



# 2002



## Burbank Annual Water Quality Report

**Burbank Water and Power (BWP)** provides water service for the citizens of Burbank. Last year, over 1,600 water samples were tested for over 80 contaminants. This report compares those tests with State standards and explains the different sources of our City water. If you have any questions about this report, please call Leighton Fong at (818) 238-3500.

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

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Այս տեղեկագիրը կը պարունակէ կարեւոր տեղեկութիւններ ձեր խմած ջուրին մասին: Հաճեցէք կարդալ կամ թարգմանել տալ:

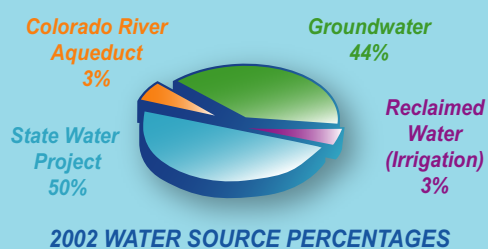
### Water Sources

The water supply for Burbank comes from three different sources: local groundwater, the Colorado River, and the State Water Project.

The groundwater in Burbank is treated to remove volatile contaminants, such as trichloroethylene (TCE) and tetrachloroethylene (PCE), before it is put into our distribution system. Burbank has two treatment facilities, the Granular Activated Carbon (GAC) Plant and the Burbank Operable Unit (BOU) Plant. For the year 2002, 44% of our total water supply came from groundwater.

The Colorado River and the State Water Project are imported supplies the City purchases from the Metropolitan Water District of Southern California (MWD). MWD operates treatment facilities for these surface water supplies before delivering it to Burbank. For the year 2002, 50% of our water supply came from the State Water Project and 3% came from the Colorado River Aqueduct.

An additional water resource for the City is reclaimed water. It is a reliable supply for the irrigation of our parks and golf courses as well as for cooling water at our Power Plant. In 2002, 3% of the city's total water supply came from reclaimed water.



A source water assessment was completed in December 2002, for both the groundwater and surface water supplies. The groundwater source is considered most vulnerable to the known contaminant plume that resulted in the construction of the BOU Plant. Possible contaminating activities include automobile repair shops, petroleum pipeline, National Pollutant Discharge Elimination Systems (NPDES) permitted discharges, metal plating, underground storage tanks, plastics producer, airport, military installation, and gas stations. The groundwater report is available for public review at the Water Engineering Office located in the BWP Administration Building at 164 W. Magnolia Blvd.

In December 2002, MWD completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Water Project supplies are considered most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting MWD by phone at (213) 217-6850.

**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 United States Environmental Protection Agency (USEPA) Safe Drinking Water Hotline: (1-800-426-4791).

**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*, 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 State Department of Health Services develop 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 must provide the same protection for public health.

**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 guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline: (1-800-426-4791).

### Water and You

The Burbank Water and Power Board typically meets the first Thursday of each month at 5:00 PM at the BWP Administration Building (164 W. Magnolia Blvd). Please feel free to participate in these meetings.

Information on the City's water quality as well as other information regarding your water or electric service can be viewed on the BWP website :

[www.BurbankWaterAndPower.com](http://www.BurbankWaterAndPower.com)

## City of Burbank Water Quality Test Results for Calendar Year 2002

**Table 1 - Sampling results showing the detection of coliform bacteria**

Microbiological Contaminants	MCL	MCLG	Highest No. of detection	Months in Violation	Typical Source of Bacteria
Total Coliform Bacteria (a)	5.0%	0.0%	0.9%	0	Naturally present in the environment
Fecal Coliform and E coli	(b)	0	1	0	Human and animal fecal waste

**Table 2 - Sampling results showing the detection of lead and copper**

Constituent	No. of samples	Action Level	PHG	90th percentile level detected	No. Sites over AL	Typical Source of Contaminant
Lead (ppb) (c)	33	15	2	3.2	0	corrosion of household plumbing
Copper (ppm) (c)	33	1.3	0.17	0.15	0	corrosion of household plumbing

**Table 3 -Disinfection By-Products and Residuals**

Parameter	Units	State MCL (MRDL)	MRDLG	Running Annual Average	Lowest - Highest	Typical Source of Contaminant
Total Trihalomethanes (i)	ppb	80	NA	31	23 - 46	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (i)	ppb	60	NA	7	ND - 14	By-product of drinking water chlorination
Total Chlorine Residual (i)	ppm	(4)	(4)	1.4	1.2 - 1.6	Drinking water disinfectant added

**Table 4 - Detection of Contaminants with Primary Drinking Water Standards**

Parameter	Units	State MCL	PHG (MCLG)	Burbank Water (d)	Lowest - Highest	Typical Source of Contaminant
<b>VOLATILE ORGANIC COMPOUNDS</b>						
Methyl-tert-butyl-ether (MTBE) (e)	ppb	13	13	ND	ND - 1	Leaking underground gasoline tanks and pipelines
<b>INORGANIC CHEMICALS</b>						
Aluminum (e)	ppb	1000	600	54	ND - 200	Residue from water treatment process; erosion of natural deposits
Arsenic	ppb	50	NA	ND	ND - 2	Erosion of natural deposits; glass and electronic production
Barium	ppm	1	(2)	0.05	ND - 0.12	Discharges from oil and metal refineries; erosion of natural deposits
Chromium	ppb	50	(100) (j)	5.5	ND - 10.7	Discharge from electroplating, textile manufacturing; erosion of natural deposits
Fluoride	ppm	2	1	0.4	ND - 0.6	Erosion of natural deposits
Nickel	ppb	100	12	3.7	ND - 60	Erosion of natural deposits, discharge from metal factories
Nitrate (as N) (f)	ppm	10	10	4.4	ND - 6	Runoff & leaching from fertilizer use; sewage; natural erosion
Nitrate and Nitrite (as N) (f)	ppm	10	10	4.4	ND - 6	Runoff & leaching from fertilizer use; sewage; natural erosion
<b>RADIONUCLIDES</b> (results are from monitoring of BOU wells conducted in 2001)						
Adjusted Gross Alpha (g)	pCi/L	15	NA	3.1	0.02 - 9.5	Erosion of natural deposits
Gross Beta	pCi/L	50	NA	6.1	ND - 14	Decay of natural and manmade deposits
Combined Radium (h)	pCi/L	5	NA	0.4	ND - 2.9	Erosion of natural deposits
Uranium	pCi/L	20	0.5	6.4	ND - 20	Erosion of natural deposits

