LAGUNA BEACH COUNTY WATER DISTRICT


WATER QUALITY IS OUR TOP PRIORITY

# Your 2024 Water Quality Report

## IMPORTANT INFORMATION ABOUT YOUR WATER

# Your 2024 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 2023 drinking water quality testing and reporting.** Laguna Beach County Water District (LBCWD) vigilantly safeguards its water supply and, as in years past, the water delivered 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.

*Whitsett Intake Pumping Plant on the Colorado River.*

In some cases, LBCWD goes beyond what is required by testing for unregulated chemicals that may have known health risks but do not have drinking water standards. 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, your drinking water is constantly monitored from source to tap for constituents that are both regulated and unregulated.

The State allows water agencies to monitor for some constituents less than once per year because the concentrations of these constituents do not change frequently. Some of the data, though representative, are more than one year old.

## Quality Water is Our Priority

Turn the tap and the water flows, as if by magic. Or so it seems. The reality is considerably different, however. Delivering high-quality drinking water to our customers is a scientific and engineering feat that requires considerable effort and talent to ensure the water is always there, always safe to drink.

Because tap water is highly regulated by state and federal laws, water treatment and distribution operators must be licensed and are required to complete on-the-job training and technical education before becoming a state certified operator.

Our licensed water professionals have an understanding of a wide range of subjects, including mathematics, biology, chemistry, physics, and engineering. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.

So, the next time you turn on your faucet, think of the skilled professionals who stand behind every drop.

**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: (949) 464-3117.

Bản báo cáo có ghi những chi tiết quan trọng về phẩm chất nước trong cộng dồng quý vị. Hãy nhờ người thông dịch, hoặc hỏi một người bạn biết rõ về vấn đề này.

يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته، أو ابحث التقرير مع صديق لك يفهم هذه المعلومات جيداً.

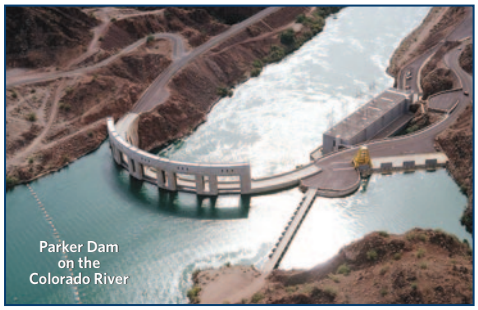
这份报告中有些重要的信息，讲到关于您所在社区的水的品质。请您找人翻译一下，或者请能看得懂这份报告的朋友给您解释一下。

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

この資料には、あなたの飲料水についての大切な情報が書かれています。内容をよく理解するために、日本語に翻訳して読むか説明を受けてください。

# Constant Monitoring Ensures Continued Excellence

## Sources of Supply




Your drinking water is surface water imported by Metropolitan Water District of Southern California (MWDSC) and groundwater from the Santa Ana Basin. MWDSC's imported water sources are the Colorado River and the State Water Project, which draws water from the Sacramento-San Joaquin River Delta. 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 groundwater basin to provide water to homes and businesses.

## Basic Information About Drinking Water Contaminants

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 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, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **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 byproducts of industrial processes and petroleum production, and can also come from gasoline stations, urban stormwater runoff, agricultural application, and septic systems.

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.

## Drinking Water Fluoridation

Fluoride has been added to U.S. drinking water supplies since 1945. Of the 50 largest cities in the U.S., 43 fluoridate their drinking water. In December 2007, MWDSC joined a majority of the nation's public water suppliers in adding fluoride to drinking water in order to prevent tooth decay. MWDSC was in compliance with all provisions of the State's fluoridation system requirements. Fluoride levels in drinking water are limited under California state regulations at a maximum dosage of 2 parts per million.

There are many places to go for additional information about the fluoridation of drinking water:

**U.S. Centers for Disease Control and Prevention**
www.cdc.gov/fluoridation/

**State Water Resources Control Board, Division of Drinking Water**
www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html

For more information about MWDSC's fluoridation program, please contact Edgar G. Dymally at edymally@mwdh2o.com or call him at (213) 217-5709.

*To Safeguard Against Issues that May Affect Your Health*

# We Comply with All State & Federal Water Quality Regulations

## Cryptosporidium

*Cryptosporidium* is a microscopic organism that, when ingested, can cause diarrhea, fever, and other gastrointestinal symptoms. The organism comes from animal and/or human wastes and may be in surface water. The MWDSC tested their source water and treated surface water for *Cryptosporidium* in 2023 but did not detect it. If it ever is detected, *Cryptosporidium* is eliminated by an effective treatment combination including sedimentation, filtration, and disinfection.

