

2004

Consumer Confidence Report

For Year 2003

Protecting Public Health

Corona

Department of Water and Power



Message From the General Manager

The purpose of this report is to inform you of how well the City's met all Environmental Protection Agency and California Department of Health Services drinking water requirements for the past year. Included in this report are details about where your water comes from, what it contains and how it compares to federal and state standards.

The Department's mission is to protect public health by providing the highest quality water and electric service as well as efficient disposal of wastewater. We take great pride in being able to serve the community and always strive to do our best to provide you with the highest quality service. As such, we are constantly looking for new, better and more efficient ways to increase the quality and quantity of our water supply.

To illustrate, the Department has just completed phase 2 of the construction of our Temescal Desalter facility. This facility will now be able to take the impurities out of approximately 15 million gallons of well water per day and turn it into drinking water. This facility is good for you, the rate payer, because

without it the City would have to purchase water from other more expensive sources.

The Department has also recently started construction of facilities to distribute the City's highly treated wastewater (recycled water) to our parks, schools and landscaped areas. When this project is completed in late 2005, it will replace approximately 5 million gallons a day of drinking water now used for irrigation purposes with non-potable recycled water. This highly treated recycled water is presently wasted because it is discharged into the Santa Ana River after it is treated.

This report is a reflection upon our ability to meet health standards, but more importantly, it also reflects our commitment to you that we will always strive to provide you with the very best that we can offer. If you have any questions regarding this report, please contact me at 909-736-2437.

Bradly L. Robbins

Assistant City Manager/DWP General Manager

Informed Customers

Last year, as in years past, your tap water met all EPA and State drinking water health standards. The City of Corona vigilantly safeguards its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard.

This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies.

Recycled Water

The demands for water, especially in Southern California, are greater than ever. To help our city secure future water supplies and become less reliant on imported water, we are expanding our recycled water program. The City plans to use the recycled water to irrigate local parks, landscape maintenance districts, school grounds, golf courses and freeway landscaping.

Construction of new infrastructure, including three storage reservoirs, two pump stations and approximately 27 miles of recycled water pipeline have started and will continue through June 2005. Most of the construction is taking place in the west and northeast part of our community. In most cases, to ease the impact of traffic, the construction crews will take up one lane of the road, completing work before evening rush hour.

To continue to increase Corona's local water supplies, we are studying the possibility of recharging the local groundwater basin. A study has been completed that involved spreading water in the local debris basins, allowing it to percolate (infiltrate) through the soil down into the groundwater aquifer. The purpose of the study was to gather information on the movement of the percolating water through layers of soil, the saturation time, and to determine the water quality impact on existing groundwater. The study has been completed and we are currently in the process of examining the results and writing a report.

Conservation Programs

In Southern California much of the water we use must be imported from surrounding areas. There is little local supply to meet the needs of the growing population. Every gallon of water that can be saved helps to stretch the existing supply that all life needs to survive.

Approximately 50% of residential water is used for landscape purposes.

Implementing a water-wise landscape design is one of the best ways to preserve our most precious resource. A water-wise landscape doesn't have to be rocks and

cactus but can incorporate a variety of native plant materials that are better suited to our climate. Installing native plants like the California Poppy, seen on the cover, is a beautiful addition to the landscape and requires less water since it is indigenous to this area. Native and California friendly plants reduce the amount of necessary watering and can add interest to the landscape. We can achieve our conservation goals by landscaping with plants that use less water while keeping our neighborhoods beautiful.

Corona's Water Sources

In 2003, Corona residents and businesses used 13.1 billion gallons of water.

47% of the Water used was pumped from ground water wells owned and operated by the City. Another 43% came from the Colorado River by way of the California Aqueduct and Lake Matthews. The final 10% came from

Northern California, by way of the State Water Project. In order to provide Corona residents with the highest quality water, while maintaining fiscal responsibilities, one or all three sources can be delivered to any part of the service area depending on the demands and the season.

Water Treatment

The water from the Colorado River must be treated to remove harmful organisms before it is delivered to your tap. This is done at the City's two treatment facilities, the Sierra Del Oro and Lester Water Treatment Plants. The treatment process involves adding coagulants which make

the harmful organisms and very fine particles stick together and become big enough to be removed by filtration, then disinfecting your water with chlorine and ammonia. In independent laboratory testing, 100% of the samples taken in 2003 were free of harmful organisms.





