Appendix D

Consumer Confidence Reports

LOS ANGELES COUNTY WATERWORKS DISTRICTS

2004 ANNUAL WATER QUALITY REPORT

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, REGION 34, DESERT VIEW HIGHLANDS

DEAR CUSTOMER:

The Los Angeles County Waterworks Districts are pleased to provide you with our 2004 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2004, your drinking water met or exceeded all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses. Analyses are performed on water samples taken from the source well and the distribution system. The well is tested for chemical, physical, radioactive, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not yet regulated.

We also monitor the water quality throughout the distribution system. Several key locations within the distribution system have been selected for this purpose. Every week, each location is tested for bacteria, color, turbidity, odor, and disinfectant level to assure that you receive safe and high quality drinking water. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Gordon Phair at (661) 942-1157 Ext. 247 or Ms. Denise Noble at (626) 300-3364. To view this report on the internet, please visit our website at **http://ladpw.org/wsm/waterqualityrpt.cfm**.

THE SOURCE OF YOUR WATER AND ITS TREATMENT

During 2004, approximately 60 percent of the water served in the Desert View Highlands Region of the District was treated surface water and the remaining 40 percent was groundwater. The District purchases its treated surface water from the Antelope Valley–East Kern Water Agency (AVEK). AVEK gets its water from the Sacramento River/San Joaquin Delta via the State Water Project. The district extracts groundwater from its well in the Desert View Highlands area.

The surface water from AVEK is treated at their treatment plants using conventional treatment methods, which include coagulation, flocculation, sedimentation, and filtration. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their regrowth in the distribution pipes. The groundwater the district serves is also disinfected with chlorine for the same reasons.

SOURCE WATER ASSESSMENT

A source water assessment was conducted for all of the active sources in the Los Angeles County Waterworks District No. 40, Region 34, Desert View Highlands, water system in December 2001. Nitrates and arsenic were detected from these sources. Arsenic occurs naturally in this region, while the occurrence of nitrates is probably due to past agricultural practices. Nevertheless, the wells listed on the table below are considered most vulnerable to the following activities although no associated contaminants have been detected in the water produced by these wells.

A copy of the complete assessment may be viewed at: DHS Los Angeles District Office, 1449 West Temple Street Room 202, Los Angeles CA, 90026, or by contacting Mr. Stephan Cajina at (213) 580-5723.

VULNERABLE WELLS	POSSIBLE CONTAMINATING ACTIVITIES
WELL 34-6	ABOVE GROUND STORAGE TANKS WATER SUPPLY WELLS

WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2004 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system and none was detected during 2004. Trihalomethanes, haloacetic acids, and chlorine are also tested for regularly in the distribution system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old.

PARAMETER	PHG or MCLG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
PRIMARY DRINKING WATER STANDARDS							
INORGANIC CONTAMINANTS							
ARSENIC (ppb)	0.004	50	ND	ND	2.76	2.76	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
FLUORIDE (ppb)	1	2	0.10	0.10	ND	ND	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
NITRATE AS NO_3 (ppm)	45	45	4.0	4.0	2.55	2.55	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
RADIOACTIVE CONTAMINANTS							
GROSS ALPHA (pCi/L)	0	15	1.23 - 2.12	1.47	1.51 - 2.88	2.38	Erosion of natural deposits
URANIUM (pCi/L)	0.43	20	0.60 - 1.47	*	--	--	Erosion of natural deposits
GROSS BETA (pCi/L)	NS	50	1.55	1.55	--	--	Decay of natural and man-made deposits
RADIUM 226 (pCi/L)	NS	NS	ND - 0.09	0.02	--	--	Erosion of natural deposits
TRITIUM (pCi/L)	NS	20000	32.80	32.80	--	--	Decay of natural and man-made deposits
UNREGULATED CONTAMINANTS							
BORON (ppb)	NS	1000 (ACTION LEVEL)	--	--	103 - 120	112	Erosion of natural deposits, industrial and agricultural discharges
CHROMIUM 6 (ppb)	NS	NS	ND	ND	ND - 2.12	1.06	Erosion of natural deposits, industrial waste discharges
VANADIUM (ppb)	NS	50 (ACTION LEVEL)	--	--	10.90 - 12.60	11.75	Erosion of natural deposits, burning of fuels
SECONDARY DRINKING WATER STANDARDS - AESTHETIC STANDARDS							
COLOR (units)	NS	15	<5	<5	0	0	Naturally-occurring organic materials
CORROSIVITY (LANGELIER INDEX)	NS	NON-CORROSIVE	**	**	0.04	0.04	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
ODOR - THRESHOLD (ton)	NS	3 UNITS	<1	<1	0	0	Naturally-occurring organic materials
TURBIDITY (ntu)***	NS	5 UNITS	0.01 - 0.21	0.03	0.19	0.19	Soil runoff
TOTAL DISSOLVED SOLIDS (ppm)	NS	1000	320	320	312	312	Runoff/leaching from natural deposits
SPECIFIC CONDUCTANCE (µmhos/cm)	NS	1600	365 - 618	470	473	473	Substances that form ions when in water; seawater influence
CHLORIDE (ppm)	NS	500	82 - 84	83	38.60	38.60	Runoff/leaching from natural deposits; seawater influence
SULFATE (ppm)	NS	500	66	66	54.60	54.60	Runoff/leaching from natural deposits; industrial wastes
ZINC (ppm)	NS	5	0.41 - 0.52	0.46	ND	ND	Runoff/leaching from natural deposits; industrial wastes

- No sample taken

PARAMETER	PHG or MCLG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
ADDITIONAL CONSTITUENTS OF INTEREST							
BICARBONATE ALKALINITY (ppm)	NS	NS	86	86	158	158	Leaching from natural deposits
CALCIUM (ppm)	NS	NS	23	23	24.1	24.1	Leaching from natural deposits
TOTAL HARDNESS as $CaCO_3$ (ppm)	NS	NS	120	120	85	85	Leaching from natural deposits
MAGNESIUM (ppm)	NS	NS	14 - 15	15	6.08	6.08	Leaching from natural deposits
pH****	NS	NS	6.3 - 7.8	6.99	7.96	7.96	Natural acidity/alkalinity of water
POTASSIUM (ppm)	NS	NS	3.0 - 4.0	3.7	--	--	Leaching from natural deposits
SODIUM (ppm)	NS	NS	62 - 64	63	67.2	67.2	Leaching from natural deposits
TOTAL ALKALINITY as $CaCO_3$, equivalents (ppm)	NS	NS	69 - 72	71	--	--	Leaching from natural deposits

* Uranium is only tested for if Gross Alpha Particle Activity is detected at a level greater than or equal to 5 pCi/L. Therefore, an average level of detection is not applicable. However, additional samples may have been taken due to changes in regulations.

** A corrosion inhibitor is added to the treated water before entry into the distribution system.

*** A measure of cloudiness; high turbidity can hinder the effectiveness of disinfectants

**** Recommended 6.5 - 8.5 with respect to corrosion control

DISTRIBUTION SYSTEM WATER QUALITY					
DISINFECTANTS & DISINFECTION BY-PRODUCTS	MCLG or [MRDLG]	MCL or [MRDL]	RANGE OF DETECTION	HIGHEST 4-QUARTERLY AVERAGE	TYPICAL SOURCE OF CONSTITUENT
TOTAL CHLORINE (ppm)	[4.0]	[4.0]	0.29 - 1.56	0.84	Water treatment – Disinfectant used to kill microbes
TOTAL TRIHALOMETHANES (ppb)	NS	80	0 - 180.40	79.82	Byproduct of drinking water chlorination
TOTAL HALOACETIC ACIDS (ppb)	NS	60	0 - 58	17.75	Byproduct of drinking water disinfection
RESIDENTIAL TAP WATER QUALITY					
LEAD AND COPPER (UNITS)	PHG	ACTION LEVEL	RANGE OF DETECTION	90th % LEVEL	TYPICAL SOURCE OF CONSTITUENT
COPPER (ppm)	0.17	1.3	0 - 0.98	0.41	Corrosion of plumbing and erosion of natural deposits
LEAD (ppb)	2	15	0	0	Corrosion of plumbing and erosion of natural deposits

TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is 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.

Maximum Residual Disinfectant Level (MRDL) is 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) is 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 USEPA.

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

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

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

ppm = parts per million (milligrams per liter)
ppb = parts per billion (micrograms per liter)
pCi/L = picoCuries per liter
SI = Saturation Index (Langelier)
NA = Not Applicable
ND = None Detected
NS = No Standard
NTU = Nephelometric Turbidity Unit
MFL = Million Fibers per Liter
µmhos/cm = micromhos per centimeter

CONTAMINANTS THAT MAY BE PRESENT IN WATER

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surface 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 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 use.

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 tap water is safe to drink, the USEPA and DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS 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 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 (1-800-426-4791).

THE QUALITY OF YOUR WATER

Lead and Copper: During 2002, we conducted lead and copper sampling from several high-risk homes in the Region as required by DHS. The 90th percentile result for copper was 0.41 milligrams per liter and below detectable levels for lead. These results are well below the regulatory Action Levels for lead and copper in drinking water. The next round of lead and copper monitoring is scheduled for 2005.

Trihalomethanes: 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.

Cryptosporidium: Cryptosporidium is a microscopic organism that causes a gastro-intestinal disease called cryptosporidiosis which may cause diarrhea, headache, abdominal cramps, nausea, vomiting, and low grade fever. The infectious microorganism can be transmitted through ingestion of contaminated food, drinking water, or by direct contact with the fecal matter of infected persons or animals.

The chance of its presence in the water supply is extremely small because it is being monitored on a regular basis and very low levels, hundreds of times lower than those reported in other parts of the Country, have been detected in untreated water. Multiple-barrier treatment which includes coagulation, flocculation, filtration, and disinfection at AVEK treatment plants further minimize the chance of its presence in treated water.

While the general public is at a very low risk of contracting Cryptosporidium, 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 risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitary Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.

WATER CONSERVATION INFORMATION

Water is an essential resource, not a commodity. In Southern California, our arid climate limits our fresh water supply. Conserving water, or being "water wise," protects our natural water supplies, reduces the risk of water shortages during spring and summer months, and reduces your water bill. Water conservation is not as complicated or demanding as you might think.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs in your area. You can conserve water at home and save money by observing the following practical guidelines:

- Water the lawn as necessary during early morning hours and save 30 to 50 gallons per day.
- Run your dishwasher or washing machine with a full load and save 300 to 800 gallons every month.
- Sweep your sidewalks and driveways instead of hosing them to save about 150 gallons each time.
- Install a low flow toilet or use a water displacement device in your existing toilet and save 3.5 to 4.5 gallons of water on every flush.
- Install a low-flow shower head and save up to 1800 gallons per person per year.
- Visit **www.h2ouse.org** or **http://ladpw.org/wsm/conservation/** for practical "how-to" information on water conservation.
- Call (866) 648-2925 to request a survey of your normal water use and recommendations for water conserving measures to reduce your usage.
- Check your pipes and faucets regularly for leaks and repair them promptly. Call our office at 1-800-675-4357 to report leaks in our system.
- Evaluate your outdoor landscaping and water use. About two-thirds of residential water is used for landscaping purposes. Choose landscaping that is native to your surroundings and learn how much and when to irrigate it.
- Visit our booth at the Annual Water Fair and Festival Garden Party on May 21, 2005 and May 22, 2005 at the Water Conservation Garden Park next to the Palmdale Water District at 2029 E. Avenue Q, Palmdale.

If you have any questions or comments regarding water conservation, visit www.888cleanLA.com. You may also call 1-888-CLEANLA or contact Mr. David Rydman at (626) 300-3351.

LOS ANGELES COUNTY WATERWORKS DISTRICTS

2004 ANNUAL WATER QUALITY REPORT

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, REGION 39, ROCK CREEK

DEAR CUSTOMER:

The Los Angeles County Waterworks Districts are pleased to provide you with our 2004 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2004, your drinking water met or exceeded all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses. Analyses are performed on samples from the source well and the distribution system. The well is tested for chemical, physical, radioactive, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not yet regulated.

We also monitor the water quality throughout the distribution system. Several key locations within the distribution system have been selected for this purpose. Every week, each location is tested for bacteria, color, turbidity, odor, and disinfectant level to ensure that you receive safe and high quality drinking water. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Gordon Phair at (661) 942-1157 Ext. 247 or Ms. Denise Noble at (626) 300-3364. To view this report on the internet, please visit our website at **http://ladpw.org/wsm/waterqualityrpt.cfm**.

THE SOURCE OF YOUR WATER AND ITS TREATMENT

During 2004, approximately 50 percent of the water served in the Rock Creek Region of the District was groundwater drawn from the Region's only well. The remainder of the water for the Region came through a connection between the Rock Creek and Pearblossom Regions of the District. The Pearblossom Region is served by a blend of groundwater from the Region's wells and treated surface water purchased from the Antelope Valley-East Kern Water Agency (AVEK). AVEK gets its water from the Sacramento River/San Joaquin Delta via the State Water Project

The surface water from AVEK is treated at their treatment plants using conventional treatment methods, which include coagulation, flocculation, sedimentation, and filtration. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their regrowth in the distribution pipes. The groundwater the District serves is also disinfected with chlorine for the same reasons.

SOURCE WATER ASSESSMENT

A source water assessment was conducted for all the active sources in the Los Angeles County Waterworks District No. 40, Region 39, Rock Creek water system in December 2001. The well is considered most vulnerable to the following activities, although no associated contaminants have been detected in the water produced by this well.

A copy of the complete assessment may be viewed at: DHS Los Angeles District Office, 1449 West Temple Street Room 202, Los Angeles CA, 90026, or by contacting Mr. Jeff O'Keefe at (213) 580-5723.

VULNERABLE WELLS	POSSIBLE CONTAMINATING ACTIVITIES
39-1	WATER SUPPLY WELLS
	TRANSPORTATION CORRIDORS – ROADS/STREETS
	SURFACE WATER – STREAMS/LAKES/RIVERS

TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is 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.

Maximum Residual Disinfectant Level (MRDL) is 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) is 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 USEPA.

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

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

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

ppm = parts per million (milligrams per liter)
ppb = parts per billion (micrograms per liter)
pCi/L = picoCuries per liter
SI = Saturation Index (Langelier)

NA = Not Applicable
ND = None Detected
NS = No Standard

NTU = Nephelometric Turbidity Unit
MFL = Million Fibers per Liter
µmhos/cm = micromhos per centimeter

WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2004 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system and none was detected during 2004. Trihalomethanes, haloacetic acids, and chlorine are also tested for regularly in the distribution system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old.

