ANNUAL WATER QUALITY REPORT

Reporting Year 2024

Presented By

CITY OF LA VERNE

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

PWS ID#: 1910062

Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Where Does My Water Come From?

The City of La Verne is proud to provide residents with a safe and reliable water supply sourced from both local groundwater and imported surface water. About 24% of our water comes from city-owned wells located throughout La Verne, including Amherst, Beech Street, Lincoln, Mills Tract, Walnut, and La Verne Heights—drawing from deep aquifers that are regularly tested for quality. The remaining 76% is imported through the Three Valleys Municipal Water District, which purchases and treats water from the State Water Project and the Colorado River Aqueduct via the Metropolitan Water District of Southern California. Together, these sources supply roughly 3.5 billion gallons of clean drinking water to the community each year. Our system meets or exceeds all state and federal standards, with water undergoing continuous treatment and testing. As we plan for the future, La Verne remains committed to infrastructure investment and water conservation to ensure a dependable supply for generations to come.

Public Participation

The city council meets on the first and third Monday of the month in Council Chambers at 3660 D Street. Public attendance and participation are welcomed.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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 at (800) 426-4791 or epa.gov/safewater.

What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit bit.ly/3Z5AMm8.

Questions?

If you would like more information or have any questions regarding the quality or delivery of your water service, please call Ryan Ciotti, Utilities Manager, at (909) 596-8741.

Substances That Could Be in Water

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 the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. EPA and the State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations and California law 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. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Lead in Home Plumbing

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of La Verne is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter certified by an American National Standards Institute-accredited certifier to reduce lead is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure it is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling does not remove lead from water.

Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, or doing laundry or a load of dishes. If you have a lead or galvanized service line requiring replacement, you may need to flush your pipes for a longer period. If you are concerned about lead and wish to have your water tested, contact Customer Service at (909) 596-8744. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The lead service inventory may be found at https://www.cityoflaverne.org/DocumentCenter/View/3852/La-Verne-LCRR-Report-2024-Excel. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

What's Your Water Footprint?

You may have some understanding about your carbon footprint, but how much do you know about your water footprint? The water footprint of an individual, community, or business is defined as the total volume of freshwater that is used to produce the goods and services that are consumed by the individual or community or produced by the business. For example, 11 gallons of water is needed to irrigate and wash the fruit in one half-gallon container of orange juice. Thirty-seven gallons of water is used to grow, produce, package, and ship the beans in that morning cup of coffee. Two hundred and sixty-four gallons of water is required to produce one quart of milk, and 4,200 gallons of water is required to produce two pounds of beef.

According to the U.S. EPA, the average American uses over 180 gallons of water daily. In fact, in the developed world, one flush of a toilet uses as much water as the average person in the developing world allocates for an entire day's cooking, washing, cleaning, and drinking. The annual American per capita water footprint is about 8,000 cubic feet, twice the global per capita average. With water use increasing sixfold in the past century, our demands for freshwater are rapidly outstripping what the planet can replenish. To check out your own water footprint, go to watercalculator.org.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through them.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen and disinfectant levels and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water to prevent sediment accumulation in your hot water tank. Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council (NRDC), bottled water is not necessarily cleaner or safer than most tap water. In fact, about 40 percent of bottled water is actually just tap water, according to government estimates.

The FDA is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to $1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water. For a detailed discussion on the NRDC study results, visit nrdc.org/stories/bottled-water-vs-tap-water.

Protecting Your Water

Bacteria are a natural and important part of our world. There are around 40 trillion bacteria living in each of us; without them, we would not be able to live healthy lives. Coliform bacteria are common in the environment and generally not harmful themselves. The presence of this bacterial form in drinking water is a concern, however, because it indicates that the water may be contaminated with other organisms that can cause disease.

In 2016 the U.S. EPA passed a regulation called the Revised Total Coliform Rule, which requires water systems to take additional steps to ensure the integrity of the drinking water distribution system by monitoring for the presence of bacteria like total coliform and E. coli. The rule requires more stringent standards than the previous regulation, and it requires water systems that may be vulnerable to contamination to have procedures in place that will minimize the incidence of contamination. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment and correct any problems quickly. The U.S. EPA anticipates greater public health protection under this regulation due to its more preventive approach to identifying and fixing problems that may affect public health.