Blending

You will notice in the tables of detected contaminants that the Groundwaters exceed the primary standard for Fluoride, Nitrate, and total Nitrogen. The unregulated chemicals Boron, Perchlorate and Vanadium are also exceeding their action levels. The City of Corona is required by law to report the highest level detected in the SOURCES of water and then the AVERAGE concentration delivered to your tap. The averages are much lower because the City of Corona blends water

from several sources to meet water quality standards and an ever increasing demand. The Blending stations are continuously monitored and routinely sampled to ensure that the water delivered to your tap meets all health standards with a safety margin of no less than 10%. For more information on the continuing efforts to determine the health effect and establish standards for contaminants such as Perchlorate visit www.dhs.ca.gov/ps/ddwem or www.epa.gov/safewater

Nitrates

Nitrate in drinking water at levels above 45 mg/L 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 levels

above 45 mg/L 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 health care provider.

Primary Standards

CLARITY (NTU)	UNIT	State MCL [MRDL]	PHG (MCLG) [MRDLG]			State Project Water
Combined Filter Effluent Turbidity (a)	NTU %	0.3 NTU 95%	NS	High %<0.3	Metropolitan Water District Henry J. Mills Water Treatment Plant	0.1 100%
Combined Filter Effluent Turbidity (a)	NTU %	0.3 NTU 95%	NS	High %<0.3	City of Corona, Lester & Sierra Del Oro Water Treatment Plants	- -
MICROBIOLOGICAL (CFU/100mL)						Ground Water
Total Coliform Bacteria (b)	(b)	5.0%	(0)	Low High Avg	Distribution-System-Wide Low: 0% Distribution-System-Wide High: 0% Distribution-System-Wide Avg: 0%	0% 0% 0%
Fecal Coliform and <i>E. Coli</i>	(c)	(c)	(0)	Low High Avg	Distribution-System-Wide Low: 0 Positive Samples Distribution-System-Wide High: 0 Positive Samples Distribution-System-Wide Avg: 0 Positive Samples	0% 0% 0%

Public Health Goal (PHG): The level of a contaminant in drinking water which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

Maximum Contaminant Level (MCL): The highest level of a contaminant allowed in drinking water. Primary MCL's are set as close to the PHG's as economically or technologically feasible. Secondary MCL's are set to protect odor, taste and appearance of drinking water.

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

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

Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Colorado River Water	Major Sources in Drinking Water	Health Effects Description
– – 0.08 100%	Soil runoff	Turbidity has no health effects. However, high levels can interfere with disinfection and provide a medium of microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
NA NA NA	Naturally Present in the Environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
NA NA NA	Human and animal fecal waste	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely-compromised immune systems.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the U.S. Environmental Protection Agency.

Footnotes

- (a) The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and filtration performance.
- (b) Total Coliform MCLs: No more than 5% of the monthly samples may be coliform-positive. Compliance is based on the combined distribution system samples and those from all the water filtration plants.
- (c) Fecal Coliform and E. Coli MCL: The occurrence of 2 consecutive total coliform positive samples, one of which contains fecal coliform/ E. Coli constitutes an acute MCL violation. The MCL was not violated in 2003.

Primary Standards

Radioactive Contaminants

PARAMETER	UNIT	State MCL [MRDL]	PHG (MCLG) [MRDLG]		Ground Water	State Project Water	Colorado River Water	Major Sources in Drinking Water	Health Effects Description
Gross Alpha Particle Activity (d)	pCi/L	15	NS	Low	ND	ND	3.5	Erosion of natural deposits	Certain minerals are radioactive and may emit forms of radiation know as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
				High	4.6	3.1	5.2		
				Avg	1.4	1.8	4.2		
Gross Beta Particle Activity	pCi/L	50	NS	Low	NC	ND	ND	Decay of natural and manmade deposits	Certain minerals are radioactive and may emit forms of radiation know as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increase risk of getting cancer.
				High	NC	ND	8.4		
				Avg	NC	ND	5.5		
Uranium	pCi/L	20	0.5	Low	ND	ND	2.3	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.
				High	14.5	ND	4.1		
				Avg	3.1	ND	3.3		

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 of our data, though representative, is more than one year old.

