

CORONA

DEPARTMENT OF WATER AND POWER



"Protecting Public Health"

MESSAGE FROM THE GENERAL MANAGER

At the City of Corona's Department of Water and Power, providing safe, clean, high-quality water is one of our highest priorities. We remain vigilant in meeting the challenges of water protection, water use efficiency and community education while continuing to serve the needs of our customers.

We believe it is important for you, our customer, to have current and factual information about your water supply. We are proud to report that we have met and exceeded all State and Federal Law standards.

The Consumer Confidence Report conforms to the Federal regulation under the Safe Drinking Water Act requiring water utilities to provide detailed water quality information to each customer annually. This report is a performance measure of the quality of water supplied by the City of Corona's Department of Water and Power against the compliance standards established by the California Department of Public Health and the United States Environmental Protection Agency.

It is our mission to continually strive to adopt new and better methods for delivering the best quality drinking water to you. To that end, I encourage you to contact me if you have questions regarding this report or require additional information.

Jonathan Daly
DWP General Manager
951-736-2477

“It is our mission to continually strive to adopt new and better methods for delivering the best quality drinking water to you.”

INFORMED CUSTOMERS

Last year, as in years past, your tap water met all United States Environmental Protection Agency (USEPA) and California Department of Public Health (CDPH) drinking water health standards. The Department of Water and Power safeguards its water supplies and we are proud to report that we have not provided any water to our customers that has violated any maximum contaminant levels.

This report is a snapshot of the water quality in 2010. Included are details about where your water comes from, what it contains, and how it compares to the USEPA and CDPH standards. We are committed to providing you with information because informed customers are our best allies.

CORONA'S WATER SOURCES

In 2010, Corona residents and businesses used approximately 13 billion gallons of drinking water (down one billion gallons from the previous year). Of that water, 62% was pumped from groundwater wells owned and operated by the Department of Water and Power. Another 32% came from the Colorado River by way of Lake Mathews. The final 6% is State Project water from Northern California, by way of the California Aqueduct.

WATER TREATMENT

The water from the Colorado River requires treatment to remove and inactivate harmful organisms. This process is accomplished using Corona's two surface water treatment facilities: the Sierra Del Oro and Lester Water Treatment Plants. These facilities incorporate the use of coagulants in conjunction with multimedia filtration and disinfection. In independent laboratory testing, 100% of the samples taken in 2010 were free of harmful organisms.

About half of the groundwater pumped in Corona is sent to a state-of-the-art reverse osmosis membrane treatment facility, the Temescal Desalter. This facility incorporates nitrate and Total Dissolved Solids^(v) (TDS) removal and also provides disinfection.

The Department of Water and Power disinfects the distribution system with mono chloramines (a ratio of chlorine and ammonia).

This allows us to achieve a long lasting residual and reduce the production of disinfection by-products. Disinfection by-products are formed when disinfectants (i.e. mono chloramines) react with naturally-occurring organic matter in water.



Lester Water Treatment Plant



BLENDING

The Department of Water and Power has six active blending facilities. These facilities blend low nitrate, fluoride, perchlorate and Total Dissolved Solids water with the remaining groundwater sources to deliver safe reliable drinking water to your tap.

You will notice in the tables of detected contaminants that the groundwater exceeds the primary standard for fluoride, nitrate, and perchlorate. The Department of Water and Power 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 Department of Water and Power blends water from several sources to meet water quality standards. 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 more than 10%. Please refer to the "Treated Average System Water" column in the tables at the end of the report for a more accurate representation of system water quality.

For more information about fluoridation, oral health, and current issues visit: www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx.



RECLAIMED WATER

Most people take it for granted that there will always be enough water. Every time we turn on the tap or a sprinkler, water flows without interruption. The reality for Southern California is that there is not enough water locally for everyone. The State and our own region are dealing with a growing population, stricter environmental constraints on how water is used and periodic droughts that will curtail unlimited use of our water supplies.

To save drinking water sources for other uses, the Department of Water and Power has constructed an extensive reclaimed water distribution system. It produces high quality reclaimed water that has been filtered and disinfected by Corona's own water reclamation facilities and is used for landscaping and irrigation. It allows the Department of Water and Power to save current potable (drinking) water supplies for homes and businesses.

Corona has made substantial progress with its reclaimed water system, which began serving reclaimed water to customers in the summer of 2006. We currently have 212 connections using approximately three-million gallons per day with many new sites in the process of being converted.

