To know how much water is used in a given period, subtract the last reading from the current total (you'll need to take two readings or look at your last billing statement). The difference is the amount of water used.

Rate of Flow ~ A second reading, the "Rate," will be displayed alternately with the Meter Reading. "Rate" is the amount of water (in gallons per minute) passing through the meter at that moment. It can be used for leak detection. If all water is shut off and a rate is observed, this means water is flowing through the meter.

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. Para mas información ó traducción, favor de contactar a Customer Service Representative. Telefono: (714) 690-3310.

이 보고서에는 귀하가 거주하는 지역의 수질에 관한 중요한 정보가 들어 있습니다. 이것을 번역하거나 충분히 이해하시는 친구와 상의하십시오.

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