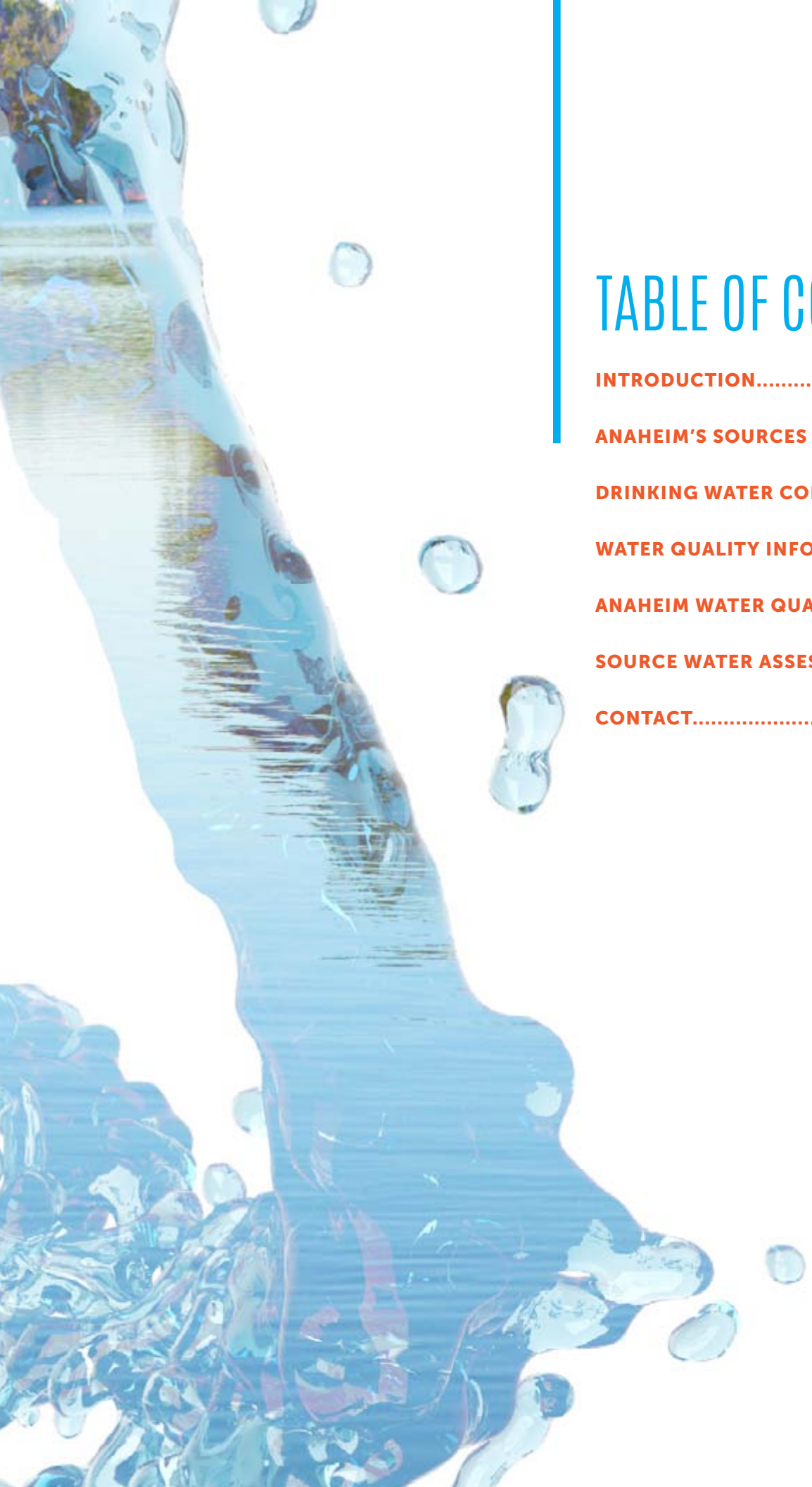
ANAHEIM PUBLIC UTILITIES

ANAHEIM OWNED. ANAHEIM FOCUSED.

