Irvine Ranch
Water District.
Water Quality.

2013 WATER QUALITY REPORT

IRVINE RANCH
WATER DISTRICT

IRWD 2013 Water Quality Report

Drinking Water Quality

Since 1990, California public water utilities have been providing an annual Water Quality Report to their customers. **This year's report covers calendar year 2012 drinking water quality testing and reporting.** Irvine Ranch Water District (IRWD) vigilantly safeguards its water supply and, as in years past, the water delivered to your home meets the quality standards required by federal and state regulatory agencies. The U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) are the agencies responsible for establishing and enforcing drinking water quality standards.

Questions about your water? Contact us for answers.

For information or questions about this report, please call Lars Oldewage, IRWD's Water Quality Manager, at (949) 453-5858. To reach IRWD Customer Service and for other information, please call (949) 453-5300, or email customerservice@irwd.com.

Community Participation

The IRWD Board of Directors meets the second and fourth Monday of each month beginning at 5 p.m. at IRWD, 15600 Sand Canyon Ave., Irvine, CA.

A copy of this report is also available on our website: www.irwd.com. For more information about the health effects of the listed contaminants in the following tables, call the U.S. Environmental Protection Agency hotline at (800) 426-4791.

In some cases, IRWD goes beyond what is required by testing for unregulated chemicals that may have health risks but do not have drinking water standards. For example, the Orange County Water District (OCWD), which manages the groundwater basin, the Metropolitan Water District of Southern California (MWD), which supplies imported treated surface water, and IRWD, which operates a local surface water treatment plant and several groundwater treatment plants, all test for unregulated chemicals in our water supply. Unregulated chemical monitoring helps USEPA and CDPH determine where certain chemicals occur and whether new standards need to be established for those chemicals.

Through drinking water quality compliance testing programs carried out by OCWD for groundwater, MWD for treated surface water and IRWD for our treatment plants and the distribution system, your drinking water is constantly monitored from source to tap for regulated and unregulated constituents.

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

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

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

Arabic

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。

Chinese

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

French

Der Bericht enthält wichtige informatienen über die Wasserqualität in threr Umgebung. Der Bericht sollte entweder offiziell uebersetzt werden, oder sprechen Sie mit Freunden oder Bekannten, die gute Englischkenntnisse besitzen

German

Questo rapporto contiene informazioni inportanti che riguardano la vostra aqua potabile. Traducetelo, o parlate con una persona qualificata in grado di spiegarvelo.

Italian

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。

Japanese

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

Korean

Este informe contiene información muy importante sobre su agua potable. Para mas información ó traducción, favor de contactar a Customer Service Representative. Telefono: (949) 453-5300.