PARAMETER	PHG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
PRIMARY DRINKING WATER STANDARDS							
INORGANIC CONTAMINANTS							
FLUORIDE (ppm)	1	2	0.10	0.10	0.22	0.22	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
NITRATE AS NO_3 (ppm)	45	45	4.0	4.0	ND - 2.01	1.01	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
RADIOACTIVE CONTAMINANTS							
GROSS ALPHA PARTICLE ACTIVITY (pCi/L)	NS	15	1.23 - 2.12	1.47	3.32 - 4.56	3.77	Erosion of natural deposits
GROSS BETA PARTICLE ACTIVITY (pCi/L)	NS	50	1.55	1.55	--	--	Decay of natural and man-made deposits
RADIUM 226 (pCi/L)	NS	NS	ND - 0.09	0.02	--	--	Erosion of natural deposits
TRITIUM (pCi/L)	NS	20000	32.80	32.80	--	--	Decay of natural and man-made deposits
URANIUM (pCi/L)	NS	20	0.60 - 1.47	*	2.03	*	Erosion of natural deposits
UNREGULATED CONTAMINANTS							
BORON (ppb)	NS	100 (ACTION LEVEL)	--	--	99 - 153	126	Erosion of natural deposits, industrial and agricultural discharges
CHROMIUM 6 (ppb)	NS	NS	ND	ND	ND	ND	Erosion of natural deposits, industrial waste discharges
VANADIUM (ppb)	NS	50 (ACTION LEVEL)	--	--	4.65 - 5.72	5.20	Erosion of natural deposits, burning of fuels
SECONDARY DRINKING WATER STANDARDS - AESTHETIC STANDARDS							
CHLORIDE (ppm)	NS	500	82 - 84	83	3.25	3.25	Runoff/leaching from natural deposits; seawater influence
COLOR (units)	NS	15	<5	<5	0	0	Naturally-occuring organic materials
CORROSIVITY (LANGELIER INDEX)	NS	NON-CORROSIVE	**	**	0.47	0.47	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
ODOR - THRESHOLD (TON)	NS	3	<1	<1	0	0	Naturally-occuring organic materials
SPECIFIC CONDUCTANCE (µmhos/cm)	NS	1600	365 - 618	470	618	618	Substances that form ions when in water; seawater influence
SULFATE (ppm)	NS	500	66	66	118	118	Runoff/leaching from natural deposits; industrial wastes
TOTAL DISSOLVED SOLIDS (ppm)	NS	1000	320	320	382	382	Runoff/leaching from natural deposits industrial wastes
TURBIDITY (ntu)**	NS	5	0.01 - 0.21	0.03	0.11	0.11	Soil runoff

-- No sample taken

PARAMETER	PHG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
ADDITIONAL CONSTITUENTS OF INTEREST							
TOTAL ALKALINITY as $CaCO_3$ (ppm)	NS	NS	69 - 72	71	--	--	Leaching from natural deposits
BICARBONATE ALKALINITY (ppm)	NS	NS	86	86	256	256	Leaching from natural deposits
CALCIUM (ppm)	NS	NS	23	23	78.60	78.60	Leaching from natural deposits
TOTAL HARDNESS as $CaCO_3$ (ppm)	NS	NS	120	120	28	28	Leaching from natural deposits
MAGNESIUM (ppm)	NS	NS	14 - 15	15	24.80	24.80	Leaching from natural deposits
pH (pH units)****	NS	NS	6.30 - 7.80	6.99	7.72	7.72	Natural acidity/alkalinity of water
POTASSIUM (ppm)	NS	NS	3 - 4	3.70	--	--	Leaching from natural deposits
SODIUM (ppm)	NS	NS	62 - 64	63	23.50	23.50	Leaching from natural deposits

* Uranium is only tested for if Gross Alpha Particle Activity is detected at a level greater than or equal to 5 pCi/L. Therefore, an average level of detection is not applicable. However, additional samples may have been taken due to changes in regulations.

** A corrosion inhibitor is added to the treated water before entry into the distribution system.

*** A measure of cloudiness; high turbidity can hinder the effectiveness of disinfectants

**** Recommended 6.5 - 8.5 with respect to corrosion control

DISTRIBUTION SYSTEM WATER QUALITY					
DISINFECTANTS & DISINFECTION BY-PRODUCTS	MCLG or [MRDLG]	MCL or [MRDL]	RANGE OF DETECTION	HIGHEST 4-QUARTERLY AVERAGE	TYPICAL SOURCE OF CONSTITUENT
TOTAL CHLORINE (ppm)	[4.0]	[4.0]	0.11 - 1.75	0.95	Water treatment - Disinfectant used to kill microbes
TOTAL TRIHALOMETHANES (ppb)	NS	80	7.30 - 90	39.71	Byproduct of drinking water chlorination
TOTAL HALOACETIC ACID (ppb)	NS	60	0 - 32.10	13.89	Byproduct of drinking water chlorination
RESIDENTIAL TAP WATER QUALITY					
LEAD AND COPPER (UNITS)	PHG	ACTION LEVEL	RANGE OF DETECTION	90th % LEVEL	TYPICAL SOURCE OF CONSTITUENT
COPPER (ppm)	0.17	1.3	0 - 0.17	0.06	Corrosion of plumbing and erosion of natural deposits
LEAD (ppb)	2	15	0	0	Corrosion of plumbing and erosion of natural deposits




CONTAMINANTS THAT MAY BE PRESENT IN WATER

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surface 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 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 use.

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 tap water is safe to drink, the USEPA and DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS 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 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 (1-800-426-4791).

THE QUALITY OF YOUR WATER

Lead and Copper: During 2002, we conducted lead and copper sampling from several high-risk homes in the Region as required by DHS. The 90th percentile result for copper was 0.06 milligrams per liter and below detectable levels for lead. These results are well below the regulatory Action Levels for lead and copper in drinking water. The next round of lead and copper monitoring is scheduled for 2005.

Trihalomethanes: 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.

Cryptosporidium: Cryptosporidium is a microscopic organism that causes a gastro-intestinal disease called cryptosporidiosis which may cause diarrhea, headache, abdominal cramps, nausea, vomiting, and low grade fever. The infectious microorganism can be transmitted through ingestion of contaminated food, drinking water, or by direct contact with the fecal matter of infected persons or animals.

The chance of its presence in the water supply is extremely small because it is being monitored on a regular basis and very low levels, hundreds of times lower than those reported in other parts of the Country, have been detected in untreated water. Multiple-barrier treatment which includes coagulation, flocculation, filtration, and disinfection at AVEK treatment plants further minimize the chance of its presence in treated water.

While the general public is at a very low risk of contracting Cryptosporidium, 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 risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units requiremaintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitary Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.

WATER CONSERVATION INFORMATION

Water is an essential resource, not a commodity. In Southern California, our arid climate limits our fresh water supply. Conserving water, or being "water wise," protects our natural water supplies, reduces the risk of water shortages during spring and summer months, and reduces your water bill. Water conservation is not as complicated or demanding as you might think.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs in your area. You can conserve water at home and save money by observing the following practical guidelines:

- Water the lawn as necessary during early morning hours and save 30 to 50 gallons per day.
- Run your dishwasher or washing machine with a full load and save 300 to 800 gallons every month.
- Sweep your sidewalks and driveways instead of hosing them to save about 150 gallons each time.
- Install a low flow toilet or use a water displacement device in your existing toilet and save 3.5 to 4.5 gallons of water on every flush.
- Install a low-flow shower head and save up to 1800 gallons per person per year.
- Visit **www.h2ouse.org** or **http://ladpw.org/wsm/conservation/** for practical "how-to" information on water conservation.
- Call (866) 648-2925 to request a survey of your normal water use and recommendations for water conserving measures to reduce your usage.
- Check your pipes and faucets regularly for leaks and repair them promptly. Call our office at 1-800-675-4357 to report leaks in our system.
- Evaluate your outdoor landscaping and water use. About two-thirds of residential water is used for landscaping purposes. Choose landscaping that is native to your surroundings and learn how much and when to irrigate it.
- Visit our booth at the Annual Water Fair and Festival Garden Party on May 21, 2005 and May 22, 2005 at the Water Conservation Garden Park next to the Palmdale Water District at 2029 E. Avenue Q, Palmdale.

If you have any questions or comments regarding water conservation, visit www.888cleanLA.com. You may also call 1-888-CLEANLA or contact Mr. David Rydman at (626) 300-3351.

LOS ANGELES COUNTY WATERWORKS DISTRICTS

2004 ANNUAL WATER QUALITY REPORT

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, REGION 24, PEARBLOSSOM

DEAR CUSTOMER:

The Los Angeles County Waterworks Districts are pleased to provide you with our 2004 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2004, your drinking water met or exceeded all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses. Analyses are performed on water samples taken from the source wells and the distribution system. The wells are tested for chemical, physical, radioactive, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not yet regulated.

We also monitor the water quality throughout the distribution system. Several key locations within the distribution system have been selected for this purpose. Every week, each location is tested for bacteria, color, turbidity, odor, and disinfectant level to ensure that you receive safe and high quality drinking water. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Gordon Phair at (661) 942-1157 Ext. 247 or Ms. Denise Noble at (626) 300-3364. To view this report on the internet, please visit our website at **http://ladpw.org/wsm/waterqualityrpt.cfm**.

THE SOURCE OF YOUR WATER AND ITS TREATMENT

During 2004, approximately 70 percent of the water served in the Pearblossom Region of the District was treated surface water and the remaining 30 percent was groundwater. The District purchases its treated surface water from the Antelope Valley-East Kern Water Agency (AVEK). AVEK gets its water from the Sacramento River/San Joaquin Delta via the State Water Project. The District extracts groundwater from two wells in the Pearblossom area.

The surface water from AVEK is treated at their treatment plants using conventional treatment methods, which include coagulation, flocculation, sedimentation, and filtration. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their regrowth in the distribution pipes. The groundwater the district serves is also disinfected with chlorine for the same reasons.

SOURCE WATER ASSESSMENT

A source water assessment was conducted for all of the active sources in the Los Angeles County Waterworks District No. 40, Region 24, Pearblossom water system in November 2001. The wells listed on the table below are considered most vulnerable to the following activities, although no associated contaminants have been detected in the water produced by these wells.

A copy of the complete assessment may be viewed at: DHS Los Angeles District Office, 1449 West Temple Street Room 202, Los Angeles CA, 90026, or by contacting Mr. Stephan Cajina at (213) 580-5723.

VULNERABLE WELLS	POSSIBLE CONTAMINATING ACTIVITIES
24-4	UTILITY STATIONS – MAINTENANCE AREAS
24-5	TRANSPORTATION CORRIDORS

TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is 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.

Maximum Residual Disinfectant Level (MRDL) is 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) is 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 USEPA.

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

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

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

ppm = parts per million (milligrams per liter)
ppb = parts per billion (micrograms per liter)
pCi/L = picoCuries per liter
SI = Saturation Index (Langelier)

NA = Not Applicable
ND = None Detected
NS = No Standard

NTU = Nephelometric Turbidity Unit
MFL = Million Fibers per Liter
µmhos/cm = micromhos per centimeter

WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2004 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system and none was detected during 2004. Trihalomethanes, haloacetic acids, and chlorine are also tested for regularly in the distribution system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old.

PARAMETER	PHG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
PRIMARY DRINKING WATER STANDARDS							
INORGANIC CONTAMINANTS							
FLUORIDE (ppb)	1	2	0.10	0.10	0.16 - 0.17	0.16	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
NITRATE AS NO_3 (ppm)	45	45	4.0	4.0	3.90 - 6.86	5.0	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
RADIOACTIVE CONTAMINANTS							
GROSS ALPHA PARTICLE ACTIVITY (pCi/L)	NS	15	1.23 - 2.12	1.47	2.12 - 3.10	2.47	Erosion of natural deposits
GROSS BETA PARTICLE ACTIVITY (pCi/L)	NS	50	1.55	1.55	--	--	Decay of natural and man-made deposits
COMBINED RADIUM (pCi/L)	NS	5	ND - 0.09	0.02	--	--	Erosion of natural deposits
TRITIUM (pCi/L)	NS	20000	32.80	32.80	--	--	Decay of natural and man-made deposits
URANIUM (pCi/L)	0.43	20	0.60 - 1.47	*	--	*	Erosion of natural deposits
UNREGULATED CONTAMINANTS							
BORON (ppb)	NS	1000 (ACTION LEVEL)	--	--	76 - 96	94	Erosion of natural deposits, industrial and agricultural discharges
CHROMIUM 6 (ppb)	NS	NS	--	--	ND - 2.20	0.43	Erosion of natural deposits, industrial waste discharges
VANADIUM (ppb)	NS	50 (ACTION LEVEL)	--	--	6.50 - 14.40	8.40	Erosion of natural deposits, burning of fuels
SECONDARY DRINKING WATER STANDARDS - AESTHETIC STANDARDS							
CHLORIDE (ppm)	NS	500	82 - 84	83	22.90 - 37.50	28.40	Runoff/leaching from natural deposits; seawater influence
COLOR (units)	NS	15	<5	<5	ND	ND	Naturally-occuring organic materials
CORROSIVITY (LANGELIER INDEX)	NS	NON-CORROSIVE	**	**	0.13 - 0.34	0.26	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
ODOR (units)	NS	3	<1	<1	ND	ND	Naturally-occuring organic materials
SPECIFIC CONDUCTANCE (µmhos/cm)	NS	1600	365 - 618	470	444 - 518	472	Substances that form ions when in water; seawater influence
SULFATE (ppm)	NS	500	66	66	52 - 82.40	63.50	Runoff/leaching from natural deposits; industrial wastes
TOTAL DISSOLVED SOLIDS (ppm)	NS	1000	320	320	258 - 344	291	Runoff/leaching from natural deposits
TURBIDITY (ntu)***	NS	5	0.01 - 0.21	0.03	0.16 - 0.19	0.17	Soil runoff
ZINC (ppm)	NS	5	0.41 - 0.52	0.46	ND	ND	Runoff/leaching from natural deposits; industrial wastes

-- No sample taken

PARAMETER	PHG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
ADDITIONAL CONSTITUENTS OF INTEREST							
TOTAL ALKALINITY as $CaCO_3$ (ppm)	NS	NS	69 - 72	71	--	--	Leaching from natural deposits
BICARBONATE ALKALINITY as HCO_3 (ppm)	NS	NS	86	86	165 - 170	167	Leaching from natural deposits
CALCIUM (ppm)	NS	NS	23	23	56.10 - 68.10	60.70	Leaching from natural deposits
TOTAL HARDNESS as $CaCO_3$ (ppm)	NS	NS	120	120	190 - 245	211	Leaching from natural deposits
MAGNESIUM (ppm)	NS	NS	14 - 15	15	12.20 - 18.20	14.50	Leaching from natural deposits
pH (pH units)****	NS	NS	6.30 - 7.80	6.99	7.60 - 7.88	7.70	Natural acidity/alkalinity of water
POTASSIUM (ppm)	NS	NS	3.0 - 4.0	3.70	--	--	Leaching from natural deposits
SODIUM (ppm)	NS	NS	62 - 64	63	19.60 - 20.10	19.90	Leaching from natural deposits

* Uranium is only tested for if Gross Alpha Particle Activity is detected at a level greater than or equal to 5 pCi/L. Therefore, an average level of detection is not applicable. However, additional samples may have been taken due to changes in regulations.

** A corrosion inhibitor is added to the treated water before entry into the distribution system.

*** A measure of cloudiness; high turbidity can hinder the effectiveness of disinfectants

**** Recommended 6.5 - 8.5 with respect to corrosion control

DISTRIBUTION SYSTEM WATER QUALITY					
DISINFECTANTS & DISINFECTION BY-PRODUCTS	MCLG or [MRDLG]	MCL or [MRDL]	RANGE OF DETECTION	HIGHEST 4-QUARTERLY AVERAGE	TYPICAL SOURCE OF CONSTITUENT
TOTAL CHLORINE (ppm)	[4.0]	[4.0]	0.21 - 1.81	0.85	Water treatment - Disinfectant used to kill microbes
TOTAL TRIHALOMETHANES (ppb)	NS	80	7.70 - 128.60	102.50	Byproduct of drinking water chlorination
TOTAL HALOACETIC ACID (ppb)	NS	60	15.30 - 38.90	26.75	Byproduct of drinking water chlorination
RESIDENTIAL TAP WATER QUALITY					
LEAD AND COPPER (UNITS)	PHG	ACTION LEVEL	RANGE OF DETECTION	90th % LEVEL	TYPICAL SOURCE OF CONSTITUENT
COPPER (ppm)	0.17	1.30	0 - 0.75	0.32	Corrosion of plumbing and erosion of natural deposits
LEAD (ppb)	2	15	0	0	Corrosion of plumbing and erosion of natural deposits




CONTAMINANTS THAT MAY BE PRESENT IN WATER

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surface 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 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 use.

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 tap water is safe to drink, the USEPA and DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS 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 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 (1-800-426-4791).