The infrastructure for the reclaimed water system consists of approximately 41 miles of pipeline, three storage reservoirs, and three pump stations. Reclaimed water has its own system of pipelines that is completely separate from drinking water lines. These pipelines are purple to easily distinguish them from potable water lines.

The reclaimed water system produced 1.2 billion gallons of reclaimed water in 2010. Soon, most parks and schools in Corona will be using this source of water to irrigate all landscape areas. During 2010, six agricultural customers, two private businesses, 16 Landscape Maintenance Districts, one church and one school were converted to reclaimed water. El Cerrito Park was constructed to use reclaimed water. In addition, the street sweeping contractor for the City utilizes reclaimed water. These conversions reduced potable water use by 60.5 million gallons last year.

THE DROUGHT IS OVER; SO WHY SHOULD WE STILL CONSERVE WATER?

California's drought is over, hydrologically speaking. Recent rains have helped to raise water levels in California State reservoirs to or above normal levels. The snowpack level in the Sierra Nevada's



was measured at 165% of the season's average on March 30, 2011, according to the snow survey conducted by the Department of Water Resources. On March 30, 2011, Governor Brown rescinded Executive Order S-06-08, which officially ended the State's emergency drought declaration from June 12, 2008. So water is plentiful again! We can open up the taps and just let the water flow, right? Well, the simple answer is no.

While the rains and snowpack levels are definitely a good thing, they are only one piece of the water puzzle for California. There are still many challenges facing California's water supply, and therefore Corona's water supply. That's why in Governor Brown's proclamation, which can be found online at <http://www.gov.ca.gov/news.php?id=16959>, he stated:

"While this season's storms have lifted us out of the drought, it's critical that Californians continue to watch their water use. Drought or no drought, demand for water in California always outstrips supply. Continued conservation is key."





Lake Mead

CHALLENGES TO OUR IMPORTED WATER SUPPLIES

Corona, like much of California, depends on imported water to meet demands for its customers. Nearly 40% of our water supply is imported through Metropolitan Water District: 6% from the State Water Project in Northern California and 32% from the Colorado River.

Pumping Restrictions on the Delta

The fact is that pumping restrictions for the Delta, due to the Endangered Species Act, are still in effect. Much of the water now flowing through the Delta is going out to sea. Neither the State Water Project (SWP) nor the Central Valley Project (CVP) is able to deliver 100% of water requests this year, even with all of the rain. As of

April 20, 2011, the SWP projected delivery allocations to be at 80% of requests, and the CVP has projected delivery allocations to be at 75% of requests as of April 8, 2011. Even with the plentiful rains, it is difficult to meet 100% deliveries due to these pumping restrictions and California's already strained water system. The infrastructure was initially built to serve a population of 19 million, but now serves more than double that at 40 million people. California's water system was not designed to capture and store these flood waters. A long term solution to the California Delta's issues still does not exist.

Drought on the Colorado River

Water from the Colorado River is shared per the 1922 Colorado River Compact, which allocates water to seven states and Mexico. The Upper Colorado region states, consisting of Colorado, Utah, New Mexico and Wyoming receive 7.5 million acre-feet of water per year. Lower Region states, including Arizona, California and Nevada receive 7.5 million acre-feet of Colorado River water every year with California receiving the largest share at 4.5 million acre-feet per year. Mexico receives 1.5 million acre-feet per year. (An acre-foot of water is 325,829 gallons.) For many years, California has taken its share of Colorado River water and up to 50% of the surplus of water available that the other states were not using. The Colorado River is in the midst of a decade long drought according to the U.S. Bureau of Reclamation's website at <http://www.usbr.gov/uc/feature/drought.html>. The elevation at Lake Mead, as of

April 2011, is 1,096 feet above sea level. If the elevation drops to 1,075 feet, then a water shortage declaration would be declared for the first time ever on the Colorado River, resulting in reduced deliveries to Nevada and Arizona. Due to the drought and other states taking their fair share, the surplus of water that California once received is no longer available.



DELTA WATER PACKAGE AND 20% BY 2020

The California State Legislature passed the Delta Water Package in November of 2009. This comprehensive legislative package on water policy, signed into law by then Governor Arnold Schwarzenegger, was recognition of how important it is for California to have a sustainable and reliable water supply for residents and businesses. As part of this legislative package, Senate Bill 7 requires all urban water agencies to reduce statewide per capita water consumption 20% by 2020. Corona has done a good job of reducing water use so far, and we still have some work to do.