Though we are fortunate in having the highest-quality drinking water, our goal is to eliminate all potential pathways of contamination into our distribution system, and this requirement helps us accomplish that goal.

Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. 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.
- Maintaining optimal water chemistry.
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels.
- Documenting and reporting test results and system operations to regulatory agencies.
- 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 each drop.

Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use three to six gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.

- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain it to reduce leaching to water sources, or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people: "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Source Water Assessment

Source Water Assessments Imported (MWD) Water Assessment Every five years, MWD 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 Metropolitan'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/stormwater 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 MWD to complete one Source Water Assessment (SWA) that utilizes information collected in the water shed sanitary surveys. MWD completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps deter mine 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 MWD at (800) CALL-MWD (225-5693).

Groundwater Assessment A source water assessment was conducted for all city owned wells including Beech Street Well, La Verne Heights Well 01, La Verne Heights Well 02, La Verne Heights Well 03, Lincoln Well, Mills Tract Well, Old Baldy Well, Amherst Well, and Walnut Well for the City of La Verne Water Department in March 2002. These sources are considered most vulnerable to the following activities not associated with any detected contaminants: hospitals, high density housing, storm drain discharge points, transportation corridors — road-right-of-ways, sewer collection systems, high density septic systems, dry cleaners, historic gas stations, confirmed leaking underground fuel tanks, automobile gas stations, and plastics/synthetics producers. A copy of the complete assessment may be viewed at: State Water Resources Control Board, Division of Drinking Water, 500 N. Central Avenue, Suite 500, Glendale, California 91203. You may request a summary of the assessment be sent to you by contacting Chi P. Diep, District Engineer, Metropolitan District, (818) 551-2016.

Why save water?

Although 80 percent of the Earth's surface is water, only 1 percent is suitable for drinking. The rest is either saltwater or permanently frozen, and we can't drink it, wash with it, or use it to water plants.

Which household activity wastes the most water?

Most people would say the majority of water use comes from showering or washing dishes; however, toilet flushing is by far the largest single use of water in a home (accounting for 40% of total water use). Toilets use about 4 to 6 gallons per flush, so consider an ultra-low-flow (ULF) toilet, which requires only 1.5 gallons.

Should I be concerned about what I'm pouring down my drain?

If your home is served by a sewage system, your drain is an entrance to your wastewater disposal system and eventually to a drinking water source. Consider purchasing environmentally friendly home products whenever possible, and never pour hazardous materials (e.g., car engine oil) down the drain. Check with your health department for more information on proper disposal methods.

How long can I store drinking water?

The disinfectant in drinking water will eventually dissipate, even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water can be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

How long does it take a water supplier to produce one glass of treated drinking water?

It can take up to 45 minutes to produce a single glass of drinking water.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

REGULATED SUBSTANCES - DISTRIBUTION SYSTEM

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2024	10	0.004	2.8	2.7–3.0	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2024	1	2	0.084	0.071–0.093	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Dichloromethane (ppb)	2024	5	4	ND	NA	No	Discharge from pharmaceutical and chemical factories; insecticide
***E. coli* (State Revised Total Coliform Rule)** (positive samples)	2024	0	(0)	0	NA	No	Human and animal fecal waste
***E. coli* Assessment and/or Corrective Action Violations** (percent positive samples)	2024	0	(0)	0	NA	No	Human and animal fecal waste
Fluoride (ppm)	2024	2.0	1	0.31	0.15–0.58	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Beta Particle Activity (pCi/L)	2024	50	(0)	ND	NA	No	Decay of natural and human-made deposits
Nitrate [as nitrogen] (ppm)	2024	10	10	15	5–26	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate (ppb)	2024	6	1	7,000	ND–20,000	No	An inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries; historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts
Radium 226 (pCi/L)	2018	5	0.05	0.014	ND–0.059	No	Erosion of natural deposits
Radium 228 (pCi/L)	2018	5	0.019	0.09	0.02–0.294	No	Erosion of natural deposits
Tetrachloroethylene [PCE] (ppb)	2024	5	0.06	0.75	0.5–0.9	No	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Trichloroethylene [TCE] (ppb)	2024	5	1.7	0.85	ND–1.6	No	Discharge from metal degreasing sites and other factories
Uranium (pCi/L)	11/04/2024	20	0.43	4.3	3.3–5.8	No	Erosion of natural deposits

Definitions

MCL (Maximum Contaminant Level): 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 (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not Detected): Indicates that the substance was not found by laboratory analysis.