THE QUALITY OF YOUR WATER

Lead and Copper: During 2002, we conducted lead and copper sampling from several high-risk homes in the Region as required by DHS. The 90th percentile result for copper was 0.41 milligrams per liter and below detectable levels for lead. These results are well below the regulatory Action Levels for lead and copper in drinking water. The next round of lead and copper monitoring is scheduled for 2005.

Trihalomethanes: 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.

Cryptosporidium: Cryptosporidium is a microscopic organism that causes a gastro-intestinal disease called cryptosporidiosis which may cause diarrhea, headache, abdominal cramps, nausea, vomiting, and low grade fever. The infectious microorganism can be transmitted through ingestion of contaminated food, drinking water, or by direct contact with the fecal matter of infected persons or animals.

The chance of its presence in the water supply is extremely small because it is being monitored on a regular basis and very low levels, hundreds of times lower than those reported in other parts of the Country, have been detected in untreated water. Multiple-barrier treatment which includes coagulation, flocculation, filtration, and disinfection at AVEK treatment plants further minimize the chance of its presence in treated water.

While the general public is at a very low risk of contracting Cryptosporidium, 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 risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitary Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.

WATER CONSERVATION INFORMATION

Water is an essential resource, not a commodity. In Southern California, our arid climate limits our fresh water supply. Conserving water, or being "water wise," protects our natural water supplies, reduces the risk of water shortages during spring and summer months, and reduces your water bill. Water conservation is not as complicated or demanding as you might think.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs in your area. You can conserve water at home and save money by observing the following practical guidelines:

- Water the lawn as necessary during early morning hours and save 30 to 50 gallons per day.
- Run your dishwasher or washing machine with a full load and save 300 to 800 gallons every month.
- Sweep your sidewalks and driveways instead of hosing them to save about 150 gallons each time.
- Install a low flow toilet or use a water displacement device in your existing toilet and save 3.5 to 4.5 gallons of water on every flush.
- Install a low-flow shower head and save up to 1800 gallons per person per year.
- Visit **www.h2ouse.org** or **http://ladpw.org/wsm/conservation/** for practical "how-to" information on water conservation.
- Call (866) 648-2925 to request a survey of your normal water use and recommendations for water conserving measures to reduce your usage.
- Check your pipes and faucets regularly for leaks and repair them promptly. Call our office at 1-800-675-4357 to report leaks in our system.
- Evaluate your outdoor landscaping and water use. About two-thirds of residential water is used for landscaping purposes. Choose landscaping that is native to your surroundings and learn how much and when to irrigate it.
- Visit our booth at the Annual Water Fair and Festival Garden Party on May 21, 2005 and May 22, 2005 at the Water Conservation Garden Park next to the Palmdale Water District at 2029 E. Avenue Q, Palmdale.

If you have any questions or comments regarding water conservation, visit www.888cleanLA.com. You may also call 1-888-CLEANLA or contact Mr. David Rydman at (626) 300-3351.

LOS ANGELES COUNTY WATERWORKS DISTRICTS

2004 ANNUAL WATER QUALITY REPORT

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, REGION 35,
NORTHEAST LOS ANGELES COUNTY

DEAR CUSTOMER:

The Los Angeles County Waterworks Districts are pleased to provide you with our 2004 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2004, your drinking water met or exceeded all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses. Analyses are performed on water samples taken from the source well and the distribution system. The well is tested for chemical, physical, radioactive, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not yet regulated.

We also monitor the water quality throughout the distribution system. Several key locations within the distribution system have been selected for this purpose. Every week, each location is tested for bacteria, color, turbidity, odor, and disinfectant level to ensure that you receive safe and high quality drinking water. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Gordon Phair at (661) 942-1157 Ext. 247 or Ms. Denise Noble at (626) 300-3364. To view this report on the internet, please visit our website at **http://ladpw.org/wsm/waterqualityrpt.cfm**

THE SOURCE OF YOUR WATER AND ITS TREATMENT

During 2004, approximately 60 percent of the water served in the Northeast Los Angeles County Region of the District was treated surface water and the remaining 40 percent was groundwater. The District purchases its treated surface water from the Antelope Valley-East Kern Water Agency (AVEK). AVEK gets its water from the Sacramento River/San Joaquin Delta via the State Water Project. The District extracts groundwater from its well in the Northeast Los Angeles County area.

The surface water from AVEK is treated at their treatment plant using conventional treatment methods, which include coagulation, flocculation, sedimentation, and filtration. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their regrowth in the distribution pipes. The groundwater the District serves is also disinfected with chlorine for the same reasons.

SOURCE WATER ASSESSMENT

In January 2002, a source water assessment was conducted for our groundwater supply source in the Los Angeles County Waterworks District No. 40, Region 35, Northeast Los Angeles County water system (Well 35-2). The source listed on the table below is considered most vulnerable to the following activities, although no associated contaminant have been detected in the water produced by this well.

A copy of the complete assessment may be viewed at: DHS Los Angeles District Office, 1449 West Temple Street Room 202, Los Angeles CA, 90026, or by contacting Mr. Stephan Cajina at (213) 580-5723.

VULNERABLE WELLS	POSSIBLE CONTAMINATING ACTIVITIES
35-2	SEPTIC SYSTEMS - LOW DENSITY

TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is 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.

Maximum Residual Disinfectant Level (MRDL) is 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) is 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 USEPA.

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

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

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

ppm = parts per million (milligrams per liter)
ppb = parts per billion (micrograms per liter)
pCi/L = picoCuries per liter
SI = Saturation Index (Langelier)

NA = Not Applicable
ND = None Detected
NS = No Standard

NTU = Nephelometric Turbidity Unit
MFL = Million Fibers per Liter
µmhos/cm = micromhos per centimeter

WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2004 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system and none was detected during 2004. Trihalomethanes, haloacetic acids, and chlorine are also tested for regularly in the distribution system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old.

PARAMETER	PHG or MCLG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
PRIMARY DRINKING WATER STANDARDS							
INORGANIC CONTAMINANTS							
CHROMIUM (ppb)	100	50	ND	ND	12.80	12.80	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
FLUORIDE (ppb)	1	2	0.10	0.10	0.24	0.24	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
NITRATE AS NO_3 (ppm)	45	45	4.0	4.0	2.93	2.93	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
RADIOACTIVE CONTAMINANTS							
GROSS ALPHA (pCi/L)	NS	15	1.23 - 2.12	1.47	1.79 - 3.74	3.10	Erosion of natural deposits
GROSS BETA (pCi/L)	NS	50	1.55	1.55	--	--	Decay of natural and man-made deposits
RADIUM 226 (pCi/L)	NS	NS	ND - 0.09	0.02	--	--	Erosion of natural deposits
TRITIUM (pCi/L)	NS	20000	32.80	32.80	--	--	Decay of natural and man-made deposits
URANIUM (pCi/L)	NS	20	0.60 - 1.47	*	--	--	Erosion of natural deposits
UNREGULATED CONTAMINANTS							
BORON (ppb)	NS	1000 (ACTION LEVEL)	--	--	34 - 59	46.50	Erosion of natural deposits, industrial and agricultural discharges
CHROMIUM 6 (ppb)	NS	NS	ND	ND	9.78 - 12.40	11.09	Erosion of natural deposits
VANADIUM (ppb)	NS	50 (ACTION LEVEL)	--	--	8.42 - 12.30	10.36	Erosion of natural deposits, burning of fuels
SECONDARY DRINKING WATER STANDARDS - AESTHETIC STANDARDS							
COPPER (ppb)	NS	1	ND	ND	0	0	Leaching from natural deposits; discharge from mining and industrial waste; leaching from copper pipes
CORROSIVITY (LANGELIER INDEX)	NS	NON-CORROSIVE	**	**	0.05	0.05	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
ODOR - THRESHOLD (ton)	NS	3 UNITS	<1	<1	0	0	Naturally-occurring organic materials
TURBIDITY (ntu)***	NS	5 UNITS	0.01 - 0.21	0.03	0.15	0.15	Soil runoff
TOTAL DISSOLVED SOLIDS (ppm)	NS	1000	320	320	258	258	Runoff/leaching from natural deposits
SPECIFIC CONDUCTANCE (µmhos/cm)	NS	1600	365 - 618	470	386	386	Substances that form ions when in water; seawater influence
CHLORIDE (ppm)	NS	500	82 - 84	83	5.34	5.34	Runoff/leaching from natural deposits; seawater influence
SULFATE (ppm)	NS	500	66	66	74.10	74.10	Runoff/leaching from natural deposits; industrial wastes
ZINC (ppm)	NS	5	0.41 - 0.52	0.46	ND	ND	Runoff/leaching from natural deposits; industrial wastes

-- No sample taken

PARAMETER	PHG or MCLG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
ADDITIONAL CONSTITUENTS OF INTEREST							
BICARBONATE ALKALINITY (ppm)	NS	NS	86	86	138	138	Leaching from natural deposits
CALCIUM (ppm)	NS	NS	23	23	28.90	28.90	Leaching from natural deposits
TOTAL HARDNESS as $CaCO_3$ (ppm)	NS	NS	120	120	100	100	Leaching from natural deposits
MAGNESIUM (ppm)	NS	NS	14 - 15	15	6.81	6.81	Leaching from natural deposits
pH****	NS	NS	6.3 - 7.8	6.99	7.94	7.94	Natural acidity/alkalinity of water
POTASSIUM (ppm)	NS	NS	3.0 - 4.0	3.70	--	--	Leaching from natural deposits
SODIUM (ppm)	NS	NS	62 - 64	63	47.80	47.80	Leaching from natural deposits
TOTAL ALKALINITY as $CaCO_3$ equivalents (ppm)	NS	NS	69 - 72	71	--	--	Leaching from natural deposits

* Uranium is only tested for if Gross Alpha Particle Activity is detected at a level greater than or equal to 5 pCi/L. Therefore, an average level of detection is not applicable. However, additional samples may have been taken due to changes in regulations.

** A corrosion inhibitor is added to the treated water before entry into the distribution system.

*** A measure of cloudiness; high turbidity can hinder the effectiveness of disinfectants

**** Recommended 6.5 - 8.5 with respect to corrosion control

DISTRIBUTION SYSTEM WATER QUALITY					
DISINFECTANTS & DISINFECTION BY-PRODUCTS	MCLG or [MRDLG]	MCL or [MRDL]	RANGE OF DETECTION	HIGHEST 4-QUARTERLY AVERAGE	TYPICAL SOURCE OF CONSTITUENT
TOTAL CHLORINE (ppm)	[4.0]	[4.0]	0.07 - 1.64	1.11	Water treatment – Disinfectant used to kill microbes
TOTAL TRIHALOMETHANES (ppb)	NS	80	5.10 - 46.60	66.21	Byproduct of drinking water chlorination
TOTAL HALOACETIC ACIDS (ppb)	NS	60	0 - 6.20	6.99	Byproduct of drinking water disinfection
RESIDENTIAL TAP WATER QUALITY					
LEAD AND COPPER (UNITS)	PHG	ACTION LEVEL	RANGE OF DETECTION	90th % LEVEL	TYPICAL SOURCE OF CONSTITUENT
COPPER (ppm)	0.17	1.3	0 - 0.14	0	Corrosion of plumbing and erosion of natural deposits
LEAD (ppb)	2	15	0	0	Corrosion of plumbing and erosion of natural deposits




CONTAMINANTS THAT MAY BE PRESENT IN WATER

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surface 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 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 use.

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 tap water is safe to drink, the USEPA and DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS 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 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 (1-800-426-4791).

THE QUALITY OF YOUR WATER

Lead and Copper: During 2002, we conducted lead and copper sampling from several high-risk homes in the Region as required by DHS. The 90th percentile result for copper was 0.41 milligrams per liter and below detectable levels for lead. These results are well below the regulatory Action Levels for lead and copper in drinking water. The next round of lead and copper monitoring is scheduled for 2005.

Cryptosporidium: Cryptosporidium is a microscopic organism that causes a gastro-intestinal disease called cryptosporidiosis which may cause diarrhea, headache, abdominal cramps, nausea, vomiting, and low grade fever. The infectious microorganism can be transmitted through ingestion of contaminated food, drinking water, or by direct contact with the fecal matter of infected persons or animals.

The chance of its presence in the water supply is extremely small because it is being monitored on a regular basis and very low levels, hundreds of times lower than those reported in other parts of the Country, have been detected in untreated water. Multiple-barrier treatment which includes coagulation, flocculation, filtration, and disinfection at AVEK treatment plants further minimize the chance of its presence in treated water.

While the general public is at a very low risk of contracting Cryptosporidium, 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 risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitary Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.

WATER CONSERVATION INFORMATION

Water is an essential resource, not a commodity. In Southern California, our arid climate limits our fresh water supply. Conserving water, or being "water wise," protects our natural water supplies, reduces the risk of water shortages during spring and summer months, and reduces your water bill. Water conservation is not as complicated or demanding as you might think.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs in your area. You can conserve water at home and save money by observing the following practical guidelines:

- Water the lawn as necessary during early morning hours and save 30 to 50 gallons per day.
- Run your dishwasher or washing machine with a full load and save 300 to 800 gallons every month.
- Sweep your sidewalks and driveways instead of hosing them to save about 150 gallons each time.
- Install a low flow toilet or use a water displacement device in your existing toilet and save 3.5 to 4.5 gallons of water on every flush.
- Install a low-flow shower head and save up to 1800 gallons per person per year.
- Visit **www.h2ouse.org** or **http://ladpw.org/wsm/conservation/** for practical "how-to" information on water conservation.
- Call (866) 648-2925 to request a survey of your normal water use and recommendations for water conserving measures to reduce your usage.
- Check your pipes and faucets regularly for leaks and repair them promptly. Call our office at 1-800-675-4357 to report leaks in our system.
- Evaluate your outdoor landscaping and water use. About two-thirds of residential water is used for landscaping purposes. Choose landscaping that is native to your surroundings and learn how much and when to irrigate it.
- Visit our booth at the Annual Water Fair and Festival Garden Party on May 21, 2005 and May 22, 2005 at the Water Conservation Garden Park next to the Palmdale Water District at 2029 E. Avenue Q, Palmdale.

If you have any questions or comments regarding water conservation, visit www.888cleanLA.com. You may also call 1-888-CLEANLA or contact Mr. David Rydman at (626) 300-3351.

LOS ANGELES COUNTY WATERWORKS DISTRICTS

2004 ANNUAL WATER QUALITY REPORT

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, REGION 27, LITTLEROCK

DEAR CUSTOMER:

The Los Angeles County Waterworks Districts are pleased to provide you with our 2004 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2004, your drinking water met or exceeded all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses. Analyses are performed on samples from the source wells and the distribution system. The wells are tested for chemical, physical, radioactive, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not yet regulated.

We also monitor the water quality throughout the distribution system. Several key locations within the distribution system have been selected for this purpose. Every week, each location is tested for bacteria, color, turbidity, odor, and disinfectant level to ensure that you receive safe and high quality drinking water. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Gordon Phair at (661) 942-1157 Ext. 247 or Ms. Denise Noble at (626) 300-3364. To view this report on the internet, please visit our website at **http://ladpw.org/wsm/waterqualityrpt.cfm**.

THE SOURCE OF YOUR WATER AND ITS TREATMENT

During 2004, approximately 70 percent of the water served in the Littlerock Region of the District was treated surface water and the remaining 30 percent was groundwater. The District purchases its treated surface water from the Antelope Valley–East Kern Water Agency (AVEK). AVEK gets its water from the Sacramento River/San Joaquin Delta via the State Water Project. The district extracts groundwater from three wells in the Littlerock area.

The surface water from AVEK is treated at their treatment plants using conventional treatment methods, which include coagulation, flocculation, sedimentation, and filtration. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their regrowth in the distribution pipes. The groundwater the district serves is also disinfected with chlorine for the same reasons.