So how can you help by reducing your water use? Think about your home or business. What are some ways that you could reduce your personal consumption by 20%? For example, could you take shorter showers a few days out of the week? Or could you install a water-saving fixture such as a low-flow showerhead, faucet aerator, or

high-efficiency clothes washer? Have you had a leaky toilet that you need to fix?

What about outdoors? Have you replaced your standard sprinkler controller with a "smart" timer that adjusts for the weather? It does the work so you don't have to! Or try doing the water limbo with your lawn: take a minute off of each of your stations this summer. Give your yard a week or two to adjust, and then try taking another minute off. Keep going until your yard is happy using less water. See how low you can go with your water usage! Have you considered removing some of your turf and replacing it with low water-using plants? We live in a semi-arid climate; using plants that have adapted to live in this type of weather means less water is needed to irrigate. Or, could you install drip irrigation in your existing planter areas? Drip irrigation puts water where it is needed – at the plant roots. This means you won't be feeding weeds in your planters.



Yuma Reservoir



WHAT DOES THIS MEAN FOR CORONA?

Droughts do happen periodically as part of nature's climate cycle. They have occurred frequently and throughout history. Generally, a drought is determined by each area; it is a period of less than normal precipitation for the area. Here in the Inland Empire, we live in a naturally arid and dry climate. That is why it is important for our State to make the best use of this year's above normal rain and snowfall and continue to prepare for the next drought in California. It is only a matter of time.

If you were to come into a large sum of money, what would you do with it? Would you spend it all at once, or would you save part of it for the future for a rainy day? Would you try to manage your money so that it lasted a long time, and for your children or grandchildren? Water is no different. California's water supply has many factors that affect it – climate, environmental and legislative restrictions to name a few. Therefore, in times of plenty, we need to save for times when our supply is lower. When we have had a good rain year, it is important that we manage that extra rain. So the rains, like any surplus, still need to be managed for the long-term so that we can make these supplies

last. It's like saving for a rainy day, but instead it's really saving a rainy day for a dry day. Using water efficiently now means that it will be available in the future when water levels are low again.

THINK ABOUT WATER

Only about 3% of the earth's water is fit for drinking, and two-thirds of that water is stored in ice caps and glaciers. Yet many of us don't think twice about the water that we use every day. All too often, water that has been pumped from the ground or imported from long distances, cleaned and treated is running down the storm drain – wasted. Water is a precious resource; we all need it to live. Where would we be without it? It's time to rethink our views about water, embrace water use efficiency as an everyday practice, and all do our part to ensure that our resources will last for future generations.



Our Water Resources group is here to help you save water. We offer landscape check-ups, rebates and landscape classes. Please contact the Water Resources Team at 951-736-2234 or by email at StopTheDrop@discovercorona.com for help achieving our 20% reduction. Remember, make every drop count – use water efficiently.

TIERED RATES AND WATER BUDGETS

In April 2010, the Department of Water and Power implemented its Tiered Rate and Water Budget program. Tiered rates and water budgets promote efficient water use, resource conservation, provide fair rates and are an equitable way to share resources. The water budget provides each customer with a budget that uses the customer's unique characteristics. All Department of Water and Power customers receive a water budget under the new program.



Residential customers receive a water budget that has two components: an indoor budget and an outdoor budget. The indoor budget provides 60 gallons per person per day in the billing cycle, based on the number of people in the home. The default indoor budget for a single family home is four people per household, and two people for each unit in a multi-family residence. The outdoor budget is based on daily weather data and the amount of irrigated area. The outdoor budget will decrease during cooler months and increase in warmer summer months because it is using weather data to determine how much water needs to be applied to the landscaping.

Commercial and industrial accounts receive a budget based on a three-year rolling average. For accounts that have not been established for more than a year, the budget would equal actual

use in the first year. Landscapes with a dedicated meter receive an outdoor budget based on irrigable area and weather data, just like residential accounts.

VARIANCE PROGRAM

The Department of Water and Power has a variance program to request changes to the water budget if the number of people in the residence is greater than the default budget or if the irrigable area estimate is not correct. A variance may also be granted if you find and fix a leak on your property. Forms are available online at www.discovercorona.com/tieredrates, at City Hall, or can be mailed to you by calling 951-736-2321. Water efficiency programs are also available to help customers stay within their water budget. Call the Water Resources Team at 951-736-2234 for more information.