The USEPA and the federal Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from USEPA's Safe Drinking Water Hotline at (800) 426-4791, or on the web at www.epa.gov/safewater.

## 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.

## Disinfectant 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 (surface water treatment plant). 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 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 LBCWD is responsible for providing high quality drinking water, but cannot control the variety of materials used in on-site 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 LBCWD can provide a list of approved testing facilities, but the cost for testing is your responsibility.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline, (800) 426-4791, or at: www.epa.gov/safewater/lead.

## Water Conservation: A Little Effort Can Save a Lot of Water *and Money*

LBCWD promotes the conservation of water to its residents so the District can preserve this scarce resource and save residents money in the process.

Water is brought to Southern California via large aqueduct systems that feed off of rivers from the Central Valley and the Colorado River. There are large costs involved in maintaining these systems and transporting the water over miles of deserts, valleys, and mountain ranges. The MWDSC is the main supplier of this water and controls the vast network of aqueducts, pumping stations, and filtration plants.

Local municipal water suppliers do have the ability to tap into underground aquifers, but this local supply of water is not enough to meet the demands of the residents; the more expensive "aqueduct" water must be used to meet the demand. For these reasons, it is recommended that you conserve water by reducing water waste. This will save you money as well.

## 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.

### 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)

### 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.

## 2023 Metropolitan Water District of Southern California Treated Surface Water

| Chemical | MCL | PHG (MCLG) | Average Amount | Range of Detections | MCL Violation? | Typical Source of Chemical |
|---|---|---|---|---|---|---|
| **Radiologicals – Tested in 2023** | | | | | | |
| Gross Alpha Particle Activity (pCi/L) | 15 | (0) | ND | ND – 5 | No | Erosion of Natural Deposits |
| Gross Beta Particle Activity (pCi/L) | 50 | (0) | ND | ND – 6 | No | Decay of Natural and Man-made Deposits |
| Uranium (pCi/L) | 20 | 0.43 | 1 | ND – 3 | No | Erosion of Natural Deposits |
| **Inorganic Chemicals – Tested in 2023** | | | | | | |
| Aluminum (ppm) | 1 | 0.6 | 0.105 | ND – 0.07 | No | Treatment Process Residue, Natural Deposits |
| Bromate (ppb) | 10 | 0.1 | ND | ND – 6.3 | No | Byproduct of Drinking Water Ozonation |
| Fluoride (ppm) | 2 | 1 | 0.7 | 0.6 – 0.8 | No | Water Additive for Dental Health |
| Nitrate (as Nitrogen) (ppm) | 10 | 10 | 0.7 | 0.7 | No | Fertilizers, Septic Tanks |
| **Secondary Standards* – Tested in 2023** | | | | | | |
| Aluminum (ppb) | 200* | 600 | 105 | ND – 70 | No | Treatment Process Residue, Natural Deposits |
| Chloride (ppm) | 500* | n/a | 66 | 42 – 91 | No | Runoff or Leaching from Natural Deposits |
| Color (color units) | 15* | n/a | 2 | 1 – 2 | No | Naturally-occurring Organic Materials |
| Odor (threshold odor number) | 3* | n/a | 2 | 2 | No | Naturally-occurring Organic Materials |
| Specific Conductance (µmho/cm) | 1,600* | n/a | 642 | 424 – 859 | No | Substances that Form Ions in Water |
| Sulfate (ppm) | 500* | n/a | 122 | 70 – 175 | No | Runoff or Leaching from Natural Deposits |
| Total Dissolved Solids (ppm) | 1,000* | n/a | 394 | 253 – 534 | No | Runoff or Leaching from Natural Deposits |
| **Unregulated Chemicals – Tested in 2023** | | | | | | |
| Alkalinity, total as $CaCO_3$ (ppm) | Not Regulated | n/a | 84 | 66 – 102 | n/a | Runoff or Leaching from Natural Deposits |
| Boron (ppm) | NL = 1 | n/a | 0.13 | 0.13 | n/a | Runoff or Leaching from Natural Deposits |
| Calcium (ppm) | Not Regulated | n/a | 38 | 25 – 52 | n/a | Runoff or Leaching from Natural Deposits |
| Hardness, total as $CaCO_3$ (ppm) | Not Regulated | n/a | 160 | 99 – 220 | n/a | Runoff or Leaching from Natural Deposits |
| Hardness, total (grains/gallon) | Not Regulated | n/a | 9.4 | 5.8 – 13 | n/a | Runoff or Leaching from Natural Deposits |
| Lithium (ppb) | Not Regulated | n/a | 15 | ND – 30 | n/a | Various Natural and Man-made Sources |
| Magnesium (ppm) | Not Regulated | n/a | 15 | 9.6 – 21 | n/a | Runoff or Leaching from Natural Deposits |
| pH (pH units) | Not Regulated | n/a | 8.5 | 8.5 | n/a | Hydrogen Ion Concentration |
| Potassium (ppm) | Not Regulated | n/a | 3.4 | 2.6 – 4.3 | n/a | Runoff or Leaching from Natural Deposits |
| Sodium (ppm) | Not Regulated | n/a | 69 | 47 – 91 | n/a | Runoff or Leaching from Natural Deposits |
| Total Organic Carbon (ppm) | TT | n/a | 2.4 | 2.1 – 3 | n/a | Various Natural and Man-made Sources |