NL: Notification Level to State Water Resources Control Board.

NR: Not required.

NS: No standard.

pCi/L (picocuries per liter): A measure of radioactivity.

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

PHG (Public Health Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

ppb (µg/L) (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (mg/L) (parts per million): One part substance per million parts water (or milligrams per liter).

TON (Threshold Odor Number): A measure of odor in water.

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

SECONDARY SUBSTANCES - DISTRIBUTION SYSTEM

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2024	500	NS	56	39–71	No	Runoff/leaching from natural deposits; seawater influence
Iron (ppb)	2024	300	NS	ND	NA	No	Leaching from natural deposits; industrial wastes
Odor, Threshold (TON)	2024	3	NS	ND	NA	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2024	1,600	NS	775	710–920	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2024	500	NS	89	76–120	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2024	1,000	NS	515	460–610	No	Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES[1] - DISTRIBUTION SYSTEM

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity (ppm)	2024	196	174–221	Naturally occurring
Calcium (ppm)	2024	96	81–119	Naturally occurring
Hardness, Total [as CaCO3] (ppm)	2024	380	300–420	Naturally occurring
Sodium (ppm)	06/18/2024	38	32–42	Naturally occurring

[1] Unregulated contaminant monitoring helps the U.S. EPA and SWRCB determine where certain contaminants occur and whether the contaminants need to be regulated.

Contaminants Exceeding MCL or AL

The range for Nitrate and other constituents in the groundwater sample results may be above the Maximum Contaminant Level (MCL). These values are for wells which account for approximately 24 percent of the total water supplied to our customers. The Nitrate content at your tap is well below the MCL of 10 parts per million (ppm), ranging from ND to 7.1 ppm with an average of 4.19 ppm. The Perchlorate content at your tap is well below the MCL of 6 parts per billion (ppb), ranging from ND to 5.3 ppb with an average of <2.0 ppb. The range for Trichloroethylene in the groundwater sample results may also be above the MCL of 5 parts per billion (ppb); however, the ground water goes through an air stripping process that reduces the Trichloro ethylene to between ND to 1.1 ppb with an average of 0.78 ppb. Nitrate as Nitrogen in drinking water at prolonged levels above 10 ppm is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate as Nitrogen in drinking water at prolonged levels above 10 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your healthcare provider. Perchlorate in drinking water at prolonged levels above 6 ppb can disrupt the normal function of the thyroid gland in both children and adults. In adults, the thyroid plays an important role in metabolism, making and storing hormones that help regulate the heart rate, blood pressure, body temperature, and the rate at which food is converted into energy. In fetuses and infants, thyroid hormones are critical for normal growth and development of the central nervous system. Perchlorate can interfere with the human body's ability to absorb iodine into the thyroid gland which is a critical element in the production of thyroid hormones.

BY THE NUMBERS

3.4 BILLION

The daily volume in gallons of water recycled and reused in the U.S., reducing waste and conserving resources.

28%

The percent reduction in per capita water use in the U.S. since 1980, thanks to efficiency improvements.

99.99%

The percent effectiveness of modern water treatment plants in removing harmful bacteria and viruses from drinking water.

1.2 MILLION

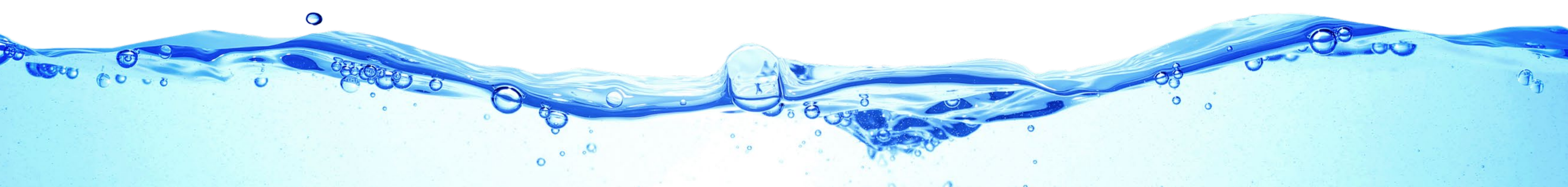
The length in miles of drinking water pipes in the U.S. delivering clean water to millions of homes and businesses daily.