DID YOU KNOW?

- There are 748 gallons of water in one unit of water
- One acre-foot of water equals 325,829 gallons or 435.6 units
- One acre-foot of water can supply two typical families with water for a whole year
- A leaky toilet can waste between 30 to 500 gallons of water per day



DID YOU KNOW THAT WHAT GOES DOWN YOUR DRAIN MAY END UP IN THE NATURAL WATER COURSE?

While water reclamation treatment removes most pollutants, even trace amounts of some substances may be harmful to the environment. The best solution is to prevent pollution from going down the drain in the first place.

Dispose of unwanted medicine properly... No Drugs Down the Drain!

For years, it was recommended to flush unwanted medicine down the drain to protect children and pets from accessing it, and to ensure against illegal recovery of controlled substances. Today, there are better options. The Department of Water and Power together with the Corona Police Department are working towards protecting our environment from the harmful effects of improperly discarded unused medications. For your convenience, a pharmaceutical disposal bin has been placed at the Corona Police Department lobby located at 730 Corporation Yard Way. For more information, please call 951-736-2330.

Keep drains free of cooking fats, oils and grease.

When flushed down the drain, cooking fats, oils and grease, or "FOG," can block sewer lines, causing raw sewage to back up into your home or into neighborhood streets and storm drains. Overflows can pose health and environmental hazards. Keep your sewer lines FOG-free by scraping cooking fats into the garbage or into your food

scrap recycling bin, where available – not down the drain. Do not use hot water to flush the cooking fats, oils, and grease down the drain as these will cool and solidify when they make contact with the cold water in the sewer main. Rather, mix the cooking fats, oils, and grease with absorbent materials such as paper towels, kitty litter, coffee grounds or newspaper before discarding into the garbage.

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.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or 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 State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 800-426-4791.

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

from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

NITRATE

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.

LEAD AND COPPER RULE MONITORING

The Lead and Copper Rule (LCR) was developed to protect public health by minimizing lead and copper levels in drinking water. The LCR established an action level of 15 parts per billion (ppb) for lead and 1.3 parts per million (ppm) for copper based on the 90th percentile level of tap water samples collected. Lead and copper are sampled on a mandated three year testing cycle with sampling conducted at the customer's tap.



In 2008, 51 samples were collected in Corona and we are pleased to report that these results did not exceed the 90th percentile action levels for copper and lead. Our 90th percentile results were 2.1 ppb for lead and 0.1 ppm for copper. To continue our commitment to the protection of public health, we are scheduled to monitor for LCR this year.

LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Department of Water and Power 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>.



SOURCE WATER ASSESSMENT

In accordance with the Federal Safe Drinking Water Act (SDWA), the State Department of Public Health Division of Drinking Water and Environmental Management developed a program, called the Drinking Water Source Assessment and Protection (DWSAP) Program, to assess the vulnerability of drinking water sources to contamination. Assessments of the drinking water sources for the Department of Water and Power were completed as early as December 2002. The assessment concluded that Corona's sources are considered most vulnerable to the following activities not associated with any detected contaminants in the water supply: automobile – gas stations, automobile – repair shops, chemical/petroleum pipelines, chemical/petroleum processing/storage, dry cleaners, historic waste dumps/landfills, housing – high density, lagoons/liquid wastes, machine shops, managed forests, metal plating/finishing/fabricating, mining – sand/gravel, NPDES/WDR permitted discharges, photo processing/printing, plastics/synthetics producers, railroad yards/maintenance/fueling areas, sewer collection systems, and utility stations – maintenance areas. A copy of the complete assessments are available through the City of Corona's City Clerk's office at 400 S. Vicentia Avenue, Corona, CA 92882, or by using the online Public Records Request form at www.discovercorona.com.