Spanish

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

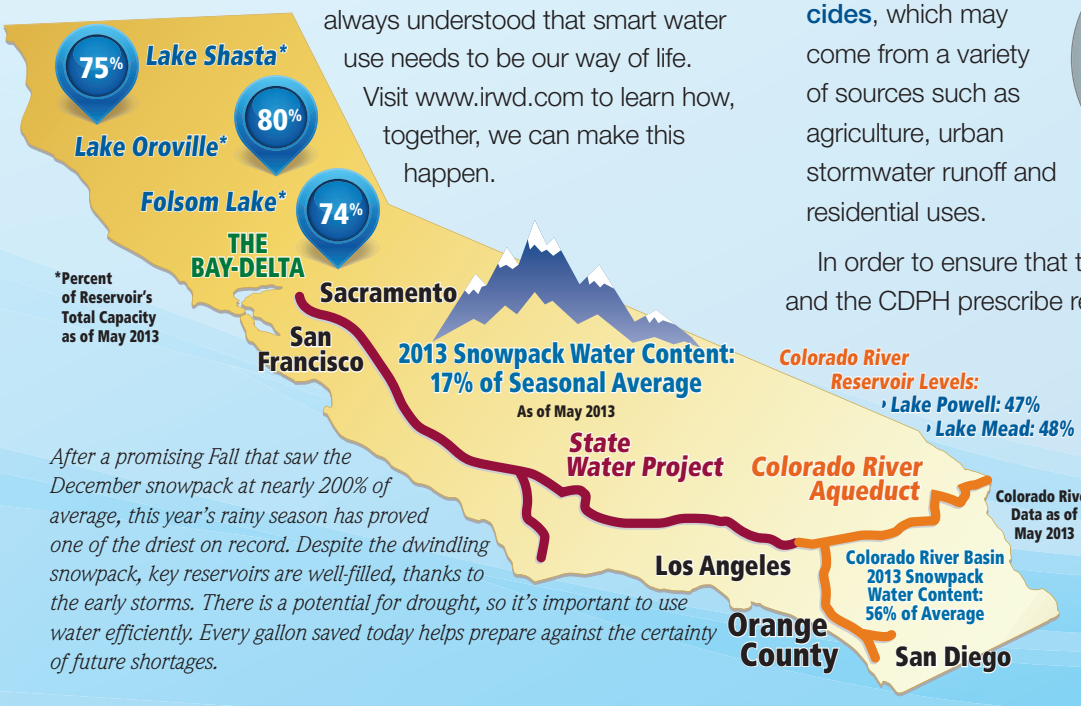
Vietnamese

We Go to Great Lengths to Ensure the Continued Quality of Your Water

Sources of Supply

IRWD is committed to providing a clean and reliable water supply for our customers. Our drinking water is a blend of groundwater from the Orange County Groundwater Basin and surface water imported by the Metropolitan Water District of Southern California. MWD's imported water sources are a blend of State Water Project water and water from the Colorado River Aqueduct. Your groundwater comes from a natural underground reservoir that stretches from the Prado Dam and fans across the north-western portions of Orange County, stretching as far south as the El Toro "Y." Additional groundwater comes from the Harding Canyon Dam watershed in the Cleveland National Forest. Groundwater provided to IRWD comprises approximately 65 percent of the total drinking water supply.

This year, the winter snow pack and recent rain have not eased the intensity of the state's water supply issues. Reduced water allocations combined with judicially imposed environmental pumping restrictions from the State Water Project in Northern California continue to affect Southern California's water supply. IRWD and our customers have always understood that smart water use needs to be our way of life. Visit www.irwd.com to learn how, together, we can make this happen.



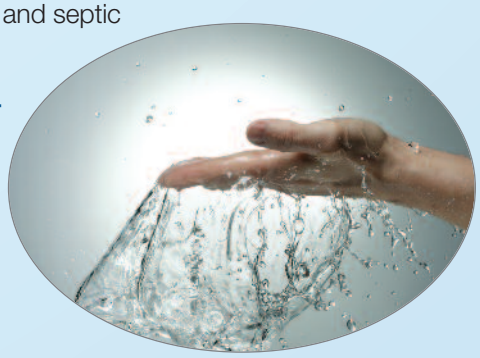
After a promising Fall that saw the December snowpack at nearly 200% of average, this year's rainy season has proved one of the driest on record. Despite the dwindling snowpack, key reservoirs are well-filled, thanks to the early storms. There is a potential for drought, so it's important to use water efficiently. Every gallon saved today helps prepare against the certainty of future shortages.

Basic Information About Drinking Water Contaminants

The sources of drinking 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:

- **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.
- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production or mining activities.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, can also come from gasoline stations, urban stormwater runoff, agricultural application and septic systems.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.



In order to ensure that tap water is safe to drink, USEPA and the CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Drinking 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.

Information You Should Know About The Quality of Your Drinking Water

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, MWD joined a majority of the nation's public water suppliers in adding fluoride to drinking water in order to prevent tooth decay. In line with recommendations from the CDPH, as well as the U.S. Centers for Disease Control and Prevention, MWD adjusted the natural fluoride level in imported treated water from the Colorado River and State Project water to the optimal range for dental health of 0.7 to 1.3 parts per million.

Our local groundwater contains naturally occurring fluoride but is not supplemented with fluoride. 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/

California Department of Public Health
www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx

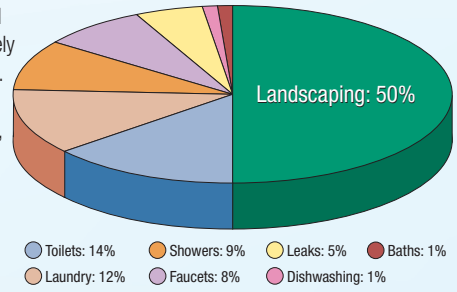
American Water Works Association
www.awwa.org

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

Residential Water Used in the IRWD Service Area

Outdoor watering of lawns and gardens makes up approximately 50 percent of home water use. By cutting your outdoor watering by 1 or 2 days a week, you can dramatically reduce your overall water use.