SOURCE WATER ASSESSMENT

A source water assessment was conducted for all of the active sources in the Los Angeles County Waterworks District No. 40, Region 27, Littlerock water system in November 2001. The wells listed on the table below are considered most vulnerable to the following activities, although no associated contaminants have been detected in the water produced by these wells.

VULNERABLE WELLS	POSSIBLE CONTAMINATING ACTIVITIES
27-2	SEPTIC SYSTEMS – HIGH DENSITY
27-3	ABOVE GROUND STORAGE TANKS
	CROPS – IRRIGATED FERTILIZER
	PESTICIDE/HERBICIDE APPLICATION
27-4	SEPTIC SYSTEMS – HIGH DENSITY

A copy of the complete assessment may be viewed at: DHS Los Angeles District Office, 1449 West Temple Street Room 202, Los Angeles CA, 90026, or by contacting Mr. Stephen Cajina at (213) 580-5723.

CAPITAL IMPROVEMENTS

In December 2004, we completed the construction of a new well, known as Well No. 27-5, to replace an existing deteriorated well, located at 8955 East Avenue U. The project consisted of constructing and equipping the well at a cost of approximately $600,000.

WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2004 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system and none was detected during 2004. Trihalomethanes, haloacetic acids, and chlorine are also tested for regularly in the distribution system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old.

PARAMETER	PHG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
PRIMARY DRINKING WATER STANDARDS							
INORGANIC CONTAMINANTS							
FLUORIDE (ppb)	1	2	0.10	0.10	0.20	0.20	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
NITRATE AS NO_3 (ppm)	45	45	4.0	4.0	9.14	9.14	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
RADIOACTIVE CONTAMINANTS							
GROSS ALPHA PARTICLE ACTIVITY (pCi/L)	NS	15	1.23 - 2.12	1.47	0.88	0.88	Erosion of natural deposits
GROSS BETA PARTICLE ACTIVITY (pCi/L)	NS	50	1.55	1.55	--	--	Decay of natural and man-made deposits
COMBINED RADIUM (pCi/L)	NS	5	ND - 0.09	0.02	--	--	Erosion of natural deposits
TRITIUM (pCi/L)	NS	20000	32.80	32.80	--	--	Decay of natural and man-made deposits
URANIUM (pCi/L)	0.43	20	0.60 - 1.47	*	--	--	Erosion of natural deposits
UNREGULATED CONTAMINANTS							
BORON (ppb)	NS	1000 (ACTION LEVEL)	--	--	ND - 91	35.20	Erosion of natural deposits, industrial and agricultural discharges
CHROMIUM 6 (ppb)	NS	NS	--	--	2.42 - 3.12	2.67	Erosion of natural deposits, industrial waste discharges
VANADIUM (ppb)	NS	50 (ACTION LEVEL)	--	--	9.71 - 13.30	10.90	Erosion of natural deposits, burning of fuels
SECONDARY DRINKING WATER STANDARDS - AESTHETIC STANDARDS							
CHLORIDE (ppm)	NS	500	82 - 84	83	50.10	50.10	Runoff/leaching from natural deposits; seawater influence
COLOR (units)	NS	15	<5	<5	ND	ND	Naturally-occuring organic materials
CORROSIVITY (LANGELIER INDEX)	NS	NON-CORROSIVE	**	**	0.02	0.02	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
IRON (ppb)	NS	300	ND	ND	ND	ND	Leaching from natural deposits; industrial wastes
ODOR (units)	NS	3	<1	<1	ND	ND	Naturally-occuring organic materials
SPECIFIC CONDUCTANCE (µmhos/cm)	NS	1600	365 - 618	470	564	564	Substances that form ions when in water; seawater influence
SULFATE (ppb)	NS	500	66	66	97.90	97.90	Runoff/leaching from natural deposits; industrial wastes
TOTAL DISSOLVED SOLIDS (ppm)	NS	1000	320	320	336	336	Runoff/leaching from natural deposits
TURBIDITY (ntu)**	NS	5	0.01 - 0.21	0.03	0.10	0.10	Soil runoff
ZINC (ppm)	NS	5	0.41 - 0.52	0.46	ND	ND	Runoff/leaching from natural deposits; industrial wastes

-- No sample taken

PARAMETER	PHG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
ADDITIONAL CONSTITUENTS OF INTEREST							
TOTAL ALKALINITY as $CaCO_3$ (ppm)	NS	NS	69 - 72	71	--	--	Leaching from natural deposits
BICARBONATE ALKALINITY as HCO_3 (ppm)	NS	NS	86	86	148	148	Leaching from natural deposits
CALCIUM (ppm)	NS	NS	23	23	44.10	44.10	Leaching from natural deposits
TOTAL HARDNESS as $CaCO_3$ (ppm)	NS	NS	120	120	160	160	Leaching from natural deposits
MAGNESIUM (ppm)	NS	NS	14 - 15	15	12.20	12.20	Leaching from natural deposits
pH (pH units)****	NS	NS	6.30 - 7.80	6.99	7.73	7.73	Natural acidity/alkalinity of water
POTASSIUM (ppm)	NS	NS	3.0 - 4.0	3.70	--	--	Leaching from natural deposits
SODIUM (ppm)	NS	NS	62 - 64	63	54.60	54.60	Leaching from natural deposits

* Uranium is only tested for if Gross Alpha Particle Activity is detected at a level greater than or equal to 5 pCi/L. Therefore, an average level of detection is not applicable. However, additional samples may have been taken due to changes in regulations.

** A corrosion inhibitor is added to the treated water before entry into the distribution system.

*** A measure of cloudiness; high turbidity can hinder the effectiveness of disinfectants

**** Recommended 6.5 - 8.5 with respect to corrosion control

DISTRIBUTION SYSTEM WATER QUALITY					
DISINFECTANTS & DISINFECTION BY-PRODUCTS	MCLG or [MRDLG]	MCL or [MRDL]	RANGE OF DETECTION	HIGHEST 4-QUARTERLY AVERAGE	TYPICAL SOURCE OF CONSTITUENT
TOTAL CHLORINE (ppm)	[4.0]	[4.0]	0.27 - 1.92	1.25	Water treatment - Disinfectant used to kill microbes
TOTAL TRIHALOMETHANES (ppm)	NS	80	7.70 - 128.60	102.50	Byproduct of drinking water chlorination
TOTAL HALOACETIC ACID (ppm)	NS	60	15.30 - 38.90	26.75	Byproduct of drinking water chlorination
RESIDENTIAL TAP WATER QUALITY					
LEAD AND COPPER (UNITS)	PHG	ACTION LEVEL	RANGE OF DETECTION	90th % LEVEL	TYPICAL SOURCE OF CONSTITUENT
COPPER (ppm)	0.17	1.30	0 - 0.75	0.32	Corrosion of plumbing and erosion of natural deposits
LEAD (ppb)	2	15	0	0	Corrosion of plumbing and erosion of natural deposits

TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is 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.

Maximum Residual Disinfectant Level (MRDL) is 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) is 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 USEPA.

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

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

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

ppm = parts per million (milligrams per liter)
ppb = parts per billion (micrograms per liter)
pCi/L = picoCuries per liter
SI = Saturation Index (Langelier)

NA = Not Applicable
ND = None Detected
NS = No Standard

NTU = Nephelometric Turbidity Unit
MFL = Million Fibers per Liter
µmhos/cm = micromhos per centimeter

CONTAMINANTS THAT MAY BE PRESENT IN WATER

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surface 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 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 use.

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 tap water is safe to drink, the USEPA and DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS 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 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 (1-800-426-4791).

THE QUALITY OF YOUR WATER

Lead and Copper: During 2002, we conducted lead and copper sampling from several high-risk homes in the Region as required by DHS. The 90th percentile result for copper was 0.32 milligrams per liter and below detectable levels for lead. These results are well below the regulatory Action Levels for lead and copper in drinking water. The next round of lead and copper monitoring is scheduled for 2005.

Trihalomethanes: 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.

Cryptosporidium: Cryptosporidium is a microscopic organism that causes a gastro-intestinal disease called cryptosporidiosis which may cause diarrhea, headache, abdominal cramps, nausea, vomiting, and low grade fever. The infectious microorganism can be transmitted through ingestion of contaminated food, drinking water, or by direct contact with the fecal matter of infected persons or animals.

The chance of its presence in the water supply is extremely small because it is being monitored on a regular basis and very low levels, hundreds of times lower than those reported in other parts of the Country, have been detected in untreated water. Multiple-barrier treatment which includes coagulation, flocculation, filtration, and disinfection at AVEK treatment plants further minimize the chance of its presence in treated water.

While the general public is at a very low risk of contracting Cryptosporidium, 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 risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitary Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.

WATER CONSERVATION INFORMATION

Water is an essential resource, not a commodity. In Southern California, our arid climate limits our fresh water supply. Conserving water, or being "water wise," protects our natural water supplies, reduces the risk of water shortages during spring and summer months, and reduces your water bill. Water conservation is not as complicated or demanding as you might think.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs in your area. You can conserve water at home and save money by observing the following practical guidelines:

- Water the lawn as necessary during early morning hours and save 30 to 50 gallons per day.
- Run your dishwasher or washing machine with a full load and save 300 to 800 gallons every month.
- Sweep your sidewalks and driveways instead of hosing them to save about 150 gallons each time.
- Install a low flow toilet or use a water displacement device in your existing toilet and save 3.5 to 4.5 gallons of water on every flush.
- Install a low-flow shower head and save up to 1800 gallons per person per year.
- Visit **www.h2ouse.org** or **http://ladpw.org/wsm/conservation/** for practical "how-to" information on water conservation.
- Call (866) 649-2925 to request a survey of your normal water use and recommendations for water conserving measures to reduce your usage.
- Check your pipes and faucets regularly for leaks and repair them promptly. Call our office at 1-800-675-4357 to report leaks in our system.
- Evaluate your outdoor landscaping and water use. About two-thirds of residential water is used for landscaping purposes. Choose landscaping that is native to your surroundings and learn how much and when to irrigate it.
- Visit our booth at the Annual Water Fair and Festival Garden Party on May 21, 2005 and May 22, 2005 at the Water Conservation Garden Park next to the Palmdale Water District at 2029 E. Avenue Q, Palmdale.

If you have any questions or comments regarding water conservation, visit www.888cleanLA.com. You may also call 1-888-CLEANLA or contact Mr. David Rydman at (626) 300-3351.

LOS ANGELES COUNTY WATERWORKS DISTRICTS

2004 ANNUAL WATER QUALITY REPORT

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, REGION 4, LANCASTER

DEAR CUSTOMER:

The Los Angeles County Waterworks Districts are pleased to provide you with our 2004 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

Thereare two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2004, your drinking water met or exceeded all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses. Analyses are performed on samples from the source wells and the distribution system. The wells are tested for chemical, physical, radioactive, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not yet regulated.

We also monitor the water quality throughout the distribution system. Several key locations within the distribution system have been selected for this purpose. Every week, each location is tested for bacteria, color, turbidity, odor, and disinfectant level to ensure that you receive safe and high quality drinking water. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Gordon Phair at (661) 942-1157 Ext. 247 or Ms. Denise Noble at (626) 300-3364. To view this report on the internet, please visit our website at **http://ladpw.org/wsm/waterqualityrpt.cfm**.

THE SOURCE OF YOUR WATER AND ITS TREATMENT

During 2004, approximately 60 percent of the water served in the Lancaster Region of the District was treated surface water and the remaining 40 percent was groundwater. The District purchases its treated surface water from the Antelope Valley-East Kern Water Agency (AVEK). AVEK gets its water from the Sacramento River/San Joaquin Delta via the State Water Project. The District extracts groundwater from its 28 wells in the Lancaster area.

The surface water from AVEK is treated at their treatment plants using conventional treatment methods, which include coagulation, flocculation, sedimentation, and filtration. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their regrowth in the distribution pipes. The groundwater the district serves is also disinfected with chlorine for the same reasons.

SOURCE WATER ASSESSMENT

A source water assessment was conducted for all of the active sources in the Los Angeles County Waterworks District No. 40, Region 4, Lancaster system in December 2001. Nitrates and arsenic were detected from these sources. Arsenic occurs naturally in this region, while the occurrence of nitrates is probably due to past agricultural practices. Nevertheless, the wells listed on the table below are considered most vulnerable to the following activities, although no associated contaminants have been detected in the water produced by these wells.

VULNERABLE WELLS	POSSIBLE CONTAMINATING ACTIVITIES	VULNERABLE WELLS	POSSIBLE CONTAMINATING ACTIVITIES
4-5	DRY CLEANERS	4-FOX	AIRPORT
4-26, 4-FOX, AND 4-60	AUTOMOBILE GAS STATIONS	4-15 AND 4-52	METAL PLATING/FINISHING/FABRICATING
4-26	CHEMICAL/PETROLEUM PROCESSING/ STORAGE	4-22, 4-27, 4-39, 4-41, AND 4-43	LOW DENSITY SEPTIC SYSTEMS
		4-29 AND 4-30	FLEET/TRUCK/BUS TERMINALS
4-12, 4-25, AND 4-38	ABOVE GROUND STORAGE TANKS	4-29 AND 4-30	UTILITY STATIONS - MAINTENANCE AREAS
4-12, 4-25, AND 4-38	AUTOMOBILE CAR WASHES	4-13, 4-33, 4-36, 4-50, 4-51, 4-54, 4-55, 4-58, AND 4-59	SEWER COLLECTION SYSTEMS
4-12, 4-25, 4-32, 4-34, AND 4-38	CONTRACTOR OR GOVERNMENT AGENCY EQUIPMENT STORAGE YARD		
4-12, 4-25, AND 4-38	HOSPITAL	4-32 AND 4-34	STORM DRAIN DISCHARGE POINTS
4-12, 4-25, AND 4-38	HIGH DENSITY HOUSING	4-37	PARKS
4-12, 4-25, AND 4-38	PARKING LOTS/MALLS	4-39, 4-41, 4-43, AND 4-44	ILLEGAL ACTIVITIES/UNAUTHORIZED DUMPING
4-12, 4-32, 4-34, AND 4-38	WATER SUPPLY WELLS	4-39, 4-41, 4-43, AND 4-44	OTHER ANIMAL OPERATIONS

A copy of the complete assessment may be viewed at: DHS Los Angeles District Office, 1449 West Temple Street Room 202, Los Angeles CA, 90026, or by contacting Mr. Stephan Cajina at (213) 580-5723.

CAPITAL IMPROVEMENTS

- In January 2004, the construction of four new groundwater wells, known as Well Nos. 4-62, 4-65, 4-67, and 4-68 began. Construction is expected to be completed by Summer 2005.
- In June 2004, a construction contract to equip Well Nos. 4-61, 4-63, and 4-64 was awarded to Bakersfield Well and Pump. Well No. 4-61 will be replacing Well No. 4-12, which is to be abandoned after Well No. 4-61 is completed. Well No. 4-63 will be replacing Well No. 4-13 and Well No. 4-64 will be replacing Well No. 4-42. Both Well Nos. 4-13 and 4-42 will be converted to monitoring wells. The construction of the wells is scheduled for completion by June 2005.
- In December 2004, Well No. 4-66 was constructed and equipped.
- In December 2004, the construction of a fuel station at Waterworks' new Lancaster Headquarters was completed. The project consisted of designing and constructing the fuel station and abandoning the existing station at a cost of $200,000.

WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2004 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system and none was detected during 2004. Trihalomethanes, haloacetic acids, and chlorine are also tested for regularly in the distribution system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old.