2014 WATER QUALITY REPORT

DATA FOR 2013



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LETTER FROM THE GENERAL MANAGER

ANAHEIM PUBLIC UTILITIES

DEAR ANAHEIM WATER CUSTOMER:

Water is one of the essential services that we all rely on in our daily lives. At Anaheim Public Utilities, our goal is to provide outstanding water service at reasonable costs. When it comes to water, one of the most critical aspects is to ensure that it meets all federal and state drinking water standards established by the U. S. Environmental Protection Agency and the California Department of Public Health. As part of our due diligence, we conduct more than 44,000 water quality tests throughout the year, and the results of those tests are listed here for your review. If you have any questions about your water quality, please call us at 714.765.4556 or email us at waterquality@anaheim.net.

Dukku Lee

General Manager

Anaheim Public Utilities

LET'S DO OUR PART

California is in a drought, but it is important to know that Anaheim currently has adequate water supplies. However, we all need to do our part to conserve this precious resource for the future. We encourage all customers to reduce their water use wherever possible to ensure the long term sustainability of Anaheim's water.

OUTDOOR

- Refrain from washing sidewalks, walkways, driveways, or other paved surfaces, except where necessary to protect public health and safety
- Promptly repair any leaks in your sprinkler system
- Avoid landscape watering between the hours of 10 a.m. and 5 p.m.

INDOOR

- Turn off the water while you brush your teeth
- Only run your dishwasher or washing machine when it is full
- Regularly check plumbing for leaks

MESSAGE FROM OUR ASSISTANT GENERAL MANAGER

We offer a number of cost-saving programs to help save water and money. For more information, visit anaheim.net/savewater.

ANAHEIM'S SOURCES OF SUPPLY

Anaheim's water supply is a blend of groundwater from our own wells, as well as water imported from Northern California and the Colorado River by the Metropolitan Water District of Southern California (MWD).

The source water for our wells is a natural aquifer that is replenished with water from the Santa Ana River, local rainfall, and imported water.

Managed by the Orange County Water District, the groundwater basin is 350 square miles in area and lies beneath most of northern and central Orange County. Anaheim and more than 20 cities and retail water districts pump from the groundwater basin to provide water to homes and businesses.

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Your water source depends on where you live or work within the boundaries of our community. Generally, the source of water for areas east and south of the 57 and 91 freeway interchange is imported water.

The central and western portions of Anaheim mostly receive groundwater or a blend with imported supplies. Customers in east Anaheim may also receive water from Anaheim's owned and operated Lenain Water Treatment Facility.

BASIC INFORMATION ABOUT DRINKING WATER

The sources of drinking water (both tap water and bottled water) can include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through layers of the ground, it dissolves naturally-occurring minerals and in some cases, this may include, radioactive material, and can pick up substances resulting from the presence of animal or human activity.

All 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.

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
- Pesticides and herbicides, which may come from a variety of sources, such as agriculture, urban storm water runoff and residential uses
- 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
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. They can also come from gasoline stations, urban storm water runoff, agricultural application and septic systems
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production or mining activities

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in the water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

More information about contaminants and potential health effects can be obtained at water.epa.gov/drink or by calling the U.S. EPA's Safe Drinking Water Hotline at 800.426.4791.

WATER SUSTAINABILITY CAMPUS

WATER QUALITY INFORMATION

THE EPA WOULD LIKE YOU TO KNOW...

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.

Anaheim Public Utilities is responsible for providing high-quality drinking water, but cannot control the variety of materials used in home plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by running your tap for 30 seconds to two minutes before using it for drinking or cooking. If you are concerned about lead in your water, you may want to have it tested.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the U.S. EPA's Safe Drinking Water Hotline, 800.426.4791, or online at epa.gov/safewater/lead.