1.7 MILLION

The number of jobs supported by the U.S. water sector.

REGULATED SUBSTANCES - SOURCE WATER

				WEYMOUTH EFFLUENT		MIRAMAR EFFLUENT			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2024	1000.0	600	93	ND–150	ND	NA	No	Residue from water treatment process; erosion of natural deposits
Barium (ppb)	2024	1000	2000	124	NA	ND	NA	No	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (ppb)[2]	2024	10	0.1	2 highest RAA	NA	NR	NA	No	Byproduct of drinking water ozonation
Chloramines (as total chlorine residual) (ppm)	2024	[4.0]	[4.0]	2.5 highest RAA distribution system-wide	NA	NR	NA	No	Drinking water disinfectant added for treatment
Chromium VI (ppb)	2024	10.0	0.02	ND	NA	ND	NA	No	Runoff/leaching from natural deposits: discharge from industrial wastes
Fluoride (ppm)[3]	2024	2.0	1	0.7	0.3–0.8	0.11	NA	No	Erosion of natural deposits; water additive that promotes strong teeth
Gross Beta Particle Activity (pCi/L)	2024	50.0	0	ND	ND–5	2.29	NA	No	Decay of natural and man-made deposits
Nitrate (as Nitrogen) (ppm)	2024	10.0	10	ND	NA	0.23	ND–0.49	No	Runoff & leaching from fertilizer use; septic tank and sewage; erosion of natural deposits
Radium 226 (pCi/L)	2024	NA	0.05	ND	NA	ND	NA	No	Erosion of natural deposits
Radium 228 (pCi/L)	2024	NA	0.019	ND	NA	ND	NA	No	Erosion of natural deposits
Sum of Five Haloacetic Acids [HAA5] (ppb)	2024	60	NA	19 distribution system-wide	ND–23	13.53 distribution system-wide	11–17.5	No	By-product of drinking water disinfection
Total Coliform Bacteria (% Positive Monthly Samples)[4]	2024	TT	0	0.1 distribution system-wide	0–0.3%	0% distribution system-wide	NA		Naturally present in the environment
Total Organic Carbon [TOC] (ppm)	2024	TT	NA	2.4 highest RAA	NA	1.18 highest RAA	NA	No	Various natural and man-made sources; TOC as a medium for the formation of disinfection byproducts
Total Trihalomethanes [TTHM] (ppb)	2024	80	NA	45 distribution system-wide	12–48	42.38 distribution system-wide	39.1–48.5	No	By-product of drinking water disinfection
Turbidity (NTU)[5]	2024	TT	NA	0.06	NA	0.08	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)		TT = 95% of samples meet the limit	NA	100%	NA	100%	NA	No	Soil runoff
Uranium (pCi/L)	2024	20	0.43	ND	ND - 3	ND	NA	No	Erosion of natural deposits