Key to Abbreviations

AL Regulatory Action Level	NS No Standard	ppb . . . Parts per billion or micrograms per liter
MCL Maximum Contaminant Level	NA Not Applicable	ppt . . . Parts per trillion or nanograms per liter
PHG Public Health Goals	umho/cm . . Micromhos per centimeter	ppq . . . Parts per quadrillion or picograms per liter
MCLG Maximum Contaminant Level Goal	NTU Nephelometric Turbidity Units	GPM. . . Gallons per minute
ND Not Detected, for Avg, ND is considered "0"	pCi/L. PicoCuries per liter	MG . . . Million Gallons
NC Not Collected	ppm Parts per million or milligrams per liter	TT Treatment Technique

Inorganic Chemicals

PARAMETER	UNIT	State MCL [MRDL]	PHG (MCLG) [MRDLG]		Ground Water	State Project Water	Colorado River Water	Major Sources in Drinking Water	Health Effects Description																																																																																																																																																										
Aluminum [AL] (e)	ppb	1000	600	Low	ND	ND	ND	Erosion of natural deposits; residue from some surface water treatment processes	Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestinal tract effects.																																																																																																																																																										
				High	110	ND	149																																																																																																																																																												
				Avg	ND	ND	ND			Arsenic [AS]	ppb	50	NA	Low	ND	ND	2.1	Erosion of natural deposits; glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.					High	21	ND	2.9					Avg	ND	ND	2.5	Barium [Ba]	ppm	1	2	Low	ND	ND	ND	Discharge from oil drilling wastes and metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.					High	0.14	ND	0.12					Avg	ND	ND	0.11	Cadmium	ppb	5	0.07	Low	ND	ND	ND	Internal corrosion of galvanized pipes, erosion of natural deposits, runoff from waste batteries and paint	Some people who drink water containing Cadmium in excess of the MCL over many years may experience kidney damage.					High	ND	ND	1.4					Avg	ND	ND	ND	Fluoride [F]	ppm	2	1	Low	0.30	ND	0.2	Erosion of natural deposits; water additive that promotes strong teeth	Some people who drink water containing fluoride in excess of the Federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the State MCL of 2 mg/L may get mottled teeth.					High	2.8	ND	0.3					Avg	0.40	ND	0.3	Nitrate [NO3] (g)	ppm	45	45	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.					High	120.0	5.7	ND					Avg	36.3	3.1	ND	Nitrate + Nitrite as Nitrogen	ppm	10	10	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.					High	24.0	1.3	ND					Avg	8.5
Arsenic [AS]	ppb	50	NA	Low	ND	ND	2.1	Erosion of natural deposits; glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.																																																																																																																																																										
				High	21	ND	2.9																																																																																																																																																												
				Avg	ND	ND	2.5			Barium [Ba]	ppm	1	2	Low	ND	ND	ND	Discharge from oil drilling wastes and metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.					High	0.14	ND	0.12					Avg	ND	ND	0.11	Cadmium	ppb	5	0.07	Low	ND	ND	ND	Internal corrosion of galvanized pipes, erosion of natural deposits, runoff from waste batteries and paint	Some people who drink water containing Cadmium in excess of the MCL over many years may experience kidney damage.					High	ND	ND	1.4					Avg	ND	ND	ND	Fluoride [F]	ppm	2	1	Low	0.30	ND	0.2	Erosion of natural deposits; water additive that promotes strong teeth	Some people who drink water containing fluoride in excess of the Federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the State MCL of 2 mg/L may get mottled teeth.					High	2.8	ND	0.3					Avg	0.40	ND	0.3	Nitrate [NO3] (g)	ppm	45	45	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.					High	120.0	5.7	ND					Avg	36.3	3.1	ND	Nitrate + Nitrite as Nitrogen	ppm	10	10	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.					High	24.0	1.3	ND					Avg	8.5	0.7	ND																								
Barium [Ba]	ppm	1	2	Low	ND	ND	ND	Discharge from oil drilling wastes and metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.																																																																																																																																																										
				High	0.14	ND	0.12																																																																																																																																																												
				Avg	ND	ND	0.11			Cadmium	ppb	5	0.07	Low	ND	ND	ND	Internal corrosion of galvanized pipes, erosion of natural deposits, runoff from waste batteries and paint	Some people who drink water containing Cadmium in excess of the MCL over many years may experience kidney damage.					High	ND	ND	1.4					Avg	ND	ND	ND	Fluoride [F]	ppm	2	1	Low	0.30	ND	0.2	Erosion of natural deposits; water additive that promotes strong teeth	Some people who drink water containing fluoride in excess of the Federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the State MCL of 2 mg/L may get mottled teeth.					High	2.8	ND	0.3					Avg	0.40	ND	0.3	Nitrate [NO3] (g)	ppm	45	45	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.					High	120.0	5.7	ND					Avg	36.3	3.1	ND	Nitrate + Nitrite as Nitrogen	ppm	10	10	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.					High	24.0	1.3	ND					Avg	8.5	0.7	ND																																																		
Cadmium	ppb	5	0.07	Low	ND	ND	ND	Internal corrosion of galvanized pipes, erosion of natural deposits, runoff from waste batteries and paint	Some people who drink water containing Cadmium in excess of the MCL over many years may experience kidney damage.																																																																																																																																																										
				High	ND	ND	1.4																																																																																																																																																												
				Avg	ND	ND	ND			Fluoride [F]	ppm	2	1	Low	0.30	ND	0.2	Erosion of natural deposits; water additive that promotes strong teeth	Some people who drink water containing fluoride in excess of the Federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the State MCL of 2 mg/L may get mottled teeth.					High	2.8	ND	0.3					Avg	0.40	ND	0.3	Nitrate [NO3] (g)	ppm	45	45	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.					High	120.0	5.7	ND					Avg	36.3	3.1	ND	Nitrate + Nitrite as Nitrogen	ppm	10	10	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.					High	24.0	1.3	ND					Avg	8.5	0.7	ND																																																																												
Fluoride [F]	ppm	2	1	Low	0.30	ND	0.2	Erosion of natural deposits; water additive that promotes strong teeth	Some people who drink water containing fluoride in excess of the Federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the State MCL of 2 mg/L may get mottled teeth.																																																																																																																																																										
				High	2.8	ND	0.3																																																																																																																																																												
				Avg	0.40	ND	0.3			Nitrate [NO3] (g)	ppm	45	45	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.					High	120.0	5.7	ND					Avg	36.3	3.1	ND	Nitrate + Nitrite as Nitrogen	ppm	10	10	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.					High	24.0	1.3	ND					Avg	8.5	0.7	ND																																																																																																						
Nitrate [NO3] (g)	ppm	45	45	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.																																																																																																																																																										
				High	120.0	5.7	ND																																																																																																																																																												
				Avg	36.3	3.1	ND			Nitrate + Nitrite as Nitrogen	ppm	10	10	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.					High	24.0	1.3	ND					Avg	8.5	0.7	ND																																																																																																																																
Nitrate + Nitrite as Nitrogen	ppm	10	10	Low	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.																																																																																																																																																										
				High	24.0	1.3	ND																																																																																																																																																												
				Avg	8.5	0.7	ND																																																																																																																																																												