IMMUNO-COMPROMISED PEOPLE

Some individuals may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as those with cancer undergoing chemo- therapy; those who have undergone organ transplants; those with HIV/AIDS or other immune system disorders; some elderly; and infants can be particularly at risk from infections.

These individuals or their caretakers should seek advice about drinking water from their health care providers.

The U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *cryptosporidium* and other microbial contaminants are available from water.epa.gov/drink or the Safe Drinking Water Hotline 800.426.4791.

Anaheim Public Utilities is responsible for providing high-quality drinking water, but cannot control the variety of materials used in home plumbing components.

RADON ADVISORY

Radon is a colorless, odorless gas that is formed from radioactive decay of uranium in the ground, which is found throughout the U.S. It can move up through the ground and into a home through cracks and holes in the foundation.

Radon can build up to high levels in all types of homes and can get into indoor air when released from tap water during showering, dishwashing, and other household activities. Breathing air containing radon can lead to lung cancer. The radon entering a home through tap water, however, is negligible compared to the amount that can enter a home through soil.

The U.S. EPA Action Level for radon in indoor air is 4.0 picocuries per liter. Radon from your tap water contributes no more than 0.1 picocurie per liter in indoor air.

If you are concerned about radon in your home, test the air. If the level of radon is 4 picocuries per liter of air or higher, there are ways to address a radon problem that are cost effective.

For additional information, call the California radon program (800.745.7236), the EPA Safe Drinking Water Hotline (800.426.4791), or the National Safety Council Radon Hotline (800.SOS.RADON).

Want additional information?

There is information on our website about your drinking water quality and water issues in general, visit anaheim.net/utilities to learn more. Click on Public Utilities, then "Water Quality." Or, contact our water quality staff at 714.765.4556.

WHAT ARE WATER QUALITY STANDARDS?

Drinking water standards established by the U.S. EPA and CDPH set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows 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 Public Health Goals (PHGs) or Maximum Contaminant Levels Goals (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 the addition of a disinfectant is necessary for control of microbial contaminants.

Notifications Level (NL):
The level above which a water agency is required to notify its governing body if an unregulated contaminant is found in its drinking water.

Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

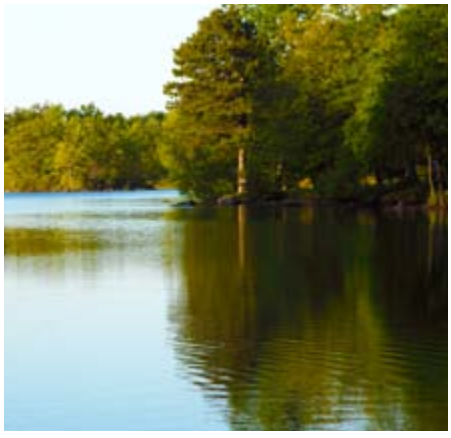
Primary Drinking Water Standard:
MCLs for contaminants that affect health, along with their monitoring and reporting requirements and water treatment requirements.

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)



CITY OF ANAHEIM WATER QUALITY (BASED ON 2013 DATA)