**ppb** = parts per billion; **ppm** = parts per million; **pCi/L** = picoCuries per liter; **µmho/cm** = micromhos per centimeter; **ND** = not detected; **TT** = treatment technique
**MCL** = Maximum Contaminant Level; **(MCLG)** = federal MCL Goal; **PHG** = California Public Health Goal; **NL** = Notification Level; **n/a** = not applicable

*Chemical is regulated by a secondary standard.

| Turbidity – combined filter effluent<br>Metropolitan Water District Diemer Filtration Plant | Treatment Technique | Turbidity Measurements | TT Violation? | Typical Source of Chemical |
|---|---|---|---|---|
| 1) Highest single turbidity measurement (NTU) | 0.3 | 0.08 | No | Soil Runoff |
| 2) Percentage of samples less than or equal to 0.3 NTU | 95% | 100% | No | Soil Runoff |

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 chemicals in drinking water that are difficult and sometimes impossible to measure directly.

## Unregulated Chemicals Requiring Monitoring

| Chemical | Notification Level | PHG | Average Amount | Range of Detections | Most Recent Sampling Date |
|---|---|---|---|---|---|
| Manganese (ppb)** | SMCL = 50 | n/a | 2.75 | 1.4 – 4.1 | 2019 |

SMCL = Secondary MCL

**Manganese is regulated with a secondary standard of 50 ppb but was not detected, based on the detection limit for purposes of reporting of 20 ppb. Manganese was included as part of the unregulated chemicals requiring monitoring.

## 2023 Laguna Beach County Water District Distribution System Water Quality

| Disinfection Byproducts | MCL (MRDL/MRDLG) | Average Amount | Range of Detections | MCL Violation? | Typical Source of Contaminant |
|---|---|---|---|---|---|
| Total Trihalomethanes (ppb) | 80 | 46 | 9.3 – 61 | No | Byproducts of Chlorine Disinfection |
| Haloacetic Acids (ppb) | 60 | 20 | 3.2 – 25 | No | Byproducts of Chlorine Disinfection |
| Chlorine Residual (ppm) | (4 / 4) | 1.7 | 0.04 – 3.24 | No | Disinfectant Added for Treatment |
| **Aesthetic Quality** | | | | | |
| Color (color units) | 15* | 1 | 1 | No | Erosion of Natural Deposits |
| Odor (threshold odor number) | 3* | 1 | 1 | No | Erosion of Natural Deposits |
| Turbidity (NTU) | 5* | 0.19 | 0.1 – 0.46 | No | Erosion of Natural Deposits |

Four locations in the distribution system are tested quarterly for trihalomethanes and haloacetic acids; twelve locations are tested monthly 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 / 34 | No | Corrosion of Household Plumbing |
| Copper (ppm ) | 1.3 | 0.3 | 0.12 | 0 / 34 | No | Corrosion of Household Plumbing |

Every three years, at least 30 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2023. Lead was not detected any homes. Copper was detected in 10 homes; none exceeded the regulatory action level. A regulatory action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