Visit www.irwd.com for water saving tips and ideas for your home and business.



Chloramines

Water imported from MWD and locally produced groundwater contains chloramines, a combination of chlorine and ammonia, as a drinking water disinfectant. Chloramines are effective killers of bacteria and other microorganisms that may cause disease. Chloramines form less disinfection by-products and have no odor when used properly. People who use kidney dialysis machines may want to take special precautions and consult their physician for the appropriate type of water treatment. Customers who maintain fish ponds, tanks or aquaria should also make necessary adjustments in water quality treatment, as these disinfectants are toxic to fish. For further information or if you have any questions about chloramines please visit www.irwd.com or call (949) 453-5300.

Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 from infections. These people should seek advice about drinking water from their health care providers.

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. MWD and IRWD tested the source waters and treated surface waters for *Cryptosporidium* in 2012 and 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 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 between 10 a.m. and 4 p.m. Eastern Time (7 a.m. to 1 p.m. in California).

Important Facts about Water Quality Which the EPA Would Like You to Know

Radon Advisory

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. It can move up through the ground and into a home through cracks and holes in the foundation. It can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Breathing air containing radon can lead to lung cancer. Drinking water containing radon could increase the risk of stomach cancer.

Compared to radon entering the home through soil, radon entering the home through your tap water is a small source of radon in indoor air.

The maximum amount of radon detected in your water during 2012 was 355 picocuries per liter which is equivalent to 0.04 picocuries per liter of radon in indoor air of a typical family residence. The USEPA Action Level for radon in indoor air is 4.0 picocuries per liter.

If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. You should pursue radon removal for your home if the level of radon is 4 picocuries per liter of air or higher. There are simple ways to fix a radon problem that are not too costly.

For additional information, call the State Radon Program (1-800-745-7236), the USEPA Safe Drinking Water Act Hotline (1-800-426-4791) or the National Safety Council Radon Hotline (1-800-SOS-RADON).

Arsenic Advisory

The following advisory is issued because in 2012 we recorded an arsenic measurement in the drinking water supply between 5 and 10 micrograms per liter. While your drinking water meets the federal and state standard for arsenic of 10 micrograms per liter, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

About Lead in Tap Water

IRWD meets all standards for lead in the USEPA Lead and Copper Rule, but if lead were present then 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.

IRWD is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Want Additional Information?

There's a wealth of information on the internet about drinking water quality and water issues in general. A good place to begin your own research is the **IRWD** website: **www.irwd.com**.

In addition to extensive information about your local water and the support and services we offer, you'll find links for many other local, statewide, and national resources.

IRWD is on Facebook.com:
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Irvine Ranch Water District

Follow IRWD on Twitter:
@IRWDnews @AlwaysH2O Smart
@IRWDemergency

Irvine Ranch Water District Local and Imported Drinking Water Quality Results for 2012