Chemical	MCL	PHG (MCLG)	Groundwater Average Amount	Lenain Average Amount	MWD Average Amount	Range of Directions	Most Recent Sampling Data	Typical Source of Containment
Radiologicals								
Radon (pCl/L)	Not Regulated	n/a	311	n/a	ND	ND - 319	2012	Soil Gas from Natural Deposits
Uranium (pCl/L)	20	0.43	9.0	4.7	2.0	1.0 - 11	2012	Erosion of Natural Deposits
Gross Beta (pCl/L)	50(a)	(0)	n/a	n/a	<4	ND - 6	2012	Decay of Natural or Man-made Deposits
Organic Chemicals								
Trichioroethyiene (ppb)	5	1.7	<0.5	ND	ND	ND - 0.6	2013	Chemical Factories Discharge
1,1-Dichloroethene (ppb)	6	10	<0.5	ND	ND	ND - 1.8	2013	Chemical Factories Discharge
Inorganic Chemicals								
Aluminum (ppm)	1	0.6	ND	0.12	0.15	ND - 0.23	2013	Water Treatment Chemical
Arsenic (ppb)	10	0.004	<2	ND	<2	ND - 2.0	2013	Erosion of Natural Deposits
Barium (ppm)	1	2	ND	0.11	ND	ND - 0.11	2013	Erosion of Natural Deposits
Fluoride (ppm)	2	1	0.44	0.32	0.8	0.32 - 1.0	2013	Erosion of Natural Deposits, Water Additive
Nitrate as NO3 (ppm)	45	45	13	ND	2	ND - 20	2013	Fertilizers, Septic Tanks
Nitrate+Nitrite as N (ppm)	10	10	3.0	ND	2.0	ND - 4.4	2013	Fertilizers, Septic Tanks
Secondary Standards*								
Aluminum (ppb)	200*	600	ND	120	150	ND - 230	2013	Water Treatment Chemical
Chloride (ppm)	500*	n/a	83	87	87	46 - 111	2013	Erosion of Natural Deposits
Color (units)	15*	n/a	ND	<2	1	ND - 2	2013	Natural Organic Materials
Odor (threshold odor number)	3*	n/a	ND	1	3.5	ND - 6	2013	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	918	878	880	654 - 1100	2013	Erosion of Natural Deposits
Sulfate (ppm)	500*	n/a	140	220	185	103 - 220	2013	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	578	570	535	444 - 716	2013	Erosion of Natural Deposits
Turbidity (NTU)	5*	n/a	0.13	0.03	ND	ND - 0.4	2013	Erosion of Natural Deposits
Unregulated Contaminants Requiring Monitoring								
Bicarbonate (as HCO3) (ppm)	Not Regulated	n/a	225	140	n/a	140 - 258	2013	Erosion of Natural Deposits
Boron (ppb)	NL=1,000	n/a	120	120	145	ND - 220	2013	Erosion of Natural Deposits
Chromium, Hexavalent (ppb) (b)	Not Regulated	n/a	0.44	ND	0.04	ND - 1.9	2013	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	102	67	59	56 - 117	2013	Erosion of Natural Deposits
Dichlorodifluoromethane (ppb)	NL=1,000	n/a	<0.5	ND	ND	ND - 1.4	2012	Industrial Waste Discharge
Magnesium (ppm)	Not Regulated	n/a	18	27	22	13 - 27	2013	Erosion of Natural Deposits
pH (pH units)	Not Regulated	n/a	8.0	7.5	8.1	7.2 - 8.1	2013	Erosion of Natural Deposits
Potassium (ppm)	Not Regulated	n/a	4.1	4.8	4.2	3.3 - 4.8	2013	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	62	89	83	39 - 89	2013	Erosion of Natural Deposits
Total Alkalinity (ppm as CaCO3)	Not Regulated	n/a	184	112	110	76 - 212	2013	Erosion of Natural Deposits
Total Hardness (grains/gal)	Not Regulated	n/a	19	15	14	13 - 22	2013	Erosion of Natural Deposits
Total Hardness (ppm as CaCO3)	Not Regulated	n/a	331	259	245	223 - 373	2013	Erosion of Natural Deposits
Total Organic Carbon (ppm)	Not Regulated	TT	0.33	2.4	2.4	ND - 2.7	2013	Various Natural and Man-made Sources
Chlorate (ppb)	NL = 800	n/a	n/a	n/a	109	38 - 259	2013	Byproduct of Chlorine Disinfection
Molybdenum (ppb)	Not Regulated	n/a	n/a	n/a	5.0	4.5 - 6.1	2013	Erosion of Natural Deposits
Strontium (ppb)	Not Regulated	n/a	n/a	n/a	986	854 - 1120	2013	Erosion of Natural Deposits
Vanadium (ppb)	NL=50	n/a	3.9	n/a	2.7	2.2 - 5.6	2013	Erosion of Natural Deposits

ppm = parts-per-million; **ppb** = parts-per-billion; **ppt** = parts-per-trillion; **pCi/L** = picoCuries per liter; **NTU** = nephelometric turbidity units **NL** = notification level; **n/a** = not applicable; **ND** = not detected; **<** = average is less than the detection limit for reporting purposes **MCL** = Maximum Contaminant Level; **MCLG** = federal MCL Goal; **PHG** = California Public Health Goal; **µmho/cm** = micromho per centimeter **TT** = treatment technique; *Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