## Unregulated Chemicals Requiring Monitoring in the Distribution System

| Chemical | Notification Level | PHG | Average Amount | Range of Detections | Most Recent Sampling Date |
|---|---|---|---|---|---|
| Haloacetic acids (HAA5) (ppb) | n/a | n/a | 7.8 | 5.5 – 11.5 | 2019 |
| Haloacetic acids (HAA6Br) (ppb) | n/a | n/a | 10.2 | 7.87 – 13.6 | 2019 |
| Haloacetic acids (HAA9) (ppb) | n/a | n/a | 15.7 | 11.9 – 21.7 | 2019 |

## 2023 Santa Ana Basin Groundwater Quality

| Chemical | MCL | PHG (MCLG) | Average Amount | Range of Detections | MCL Violation? | Most Recent Sampling Date | Typical Source of Contaminant |
|---|---|---|---|---|---|---|---|
| **Radiologicals** | | | | | | | |
| Uranium (pCi/L) | 20 | 0.43 | 2.87 | ND – 5.54 | No | 2019 | Erosion of Natural Deposits |
| **Inorganic Chemicals** | | | | | | | |
| Arsenic (ppb) | 10 | 0.004 | 2.2 | ND – 4.1 | No | 2023 | Erosion of Natural Deposits |
| Barium (ppm) | 1 | 2 | <0.1 | ND – 0.1 | No | 2023 | Erosion of Natural Deposits |
| Fluoride (ppm) | 2 | 1 | 0.42 | 0.33 – 0.47 | No | 2023 | Erosion of Natural Deposits |
| Nitrate (ppm as N) | 10 | 10 | 1.39 | ND – 2.73 | No | 2023 | Fertilizers, Septic Tanks |
| Nitrate+Nitrite (ppm as N) | 10 | 10 | 1.39 | ND – 2.73 | No | 2023 | Fertilizers, Septic Tanks |
| **Secondary Standards*** | | | | | | | |
| Chloride (ppm) | 500* | n/a | 40 | 8.2 – 79 | No | 2023 | Erosion of Natural Deposits |
| Manganese (ppb) | 50* | n/a | 1.2 | ND – 2.6 | No | 2023 | Erosion of Natural Deposits |
| Specific Conductance (µmho/cm) | 1,600* | n/a | 547 | 182 – 963 | No | 2023 | Erosion of Natural Deposits |
| Sulfate (ppm) | 500* | n/a | 76 | 10 – 153 | No | 2023 | Erosion of Natural Deposits |
| Total Dissolved Solids (ppm) | 1000* | n/a | 352 | 108 – 638 | No | 2023 | Erosion of Natural Deposits |
| Turbidity (NTU) | 5* | n/a | <0.10 | ND – 0.10 | No | 2023 | Erosion of Natural Deposits |
| **Unregulated Chemicals** | | | | | | | |
| Alkalinity, total (ppm as $CaCO_3$) | Not Regulated | n/a | 143 | 67.3 – 224 | n/a | 2023 | Erosion of Natural Deposits |
| Bicarbonate (ppm as $HCO_3$) | Not Regulated | n/a | 174 | 82 – 273 | n/a | 2023 | Erosion of Natural Deposits |
| Boron (ppm) | NL = 1 | n/a | 0.16 | 0.12 – 0.19 | n/a | 2023 | Erosion of Natural Deposits |
| Calcium (ppm) | Not Regulated | n/a | 64.5 | 12.9 – 127 | n/a | 2023 | Erosion of Natural Deposits |
| Hardness, total (ppm as $CaCO_3$) | Not Regulated | n/a | 225 | 47.5 – 415 | n/a | 2023 | Erosion of Natural Deposits |
| Hardness, total (grains/gallon) | Not Regulated | n/a | 13 | 2.8 – 24 | n/a | 2023 | Erosion of Natural Deposits |
| Magnesium (ppm) | Not Regulated | n/a | 10.7 | 1.5 – 23.5 | n/a | 2023 | Erosion of Natural Deposits |
| Perfluoro Hexane Sulfonic Acid (ppt)** | NL = 3 | n/a | <3 | ND | n/a | 2023 | Industrial Discharge |
| Perfluoro Octane Sulfonic Acid (ppt)** | NL = 6.5 | n/a | <4 | ND | n/a | 2023 | Industrial Discharge |
| pH (units) | Not Regulated | n/a | 7.9 | 7.5 – 8.2 | n/a | 2023 | Acidity, Hydrogen Ions |
| Potassium (ppm) | Not Regulated | n/a | 2.8 | 1.5 – 4.4 | n/a | 2023 | Erosion of Natural Deposits |
| Sodium (ppm) | Not Regulated | n/a | 41.0 | 24.1 – 51.9 | n/a | 2023 | Erosion of Natural Deposits |
| Vanadium (ppb) | NL = 50 | n/a | 3.8 | ND – 7.4 | n/a | 2023 | Erosion of Natural Deposits |