PRIMARY STANDARDS – Mandatory Health-Related Standards

PARAMETER	Units	State MCL	PHG (MCLG)	State DLR		Range Average	State Project Water	Colorado River Water	Major Sources in Drinking Water
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CLARITY

Combined Filter Effluent Turbidity	NTU %	0.3 95(a)	NA	–	Metropolitan Water District Henry J. Mills Water Treatment Plant	Highest	0.18	0.1	Soil runoff
						% < 0.3	100%	100	
Combined Filter Effluent Turbidity	NTU %	0.3 95 (a)	NA	–	City of Corona, Lester & Sierra Del Oro Water Treatment Plants	Highest	–	0.09	Soil runoff
						% < 0.3	–	100	

MICROBIOLOGICAL CONTAMINANTS

PARAMETER	Units	State MCL	PHG (MCLG)	State DLR	Regulated in Distribution System	Range Average	Ground Water	Colorado River Water	Major Sources in Drinking Water
Total Coliform Bacteria	%	5.0 (b)	(0)	–	Highest % of positive samples collected in any one month = 0%	–	–	–	Naturally present in the environment
Fecal Coliform and E. coli	(c)	(c)	(0)	–	Total number of positive samples collected in 2010 = 0	–	–	–	Human and animal fecal waste
Heterotrophic Plate Count (HPC)	CFU/ mL	TT	NA	NA	ND-5,700	Range	–	–	Naturally present in the environment
					13	Average	–	–	
Turbidity	NTU	–	(0)	–	ND-0.7	Range	–	–	Soil runoff
					0.1	Average	–	–	

KEY TO ABBREVIATIONS

CFU/mL	Colony Forming Units per Milliliter
DBP	Disinfection By-Products
DLR	Detection Limits for Purposes of Reporting
MBAS	Methylene Blue Active Substances

N	Nitrogen
NA	Not Applicable
ND	Not Detected
NL	Notification Level
NTU	Nephelometric Turbidity Units
pCi/L	picoCuries per Liter
ppb	parts per billion or micrograms per liter (µg/L)

ppm	parts per million or milligrams per liter (mg/L)
ppq	parts per quadrillion or picograms per liter (pg/L)
ppt	parts per trillion or nanograms per liter (ng/L)
RAA	Running Annual Average

TOC	Total Organic Carbon
µS/cm	microSiemen per centimeter; or micromho per centimeter (µmho/cm)



Parameter	Units	State MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Colorado River Water	Ground Water	Major Sources in Drinking Water
RADIOACTIVE CONTAMINANTS (j)								
Gross Alpha Particle Activity ^(u)	pCi/L	15	{0}	3	High	9.4	28	Erosion of natural deposits
					Low	4.2	ND	
					Average	5.7	6.7	
Combined Radium ^(k)	pCi/L	5	{0}	NA	High	ND	0.035	Erosion of natural deposits
					Low	ND	0	
					Average	ND	0.03	
Uranium ^(u)	pCi/L	20	0.43	1	High	3.8	23.3	Erosion of natural deposits
					Low	3.8	ND	
					Average	3.5	4.8	

EXTENDED ABBREVIATIONS

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

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 the U.S. Environmental Protection Agency.

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.

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

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.

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.

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

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

Parameter	Units	State MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	State Project Water	Colorado River Water	Ground Water	Treated Average System Water	Major Sources in Drinking Water
INORGANIC CONTAMINANTS										
Arsenic	ppb	10	0.004	2	High	3.1	3.1	2.3	ND	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
					Low	ND	2.2	ND	ND	
					Average	2.7	2.7	ND	ND	
Barium	ppm	1	2	0.1	High	ND	0.14	0.13	ND	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
					Low	ND	0.13	ND	ND	
					Average	ND	0.13	ND	ND	
Cadmium	ppb	5	0.04	1	High	ND	ND	1.1	ND	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints
					Low	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	
Chromium	ppb	50	(100)	10	High	ND	ND	9	ND	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
					Low	ND	ND	ND	ND	
					Average	ND	ND	1.1	ND	

California's water supply has many factors that affect it – climate, environmental and legislative restrictions to name a few. Therefore, in times of plenty, we need to save for times when our supply is lower.



Parameter	Units	State MCL [MRDL]	PHG [MCLG] [MRDLG]	State DLR	Range Average	State Project Water	Colorado River Water	Ground Water	Treated Average System Water	Major Sources in Drinking Water
Fluoride ^(b, e)	ppm	2	1	0.1	High	0.9	0.3	2.4	0.9	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
					Low	0.5	0.3	ND	ND	
					Average	0.7	0.3	0.4	0.3	
Nickel	ppb	100	12	10	High	ND	ND	31	ND	Erosion of natural deposits; discharge from metal factories
					Low	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	
Nitrate (as NO₃) ^(d, e)	ppm	45	45	2	High	4.9	ND	100	31	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
					Low	ND	ND	ND	ND	
					Average	2.7	ND	39	16	
Perchlorate ^(f, e)	ppb	6	6	4	High	ND	1.2	12	ND	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts
					Low	ND	1	ND	ND	
					Average	ND	1.2	2.6	ND	
Selenium	ppb	50	30	5	High	ND	ND	7	ND	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
					Low	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	