REGULATED SUBSTANCES - SOURCE WATER

				MIRAMAR GROUNDWATER									
				WELL #1		WELL #2		GRAND WELL		MIRAGRAND WELL			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2024	1000.0	600	ND	NA	ND	NA	ND	NA	NR	NA	No	Residue from water treatment process; erosion of natural deposits
Barium (ppb)	2024	1000	2000	ND	NA	ND	NA	ND	NA	NR	NA	No	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (ppb)[2]	2024	10	0.1	NR	NA	NR	NA	NR	NA	NR	NA	No	Byproduct of drinking water ozonation
Chloramines (as total chlorine residual) (ppm)	2024	[4.0]	[4.0]	NR	NA	NR	NA	NR	NA	NR	NA	No	Drinking water disinfectant added for treatment
Chromium VI (ppb)	2024	10.0	0.02	0.58	NA	0.4	NA	0.4	NA	0.63	NA	No	Runoff/leaching from natural deposits: discharge from industrial wastes
Fluoride (ppm)[3]	2024	2.0	1	0.62	NA	0.42	NA	0.1	NA	NR	NA	No	Erosion of natural deposits; water additive that promotes strong teeth
Gross Beta Particle Activity (pCi/L)	2024	50.0	0	NR	NA	NR	NA	NR	NA	NR	NA	No	Decay of natural and man-made deposits
Nitrate (as Nitrogen) (ppm)	2024	10.0	10	1.53	ND–2.7	0.667	ND–1.2	1.45	ND–1.9	2.57	ND–4.2	No	Runoff & leaching from fertilizer use; septic tank and sewage; erosion of natural deposits
Radium 226 (pCi/L)	2024	NA	0.05	NR	NA	NR	NA	NR	NA	0.82	NA	No	Erosion of natural deposits
Radium 228 (pCi/L)	2024	NA	0.019	NR	NA	NR	NA	NR	NA	0.34	NA	No	Erosion of natural deposits
Sum of Five Haloacetic Acids [HAA5] (ppb)	2024	60	NA	NR	NA	NR	NA	NR	NA	NR	NA	No	By-product of drinking water disinfection
Total Coliform Bacteria (% Positive Monthly Samples)[4]	2024	TT	0	0%	NA	0%	NA	0%	NA	0%	NA		Naturally present in the environment
Total Organic Carbon [TOC] (ppm)	2024	TT	NA	NR	NA	NR	NA	NR	NA	NR	NA	No	Various natural and man-made sources; TOC as a medium for the formation of disinfection byproducts
Total Trihalomethanes [TTHM] (ppb)	2024	80	NA	NR	NA	NR	NA	NR	NA	NR	NA	No	By-product of drinking water disinfection
Turbidity (NTU)[5]	2024	TT	NA	0.34	NA	0.09	NA	0.225	NA	0.17	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)		TT = 95% of samples meet the limit	NA	100%	NA	100%	NA	100%	NA	100%	NA	No	Soil runoff
Uranium (pCi/L)	2024	20	0.43	NR	NA	NR	NA	1.6	NA	3.4	NA	No	Erosion of natural deposits

SECONDARY SUBSTANCES - SOURCE WATER

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG	WEYMOUTH EFFLUENT AMOUNT DETECTED	WEYMOUTH EFFLUENT RANGE LOW-HIGH	MIRAMAR EFFLUENT AMOUNT DETECTED	MIRAMAR EFFLUENT RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)[6]	2024	200.0	600	93	ND - 150	ND	NA	No	Residue from water treatment processes; natural deposits erosion
Chloride (ppm)	2024	500.0	NA	106	96 - 116	56	NA	No	Runoff/leaching from natural deposits; seawater influence
Color (color units)	2024	15.0	NA	1	NA	ND	NA	No	Naturally occurring organic materials
Odor Threshold (TON)	2024	3	NA	ND	NA	1	NA	No	Naturally occurring organic materials
Specific Conductance (μS/cm)	2024	1600.0	NA	996	912–1080	420	NA	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2024	500.0	NA	225	200–250	31	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)[7]	2024	1000.0	NA	632	573–690	230	NA	No	Runoff/leaching from natural deposits; seawater influence
Turbidity (NTU)[8]	2024	5.0	NA	ND	NA	0.044	NA	No	Soil runoff

				MIRAMAR GROUNDWATER									
				WELL #1		WELL #2		GRAND WELL		MIRAGRAND WELL			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)[6]	2024	200.0	600	ND	NA	ND	NA	ND	NA	NR	NA	No	Residue from water treatment processes; natural deposits erosion
Chloride (ppm)	2024	500.0	NA	8.1	NA	4.9	NA	15	NA	NR	NA	No	Runoff/leaching from natural deposits; seawater influence
Color (color units)	2024	15.0	NA	ND	NA	ND	NA	ND	NA	NR	NA	No	Naturally occurring organic materials
Odor Threshold (TON)	2024	3	NA	1	NA	1	NA	1	NA	NR	NA	No	Naturally occurring organic materials
Specific Conductance (μS/cm)	2024	1600.0	NA	420	NA	380	NA	450	NA	NR	NA	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2024	500.0	NA	21	NA	21	NA	28	NA	NR	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)[7]	2024	1000.0	NA	260	NA	220	NA	280	NA	NR	NA	No	Runoff/leaching from natural deposits; seawater influence
Turbidity (NTU)[8]	2024	5.0	NA	0.95	NA	0.4	NA	0.4	NA	NR	NA	No	Soil runoff