**ppb** = parts-per-billion; **ppm** = parts-per-million; **ppt** = parts-per-trillion; **pCi/L** = picoCuries per liter; **NTU** = nephelometric turbidity units; **<** = average is less than the detection limit for reporting purposes;
**MCL** = Maximum Contaminant Level; **PHG** = California Public Health Goal; **NL** = Notification Level; **µmho/cm** = micromho per centimeter; **ND** = not detected; **n/a** = not applicable

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

**Detections of perfluoro hexane sulfonic acid (PFHxS) and perfluoro octane sulfonic acid (PFOS) are in the City of Newport Beach shallow wells. Through blending treatment and as a result, the City of Newport Beach reservoir has no detections of these two chemicals, which serves water to customers.

## Unregulated Chemicals Requiring Monitoring at Entry Points to the Distribution System

| Chemical | Notification Level | PHG | Average Amount | Range of Detections | Most Recent Sampling Date |
|---|---|---|---|---|---|
| Manganese (ppb)*** | SMCL = 50 | n/a | 0.86 | 0.86 | 2019 |

**SMCL** = Secondary MCL

***Manganese is regulated with a secondary standard of 50 ppb but was not detected, based on the detection limit for purposes of reporting of 20 ppb. Manganese was included as part of the unregulated chemicals requiring monitoring.

# 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 — 2021 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 our groundwater sources from the Santa Ana Basin was completed in December 2002 and is updated on a continuing basis. The groundwater sources are considered most vulnerable to the following activities not associated with detected contaminants: dry cleaners, gas stations, and known contaminant plumes. A copy of the complete assessment is available at State Water Resources Control Board, Division of Drinking Water, Santa Ana District, 2 MacArthur Place, Suite 150, Santa Ana, California 92707. You may request a summary of the assessment by contacting the Water Quality Specialist at (949) 464-3117.

# Your 2024 Water Quality Report

## *The Knowledge You Need for Continued Consumer Confidence*

Look inside to see how our water quality
is equal to or better than what is required to safeguard public health.

LAGUNA BEACH
COUNTY WATER DISTRICT

306 Third Street
Laguna Beach, California 92651



## You Can Have Confidence in the Quality of Your Water

The Laguna Beach County Water District is pleased to distribute this report to its water customers. It provides important information about where your water comes from and the work we perform each day to assure the water delivered to your tap meets all Federal and State drinking water standards.

The tap water that comes out of your faucet has to meet rigorous Federal and State regulatory standards; otherwise, we wouldn't be able to deliver it to your home.

Our annual water quality report shares details about the water you receive. You can see for yourself that we are meeting and even exceeding standards required to maintain water quality.

Take a look inside for details on water sources, the constituents found in the water, and how our water compares with Federal and State standards.

The Laguna Beach County Water District is committed to safeguarding its water supply and ensuring that your tap water is safe to drink. We also strive to keep you informed about the quality of your water supply.

### *Want to Learn More About Your Water's Quality?*

For information about this report, or your water quality in general, please contact the Water Quality Specialist at (949) 464-3117, or visit the LBCWD's website at www.lbcwd.org.

For more information about the health effects of the listed contaminants in the following tables, call the USEPA hotline at (800) 426-4791.

Please check our website at www.lbcwd.org for the dates and times of the monthly Water District Commission Meetings at 306 Third Street in the City of Laguna Beach. You are encouraged to participate in these meetings.

# Where Does Our Water Come From?

## ...and How Does It Get to Us?

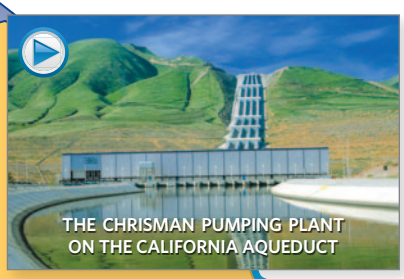
Have you ever wondered where your water comes from? Here in the Laguna Beach County Water District our water is drawn from local groundwater supplies then blended with water imported from both Northern California and the Colorado River.