INORGANIC CONTAMINANTS

Parameter	Units	State MCL [MRDL]	PHG [MCLG] [MRDLG]	State DLR	Range Average	State Project Water	Colorado River Water	Ground Water	Treated Average System Water	Major Sources in Drinking Water
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SYNTHETIC ORGANIC CONTAMINANTS including Pesticides/PCBs

Dibromochloro-propane (DBCP)	ppt	200	1.7	10	High	ND	ND	35	ND	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit
					Low	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	

VOLATILE ORGANIC CONTAMINANTS

Tetrachloroethylene (PCE)	ppb	5	0.06	0.5	High	ND	ND	0.82	ND	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
					Low	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	
Trichloroethylene (TCE)	ppb	5	1.7	0.5	High	ND	ND	3	0.75	Discharge from metal degreasing sites and other factories
					Low	ND	ND	ND	ND	
					Average	ND	ND	1	ND	

SECONDARY STANDARDS – Aesthetic Standards

Chloride	ppm	500	NA	-	High	88	90	240	26	Runoff/leaching from natural deposits; seawater influence
					Low	52	87	ND	26	
					Average	78	92	134	26	
Color	Units	15	NA	-	High	1	3	3	ND	Naturally-occurring organic materials
					Low	1	2	ND	ND	
					Average	2	3	ND	ND	



Parameter	Units	State MCL [MRDL]	PHG [MCLG] [MRDLG]	State DLR	Range Average	State Project Water	Colorado River Water	Ground Water	Treated Average System Water	Major Sources in Drinking Water
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SECONDARY STANDARDS – Aesthetic Standards, continued

Foaming Agents (MBAS)	ppb	500	NA	-	High	ND	ND	60	60	Municipal and industrial waste discharges
					Low	ND	ND	ND	60	
					Average	ND	ND	21.8	60	
Iron	ppb	300	NA	100	High	ND	230	100	ND	Leaching from natural deposits; industrial wastes
					Low	ND	ND	ND	ND	
					Average	ND	120	ND	ND	
Manganese ^(6,1)	ppb	50	NA	20	High	35	ND	930	2.1	Leaching from natural deposits
					Low	ND	ND	ND	ND	
					Average	20	ND	8.5	0.4	
Specific Conductance ⁽⁴⁾	µS/cm	1600	NA	-	High	540	1,000	2,000	230	Substances that form ions when in water; seawater influence
					Low	390	980	680	230	
					Average	530	1,000	1,264	230	
Sulfate	ppm	500	NA	0.5	High	54	240	380	10	Runoff/leaching from natural deposits; industrial wastes
					Low	27	230	130	10	
					Average	52	250	202	10	
Total Dissolved Solids ⁽⁶⁾	ppm	1000	NA	-	High	270	630	1,300	700	Runoff/leaching from natural deposits
					Low	230	590	410	220	
					Average	290	640	805	457	
Turbidity	Units	5	NA	-	High	0.09	4.4	1.6	ND	Soil runoff
					Low	0.04	0.42	ND	ND	
					Average	0.06	1.9	0.1	ND	

Parameter	Units	State MCL [MRDL]	PHG [MCLG] [MRDLG]	State DLR	Range Average	State Project Water	Colorado River Water	Ground Water	Treated Average System Water	Major Sources in Drinking Water
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UNREGULATED CHEMICALS REQUIRING MONITORING (STATE AND FEDERAL) (g)

Boron ^(p)	ppb	NA	NL=1,000	100	Range	100-140	130	330-4,500	270-420	Runoff/leaching from natural deposits; industrial wastes
					Average	120	130	1,365	330	
Chromium VI ^(q)	ppb	NA	NA	0.03	Range	0.11-0.44	ND	ND-1.6	-	Industrial waste discharge; could be naturally present as well
					Average	0.37	ND	0.38	-	
Vanadium	ppb	NA	NL=50	3	Range	3.5-5.6	ND-3.6	ND-10	ND-3.5	Naturally-occurring; industrial waste discharge
					Average	4.6	3	6	2	