UNREGULATED SUBSTANCES - SOURCE WATER

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL	PHG	WEYMOUTH EFFLUENT AMOUNT DETECTED	WEYMOUTH EFFLUENT RANGE LOW-HIGH	MIRAMAR EFFLUENT AMOUNT DETECTED	MIRAMAR EFFLUENT RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alkalinity (as CaCO3) (ppm)	2024	NA	NA	118	109–127	78	NA	No	Measure of water quality
Boron (ppb)	2024	NL=1,000	NA	140	NA	140	NA	No	Runoff/leaching from natural deposits; industrial wastes
Calcium (ppm)	2024	NA	NA	68	59–76	22	NA	No	Measure of water quality
Calcium Carbonate Precipitation Potential [CCPP] (as CaCO3) (ppm)[9]	2024	NA	NA	8.4	5.5–11	NR	NA	No	Measures of the balance between pH and calcium carbonate saturation in the water
Chlorate (ppb)	2024	NL=800	NA	80	NA	56	NA	No	By-product of drinking water chlorination; industrial processes
Corrosivity (AI)[10]	2024	NA	NA	12.5	12.4–12.6	12.3	NA	No	Measures of the balance between pH and calcium carbonate saturation in the water
Corrosivity (SI)[11]	2024	NA	NA	0.62	0.60–0.65	0.44	NA	No	Measures of the balance between pH and calcium carbonate saturation in the water
Hardness (as CaCO3) (ppm)	2024	NA	NA	272	241–303	99	NA	No	Measure of water quality
Lithium (ppb)	2024	NA	NA	40	32–47	NR	NA	No	Naturally occurring, used in electrochemical cells, batteries, and organic synthesis and pharmaceuticals
Magnesium (ppm)	2024	NA	NA	26	25–29	11	NA	No	Measure of water quality
pH (pH units)	2024	NA	NA	8.2	NA	8.25	7.9–8.6	No	Not applicable
Potassium (ppm)	2024	NA	NA	5.0	4.6–5.4	2.4	NA	No	Measure of water quality
Sodium (ppm)	2024	NA	NA	105	93–117	46	NA	No	Measure of water quality
Total Dissolved Solids [TDS] (ppm)[12]	2024	1000.0	NA	587	506–680	250	230–270	No	Runoff/leaching from natural deposits
Vanadium (ppb)	2024	NL=50	NA	ND	NA	ND	NA	No	Naturally occurring; industrial waste discharge