Footnotes

- (d) State Project Water and Colorado River Water results are for 2002 -2003, 4 quarter monitoring, except Gross Alpha and Uranium monitoring is done monthly on the Colorado River Water. City water is analyzed every four years, in a 4 quarter monitoring program and was sampled from April 2000 to July 2003.
- (e) Aluminum has both primary and secondary standards.
- (g) State MCL is 45 mg/L as Nitrate, which equals 10.16 mg/L as Nitrogen.

Primary Standards

Volatile Organic Chemicals (mg/L)

PARAMETER	UNIT	State MCL [MRDL]	PHG (MCLG) [MRDLG]		Ground Water	State Project Water	Colorado River Water	Major Sources in Drinking Water	Health Effects Description
Methyl-tert-butyl ether [MTBE] (f)	ppb	13	13	Low High Avg	ND ND ND	ND 1.0 ND	ND ND ND	Leaking underground tanks; discharge from petroleum and chemical factories	Some people who use water containing methyl-tert-butyl ether in excess of the MCL over many years may have an increased risk of getting cancer.
Tetrachloro ethylene [PCE]	ppb	5	0.06	Low High Avg	ND 1.4 ND	ND ND ND	ND ND ND	Discharge from factories, dry cleaners and auto shops	Some people who use water containing tetrachloroethylene in excess of the MCL over many years may experience liver problems, and may have an increased risk of getting cancer.
Trichloro ethylene [TCE]	ppb	5	0.8	Low High Avg	ND 4.1 0.70	ND ND ND	ND ND ND	Discharge from metal degreasing sites and other factories	Some people who use water containing trichloroethylene in excess of the MCL over many years may experience liver problems, and may have an increased risk of getting cancer.
Dibromochloro-propane [DBCP]	ppt	200	0.01	Low High Avg	ND 94.0 ND	ND ND ND	ND ND ND	Banned nematocide that may still be present in soils due to runoff/leaching from use on fruit trees.	Some people who use water containing DBCP in excess of the MCL over many years may experience reproductive problems and may have an increased risk of getting cancer.