OTHER PARAMETERS THAT MUST BE INCLUDED IN THE CCR

Alkalinity	ppm	NA	NA	-	Range	50-76	120-130	140 -340	35-110
					Average	74	130	218	78
Calcium	ppm	NA	NA	-	Range	17-23	68-74	70 -190	11-54
					Average	22	74	118	35
Hardness ^(r)	ppm	NA	NA	-	Range	74-110	280-300	230 -690	28-210
					Average	96	300	424	123
Magnesium	ppm	NA	NA	-	Range	8-12	27-29	12 -70	2.5-17
					Average	10	29	31	9
pH	Units	NA	NA	-	Range	8.2-8.7	8.1-8.4	7.1-7.8	6.8-8.9
					Average	8.4	8.2	7.4	8
Potassium	ppm	NA	NA	-	Range	2.2-2.8	4.6-5.1	1.4 -11	ND
					Average	2.6	5.1	4	ND
Sodium ^(s)	ppm	NA	NA	-	Range	46-63	93-100	43 -160	33
					Average	66	100	95	33
Bicarbonate	ppm	NS	NS	-	Range	-	-	150 -410	34-56
					Average	-	-	264	39



Well 7



Parameter	UNIT	State MCL [MRDL]	PHG [MCLG] [MRDLG]	State DLR	Low High Avg /Max RAA	Distribution System Wide	Major Sources in Drinking Water	Health Effects Language
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DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCT PRECURSORS FEDERAL RULE (m)

Total Trihalomethanes (TTHM) (n)	ppb	80	n/a	1	Low	ND	By-product of drinking water chlorination	Some people who use water containing trihalomethanes in excess of the MCL over many years may experience liver problems, kidney, or central nervous system problems, and may have an increased risk of getting cancer
					High	33		
					Max RAA	15.7		
Haloacetic Acids (o)	ppb	60	n/a	1	Low	ND	By-product of drinking water chlorination	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer
					High	27		
					Max RAA	10.3		
Bromate (l) (Mills - WR-24 Conn.)	ppb	10	0.1	1	Low	ND	By-product of drinking water ozonation	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer
					High	13		
					Avg	7.7		
Total Chlorine Residual	ppm	[4]	[4]	n/a	Low	1.42	Drinking water disinfectant added for treatment	Some people who drink water containing chloramines well in excess of the MRDL 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
					High	1.52		
					Avg	1.47		
DBP Precursors Control (TOC)	ppm	TT	NA	0.3	Low	2	Various natural and man made sources	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by-products. These by-products include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these by-products 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
					High	2.2		
					Avg	2.2		

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 NTU at any time. Turbidity, a measure of the cloudiness of the water, is an indicator of treatment performance. The averages and ranges of turbidity shown in the Secondary Standards were based on the treatment plant effluent.
- (b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution system sampling from all the treatment plants. In 2010, 1563 samples were analyzed and none were positive for total coliforms. The MCL was not violated.
- (c) E. coli MCL: The occurrence of two consecutive total coliform-positive samples, one of which contains E. coli, constitutes an acute MCL violation. The MCL was not violated.
- (d) State MCL is 45 mg/L as nitrate, which is the equivalent of 10 mg/L as N.
- (e) Fluoride, nitrate, perchlorate, and TDS are a part of Corona's blending plan to reduce the levels being delivered to the consumer's tap. Refer to the "Treated Average System Water" column for a more accurate representation of system water quality.
- (f) The high concentration of Manganese is from two groundwater wells of many that Corona utilizes. Thus, the flow weighted average was used as a better representation of the Manganese concentration in the overall water supply.
- (g) Unregulated contaminant monitoring helps the USEPA and CDPH determine where certain contaminants occur and whether the contaminants need to be regulated.
- (h) The Department of Water and Power was in compliance with all provisions of the State's Fluoridation System Requirements. This is part of the Corona's blending plan to reduce the levels of fluoride being delivered to the consumer's tap. Refer to the "Treated Average System Water" column for a more accurate representation of system water quality.
- (i) Perchlorate reporting level is 2 ppb.
- (j) The City of Corona used data collected for radioactive contaminants from 2006 through the current reporting year, 2010. CDPH does not require collection of radioactive contaminants annually; therefore the City used previous years' data in this report for some of the sources.
- (k) Combined Radium-226 and -228 State MCL is 5 pCi/L.
- (l) Bromate reporting level is 3 ppb and reported from Mills Filtration Plant MWD. Mills MWD Water is blended with other Corona water sources. Please note that this water is blended with water from other sources to provide consumers with the highest quality drinking water.
- (m) The Department of Water and Power was in compliance with all provisions of the Stage 1 Disinfectants/Disinfection By-Products (D/DBP) Rule. Compliance was based on the RAA.
- (n) Reporting level is 0.5 ppb for each of the following: bromodichloromethane, bromoform, chloroform, and dibromochloromethane.
- (o) DLR is 1.0 ppb for each of the following: dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid; and 2.0 ppb for monochloroacetic acid.
- (p) The sources that were detected for Boron are all directed to the Temescal Desalter for reverse osmosis treatment. The treated water is monitored at the effluent of the facility which is represented in the "Treated Average System Water" column.
- (q) Chromium VI reporting level is 0.03 ppb.
- (r) Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally-occurring.
- (s) Sodium refers to the salt present in the water and is generally naturally-occurring.
- (t) This constituent was detected at high levels exceeding the MCL at the highlighted source. Please note that this water is blended with water from other sources to provide consumers with the highest quality drinking water.
- (u) The detected result exceeding the MCL was collected from a well that is out of service, therefore the water was not being delivered to the system.
- (v) Total Dissolved Solids (TDS) is a measure of the total amount of all the materials that are dissolved in water. These minerals, both natural and anthropogenic (made by humans), are mainly inorganic solids, with a minor amount of organic material.