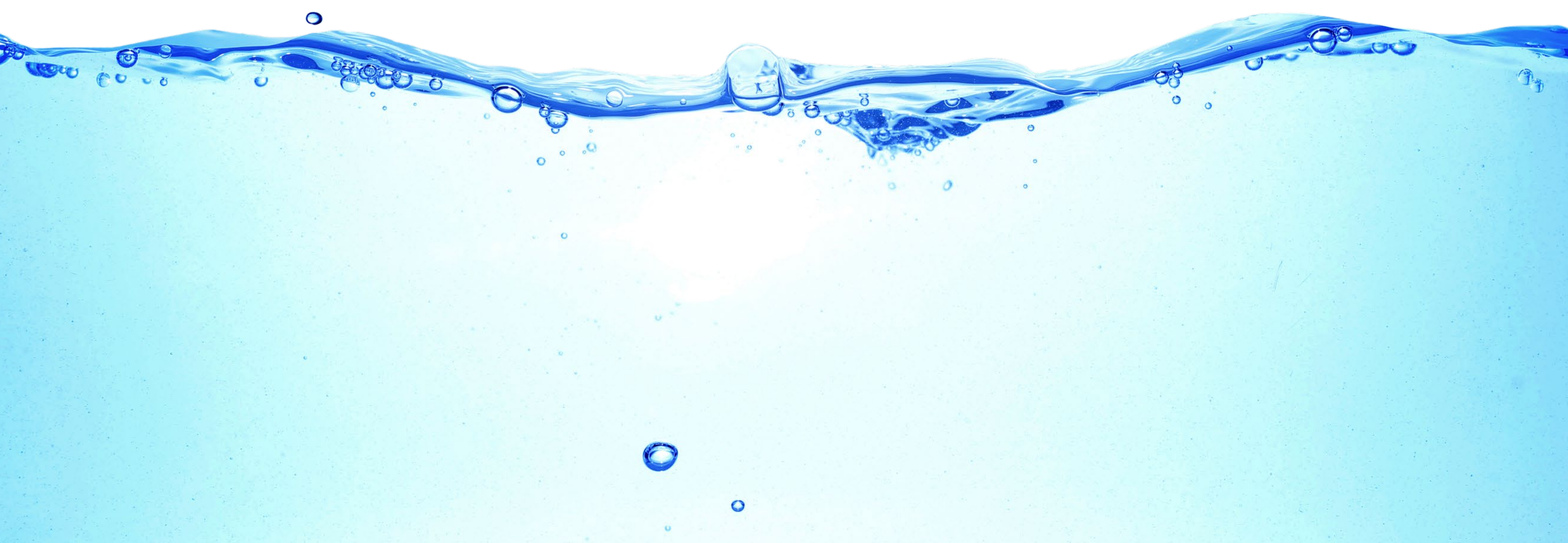
[2] Compliance with the state and federal bromate MCL is based on RAA.
[3] Metropolitan was in compliance with all provisions of the State's fluoridation system requirements. TVMWD does not have fluoride feed systems and all fluoride results are naturally occurring.
[4] Compliance is based on monthly samples from treatment plant effluents and the distribution system. No.Level 1 assessments occurred and no. E. coli was detected.
[5] Metropolitan and Three Valleys MWD monitors turbidity at the CFE locations using continuous and grab samples. Turbidity, a measure of cloudiness of the water, is an indicator of treatment performance. Turbidity was in compliance with the TT primary drinking water standard and the secondary drinking water standard of less than 5 NTU.
[6] Compliance with the State MCL for aluminumis based on RAA.
[7] Metropolitan's TDS compliance data are based on flow-weighted monthly composite samples collected twice per year (April and October). The 12-month statistical summary of flow-weighted data is reported in "Other Parameters'. TVMWD is required to test once annually for TDS.
[8] Positive CCPP = non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative CCPP = corrosive; tendency to dissolve calcium carbonate. Reference: Standard Methods (SM2330)
[9] AI ≥ 12.0 = Non-aggressive water; AI 10.0–11.9 = Moderately aggressive water; AI ≤ 10.0 = Highly aggressive water. Reference: ANSI/AWWA Standard C400-93 (R98)
[10] Positive SI = non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative SI = corrosive; tendency to dissolve calcium carbonate. Reference: Standard Methods (SM2330)
[11] Metropolitan's TDS compliance data are based on flow-weighted monthly composite samples collected twice per year (April and October). The 12-month statistical summary of flow-weighted data is reported in "Other Parameters'. TVMWD is required to test once annually for TDS.
[12] Statistical summary represents 12 months of flow-weighted data and values may be different than the TDS reported to meet compliance with secondary drinking water regulations for Metropolitan. Metropolitans and TVMWD TDS goal is < 500 mg/L.

UNREGULATED SUBSTANCES - SOURCE WATER

				MIRAMAR GROUNDWATER									
				WELL #1		WELL #2		GRAND WELL		MIRAGRAND WELL			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL	PHG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alkalinity (as CaCO3) (ppm)	2024	NA	NA	170	NA	170	NA	170	NA	NR	NA	No	Measure of water quality
Boron (ppb)	2024	NL=1,000	NA	ND	NA	ND	NA	ND	NA	NR	NA	No	Runoff/leaching from natural deposits; industrial wastes
Calcium (ppm)	2024	NA	NA	59	NA	60	NA	66	NA	NR	NA	No	Measure of water quality
Calcium Carbonate Precipitation Potential [CCPP] (as CaCO3) (ppm)[9]	2024	NA	NA	NR	NA	NR	NA	NR	NA	NR	NA	No	Measures of the balance between pH and calcium carbonate saturation in the water
Chlorate (ppb)	2024	NL=800	NA	ND	NA	ND	NA	ND	NA	NR	NA	No	By-product of drinking water chlorination; industrial processes
Corrosivity (AI)[10]	2024	NA	NA	NR	NA	NR	NA	NR	NA	NR	NA	No	Measures of the balance between pH and calcium carbonate saturation in the water
Corrosivity (SI)[11]	2024	NA	NA	NR	NA	NR	NA	NR	NA	NR	NA	No	Measures of the balance between pH and calcium carbonate saturation in the water
Hardness (as CaCO3) (ppm)	2024	NA	NA	180	NA	190	NA	20	NA	NR	NA	No	Measure of water quality
Lithium (ppb)	2024	NA	NA	ND	NA	ND	NA	ND	NA	NR	NA	No	Naturally occurring, used in electrochemical cells, batteries, and organic synthesis and pharmaceuticals
Magnesium (ppm)	2024	NA	NA	9.4	NA	9.3	NA	8.5	NA	NR	NA	No	Measure of water quality
pH (pH units)	2024	NA	NA	NR	NA	NR	NA	NR	NA	NR	NA	No	Not applicable
Potassium (ppm)	2024	NA	NA	1.5	NA	1.7	NA	1.9	NA	NR	NA	No	Measure of water quality
Sodium (ppm)	2024	NA	NA	16	NA	9.8	NA	17	NA	NR	NA	No	Measure of water quality
Total Dissolved Solids [TDS] (ppm)[12]	2024	1000.0	NA	260	NA	220	NA	280	NA	NR	NA	No	Runoff/leaching from natural deposits
Vanadium (ppb)	2024	NL=50	NA	3.9	NA	3.4	NA	ND	NA	NR	NA	No	Naturally occurring; industrial waste discharge