Constituents	MCL	PHG (MCLG)	Avg. Local Treated Groundwater	Avg. Imported MWD Treated Water	Avg. Local Treated Surface Water	Range of Detections	MCL Violation?	Typical Source of Contaminant
Radiologicals – Tested in 2008 – 2012								
Alpha Radiation (pCi/L)	15	(0)	ND	3	ND	ND – 3	No	Erosion of Natural Deposits
Beta Radiation (pCi/L)	50	(0)	<4	ND	ND	ND – 5	No	Decay of Natural and Man-Made Deposits
Uranium (pCi/L)	20	0.43	1	2	ND	ND – 2.6	No	Erosion of Natural Deposits
Inorganic Chemicals – Tested in 2010 – 2012								
Aluminum (ppm)	1	0.6	ND	0.15	0.067	ND – 0.34	No	Treatment Process Residue, Natural Deposits
Arsenic (ppb)	10	0.004	<2.0	ND	ND	ND – 7.0	No	Erosion of Natural Deposits
Fluoride (ppm) naturally-occurring	2	1	0.42	NR	0.13	0.13 – 1.2	No	Erosion of Natural Deposits
Fluoride (ppm) treatment-related	Control Range 0.7 – 1.3 ppm Optimal Level 0.8 ppm		NR	0.8	NR	0.7 – 0.8	No	Water Additive for Dental Health
Nitrate (ppm as Nitrate)	45	45	<2	ND	ND	ND – 2.5	No	Fertilizers, Septic Tanks
Nitrate+Nitrite (ppm as N)	10	10	<0.4	ND	ND	ND – 0.55	No	Fertilizers, Septic Tanks
Secondary Standards* – Tested in 2010 - 2012								
Aluminum (ppb)	200*	600	ND	150	67	ND – 340	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	34	90	12	12 – 93	No	Leaching from Natural Deposits; Seawater Influence
Color (color units)	15*	n/a	4	1	ND	ND – 25	No	Naturally-Occurring Organic Substances
Manganese (ppb)	50*	n/a	<20	ND	23	ND – 23	No	Naturally-Occurring Organic Materials
Odor (TON)	3*	n/a	2	2	1	ND – 64	No	Naturally-Occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	490	780	680	330 – 930	No	Ions in Water; Seawater Influence
Sulfate (ppm)	500*	n/a	62	160	120	3.7 – 160	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	310	500	470	200 – 740	No	Runoff or Leaching from Natural Deposits
Turbidity (NTU)	5*	n/a	0.1	ND	<0.1	ND – 0.5	No	Erosion of Natural Deposits
Unregulated Contaminants Requiring Monitoring – Tested in 2010 - 2012								
Bicarbonate (ppm as HCO_3)	Not Regulated	n/a	170	NR	270	120 – 270	n/a	Runoff or Leaching from Natural Deposits
Boron (ppb)	NL = 1,000	n/a	90	130	ND	ND – 520	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	31	51	90	2.4 – 90	n/a	Runoff or Leaching from Natural Deposits
Carbonate (ppm)	Not Regulated	n/a	2.6	NR	ND	ND – 21	n/a	Runoff or Leaching from Natural Deposits
Corrosivity (Aggressiveness)	Not Regulated	n/a	12	12	12	12	n/a	Elemental Balance in Water
Corrosivity (Langlier Index)	Not Regulated	n/a	0.06	0.36	(-)0.16	(-)0.33 – 0.83	n/a	Elemental Balance in Water
Hexavalent Chromium (ppb)	Not Regulated	0.02	<1	ND	NR	ND – 1.6	n/a	Erosion of Natural Deposits; Industrial Discharge
Magnesium (ppm)	Not Regulated	n/a	6.9	21	21	0.2 – 21	n/a	Runoff or Leaching from Natural Deposits
ortho-Phosphate (ppm)	Not Regulated	n/a	<0.06	NR	NR	ND – 0.34	n/a	Drinking Water Treatment Chemical for Aesthetic Quality
pH (pH units)	Not Regulated	n/a	8.2	8.1	7.6	7.6 – 9.1	n/a	Acidity, Hydrogen Ions
Potassium (ppm)	Not Regulated	n/a	1.5	4.0	0.93	0.50 – 4.0	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	66	80	24	24 – 120	n/a	Runoff or Leaching from Natural Deposits
Total Alkalinity (ppm as $CaCO_3$)	Not Regulated	n/a	150	98	220	53 – 230	n/a	Runoff or Leaching from Natural Deposits
Total Hardness (ppm as $CaCO_3$)	Not Regulated	n/a	110	210	310	6.6 – 310	n/a	Runoff or Leaching from Natural Deposits
Total Hardness (grains/gal)	Not Regulated	n/a	6.3	12	18	0.4 – 18	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	0.9	2.4	0.6	ND – 7.4	TT	Various Natural and Man-Made sources
Vanadium (ppb)	NL = 50	n/a	5.1	ND	ND	ND – 11	n/a	Runoff or Leaching from Natural Deposits
Additional Parameters That Are Not Required, But May Be Of Interest To Customers – Tested in 2012								
1,4-Dioxane (ppb)	NL = 1	n/a	<1	NR	NR	ND – 5.8	n/a	Industrial Waste Discharge
Radon 222 (pCi/L)	Not Regulated	n/a	355	ND	NR	ND – 355	n/a	Erosion of Natural Deposits

Your water has been tested for many more chemicals than are listed above, including metals (such as mercury), pesticides and volatile organic compounds. Chemicals not detected in any water sources are not included in the table.