(a) **Gross Beta MCL:** CDPH considers 50 pCi/L to be the level of concern. The official MCL is '4 millirem/year annual dose equivalent to the total body or any internal organ'.

(b) **UCMR3** (Unregulated Contaminant Monitoring Rule / Phase 3) - detection/reporting levels for UCMR3 monitoring are significantly lower than current regulatory detection levels for purposes of reporting.

CITY OF ANAHEIM WATER QUALITY (BASED ON 2013 DATA) continued...

Turbidity - treatment plant combined filter effluent	Treatment Technique	Turbidity Measurements	Sample Date	Typical Source of Contaminant
1) Highest single turbidity measurement	1 NTU	Lenain = 0.07 NTU	2013	Soil run-off
	1 NTU	MWD = 0.06 NTU	2013	Soil run-off
2) Percentage of samples less than 0.3 NTU	95%	Lenain = 100%	2013	Soil run-off
	95%	MWD = 100%	2013	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. Low turbidity in the City of Anaheim's and Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a "treatment technique". 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.

CITY OF ANAHEIM DISTRIBUTION SYSTEM WATER QUALITY

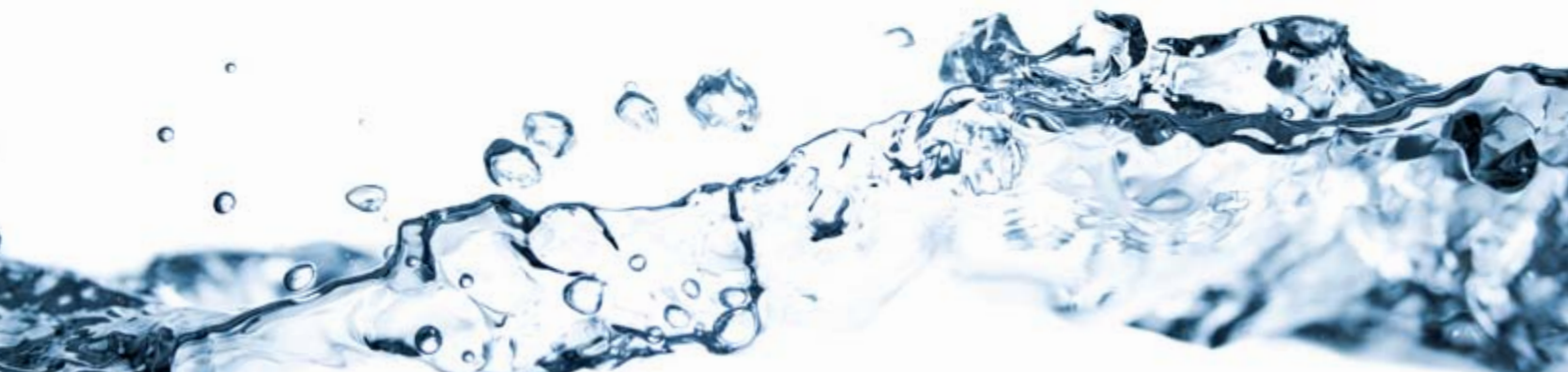
Disinfection Byproducts	MCL (MRDL/MRDLG)	Average Amount Of Contaminant	Range of Detections	Typical Source
Total Trihalomethanes (ppb)	80	58	5 - 72	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	11	ND - 18	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	0.9	0.05 - 2.8	Disinfectant Added for Treatment
Aesthetic Quality				
Color (color units)	15*	ND	ND - 2	Erosion of Natural Deposits
Odor (threshold odor number)	3*	1	ND - 3	Erosion of Natural Deposits
Turbidity (ntu)	5*	0.10	0.04 - 0.64	Erosion of Natural Deposits