Water from Northern California travels to us through a complex delivery system known as the California State Water Project. Designed and built in the 1960s, the State Water Project is one of the largest public water and power utilities in the world, providing drinking water for more than 25 million people statewide.

Managed by the California Department of Water Resources, the project stretches over 700 miles, from Lake Oroville in the north to Lake Perris in the south. Water stored in Lake Oroville, Folsom Lake, and other tributaries, and fed by snow melt from the Sierra Nevada Mountains, flows into the Sacramento and San Joaquin rivers, and from there into reservoirs in the Bay-Delta region.

From the Bay-Delta, giant pumps lift the water into the 444-mile-long California Aqueduct, there to flow southward to cities and farms in Central and Southern California. Composed mainly of concrete-lined canals, the Aqueduct also includes over 20 miles of tunnels, more than 130 miles of pipelines, and 27 miles of siphons. Along the way, the water is pumped 2,882 feet over the Tehachapi Mountains. The Edmonston Pumping Plant alone lifts millions of gallons a day up 1,926 feet, the highest single water lift in the world.

Is it any wonder the State Water Project is the largest single consumer of power in the State of California?

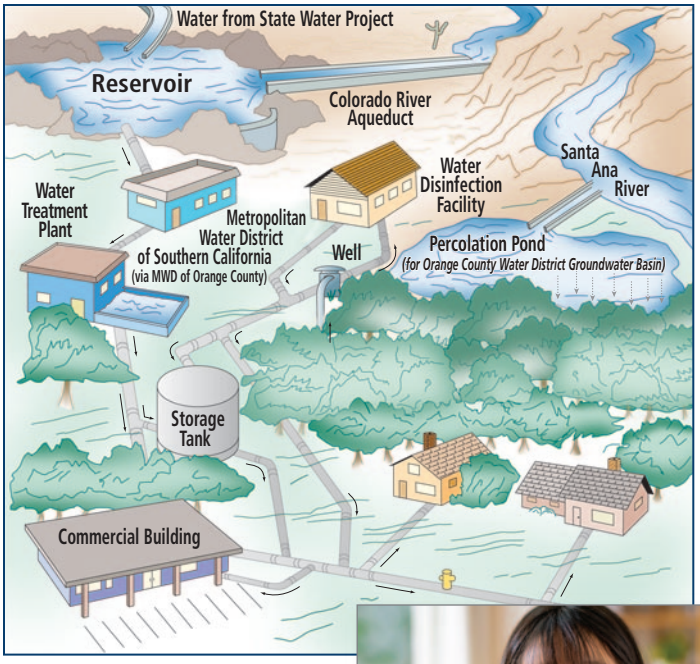





Managed by the Metropolitan Water District of Southern California, the Colorado River Aqueduct begins near Parker Dam on the Colorado River. There, the Gene Pumping Station lifts the water over 300 feet as it begins its 242 mile journey to Lake Mathews, just outside the City of Corona. Along the way, the water passes through two reservoirs, five pumping stations, 62 miles of canals, and 176 miles of tunnels, buried conduits and siphons. All told, the water is lifted four times, a total of more than 1,300 feet.

After its journey across the Mojave Desert, the water descends into the Coachella Valley and through the San Gorgonio Pass. Near Cabazon, the aqueduct flows underground, passing beneath the San Jacinto Mountains and continuing until it reaches its terminus at Lake Mathews. From there, 156 miles of distribution lines, along with eight more tunnels and five drinking water treatment plants, delivers treated water throughout Southern California.