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

Turbidity combined filter effluent	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source of Contaminant
Metropolitan Water District Diemer Filtration Plant				
1) Highest single turbidity measurement	0.3 NTU	0.04	No	Soil Run-Off
2) Percentage of samples less than 0.3 NTU	95%	100%	No	Soil Run-Off
IRWD Manning Water Treatment Plant				
1) Highest single turbidity measurement	0.2 NTU	0.2	No	Soil Run-Off
2) Percentage of samples less than 0.2 NTU	95%	100%	No	Soil Run-Off

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

2012 Irvine Ranch Distribution System Water Quality

	MCL (MRDL/MRDLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant
Disinfection Byproducts					
Total Trihalomethanes (ppb)	80	37/44***	1.7 – 68	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	22/17***	ND – 30	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	2	ND – 4.3	No	Disinfectant Added for Treatment
Aesthetic Quality					
Color (color units)	15*	<2	ND – 7	No	Erosion of Natural Deposits
Turbidity (NTU)	5*	0.18	0.07 – 9.2	No	Erosion of Natural Deposits
Odor (threshold odor number)	3*	<1	ND – 1	No	Erosion of Natural Deposits
Other					
Fluoride (mg/L)	2/0.8**	0.66	ND – 1	No	Erosion of Natural Deposits, Water Treatment

Twelve locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; 99 locations are tested monthly for color and odor, and weekly for chlorine residual and turbidity.
MRDL = Maximum Residual Disinfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal; **NTU** = nephelometric turbidity units; **ND** = not detected
*Contaminant is regulated by a secondary standard; **MCL/Optimum Level for our climate; ***Highest Stage 1 DBP Rule system-wide Running Annual Average (RAA)/Highest Stage 2 DBP Rule location RAA

Bacterial Quality	MCL	MCLG	Highest Monthly % Positive Samples	MCL Violation?	Typical Source of Contaminant
Total Coliform Bacteria	5%	0	0.4%	No	Naturally Present in the Environment
Heterotrophic Plate Count Bacteria	5%	n/a	0.3%	No	Naturally Present in the Environment

No more than 5% of the monthly samples may be positive for total coliform bacteria. The occurrence of 2 consecutive total coliform positive samples, one of which contains fecal coliform/*E. coli*, constitutes an acute MCL violation. A system is in non-compliance if more than 5% of samples collected in a given month have Heterotrophic Plate Counts greater than 500 colony forming units per milliliter and no detectable chlorine residual.

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
Copper (ppm)	1.3	0.3	0.19	0 / 70	No	Corrosion of Household Plumbing
Lead (ppb)	15	0.2	<5	0 / 70	No	Corrosion of Household Plumbing

The most recent lead and copper at-the-tap samples were collected from 70 residences in 2010. Lead was detected in 2 homes and copper was detected in 48 homes, but none of the samples for lead and copper exceeded the respective regulatory Action Level (AL). A regulatory Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Chart Legend

What are Water Quality Standards?

Drinking water standards established by USEPA 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 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 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)

What is a Water Quality Goal?

In addition to mandatory water quality standards, USEPA and CDPH 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 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 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.

Source Water Assessments

Imported (MWD) Water Assessment

Every five years, MWD is required by CDPH to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters.

In 2012, MWD submitted to CDPH its updated Watershed Sanitary Surveys for the Colorado River and State Water Project, which include suggestions for how to better protect these source waters. Both source waters are exposed to stormwater runoff, recreational activities, wastewater discharges, wildlife, fires, and other watershed-related factors that could affect water quality.

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 watershed sanitary surveys. MWD 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 MWD at (213) 217-6850.

Groundwater Assessment

An assessment of the groundwater sources in the Dyer Road Well Field was completed in July 2003. This groundwater is considered most vulnerable to contamination from gas stations, historic gas stations, metal plating/finishing/fabrication facilities, military installations and plastics/synthetics producers. An assessment of the groundwater sources in the Irvine Desalter Project was completed in March 2006. This groundwater is considered most vulnerable to contamination from crop irrigation and fertilizers. An assessment of the groundwater source in the Orange Park Acres service area of IRWD was completed in March 2003. This groundwater is considered most vulnerable to contamination from sewer collection systems. An assessment of the groundwater in the Santiago Canyon service area of IRWD was completed in January 2003. There have been no contaminants detected in the water supply, however the source is still considered vulnerable to contamination from historic mining operations.

Copies of the complete assessments may be viewed at the IRWD Water Quality Department, 3512 Michelson Drive, Irvine. You may request a summary of the assessments by writing to Leslie Bonkowski, Irvine Ranch Water District, 15600 Sand Canyon Avenue, Irvine, California 92618.