**Table 5 - Detection of Contaminants with Secondary Drinking Water Standards**

Parameter	Units	State MCL	PHG	Burbank Water	Lowest - Highest	Typical Source of Contaminant
Aluminum (e)	ppb	200	600	54	ND - 200	Residue from water treatment process; erosion of natural deposits
Chloride	ppm	500	NA	85	74 - 98	Runoff or leaching from natural deposits
Manganese	ppb	50	NA	1	ND - 30	Leaching from natural deposits
Methyl-tert-butyl-ether (MTBE) (e)	ppb	5	13	ND	ND - 1	Leaking underground gasoline tanks and pipelines
Specific Conductance	µmho/cm	1600	NA	839	556 - 910	Substances that form ions in water
Sulfate	ppm	500	NA	171	45 - 196	Runoff or leaching from natural deposits; industrial wastes
Total Dissolved Solids	ppm	1000	NA	500	307 - 565	Runoff or leaching from natural deposits

**Table 6 - Detection of Unregulated Chemicals Requiring Monitoring**

Parameter	Units	State MCL	PHG	Burbank Water	Lowest - Highest	Typical Source of Contaminant
Boron	ppb	NA	AL = 1000	220	100 - 282	Runoff or leaching from natural deposits; industrial wastes
Chromium VI	ppb	NA	(j)	3.6	ND - 6	Discharge from electroplating, textile manufacturing; erosion of natural deposits
Vanadium	ppb	NA	AL = 50	4	ND - 4.9	Naturally occurring; industrial waste discharge

**Table 7 - Other Parameters**

Parameter	Units	State MCL	PHG	Burbank Water	Lowest - Highest	Typical Source of Contaminant
Calcium mg/L	ppm	NA	NA	56	23 - 61	Erosion of natural deposits
Hardness as CaCO3 (k)	ppm	NA	NA	230	117 - 350	Erosion of natural deposits
Magnesium mg/L	ppm	NA	NA	23	14 - 27	Erosion of natural deposits
Sodium mg/L	ppm	NA	NA	80	33 - 89	Erosion of natural deposits

**ppm** = parts per million; **ppb** = parts per billion; **pCi/L** = picoCurries per liter (radioactivity); **µmho/cm** = micromhos per centimeter; **mg/L** = milligrams per liter (equivalent to ppm); **ug/L** = micrograms per liter (equivalent to ppb); **AL** = action level; **BOU** = Burbank Operable Unit; **MCL** = maximum contaminant level; **MCLG** = maximum contaminant level goal; **MRDL** = maximum residual disinfectant level; **MRDLG** = maximum residual disinfectant level goal; **NA** = not applicable; **ND** = none detected; **NTU** = nephelometric turbidity units; **PHG** = public health goal

The following definitions may be helpful in your understanding of our Water Quality Report:

**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 (USEPA).

**Maximum Residual Disinfectant Level (MRDL):** The level of a disinfectant added for water treatment that may not be exceeded at the customer'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. MRDLGs are set by the USEPA.

**Primary Drinking Water Standard (PDWS):** Maximum levels set for contaminants that affect health. California's drinking water program is accountable to the USEPA for implementation of standards at least as stringent as the federal government.

**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

- a. MCL for total coliform is that no more than 5% of monthly samples are positive.
- b. Fecal coliform/E.coli MCLs: 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 2002.
- c. Lead and copper compliance based on 90th percentile being below the Action Level. Samples were taken from customer taps to reflect influence of household plumbing. 33 homes were sampled in November 2000, none exceeded the action level for lead or copper.
- d. Value shown is highest of the annual averages of the three sources (Valley, MWD Weymouth, MWD Jensen).
- e. Aluminum and MTBE have primary and secondary MCLs.
- f. State MCL for Nitrate of 10 mg/L as N is equivalent to 45 mg/L as Nitrate.
- g. State MCL for Gross Alpha excludes radon and uranium. Compliance is based on adjusted gross alpha where radon and uranium are deducted.
- h. Standard is for Radium-226 and -228 combined.
- i. Compliance is based on Running Annual Average which is the average of the last four quarters.
- j. A PHG for total chromium of 2.5 ppb was adopted in 1999, but withdrawn in November 2000.
- k. Hardness in grains/gallon can be found by dividing the ppm by 17.1. 230 ppm = 13.5 grains/gallon.

### Get More Information

If you have any questions or concerns regarding water quality please contact:  
**Water Engineering at (818) 238-3500.**

For questions regarding water conservation please contact:  
**BWP Conservation Services at (818) 238-3731.**

Information on the City's water quality as well as other information regarding your water or electric service can be viewed on the BWP website :

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