PERFLUOROALKYL AND POLYFLUOROALKY SUBSTANCES (PFAS) - SOURCE WATER

				WEYMOUTH EFFLUENT		MIRAMAR EFFLUENT			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	NL	PHG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Nonafluoro-3,6-dioxaheptanoic acid [NFDHA] (ppt)	2024	NA	NA	ND	NA	ND	NA	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluorobutaneulfonic Acid [PFBS] (ppt)	2024	NL=500	NA	ND	NA	ND	NA	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluorobutanoic acid [PFBA] (ppt)	2024	NA	NA	ND	NA	ND	NA	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluorocatanoic Acid [PFOA] (ppt)	2024	NL=5.1	0.007	ND	NA	ND	NA	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluoroctanesulfonic Acid [PFOS] (ppt)	2024	NL=6.5	1	ND	NA	ND	NA	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluoroheptanoic Acid [PFHpA] (ppt)	2024	NA	NA	ND	NA	ND	NA	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluorohexanesulfonic Acid [PFHxS] (ppt)	2024	NL=1000	NA	ND	NA	ND	NA	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluorohexanoic Acid [PFHxA] (ppt)	2024	NA	NA	ND	NA	ND	NA	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluoropenetanoic acid [PFPeA] (ppt)	2024	NA	NA	ND	NA	ND	NA	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes



PERFLUOROALKYL AND POLYFLUOROALKY SUBSTANCES (PFAS) - SOURCE WATER

				MIRAMAR GROUNDWATER									
				WELL #1		WELL #2		GRAND WELL		MIRAGRAND WELL			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	NL	PHG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Nonafluoro-3,6-dioxaheptanoic acid [NFDHA] (ppt)	2024	NA	NA	ND	NA	ND	NA	ND	NA	8	NA	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluorobutaneulfonic Acid [PFBS] (ppt)	2024	NL=500	NA	ND	NA	ND	NA	ND	NA	1.43	ND–3.8	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluorobutanoic acid [PFBA] (ppt)	2024	NA	NA	ND	NA	ND	NA	ND	NA	2.4	ND–3.5	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluorocatanoic Acid [PFOA] (ppt)	2024	NL=5.1	0.007	ND	NA	ND	NA	ND	NA	4.0	ND–4.7	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluoroctanesulfonic Acid [PFOS] (ppt)	2024	NL=6.5	1	ND	NA	ND	NA	ND	NA	1.68	ND–3.4	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluoroheptanoic Acid [PFHpA] (ppt)	2024	NA	NA	ND	NA	ND	NA	ND	NA	2.08	ND–3.1	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluorohexanesulfonic Acid [PFHxS] (ppt)	2024	NL=1000	NA	ND	NA	ND	NA	ND	NA	1.9	ND–2.7	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluorohexanoic Acid [PFHxA] (ppt)	2024	NA	NA	ND	NA	ND	NA	ND	NA	4.65	3.2–5.7	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes
Perfluoropenetanoic acid [PFPeA] (ppt)	2024	NA	NA	ND	NA	ND	NA	ND	NA	3.7	ND–5.5	No	Industrial chemical factory discharges: runoff/leaching from landfills: used in fire-retarding foams and various industrial processes