Total trihalomethanes and haloacetic acids are tested quarterly at 12 locations. Chlorine residual disinfectant levels are tested weekly at 51 locations. Color, odor, and turbidity are tested quarterly at 11 locations. **MRDL** = Maximum Residual Disinfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal; **ND** = not detected; **ntu** = nephelometric turbidity units; *Contaminant is regulated by a secondary standard to maintain aesthetic qualities (color, odor, clarity).

LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS

	Action Level (AL)	Health Goal	90th Percentile Value	Sites Exceeding AL / Number of Sites	Typical Source Of Contaminant
Lead (ppb)	15	0.2	ND<5	0 / 55	Corrosion of Household Plumbing
Copper (ppm)	1.3	0.3	0.17	0 / 55	Corrosion of Household Plumbing

Every three years, at least 50 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2012. Lead was detected in 3 samples; none exceeded the action level. Copper was detected in 27 samples; none exceeded the action level. The regulatory action level is the concentration which, if exceeded in more than ten percent of the homes tested, triggers treatment or other requirements that a water system must follow. The City of Anaheim complied with the lead and copper action levels.



WHAT IS A WATER QUALITY GOAL?

In addition to mandatory water quality standards, U.S. EPA and Cal/EPA have set voluntary water quality goals for some contaminants. The chart in this report includes 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 U.S. EPA.

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.

SOURCE WATER ASSESSMENTS

IMPORTED WATER ASSESSMENT

The Metropolitan Water District of Southern California updated its source water assessment of the Colorado River and State Water Project supplies in 2012. Colorado River supplies are considered to be most vulnerable to recreation contamination, urban/storm water runoff, increasing urbanization, and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting Metropolitan by phone, at 213.217.6850.

GROUNDWATER ASSESSMENT

Anaheim has completed source water assessments of areas around each well and around the Walnut Canyon Reservoir, which provides imported water to the Lenain Water Treatment Facility. As in any urban area, Orange County's groundwater is considered potentially vulnerable to contamination from sources such as gas stations, dry cleaners, and industrial activities. To help prevent surface contamination of our wells, we seal the upper 400 to 500 feet of the well casing.

A copy of the complete assessment is available at the Department of Public Health, Drinking Water Field Operations Branch, 605 W. Santa Ana Boulevard, Building 28, Santa Ana, CA 92701. You may request a summary of the assessment by contacting the DPH Sanitary Engineer at 714.547.0430 or Anaheim's Environmental Services Division at 714.765.4277.

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CONTACT

QUESTIONS ABOUT YOUR WATER? CONTACT US FOR ANSWERS

For information about this report or your water quality in general, please contact our Water Quality Laboratory at 714.765.4556, or e-mail us at waterquality@anaheim.net. You may also address water quality and other utility issues by attending a Public Utilities Board meeting scheduled for 5 p.m. on the fourth Wednesday of each month, at Anaheim West Tower, 11th Floor Conference Room, Anaheim, California.

Contact the U.S. Environmental Protection Agency to learn more about the potential health effects of contaminants listed in this report, visit water.epa.gov/drink or call hotline at 800.426.4791.

Este informe contiene informacion importante acerca del agua potable de Anaheim. Para obtener un informe de la calidad del agua en espanol, llame por favor al 765-4151.
Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.
此份有关你的食水报告,内有重要资料和讯息,请找 他人为你翻译及解释清楚。
Chi tiết này thật quan trọng. Xin nhờ người dịch cho quý vị.
이 보내는 매우 중요합니다. 본인을 위해 번역인을 사용하십시오.

We comply with the AMERICANS WITH DISABILITIES ACT.

For this information in other formats, contact: 714.765.3300, TTY 714.765.5125 or visit anaheim.net/utilities.