State Regulated Contaminants with No MCLs

PARAMETER	UNIT	State MCL [MRDL]	PHG (MCLG) [MRDLG]		Ground Water	State Project Water	Colorado River Water	Major Sources in Drinking Water
Boron	ppb	NS	AL-1000	Low High Avg	ND 4500 497	100 180 150	110 130 120	Some men who drink water containing boron in excess of the action level over many years may experience reproductive effects, based on studies in dogs.
Chromium VI [Hexavalent Chromium]	ppb	NS	NS	Low High Avg	ND 1.8 ND	ND ND ND	ND ND ND	n/a
**Perchlorate	ppb	NS	AL-4	Low High Avg	ND 13 3.1	ND ND ND	ND 5.1 ND	Some people who drink water containing perchlorate in excess of the action level may experience effects associated with hypothyroidism. Perchlorate interferes with the production of thyroid hormones, which are required for normal pre- and postnatal development in humans, as well as normal body metabolism.
Vanadium	ppb	NS	AL-50	Low High Avg	ND 180 13.9	ND ND ND	3 4 3	The developing babies of some pregnant women who drink water containing vanadium in excess of the action level may have an increased risk of developmental effects, based on studies in laboratory animals.

** Perchlorate is also a Federal Regulated contaminant with no MCL.

Disinfection Byproducts, Disinfectant Residuals and Disinfection Byproduct Precursors

PARAMETER	UNIT	State MCL [MRDL]	PHG (MCLG) [MRDLG]	Distribution System	Health Effects Description	
TTHMs [Total Trihalomethanes]	ppb	80	NA	Range RAA	13.9-40.5 26.0	Some people who use water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
Halocetic Acids	ppb	60	NA	Range RAA	4.4-18.2 11.6	Some people who drink water containing halocetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Chloramines	ppm	[4]	[4]	Range RAA	.5-1.1 .93	Some people who use water containing chloramines well in excess of the MCL over many years could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort.
Bromate (l)	ppb	10	0	High RAA	4.5-10.4 6.6	Some people who drink water containing Bromate in excess of the MCL over many years may have an increased risk of getting cancer.
DBP Precursors Control [TOC]	ppm		ACC	High RAA	4.5 2.8	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes and haloacetic acids. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects and may lead to an increased risk of cancer.

ACC: Alternative Compliance Criteria; Source water TOC <4.0mg/L, calculated quarterly as a running annual average (RAA); source alkalinity >60mg/L, calculated quarterly as RAA; and either TTHM and HAA5 RAAs < 0.4 mg/L and 0.3 mg/L, respectively.

Footnotes

- (f) MTBE has both primary and secondary standards.
- (l) Bromate levels reported are from Mills Filtration Plant MWD. Corona Water Plants do not ozonate water. Mills Water is blended with other sources. MWD Bromate compliance began in October 2003 and values based on weekly samples.

Secondary Standards

Aesthetic Standards

PARAMETER	UNIT	State MCL	PHG (MCLG)	Ground Water	State Project Water	Colorado River Water	Major Sources in Drinking Water	
Aluminum [AL] (e)	ppb	200	600	Low High Avg	ND 110 ND	ND 149 ND	Residue from water treatment process; erosion of natural deposits.	
Color [units]	Units	15	NS	Low High Avg	ND 1 2 ND 2 1	ND 3 3	Naturally-occurring organic materials.	
Corrosivity (h)	Si	Non-Corrosive	NS	Low High Avg	Non-Corrosive ND ND ND	Non-Corrosive ND ND ND	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature.	
Iron [Fe]	ppb	300	NS	Low High Avg	ND 500 ND ND	(i) (i) (i)	Leaching from natural deposits; industrial wastes.	
Odor-Threshold (units) (i)	Units	3	NS	Low High Avg	ND 1 1	(i) (i) (i)	Naturally-occurring organic materials.	
Turbidity Monthly (j)	NTU	5	NS	Low High Avg	0.08 1.2 0.2	NS NS NS	Soil runoff.	
Total Dissolved Solids [TDS]	ppm	1000	NS	Low High Avg	470 1100 774	199 366 261	568 604 593	Runoff/leaching from natural deposits.
Specific Conductance (umho/cm)	umho/cm	1600	NS	Low High Avg	720 1800 1258	361 660 476	930 990 960	Substances that form ions when in water; seawater influence.
Chloride [Cl]	ppm	500	NS	Low High Avg	29 220 128	47 114 70	80 83 81	Runoff/leaching from natural deposits; seawater influence.
Sulfate [So4]	ppm	500	NS	Low High Avg	140 250 192	34 91 48	222 237 232	Runoff/leaching from natural deposits; industrial wastes.