PARAMETER	PHG or MCLG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
PRIMARY DRINKING WATER STANDARDS							
INORGANIC CONTAMINANTS							
ARSENIC (ppb)	0.004	50	ND	ND	ND - 58.8	12.56	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
BARIUM (ppb)	2000	1000	ND	ND	ND - 17.2	0.4	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
CHROMIUM (ppb)	100	50	ND	ND	ND - 21	7.6	Discharges from steel and pulp mills and chrome plating; erosion of natural deposits
FLUORIDE (ppm)	1	2	0.10	0.10	ND - 0.87	0.39	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
NITRATE AS NO_3 (ppm)	45	45	4.0	4.0	0 - 20.5	2.1	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
VOLATILE ORGANIC CONTAMINANTS							
TETRACHLOROETHYLENE (ppb)	0.06	5	ND	ND	ND - 0.6	0.004	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
RADIOACTIVE CONTAMINANTS							
GROSS ALPHA (pCi/L)	N/A	15	1.23 - 2.12	1.47	ND - 7.72	1.42	Erosion of natural deposits
URANIUM (pCi/L)	0.43	20	0.60 - 1.47	*	3.66 - 6.43	*	Erosion of natural deposits
GROSS BETA (pCi/L)	NS	50	1.55	1.55	--	--	Decay of natural and man-made deposits
RADIUM 226 (pCi/L)	NS	NS	ND - 0.09	0.02	--	--	Erosion of natural deposits
TRITIUM (pCi/L)	NS	20000	32.8	32.8	--	--	Decay of natural and man-made deposits
UNREGULATED CONTAMINANTS							
BORON (ppb)	NS	1000 (ACTION LEVEL)	--	--	0 - 500	107	Erosion of natural deposits; industrial and agricultural discharges
CHROMIUM 6 (ppb)	NS	NS	--	--	0 - 480	35.5	Erosion of natural deposits; industrial and agricultural discharges
VANADIUM (ppb)	NS	50 (ACTION LEVEL)	--	--	6.14 - 53.7	22.6	Erosion of natural deposits; industrial and agricultural discharges
SECONDARY DRINKING WATER STANDARDS - AESTHETIC STANDARDS							
COLOR (Units)	NS	15	< 5	< 5	0 - 20	0.18	Natural occuring organic materials
CORROSIVITY (LANGELIER INDEX)	NS	Non-corrosive	**	**	-0.41 - 0.569	-0.09	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
IRON (ppb)	NS	300	ND	ND	ND - 196	6.5	Leaching from natural deposits; industrial wastes
ODOR - THRESHOLD (TON)	NS	3 Units	< 1	< 1	0	0	Natural occuring organic materials
TURBIDITY (NTU)***	NS	5 Units	0.01 - 0.21	0.03	0.12 - 14.9	0.43	Soil runoff
ZINC (ppm)	NS	5	0.41 - 0.52	0.463	ND - 228	1.32	Runoff/leaching from natural deposits; industrial wastes
TOTAL DISSOLVED SOLIDS (ppm)	NS	1000	320	320	160 - 626	279	Runoff/leaching from natural deposits
SPECIFIC CONDUCTANCE (µmhos/cm)	NS	1600	365 - 618	470	229 - 996	427	Substances that form ions when in water, seawater influence
CHLORIDE (ppm)	NS	500	82 - 84	83	2.79 - 98.7	33.6	Runoff/leaching from natural deposits; seawater influence
SULFATE (ppm)	NS	500	66	66	12 - 200	48.9	Runoff/leaching from natural deposits; industrial wastes

-- No sample taken

PARAMETER	PHG or MCLG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
ADDITIONAL CONSTITUENTS OF INTEREST							
BICARBONATE ALKALINITY (ppm)	NS	NS	86	86	91.3 - 198.6	127.8	Leaching from natural deposits
CALCIUM (ppm)	NS	NS	23	23	8.82 - 88.2	27.7	Leaching from natural deposits
CARBONATE ALKALINITY (ppm)	NS	NS	ND	ND	ND - 7.92	0.43	Leaching from natural deposits
MAGNESIUM (ppm)	NS	NS	14 - 15	15	ND - 21.9	3.9	Leaching from natural deposits
SODIUM (ppm)	NS	NS	62 - 64	63	17.5 - 118	53.8	Leaching from natural deposits
TOTAL HARDNESS (ppm)	NS	NS	120	120	34 - 310	85	Leaching from natural deposits
pH (pH Units)****	NS	NS	6.3 - 7.8	6.99	7.61 - 8.59	7.96	Natural acidity/alkalinity of water
TOTAL ALKALINITY (ppm)	NS	NS	69 - 72	71	--	--	Leaching from natural deposits
POTASSIUM (ppm)	NS	NS	3.0 - 4.0	3.7	--	--	Leaching from natural deposits

*Uranium is only tested for if Gross Alpha Particle Activity is detected at a level greater than or equal to 5 pCi/L. Therefore, an average level of detection is not applicable. However, additional samples may have been taken due to changes in regulations.
**A corrosion inhibitor is added to the treated water before entry into the distribution system.
***A measure of cloudiness; high turbidity can hinder the effectiveness of disinfectants
****Recommended 6.5 - 8.5 with respect to corrosion control

DISTRIBUTION SYSTEM WATER QUALITY					
DISINFECTANTS & DISINFECTION BY-PRODUCTS	MCLG or [MRDLG]	MCL or [MRDL]	RANGE OF DETECTION	HIGHEST 4-QUARTERLY AVERAGE	TYPICAL SOURCE OF CONSTITUENT
TOTAL CHLORINE (ppm)	[4.0]	[4.0]	0 - 2.20	0.91	Water treatment – Disinfectant used to kill microbes
TOTAL TRIHALOMETHANES (ppb)	NS	80	0 - 180.4	79.82	Byproduct of drinking water chlorination
TOTAL HALOACETIC ACID (ppb)	NS	60	0 - 58	17.75	Byproduct of drinking water disinfection
RESIDENTIAL TAP WATER QUALITY					
LEAD AND COPPER (UNITS)	PHG	ACTION LEVEL	RANGE OF DETECTION	90th % LEVEL	TYPICAL SOURCE OF CONSTITUENT
COPPER (ppm)	0.17	1.3	0 - 0.98	0.41	Corrosion of plumbing and erosion of natural deposits
LEAD (ppb)	2	15	0	0	Corrosion of plumbing and erosion of natural deposits

TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is 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.

Maximum Residual Disinfectant Level (MRDL) is 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) is 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 USEPA.

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

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

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

ppm = parts per million (milligrams per liter)
ppb = parts per billion (micrograms per liter)
pCi/L = picoCuries per liter
SI = Saturation Index (Langelier)

NA = Not Applicable
ND = None Detected
NS = No Standard

NTU = Nephelometric Turbidity Unit
MFL = Million Fibers per Liter
µmhos/cm = micromhos per centimeter

CONTAMINANTS THAT MAY BE PRESENT IN WATER

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surface 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 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 use.

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 tap water is safe to drink, the USEPA and DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS 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 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 (1-800-426-4791).

THE QUALITY OF YOUR WATER

Lead and Copper: During 2004, we conducted lead and copper sampling from several high-risk homes in the Region as required by DHS. The 90th percentile result for copper was 0.41 milligrams per liter and below detectable levels for lead. These results are well below the regulatory Action Levels for lead and copper in drinking water. The next round of lead and copper monitoring is scheduled for 2007.

Arsenic: Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Trihalomethanes: 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.

Cryptosporidium: Cryptosporidium is a microscopic organism that causes a gastro-intestinal disease called cryptosporidiosis which may cause diarrhea, headache, abdominal cramps, nausea, vomiting, and low grade fever. The infectious microorganism can be transmitted through ingestion of contaminated food, drinking water, or by direct contact with the fecal matter of infected persons or animals.

The chance of its presence in the water supply is extremely small because it is being monitored on a regular basis and very low levels, hundreds of times lower than those reported in other parts of the Country, have been detected in untreated water. Multiple-barrier treatment which includes coagulation, flocculation, filtration, and disinfection at AVEK treatment plants further minimize the chance of its presence in treated water.

While the general public is at a very low risk of contracting Cryptosporidium, 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 risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitary Foundation.

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.

WATER CONSERVATION INFORMATION

Water is an essential resource, not a commodity. In Southern California, our arid climate limits our fresh water supply. Conserving water, or being "water wise," protects our natural water supplies, reduces the risk of water shortages during spring and summer months, and reduces your water bill. Water conservation is not as complicated or demanding as you might think.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs in your area. You can conserve water at home and save money by observing the following practical guidelines:

- Water the lawn as necessary during early morning hours and save 30 to 50 gallons per day.
- Run your dishwasher or washing machine with a full load and save 300 to 800 gallons every month.
- Sweep your sidewalks and driveways instead of hosing them to save about 150 gallons each time.
- Install a low flow toilet or use a water displacement device in your existing toilet and save 3.5 to 4.5 gallons of water on every flush.
- Install a low-flow shower head and save up to 1800 gallons per person per year.
- Visit **www.h2Ouse.org** or **http://ladpw.org/wsm/conservation/** for practical "how-to" information on water conservation.
- Call (866) 648-2925 to request a survey of your normal water use and recommendations for water conserving measures to reduce your usage.
- Check your pipes and faucets regularly for leaks and repair them promptly. Call our office at 1-800-675-4357 to report leaks in our system.
- Evaluate your outdoor landscaping and water use. About two-thirds of residential water is used for landscaping purposes. Choose landscaping that is native to your surroundings and learn how much and when to irrigate it.
- Visit our booth at the Annual Water Fair and Festival Garden Party on May 21, 2005 and May 22, 2005 at the Water Conservation Garden Park next to the Palmdale Water District at 2029 E. Ave. Q, Palmdale.

If you have any questions or comments regarding water conservation, visit www.888cleanLA.com. You may also call 1-888-CLEANLA or contact Mr. David Rydman at (626) 300-3351.

LOS ANGELES COUNTY WATERWORKS DISTRICTS

2004 ANNUAL WATER QUALITY REPORT

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, REGION 38, LAKE LOS ANGELES

DEAR CUSTOMER:

The Los Angeles County Waterworks Districts are pleased to provide you with our 2004 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2004, your drinking water met or exceeded all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses. Analyses are performed on water samples taken from the source wells and the distribution system. The wells are tested for chemical, physical, radioactive, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not yet regulated.

We also monitor the water quality throughout the distribution system. Several key locations within the distribution system have been selected for this purpose. Every week, each location is tested for bacteria, color, turbidity, odor, and disinfectant level to ensure that you receive safe and high quality drinking water. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Gordon Phair at (661) 942-1157 Ext. 247 or Ms. Denise Noble at (626) 300-3364. To view this report on the internet, please visit our website at **http://ladpw.org/wsm/waterqualityrpt.cfm**.

THE SOURCE OF YOUR WATER AND ITS TREATMENT

During 2004, approximately 60 percent of the water served in the Lake Los Angeles Region of the District was treated surface water and the remaining 40 percent was groundwater. The District purchases its treated surface water from the Antelope Valley-East Kern Water Agency (AVEK). AVEK gets its water from the Sacramento River/San Joaquin Delta via the State Water Project. The District extracts groundwater from its two wells in the Lake Los Angeles area.

The surface water from AVEK is treated at their treatment plants using conventional treatment methods, which include coagulation, flocculation, sedimentation, and filtration. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their regrowth in the distribution pipes. The groundwater the District serves is also disinfected for the same reasons.

SOURCE WATER ASSESSMENT

A source water assessment was conducted for all the active sources in the Los Angeles County Waterworks District No. 40, Region 38, Lake Los Angeles water system in December 2001.

Nitrates and total chromium were detected from these sources. Total chromium occurs naturally in this region, while the occurrence of nitrates is due to the ongoing use of private sewage disposal systems. Nevertheless, the sources listed on the table below are considered most vulnerable to the following activities, although no associated contaminants have been detected in the water produced by these wells.

A copy of the complete assessment may be viewed at: DHS Los Angeles District Office, 1449 West Temple Street Room 202, Los Angeles CA, 90026, or by contacting Mr. Stephen Cajina at (213) 580-5723.

VULNERABLE WELLS	POSSIBLE CONTAMINATING ACTIVITIES
38-1	OTHER ANIMAL OPERATIONS LOW DENSITY SEPTIC SYSTEMS
38-3	HIGH DENSITY SEPTIC SYSTEMS

ADDITIONAL INFORMATION

A large portion of the Region's water supply is surface water purchased from the Antelope Valley-East Kern Water Agency (AVEK). AVEK obtains its surface water from the State Water Project via the California Aqueduct. The water is treated with chlorine to disinfect it prior to supplying it to the Region to destroy disease-causing microorganisms. Unfortunately, some of the chlorine used for disinfection combines with organic matter naturally present in surface water to form chemicals called disinfection byproducts (DBPs).

In 2002, the U.S. Environmental Protection Agency (USEPA) established the Disinfectant and Disinfection Byproducts (D/DBP) Rule to control disinfection byproduct levels, including trihalomethanes (TTHMs), in drinking water. The D/DBP Rule recognizes the risk of disease from drinking water that is not disinfected is more immediate than the increased risk from drinking water containing DBPs over a period of many years. However, some people who drink water over many years containing TTHMs that exceed the Maximum Contaminant Level (MCL) may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

The current MCL for TTHMs is 80 parts per billion (ppb) based on a running annual average from quarterly sampling. In 2004, Region 38 exceeded the TTHMs MCL of the D/DBP Rule twice. The first time was during the second quarter of the year with a running annual average of 84.8 ppb. At that time, we reported that we had increased water production from the Region's groundwater wells to reduce the water system's TTHMs levels because groundwater does not contain the organic matter that reacts with chlorine to create DBPs. Unfortunately, high water demands due to high summer temperatures required the purchase of additional surface water from AVEK and offset efforts to decrease TTHMs levels. Therefore, the Region exceeded the TTHMs MCL of the D/DBP Rule in the third quarter with a running annual average of 90.5 ppb.

The District has taken measures to solve the problem and was in full compliance by the fourth quarter. In addition to increasing groundwater production from wells in the area, we have been working with AVEK to upgrade their surface water treatment system and designing improvements to convert our groundwater disinfection facilities to chloramines to reduce the water system's trihalomethane levels. Chloramines are a combination of chlorine and ammonia. Compared to chlorine, chloramines produce much lower levels of trihalomethanes.

WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2004 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system and none was detected during 2004. Trihalomethanes, haloacetic acids, and chlorine are also tested for regularly in the distribution system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old.