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 406 ppm or 23.7 grains per gallon, hard to very hard. Our water's hardness can change depending on the water demand and the season.

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.

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 951-736-2234 and we will be happy to mail, fax or e-mail them to you.

Where does the weather data for my water budget come from?

The Department of Water and Power receives weather data from a weather station that is owned and maintained by the California Department of Water Resources. The weather station is a part of the

California Irrigation Management Information System, or CIMIS, and is located at U.C. Riverside. For more information on CIMIS, visit their website at www.cimis.water.ca.gov.

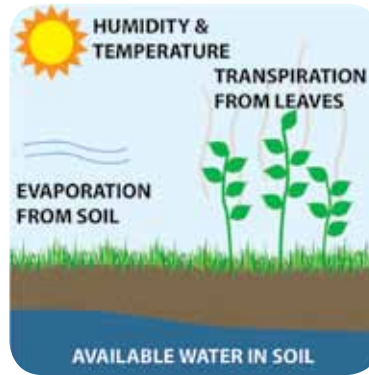
What is evapotranspiration?

Evapotranspiration, or ET, is the amount of water that is lost to the atmosphere each day due to evaporation from the soil and plant transpiration. Evaporation is water that is lost from the soil due to factors such as wind, humidity and temperature. Plant transpiration is the amount of water that plants lose from their leaves and plant tissues. Evapotranspiration is an indicator of how much water crops, lawns, gardens and trees need for healthy growth and productivity.

How do I know what my outdoor budget will be?

Your water budget will change throughout the year, based on weather conditions. In general, your water budget will be more in the summer months, when more evaporation is happening, and less in the winter months, when we receive rain and the weather is cooler. To get a good idea of how your water budget changes, visit our website at

www.discovercorona.com/tieredrates and check out our budget estimator. Simply enter your customer number and account number from your water bill to see a graph of your water budget and your past water use. This will give you an idea of how much your outdoor budget



will be. In order to help make sure that you stay under budget, here are some helpful tips:

- Turn off your sprinklers a day before it rains, and keep them off for several days afterward.
- Consider installing a “smart” irrigation controller; these smart controllers will adjust watering times automatically based on the weather. Rebates are available towards the purchase of these controllers.
- Check your irrigation system every couple of weeks for broken sprinkler heads and soggy areas.
- Not sure how to program your timer? Call our Water Resources Team at 951-736-2234 to schedule a free landscape check-up. Our technicians can give you recommended watering times based on your irrigation system.



Where can I get information on how to conserve water?

Call us! The best way to get information on water conservation for your home or business is to call our office and talk to our Water Resources Team. Please call us at 951-736-2234. Our website also has a lot of good conservation tips and rebate information to help you conserve water. Please visit www.discovercorona.com/dwp for more information or e-mail StopTheDrop@discovercorona.com.

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

If you are interested in participating in decisions that affect the quality and supply of the water in the City of Corona, or for general information about this report and questions related to water quality, please call 951-736-2234.

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





City of Corona

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