Additional Parameters

PARAMETER	UNIT	State MCL	PHG (MCLG)		Ground Water	State Project Water	Colorado River Water
Alkalinity [AS CaCO₃]	ppm	NS	NS	Low	150	57	120
				High	300	80	137
				Avg	226	67	133
Bicarbonate [HCO₃]	ppm	NS	NS	Low	180	NC	NC
				High	440	NC	NC
				Avg	278	NC	NC
Calcium [Ca]	ppm	NS	NS	Low	79	16	63
				High	200	25	72
				Avg	141	20	69
Magnesium [Mg]	ppm	NS	NS	Low	17	9.5	27
				High	41	15	29
				Avg	26	11.5	28
pH	Units ph	NS	NS	Low	7.1	8.4	7.6
				High	7.7	8.5	8.4
				Avg	7.4	8.4	8.1
Potassium [K]	ppm	NS	NS	Low	1.2	2.1	4.2
				High	5.1	3.6	4.5
				Avg	3.1	2.6	4.4
Sodium	ppm	NS	NS	Low	48	37	86
				High	160	82	90
				Avg	96	53	88
Hardness [Total Hardness]	ppm	NS	NS	Low	270	81	268
				High	620	122	297
				Avg	434	97	288
Total Organic Carbons	ppm	NS	NS	Low	NC	1.6	2.8
				High	NC	3.1	5.7
				Avg	NC	2.1	3.4

"Hardness" is the sum of polyvalent cations present in the water, generally Magnesium and Calcium. The cations are usually naturally-occurring.

"Sodium" refers to the salt present in the water and is generally naturally-occurring.



Footnotes

- (e) Aluminum has both primary and secondary standards.
- (h) Corrosivity is measured by the Langlier Stability Index. A positive index, indicating non-corrosivity, was maintained.
- (i) Metropolitan Water District (MWD) has developed a flavor-profile analysis method that can more accurately detect odor occurrences. For information contact MWD at (213) 217-6000.
- (j) Measured in the distribution system on a monthly basis.

General Water Quality Information

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.

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as

- Pesticides and herbicides, which 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Health Services prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottle water that provide the same protection for public health.

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. USEPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from Safe Drinking Water Hotline (1-800-426-4791).

Source Water Assessment

An assessment of the drinking water sources for Corona, Coronita, El Cerrito and Green River was completed in December of 2002. A copy of the assessment is available at the Corona Department of Water & Power

customer counter. You may request a summary of the assessment be sent to you by contacting the CDWP office at (909) 736-2263.

Frequently Asked Questions

I am installing a new dishwasher and/or water softener. How hard is my water?

Hardness is dissolved calcium and magnesium which may cause a deposit on fixtures and dishes. Our average hardness is 338 ppm or 19.7 grains per gallon, hard to very hard.

When I turn on my kitchen or bathroom faucet the water comes out white. What is wrong?

Dissolved air in the water causes a milky appearance. When you open your faucet, the pressure is relieved and this allows the air to form bubbles that rise to the top of the glass. It will clear within a minute, beginning at the bottom of the glass.

My dentist has asked what the Fluoride content of the water is in Corona.

Fluoride is not added to City water. Fluoride occurs naturally in Corona's water at an average of 0.3 ppm, or 0.3 milligrams per liter.

I was told to flush my water heater and I don't know how to do it. Can you help?

We have general instructions for flushing your water heater, to obtain a copy please call 736-2478, and we will be happy to mail, fax or e-mail it to you.

For general information about this report please call (909) 736-2263.

For questions related to water quality, please contact the Water Production & Distribution Division at (909) 736-2478.

If you are interested in participating in decisions that affect the quality and supply of the water in the City of Corona, you can attend the regular

City Council meetings on the first and third Wednesday of every month.

-Español- Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo o hable con alguien que lo entienda bien.



City of Corona

*Department of Water and Power
P.O. Box 940
Corona, CA 92878*

Presorted Standard
U.S. POSTAGE

PAID

Corona, CA
Permit No. 146

Postal Customer