PARAMETER	PHG or MCLG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
PRIMARY DRINKING WATER STANDARDS							
INORGANIC CONTAMINANTS							
CHROMIUM (ppb)	100	50	ND	ND	14.5 - 14.7	14.66	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
FLUORIDE (ppm)	1	2	0.10	0.10	0.25 - 0.30	0.26	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
NITRATE AS NO_3 (ppm)	45	45	4.0	4.0	2.31 - 2.50	2.35	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
RADIOACTIVE CONTAMINANTS							
GROSS ALPHA (pCi/L)	NS	15	1.23 - 2.12	1.47	1.22 - 5.31	2.74	Erosion of natural deposits
GROSS BETA (pCi/L)	NS	50	1.55	1.55	--	--	Decay of natural and man-made deposits
RADIUM 226 (pCi/L)	NS	NS	ND - 0.09	0.02	--	--	Erosion of natural deposits
TRITIUM (pCi/L)	NS	20000	32.80	32.80	--	--	Decay of natural and man-made deposits
URANIUM (pCi/L)	NS	20	0.60 - 1.47	*	1.22	--	Erosion of natural deposits
UNREGULATED CONTAMINANTS							
BORON (ppb)	NS	1000 (ACTION LEVEL)	--	--	60 - 68	61.76	Erosion of natural deposits, industrial and agricultural discharges
CHROMIUM 6 (ppb)	NS	NS	ND	ND	10.61 - 12.85	12.36	Erosion of natural deposits, industrial waste discharges
VANADIUM (ppb)	NS	50 (ACTION LEVEL)	--	--	10.67 - 10.85	10.81	Erosion of natural deposits, burning of fuels
SECONDARY DRINKING WATER STANDARDS - AESTHETIC STANDARDS							
COLOR (units)	NS	1	<5	<5	1	1	Leaching from natural deposits; discharge from mining and industrial waste; leaching from copper pipes
CORROSIVITY (LANGELIER INDEX)	NS	NON-CORROSIVE	**	**	0.85 - 0.95	0.93	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
ODOR - THRESHOLD (ton)	NS	3 UNITS	<1	<1	0 - 1	0.22	Naturally-occurring organic materials
TURBIDITY (ntu)***	NS	5 UNITS	0.01 - 0.21	0.03	0.15 - 0.60	0.25	Soil runoff
TOTAL DISSOLVED SOLIDS (ppm)	NS	1000	320	320	238 - 250	247	Runoff/leaching from natural deposits
SPECIFIC CONDUCTANCE (µmhos/cm)	NS	1600	365 - 618	470	365 - 369	368	Substances that form ions when in water; seawater influence
CHLORIDE (ppm)	NS	500	82 - 84	83	0.56 - 7.06	5.63	Runoff/leaching from natural deposits;
SULFATE (ppm)	NS	500	66	66	49.50 - 50	49.60	Runoff/leaching from natural deposits; industrial wastes
ZINC (ppm)	NS	5	0.41 - 0.52	0.46	ND	ND	Runoff/leaching from natural deposits; industrial wastes

-- No sample taken

PARAMETER	PHG or MCLG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
ADDITIONAL CONSTITUENTS OF INTEREST							
BICARBONATE ALKALINITY (ppm)	NS	NS	86	86	137 - 143	141.70	Leaching from natural deposits
CALCIUM (ppm)	NS	NS	23	23	24.40 - 25.70	25.40	Leaching from natural deposits
TOTAL HARDNESS (ppm)	NS	NS	120	120	96 - 102	100.70	Leaching from natural deposits
MAGNESIUM (ppm)	NS	NS	14 - 15	15	8.56 - 9.34	9.20	Leaching from natural deposits
pH****	NS	NS	6.30 - 7.80	6.99	7.81 - 7.87	7.86	Natural acidity/alkalinity of water
POTASSIUM (ppm)	NS	NS	3.0 - 4.0	3.7	--	--	Leaching from natural deposits
SODIUM (ppm)	NS	NS	62 - 64	6	37.50 - 38.40	38.20	Leaching from natural deposits
TOTAL ALKALINITY as $CaCO_3$ equivalents (ppm)	NS	NS	69 - 72	71	--	--	Leaching from natural deposits

* Uranium is only tested for if Gross Alpha Particle Activity is detected at a level greater than or equal to 5 pCi/L. Therefore, an average level of detection is not applicable. However, additional samples may have been taken due to changes in regulations.

** A corrosion inhibitor is added to the treated water before entry into the distribution system.

*** A measure of cloudiness; high turbidity can hinder the effectiveness of disinfectants

**** Recommended 6.5 - 8.5 with respect to corrosion control

DISTRIBUTION SYSTEM WATER QUALITY					
DISINFECTANTS & DISINFECTION BY-PRODUCTS	MCLG or [MRDLG]	MCL or [MRDL]	RANGE OF DETECTION	HIGHEST 4-QUARTERLY AVERAGE	TYPICAL SOURCE OF CONSTITUENT
TOTAL CHLORINE (ppm)	[4.0]	[4.0]	0.08 - 2.40	1.84	Water treatment – Disinfectant used to kill microbes
TOTAL TRIHALOMETHANES (ppb)	NS	80	3.40 - 154.80	90.47	Byproduct of drinking water chlorination
TOTAL HALOACETIC ACID (ppb)	NS	60	11.10 - 40.10	23.73	Byproduct of drinking water disinfection
RESIDENTIAL TAP WATER QUALITY					
LEAD AND COPPER (UNITS)	PHG	ACTION LEVEL	RANGE OF DETECTION	90th % LEVEL	TYPICAL SOURCE OF CONSTITUENT
COPPER (ppm)	0.17	1.3	0 - 0.82	0.45	Corrosion of plumbing and erosion of natural deposits
LEAD (ppb)	2	15	0 - 10.50	0	Corrosion of plumbing and erosion of natural deposits

TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is 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.

Maximum Residual Disinfectant Level (MRDL) is 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) is 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 USEPA.

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

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

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

ppm = parts per million (milligrams per liter)
ppb = parts per billion (micrograms per liter)
pCi/L = picoCuries per liter
SI = Saturation Index (Langelier)

NA = Not Applicable
ND = None Detected
NS = No Standard

NTU = Nephelometric Turbidity Unit
MFL = Million Fibers per Liter
µmhos/cm = micromhos per centimeter

CONTAMINANTS THAT MAY BE PRESENT IN WATER

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surface 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 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 use.

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 tap water is safe to drink, the USEPA and DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS 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 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 (1-800-426-4791).

THE QUALITY OF YOUR WATER

Lead and Copper: During 2002, we conducted lead and copper sampling from several high-risk homes in the Region as required by DHS. The 90th percentile result for copper was 0.45 milligrams per liter and below detectable levels for lead. These results are well below the regulatory Action Levels for lead and copper in drinking water. The next round of lead and copper monitoring is scheduled for 2005.

Trihalomethanes: 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.

Cryptosporidium: Cryptosporidium is a microscopic organism that causes a gastro-intestinal disease called cryptosporidiosis which may cause diarrhea, headache, abdominal cramps, nausea, vomiting, and low grade fever. The infectious microorganism can be transmitted through ingestion of contaminated food, drinking water, or by direct contact with the fecal matter of infected persons or animals.

The chance of its presence in the water supply is extremely small because it is being monitored on a regular basis and very low levels, hundreds of times lower than those reported in other parts of the Country, have been detected in untreated water. Multiple-barrier treatment which includes coagulation, flocculation, filtration, and disinfection at AVEK treatment plants further minimize the chance of its presence in treated water.

While the general public is at a very low risk of contracting Cryptosporidium, 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 risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitary Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.

WATER CONSERVATION INFORMATION

Water is an essential resource, not a commodity. In Southern California, our arid climate limits our fresh water supply. Conserving water, or being "water wise," protects our natural water supplies, reduces the risk of water shortages during spring and summer months, and reduces your water bill. Water conservation is not as complicated or demanding as you might think.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs in your area. You can conserve water at home and save money by observing the following practical guidelines:

- Water the lawn as necessary during early morning hours and save 30 to 50 gallons per day.
- Run your dishwasher or washing machine with a full load and save 300 to 800 gallons every month.
- Sweep your sidewalks and driveways instead of hosing them to save about 150 gallons each time.
- Install a low flow toilet or use a water displacement device in your existing toilet and save 3.5 to 4.5 gallons of water on every flush.
- Install a low-flow shower head and save up to 1800 gallons per person per year.
- Visit **www.h2ouse.org** or **http://ladpw.org/wsm/conservation/** for practical "how-to" information on water conservation.
- Call (866) 648-2925 to request a survey of your normal water use and recommendations for water conserving measures to reduce your usage.
- Check your pipes and faucets regularly for leaks and repair them promptly. Call our office at 1-800-675-4357 to report leaks in our system.
- Evaluate your outdoor landscaping and water use. About two-thirds of residential water is used for landscaping purposes. Choose landscaping that is native to your surroundings and learn how much and when to irrigate it.
- Visit our booth at the Annual Water Fair and Festival Garden Party on May 21, 2005 and May 22, 2005 at the Water Conservation Garden Park next to the Palmdale Water District at 2029 E. Ave. Q, Palmdale.

If you have any questions or comments regarding water conservation, visit www.888cleanLA.com. You may also call 1-888-CLEANLA or contact Mr. David Rydman at (626) 300-3351.

LOS ANGELES COUNTY WATERWORKS DISTRICTS

2004 ANNUAL WATER QUALITY REPORT

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, REGION 33, SUN VILLAGE

DEAR CUSTOMER:

The Los Angeles County Waterworks Districts are pleased to provide you with our 2004 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2004, your drinking water met or exceeded all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses. Analyses are performed on water samples taken from the source wells and the distribution system. The wells are tested for chemical, physical, radioactive, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not yet regulated.

We also monitor the water quality throughout the distribution system. Several key locations within the distribution system have been selected for this purpose. Every week, each location is tested for bacteria, color, turbidity, odor, and disinfectant level to ensure that you receive safe and high quality drinking water. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Gordon Phair at (661) 942-1157 Ext. 247 or Ms. Denise Noble at (626) 300-3364. To view this report on the internet, please visit our website at **http://ladpw.org/wsm/waterqualityrpt.cfm**.

THE SOURCE OF YOUR WATER AND ITS TREATMENT

During 2004, approximately 70 percent of the water served in the Sun Village Region of the District was treated surface water and the remaining 30 percent was groundwater. The District purchases its treated surface water from the Antelope Valley-East Kern Water Agency (AVEK). AVEK gets its water from the Sacramento River/San Joaquin Delta via the State Water Project. The District extracts groundwater from its three wells in the Littlerock area.

The surface water from AVEK is treated at their treatment plants using conventional treatment methods, which include coagulation, flocculation, sedimentation, and filtration. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their regrowth in the distribution pipes. The groundwater the district serves is also disinfected with chlorine for the same reasons.

SOURCE WATER ASSESSMENT

A source water assessment was conducted for all of the active sources in the Los Angeles County Waterworks District No. 40, Region 33, Sun Village, water system in November 2001. The wells listed on the table below are considered most vulnerable to the following activities, although no associated contaminants have been detected in the water produced by these wells.

VULNERABLE WELLS	POSSIBLE CONTAMINATING ACTIVITIES
27-2	SEPTIC SYSTEMS – HIGH DENSITY
27-3	ABOVE GROUND STORAGE TANKS CROPS – IRRIGATED FERTILIZER PESTICIDE/HERBICIDE APPLICATION
27-4	SEPTIC SYSTEMS – HIGH DENSITY

A copy of the complete assessment may be viewed at: DHS Los Angeles District Office, 1449 West Temple Street Room 202, Los Angeles CA, 90026, or by contacting Mr. Stephan Cajina at (213) 580-5723.

TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is 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.

Maximum Residual Disinfectant Level (MRDL) is 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) is 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 USEPA.

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

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

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

ppm = parts per million (milligrams per liter)
ppb = parts per billion (micrograms per liter)
pCi/L = picoCuries per liter
SI = Saturation Index (Langelier)

NA = Not Applicable
ND = None Detected
NS = No Standard

NTU = Nephelometric Turbidity Unit
MFL = Million Fibers per Liter
µmhos/cm = micromhos per centimeter

WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2004 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system and none was detected during 2004. Trihalomethanes, haloacetic acids, and chlorine are also tested for regularly in the distribution system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old.

PARAMETER	PHG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
PRIMARY DRINKING WATER STANDARDS							
INORGANIC CONTAMINANTS							
FLUORIDE (ppb)	1	2	0.10	0.10	0.20	0.20	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
NITRATE AS NO_3 (ppm)	45	45	4.0	4.0	9.14	9.14	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
RADIOACTIVE CONTAMINANTS							
GROSS ALPHA PARTICLE ACTIVITY (pCi/L)	NS	15	1.23 - 2.12	1.47	0.88	0.88	Erosion of natural deposits
GROSS BETA PARTICLE ACTIVITY (pCi/L)	NS	50	1.55	1.55	--	--	Decay of natural and man-made deposits
COMBINED RADIUM (pCi/L)	NS	5	ND - 0.09	0.02	--	--	Erosion of natural deposits
TRITIUM (pCi/L)	NS	20000	32.80	32.80	--	--	Decay of natural and man-made deposits
URANIUM (pCi/L)	0.43	20	0.60 - 1.47	*	--	--	Erosion of natural deposits
UNREGULATED CONTAMINANTS							
BORON (ppb)	NS	1000 (ACTION LEVEL)	--	--	ND - 91	35.20	Erosion of natural deposits, industrial and agricultural discharges
CHROMIUM 6 (ppb)	NS	NS	--	--	2.42 - 3.12	2.67	Erosion of natural deposits, industrial waste discharges
VANADIUM (ppb)	NS	50 (ACTION LEVEL)	--	--	9.71 - 13.30	10.90	Erosion of natural deposits, burning of fuels
SECONDARY DRINKING WATER STANDARDS - AESTHETIC STANDARDS							
CHLORIDE (ppm)	NS	500	82 - 84	83	50.10	50.10	Runoff/leaching from natural deposits; seawater influence
COLOR (units)	NS	15	<5	<5	ND	ND	Naturally-occuring organic materials
CORROSIVITY (LANGELIER INDEX)	NS	NON-CORROSIVE	**	**	0.02	0.02	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
ODOR (units)	NS	3	<1	<1	ND	ND	Naturally-occuring organic materials
SPECIFIC CONDUCTANCE (µmhos/cm)	NS	1600	365 - 618	470	564	564	Substances that form ions when in water; seawater influence
SULFATE (ppb)	NS	500	66	66	97.90	97.90	Runoff/leaching from natural deposits; industrial wastes
TOTAL DISSOLVED SOLIDS (ppm)	NS	1000	320	320	336	336	Runoff/leaching from natural deposits
TURBIDITY (ntu)***	NS	5	0.01 - 0.21	0.03	0.10	0.10	Soil runoff
ZINC (ppm)	NS	5	0.41 - 0.52	0.46	ND	ND	Runoff/leaching from natural deposits; industrial wastes

-- No sample taken

PARAMETER	PHG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	
ADDITIONAL CONSTITUENTS OF INTEREST							
TOTAL ALKALINITY as $CaCO_3$ (ppm)	NS	NS	69 - 72	71	--	--	Leaching from natural deposits
BICARBONATE ALKALINITY as HCO_3 (ppm)	NS	NS	86	86	148	148	Leaching from natural deposits
CALCIUM (ppm)	NS	NS	23	23	44.10	44.10	Leaching from natural deposits
TOTAL HARDNESS as $CaCO_3$ (ppm)	NS	NS	120	120	160	160	Leaching from natural deposits
MAGNESIUM (ppm)	NS	NS	14 - 15	15	12.20	12.20	Leaching from natural deposits
pH (pH units)****	NS	NS	6.30 - 7.80	6.99	7.73	7.73	Natural acidity/alkalinity of water
POTASSIUM (ppm)	NS	NS	3.0 - 4.0	3.70	--	--	Leaching from natural deposits
SODIUM (ppm)	NS	NS	62 - 64	63	54.60	54.60	Leaching from natural deposits

* Uranium is only tested for if Gross Alpha Particle Activity is detected at a level greater than or equal to 5 pCi/L. Therefore, an average level of detection is not applicable. However, additional samples may have been taken due to changes in regulations.

** A corrosion inhibitor is added to the treated water before entry into the distribution system.

*** A measure of cloudiness; high turbidity can hinder the effectiveness of disinfectants

**** Recommended 6.5 - 8.5 with respect to corrosion control

DISTRIBUTION SYSTEM WATER QUALITY					
DISINFECTANTS & DISINFECTION BY-PRODUCTS	MCLG or [MRDLG]	MCL or [MRDL]	RANGE OF DETECTION	HIGHEST 4-QUARTERLY AVERAGE	TYPICAL SOURCE OF CONSTITUENT
TOTAL CHLORINE (ppm)	[4.0]	[4.0]	0.16 - 1.46	0.77	Water treatment - Disinfectant used to kill microbes
TOTAL TRIHALOMETHANES (ppb)	NS	80	7.70 - 128.60	102.50	Byproduct of drinking water chlorination
TOTAL HALOACETIC ACID (ppb)	NS	60	15.30 - 38.90	26.75	Byproduct of drinking water chlorination
RESIDENTIAL TAP WATER QUALITY					
LEAD AND COPPER (UNITS)	PHG	ACTION LEVEL	RANGE OF DETECTION	90th % LEVEL	TYPICAL SOURCE OF CONSTITUENT
COPPER (ppm)	0.17	1.30	0 - 0.75	0.32	Corrosion of plumbing and erosion of natural deposits
LEAD (ppb)	2	15	0	0	Corrosion of plumbing and erosion of natural deposits




CONTAMINANTS THAT MAY BE PRESENT IN WATER

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surface 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 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 use.