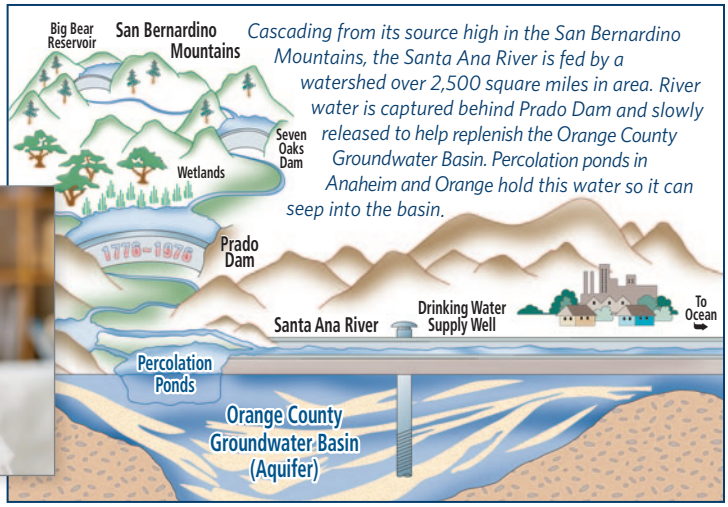
Trinity Lake
Shasta Lake
REDDING
Lake Oroville
Feather River
Sacramento River
SACRAMENTO
Folsom Lake
New Hogan Reservoir
The Bay-Delta
SAN FRANCISCO
San Joaquin River
Millerton Lake
California Aqueduct
STATE WATER PROJECT
BAKERSFIELD
Lake Isabella
Chrisman Pumping Plant
Edmonston Pumping Plant
Pyramid Lake
Castaic Lake
Silverwood Lake
Colorado Aqueduct
Lake Perris
Gene Pumping Station
LOS ANGELES
Lake Mathews
ORANGE COUNTY
SAN DIEGO
PACIFIC OCEAN
Colorado River




## How Does Our Water Get to Us?

Importing water from hundreds of miles away is only the start to providing you clean, fresh water. Once the water is in the southland, the Metropolitan Water District of Southern California, in partnership with the Municipal Water District of Orange County, treats and pumps the water to individual cities throughout Orange County.

The Orange County Water District, which manages the groundwater basin beneath Central and Northern Orange County, ensures the quality and supply of groundwater throughout its service area. LBCWD draws water from this local source, then blends it with the imported surface water.




*Cascading from its source high in the San Bernardino Mountains, the Santa Ana River is fed by a watershed over 2,500 square miles in area. River water is captured behind Prado Dam and slowly released to help replenish the Orange County Groundwater Basin. Percolation ponds in Anaheim and Orange hold this water so it can seep into the basin.*

LBCWD vigorously works to ensure the safety of your drinking water and, in conjunction with MWDSC and OCWD, continuously monitors the water to verify adherence with drinking water regulations.

## The Need to Conserve Water Remains A High Priority Throughout California

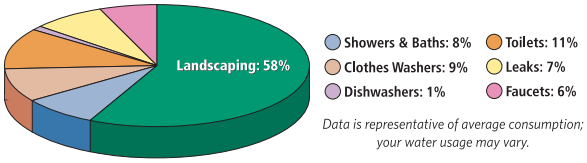
Southern California has an arid climate and wise water use needs to become a part of everyone's daily lives. For as finite as our water resources are, they get smaller every year. Simple water saving acts like the ones listed here can save countless gallons of water every day.

- Soak pots and pans instead of letting water run while you scrub them clean. ***This both saves water and makes the job easier.***
- Keep a pitcher of drinking water in the refrigerator. ***This can save gallons of water every day and it's always cold!***
- Plug the sink instead of running water to rinse your razor or wet your toothbrush. ***This can save upwards of 300 gallons of water a month.***
- Use a broom instead of a hose to clean off sidewalks and driveways. ***It takes very little time to sweep and the water savings quickly adds up.***
- Check your sprinkler system for leaks, overspray, and broken sprinkler heads and repair promptly. ***This can save countless gallons each time you water.***
- Water plants in the early morning. ***It reduces evaporation and ensures deeper watering.***

## Where Do We Use Water the Most?

Outdoor watering of lawns and gardens makes up approximately 60% of home water use. By reducing your outdoor water use — by either cutting back on irrigation or planting more drought tolerant landscaping — you can dramatically reduce your overall water use.

Save the most where you use the most: Make your outdoor use efficient.




*Data is representative of average consumption; your water usage may vary.*

## Where Can You Learn More?

There's a wealth of information on the internet about Drinking Water Quality and water issues in general. Some good sites to begin your own research are:

**Metropolitan Water District of So. California:** www.mwdh2o.com
**California Department of Water Resources:** www.water.ca.gov
**The Water Education Foundation:** www.watereducation.org

To learn more about **Water Conservation & Rebate Information**:
www.bewaterwise.com • www.ocwatersmart.com

And to see the Aqueducts in action, checkout these two videos:
**Wings Over the State Water Project:** youtu.be/8A1v1Rr2neU
**Wings Over the Colorado Aqueduct:** youtu.be/KipMQh5t0f4

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