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 tap water is safe to drink, the USEPA and DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS 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 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 (1-800-426-4791).

THE QUALITY OF YOUR WATER

Lead and Copper: During 2004, we conducted lead and copper sampling from several high-risk homes in the Region as required by DHS. The 90th percentile result for copper was 0.32 milligrams per liter and below detectable levels for lead. These results are well below the regulatory Action Levels for lead and copper in drinking water. The next round of lead and copper monitoring is scheduled for 2007.

Trihalomethanes: 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.

Cryptosporidium: Cryptosporidium is a microscopic organism that causes a gastro-intestinal disease called cryptosporidiosis which may cause diarrhea, headache, abdominal cramps, nausea, vomiting, and low grade fever. The infectious microorganism can be transmitted through ingestion of contaminated food, drinking water, or by direct contact with the fecal matter of infected persons or animals.

The chance of its presence in the water supply is extremely small because it is being monitored on a regular basis and very low levels, hundreds of times lower than those reported in other parts of the Country, have been detected in untreated water. Multiple-barrier treatment which includes coagulation, flocculation, filtration, and disinfection at AVEK treatment plants further minimize the chance of its presence in treated water.

While the general public is at a very low risk of contracting Cryptosporidium, 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 risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitary Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as a ring in the bathtub, scale on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.

WATER CONSERVATION INFORMATION

Water is an essential resource, not a commodity. In Southern California, our arid climate limits our fresh water supply. Conserving water, or being "water wise," protects our natural water supplies, reduces the risk of water shortages during spring and summer months, and reduces your water bill. Water conservation is not as complicated or demanding as you might think.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs in your area. You can conserve water at home and save money by observing the following practical guidelines:

- Water the lawn as necessary during early morning hours and save 30 to 50 gallons per day.
- Run your dishwasher or washing machine with a full load and save 300 to 800 gallons every month.
- Sweep your sidewalks and driveways instead of hosing them to save about 150 gallons each time.
- Install a low flow toilet or use a water displacement device in your existing toilet and save 3.5 to 4.5 gallons of water on every flush.
- Install a low-flow shower head and save up to 1800 gallons per person per year.
- Visit **www.h2ouse.org** or **http://ladpw.org/wsm/conservation/** for practical "how-to" information on water conservation.
- Call (866) 648-2925 to request a survey of your normal water use and recommendations for water conserving measures to reduce your usage.
- Check your pipes and faucets regularly for leaks and repair them promptly. Call our office at 1-800-675-4357 to report leaks in our system.
- Evaluate your outdoor landscaping and water use. About two-thirds of residential water is used for landscaping purposes. Choose landscaping that is native to your surroundings and learn how much and when to irrigate it.
- Visit our booth at the Annual Water Fair and Festival Garden Party on May 21, 2005 and May 22, 2005 at the Water Conservation Garden Park next to the Palmdale Water District at 2029 E. Ave. Q, Palmdale.

If you have any questions or comments regarding water conservation, visit www.888cleanLA.com. You may also call 1-888-CLEANLA or contact Mr. David Rydman at (626) 300-3351.

Appendix D-2

RCSD 2004 Consumer Confidence Report

SUMMARY OF WATER QUALITY DATA

MICROBIOLOGICAL CONTAMINANTS	TEST DATE	UNIT	PHG	MCL	AVERAGE	RANGE	SOURCE OF CONTAMINANTS
Turbidity [1]	2003	NTU	n/a	TT(5.0)	.13	<.01 - .16	Soil runoff
Arsenic	2003	ppb	n/a	50	12.50	11. - 14.	Erosion of natural deposit; runoff from orchards; glass and electronics productions wastes
INORGANIC CHEMICALS	TEST DATE	UNIT	PHG	MCL	AVERAGE	RANGE	
Chromium	2003	ppb	2.5	50	11.25	<10. - 14.	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride	2003	ppm	1	2	4.5	.50 - 1.9	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate	2003	ppm	45	45	4.77	3.7 - 5.78	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Chloride	2003	ppm	n/a	(500)	17.5	15. - 21.	Runoff/leaching from natural deposits; seawater influence
Foaming Agents (MBAS)	2003	ppb	n/a	(500)	.05	<.05 - .06	Municipal and industrial waste discharges
INORGANIC CHEMICALS LEAD & COPPER	TEST DATE	UNIT	PHG	MCL	AVERAGE	RANGE	SOURCE OF CONTAMINANTS
Copper [2]	2003	ppm	0.17	AL = 1.3	<1.	n/a	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching for wood preservatives
Lead [3]	2003	ppb	2	AL = 15	<10.	n/a	Internal corrosion of household water plumbing systems: discharges from industrial manufacturers
GENERAL PHYSICAL	TEST DATE	UNIT	PHG	MCL	AVERAGE	RANGE	SOURCE OF CONTAMINANTS
Color	2003	units	n/a	(15)	1.7	1.-2.	Naturally-occurring organic materials
Specific conductance	2003	umhos/cm	n/a	(1600)	408.	370. - 468.	Substances that form ions when in water; seawater influence
Total dissolved solids	2003	ppm	n/a	(1000)	277.	232. - 316.	Runoff/leaching from natural deposits
GENERAL MINERAL	TEST DATE	UNIT	PHG	MCL	AVERAGE	RANGE	SOURCE OF CONTAMINANTS
Hardness	2003	ppm	n/a	n/a	101.	83. - 140.	Naturally-occurring polyvalent cations present in the water, generally magnesium and calcium
Sodium	2003	ppm	n/a	n/a	45.	41. - 51.	Naturally-occurring salt; seawater influence
VOLATILE ORGANIC CONTAMINANTS	TEST DATE	UNIT	PHG	MCL	AVERAGE	RANGE	SOURCE OF CONTAMINANTS
Dichloromethane	2003	ppb	0.004	5	<1.	n/d-<1.	Discharge from pharmaceutical and chemical factories; insecticide
DISINFECTION BY-PRODUCTS	TEST DATE	UNIT	PHG	MCL	AVERAGE	RANGE	SOURCE OF CONTAMINANTS
TTHMS (Total trihalomethanes)	2003	ppb	n/d	100	2.	<2. - 2.	By-product of drinking water chlorination

WATER QUALITY TABLE FOOTNOTES

1. Turbidity is a measure of the cloudiness of the water. Our turbidity levels did not exceed the Treatment Technique level of .05 NTU.
2. None of the forty-four samples tested had copper at a level that exceeded the Action Level of 1.3 ppm.
3. One of the forty-four samples tested had lead at a level that exceeded the Action Level of 15 ppb.
4. The MCL of 60 ppb is not yet in effect.

WHAT IS THIS REPORT?

Rosamond Community Services District is proud of the fine drinking water it provides. This annual water quality report shows the source of our water, lists the results of our tests, and contains important information about water and health.

Rosamond Community Services District will notify you immediately if there is any reason for concern about our water. We are happy to show you how we have surpassed water quality standards.

The bottom line: Is the water safe to drink? ***Absolutely!***

WHERE DOES THE WATER COME FROM?

The Rosamond Community Services District provides water from a blend of surface and groundwater. The Antelope Valley East Kern Water Agency (AVEK) supplies the surface water we use to us. Surface water is blended with water from the District's four (4) producing water wells and then is distributed through the distribution system to your homes. The District also maintains six and one-half million gallons of water storage in 5 above ground tanks so that you can have drinking water available to your homes.

"Sweep off your driveways and sidewalks instead of hosing them down."

Source Water Assessment

The Department of Health Services, in 2003, conducted a Source Water Assessment Report to determine possible contaminating activities (PCAs) that the Districts water supplies may be exposed too. The following activities are associated with containments detected in the 4 wells operated by the RCSD; septic systems – low density, transportation corridors, storm water detention facilities and junk/scrap salvage yards.

For a copy of the Source Water Assessment please contact the Rosamond Community Services District at (661) 256-3411 or the Department of Health Services at (661) 335-7315.

WHAT SHOULD BE IN MY WATER?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, steams, 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. bottled water that provide the same protection for public health.

"Use Xeriscape techniques to landscape your yard."

WHAT CONTAMINANTS MIGHT BE IN THE WATER?

Contaminants that may be present in sour water include:

(A) Microbial contaminants, such as virus and bacteria, that may come from sewa treatment plants, septic systems, agricultur livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts a metals, that can be naturally-occurring or r sult from urban stormwater runoff, industri or domestic wastewater discharges, oil and g production, mining, or farming.

(C) Pesticides and herbicides, that may com from a variety of sources such as agricultur urban stormwater runoff, and residential use

(D) Organic chemical contaminants, inclu ing synthetic and volatile organic chemical that are by-products of industrial process and petroleum production, and can also com from gas stations, urban stormwater runo agricultural application, and septic systems

(E) Radioactive contaminants, that can naturally occurring or be the result of oil a gas production and mining activities.

In order to ensure that tap water is safe drink, the U.S. Environmental Protecti Agency (USEPA) and the State Departme of Health Services (Department) prescri regulations that limit the amount of certa contaminants in water provided by publ water systems. Department regulations al establish limits for contaminants in bottl water that provide the same protection f public health.

WHAT ABOUT RADON?

Rosamond Community Services District ested for radon in the water, and detected ra- lon in the finished water supply at levels of 455 o 526 picocuries per liter in the samples tested. There is no Federal Regulation for radon levels n drinking water at this time.

Radon is found throughout the U.S. It is a ra- lioactive gas that you can't see, taste, or smell. Radon can move up through the ground and into a ome through cracks and holes in the foundation. Radon can also get into indoor air when released rom tap water from showering, washing dishes, nd other household activities. Compared to ra- lon entering the home through soil, radon enter- ng the home through tap water will in most cases e a small source of radon in indoor air.

If you are concerned about radon in your home nd would like additional information on how o test your home, contact the EPS's Radon Hotline (800-SOS-RADON).

WHAT ABOUT ARSENIC?

The EPA has been reviewing the drinking ater standard for arsenic because of special oncerns that it may not be stringent enough. rsenic is a naturally occurring mineral known o cause cancer in humans at high concentra- ons. On January 22, 2001, the EPA set the ew arsenic MCL at 10 ppb. By January 2006 ll water systems will be required to meet the ew arsenic MCL.

IMPORTANT HEALTH INFORMATION

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/Center 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 (1-800-426-4791).

WHAT ELSE SHOULD I KNOW?

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 (1-800-426-4791)

HOW TO READ YOUR WATER QUALITY SUMMARY

Our water is tested regularly for many contaminants. The results of tests performed in 2001 are presented here.

Public Health Goal or PHG is 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. If the number in this column is in parentheses, it is the Maximum Contaminant Level Goal or MCLG. This is 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.

Maximum Contaminant Level or MCL is 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.

AVERAGE AND RANGE show the results observed in our water during the most recent round of testing. AVERAGE is the average of values detected for each contaminant. RANGE is the range of all tested levels from low to high during the testing period.

SOURCE OF CONTAMINANTS provides an explanation of the typical natural or man-made origins of the contaminant. .

REGULATORY ACTION LEVEL (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

TREATMENT TECHNIQUE (TT) is a required process intended to reduce the level of a contaminant in drinking water.

PRIMARY DRINKING WATER STANDARD or **PDWS**: MCLs for contaminants that affect health along with their monitoring and reporting require-

Regular Rosamond Community Services District meetings occur on the second and fourth Wednesdays of every month at 7:00 p.m. at the Rosamond Community Services District offices, 3179 35th Street, Rosamond, Ca. 93560. We can also be contacted by e-mail at rosd@qnet.com and additional information about the District can be obtained on our website at rosamondcsd.com.

If you have questions about this report or drinking water quality call Sherry L. DeLano, General Manager with Rosamond Community Services District, (661) 256-3411 or the EPA Safe Drinking Water Hotline: (800) 426-4791.

Rosamond Community Services District is a member of:
American Water Works Association
&
California Special Districts Association
PWS ID#: 1510018

Este informe contiene informacion muy importane sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

CR. RT PRESORTED
FIRST CLASS MAIL
US POSTAGE PAID
ROSAMOND, CA
PERMIT NO. 2

Rosamond Community Services District
3179 35th Street West
Rosamond,CA 93560

Rosamond Community Services District

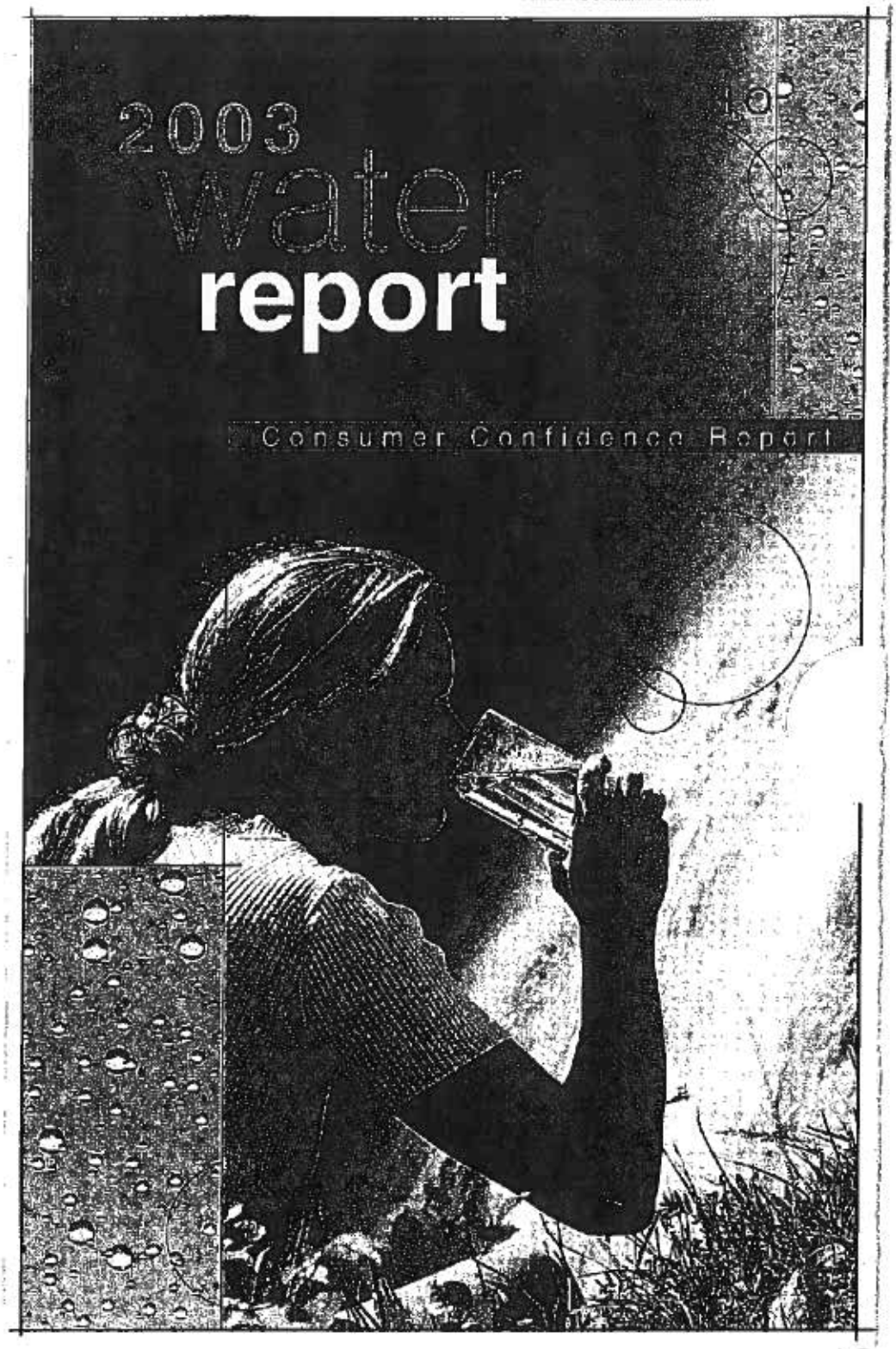
WATER • SEWER • STREET LIGHTING • GRAFFITI ABATEMENT • PARKS & REC

ROSAMOND
COMMUNITY SERVICES DISTRICT

2004 Annual Drinking Water Quality Report

Appendix D-3

QHWD 2004 Consumer Confidence Report


2003
water
report
Consumer Confidence Report

Ir
ort
lity.

andards?

rs who implement rds. The SDWA water systems with human consumption service connections it regularly serves at iduals.

r, including bottled sonably be expected ast small amounts ntaminants. The ntaminants does not licate that the water alth risk. More out contaminants ealth effects can be simply calling the nking Water Hotline 4791).

nation

ularly at risk from e people should seek king water from their oviders. EPA/CDC ppropriate means to risk of infection ptidium and other ntaminants are the Safe Drinking (1-800-426-4791).

En Español:

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

Why do I need to read this?

A survey conducted by the American Water Works Research Foundation in 1993 found that nearly two-thirds of water consumers surveyed said they received "very little" or "no" information on the quality of their water. The water quality reports will increase the availability of information. Informed and involved citizens can be strong allies of water systems, large and small, as they take action on pressing problems. Also, an increase in public awareness can give sensitive sub-populations the information that they need to protect themselves.

Drinking water can come from either ground water sources (via wells) or surface water sources (such as rivers, lakes, and streams). Nationally, most water systems use a ground water source (80%), but most people (66%) are served by a water system that uses surface water. This is because large metropolitan areas tend to rely on surface water, whereas small and rural areas tend to rely on ground water. In addition, 10-20% of people have their own private well for drinking water.

Where can I get more information?

Information on water quality in your area is available from several sources, including your local public health department and your water supplier. You can determine whom to contact by checking your water bill or by calling your local town hall. You can also contact your state drinking water program or call EPA's Safe Drinking Water Hotline at 1-800-426-4791. EPA has also prepared a citizen's guide to drinking water called "Water on Tap: A Consumer's Guide to the Nation's Drinking Water."

terminology

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-occuring 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occuring 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, stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

rinking Report District

er Confidence

serves high quality drinking water State standards for drinking water.

ground water extracted from the)' to 600' deep, and on treated om the Antelope Valley-East

rth of Avenue L. We do add chlorine to ı chlorine residual required by the es.

the District's water came from the 'EK. State Water Project Water is nnections with AVEK, both located ntly beginning to utilize four (4) new . give us a total of nine (9) wells in ve have constructed a state of the art allon reservoir. With growth levels up in s to meet the water needs of our

l weekly bacteriological water quality ghout the District, insuring that the ty of water throughout the District. not detected, therefore not reported. d by a state State Health

se telephone)0 a.m. and 4:00 l 9:00 a.m. and

Did You Know?

75% of the human brain is water

75% of a living tree is water

Test Results Quartz Hill Water District

Microbiological (A)

Test Method	No. of Violations (b)	No. of Samples Taken	No. of Samples Positive
Present - Absent	0	208	0

Inorganic Chemicals (ug/L)

Parameter	MCL*	Range*	PHG*	MCLG*
Antimony	6	N/D	20	n/a
Arsenic	50	2.2-20	n/a	n/a
Asbestos	MFL7	N/D	MFL7	.004
Barium	1000	N/D	n/a	2
Beryllium	4	N/D	n/a	4
Cadmium	5	N/D	0.7	n/a
Chromium (total)	50	N/D	2.5	n/a
Cyanide	200	N/D	150	n/a
Fluoride	2000	640-780	1000	n/a
Lead	AL.015mg/L	N/D	-	-
+Iron	300	N/D	n/a	n/a
+Manganese	50	N/D	n/a	n/a
Mercury	2	N/D	1.2	n/a
Nickel	100	N/D	n/a	100
Nitrate (as Nitrogen)	45,000	2,700-8,000	45,000	n/a
Nitrite (as Nitrogen)	10,000	N/D	10,000	n/a
Selenium	50	N/D	n/a	n/a
+Silver	100	N/D	n/a	n/a
Thallium	2	N/D	.1	n/a
Zinc	5000	N/D	n/a	n/a

Other - Unregulated Contaminants

Parameter	MCL	Range	PHG	MCLG
Perchlorate	18	N/D	-	-
Chromium VI	-	4.3-14	-	-
Boron	-	N/D-140	-	-

General Mineral

Parameter	MCL	Range	PHG	MCLG
Bicarbonate Alkalinity	—	140-190	-	-
Calcium	—	18-32	-	-
Carbonate Alkalinity	—	N/D	-	-
Hydroxide Alkalinity (OH)	—	N/D	-	-
Magnesium	—	3.2-8.00	-	-
Sodium	—	57-92	-	-
Potassium	—	1.5	-	-
Total Hardness (as CaCO3)	—	65-110	-	-

Secondary Standards

Parameter	MCL	Range	PHG	MCLG
Aluminum	0.2 mg/1.05	N/D	N/D	n/a
Copper (Wells)	N/D	N/D	0.05	-
Color	15 Units	N/D	15 Units	n/a
Chloride	500 mg/l	15-43	-	-
Corrosivity	Noncorrosive	11.74 (avg)=Noncorrosive	-	-
Foaming Agents (MBAS)	0.5 mg/l	N/D	-	-
Odor - Threshold	3 Units	N/D	N/D	-
Thiobencarb	.001 mg/l	N/D	N/D	-

Hill Water District, cont.

Range	PHG	MCLG
340-550	-	-
210-340	-	-
.1	-	-
N/D	-	-
31-80	-	-

Range	PHG	MCLG
N/D	-	-
1.605-1.892	n/a	-
<2.2-2.5	n/a	n/a
n/a	n/a	n/a
n/a	n/a	n/a
3.1-4.2		

Range	PHG*	MCLG*
N/D	n/a	0
N/D	n/a	0
N/D	600	n/a
N/D	-	-
N/D	-	-
N/D	-	-
N/D	-	-
N/D	-	-
N/D	-	-
N/D	n/a	0
N/D	-	-
N/D	-	-
N/D	-	-
N/D	n/a	100
N/D	n/a	100
N/D	n/a	n/a
N/D	-	-
N/D	n/a	100
N/D	-	-
N/D	n/a	200
N/D	n/a	3
N/D	60	-
N/D	n/a	n/a
N/D	.8	.8
N/D	n/a	0
N/D	1800	-

le, the District collected 32 samples from the system.
µl for copper. These results are below the Action Levels
ts were completed in 2001).

Test Results

Quartz Hill Water District, cont.

Unregulated Organic Chemicals, Table 64450 - A

Parameter	MCL	Range	PHG*	MCLG*	Parameter	MCL	Range	PHG*	MCLG*
Bromobenzene	---	N/D	-	-	4-Chlorotoluene	---	N/D	-	-
Bromodichloromethane	---	N/D	-	-	Dibromomethane	---	N/D	-	-
Bromoform	---	N/D	-	-	1,3-Dichlorobenzene	---	N/D	-	-
Bromomethane	---	N/D	-	-	Dichlorodifluoromethane	---	N/D	-	-
Chlorodibromomethane	---	N/D	-	-	1,3-Dichloropropane	---	N/D	-	-
Chloroethane	---	N/D	-	-	2,2-Dichloropropane	---	N/D	-	-
Chloroform	---	N/D	-	-	1,1-Dichloropropane	---	N/D	-	-
Chloromethane	---	N/D	-	-	1,1,1,2-Tetrachloroethane	---	N/D	-	-
2-Chlorotoluene	---	N/D	-	-	1,2,3-Trichloropropane	---	N/D	-	-

* Trihalomethanes

Unregulated Organic Chemicals, List B (Volatiles Only)

Parameter	MCL*	Range	PHG*	MCLG*	Parameter	MCL*	Range	PHG*	MCLG*
Bromochloromethane	---	N/D	-	-	p-Isopropyltoluene	---	N/D	-	-
n-Butylbenzene	---	N/D	-	-	1-Phenylpropane	---	N/D	-	-
sec-Butylbenzene	---	N/D	-	-	1, 2, 3-Trichlorobenzene	---	N/D	-	-
tert-Butylbenzene	---	N/D	-	-	1, 2, 4 Trimethylbenzene	---	N/D	-	-
Hexachlorobutadiene	---	N/D	-	-	1, 2, 3-Trimethylbenzene	---	N/D	-	-
Isopropylbenzene	---	N/D	-	-					

Disinfection Byproducts

Parameter	MCL*	Range	Average
Trihalomethanes (THM's)	80	ND - 113.4	46
Haloacete Acid (HAA5's)	60	ND - 46.5	12.9

Antelope Valley East Kern Water Agency 2001 Water Quality Report available on request.

ug/l = micrograms per liter; pCi/l = pico Curies per liter; n/a = None Available
N/D = None Detected Above DLR; --- = No MCL Established

MCL = The highest level of a contaminant that is allowed in drinking water. MCLs are set as close as possible to the PHGs and MCLGs as is economically or technologically feasible.

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 E.P.A.

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. E.P.A.

Primary Drinking Water Standard = Specific treatment techniques adopted in lieu of primary MCLs, and monitoring requirements that are specified in regulations.

+ Indicates Secondary Drinking Water Standard. * Indicates value in ug/l.

Appendix D-4

AVEK 2004 Consumer Confidence Reports

2003 ANNUAL WATER QUALITY REPORT
ANTELOPE VALLEY-EAST KERN WATER AGENCY

KERN COUNTY SYSTEM

The Antelope Valley-East Kern Water Agency provides treated surface water as a source of drinking water.

Treatment technique: Conventional

EPA Turbidity Performance Standards: Turbidity of the filtered water must:

1. Be less than or equal to 0.30 NTU in 95% of measurements in a month.
2. Not exceed 1 NTU at any time.

Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1: 100%

Highest single turbidity measurement during the year: 0.20 NTU

Percentage of samples < 0.30 NTU: 100%

The number of violations of any surface water treatment requirements: NONE

Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtraion performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

MICROBIOLOGICAL - PRIMARY DRINKING WATER STANDARD

Type of Sample(s)	Parameter	Sampling Frequency	MCL	No. of Months in Violation	System Results range	System Results average
Distribution & Effluent	Coliform Bacteria	78 - 92 samples/mo.	5% positive samples/mo.	none	0%	0%

INORGANIC CHEMICALS - PRIMARY DRINKING WATER STANDARDS

Type of Sample(s)	Parameter	Units	MCL	DLR	PHG or (MCLG)	System Results range	System Results average
Plant Effluent	Aluminum	mg/L	1	0.05	0.6	ND	ND
"	Antimony	ug/L	6	6	20	ND	ND
"	Arsenic	ug/L	50	2	none	ND	ND
Source Water	Asbestos	MFL	7	2	(7)	ND	ND
Plant Effluent	Barium	mg/L	1	0.1	(2)	ND	ND
"	Beryllium	ug/L	4	1	(4)	ND	ND
"	Cadmium	ug/L	5	1	0.07	ND	ND
"	Chromium	ug/L	50	10	(100)	ND	ND
"	Copper	mg/L	AL=1.3	0.05	0.17	ND	ND
"	Cyanide	ug/L	200	100	150	ND	ND
"	Fluoride	mg/L	2	0.1	1	ND - 0.21	0.11
"	Lead	ug/L	AL = 15	5	2	ND	ND
"	Mercury	ug/L	2	1	1.2	ND	ND
"	Nickel	ug/L	100	10	12	ND	ND
"	Nitrate (as NO3)	mg/L	45	2.0	45	3.23 - 7.35	5.29
"	Nitrite (as N)	mg/L	1	0.4	1	ND	ND
"	Selenium	ug/L	50	5	(50)	ND - 6.85	3.42
"	Thallium	ug/L	2	1	0.1	ND	ND

DISINFECTION RESIDUAL, PRECURSORS, and BYPRODUCTS

Type of Sample(s)	Parameter	Units	MCL/MRDL	DLR	MRDLG	Results range	Results average
Distribution	Chlorine (as total Cl2)	mg/L	4.0		4	ND - 3.80	0.60
Treated Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.50		1.5 - 2.9	2.0
Distribution	Total Trihalomethanes	ug/L	80**	0.5	none	0.061-0.077	0.064 #
Distribution	Total Haloacetic Acids (5)	ug/L	60**	2		0.013-0.029	0.023 #

** Total Trihalomethanes and Haloacetic Acids MCLs are an annual running average of distribution system samples.

The State of California Total Trihalomethanes MCL is 100 ug/L, the EPA MCL is 80 ug/L

The State of California has not adopted a Total Haloacetic Acids MCL, the EPA MCL is 60 ug/L

#This average is a system-wide value, please see the attached summaries for site specific averages.

SYNTHETIC ORGANIC CHEMICALS - Including Pesticides and Herbicides

Type of Sample(s)	Parameter	Units	MCL	DLR	PHG or (MCLG)	Results range	Results average
Source Water	Diquat	ug/L	20	4	15	ND	ND
"	Endothall	ug/L	100	45	580	ND	ND
"	2,3,7,8-TCDD (Dioxin)	pg/L	30	5	(0)	ND	ND

VOLATILE ORGANIC CONTAMINANTS

Type of Sample(s)	Parameter	Units	MCL	DLR	PHG or (MCLG)	Results range	Results average
Source Water	Benzene	ug/L	1	0.5	0.15		ND
"	Carbon tetrachloride	ng/L	500	500	100		ND
"	1,2-Dichlorobenzene	ug/L	600	0.5	600		ND
"	1,4-Dichlorobenzene	ug/L	5	0.5	6		ND
"	1,1-Dichloroethane	ug/L	5	0.5	3		ND
"	1,2-Dichloroethane	ng/L	500	500	400		ND
"	1,1-Dichloroethene	ug/L	6	0.5	10		ND
"	cis-1,2-Dichloroethene	ug/L	6	0.5	(70)		ND
"	trans-1,2-Dichloroethene	ug/L	10	0.5	(100)		ND
"	Dichloromethane	ug/L	5	0.5	4		ND
"	1,2-Dichloropropane	ug/L	5	0.5	0.5		ND

"	1,3-Dichloropropene	ng/L	300	500	200		ND
"	Ethyl Benzene	ug/L	700	0.5	300		ND
"	Methyl tert-Butyl Ether (MTBE)	ug/L	13	3.00	13		ND
"	Monochlorobenzene	ug/L	70	0.5			ND
"	Styrene	ug/L	100	0.5	(100)		ND
"	1,1,2,2-Tetrachloroethane	ug/L	1	0.5	0.1		ND
"	Tetrachloroethene (PCE)	ug/L	5	0.5	0.06		ND
"	1,2,4-Trichlorobenzene	ug/L	5	0.5	5		ND
"	1,1,1-Trichlorethane	ug/L	200	0.5	(200)		ND
"	1,1,2-Trichloroethane	ug/L	5	0.5	(3)		ND
"	Trichloroethene (TCE)	ug/L	5	0.5	0.8		ND
"	Toluene	ug/L	150	0.5	150		ND
"	Trichlorofluromethane	ug/L	150	5	700		ND
"	Trichlorotrifluoromethane	mg/L	1.2	0.01	4		ND
"	Vinyl chloride	ng/L	500	500	50		ND
"	Xylenes (total)	mg/L	1.750	0.0005	1.800		ND

SECONDARY DRINKING WATER STANDARDS

Type of Sample(s)	Parameter	Units	MCL	Results range	Results average
Plant Effluent	Aluminum	ug/L	200	ND	ND
"	Chloride	mg/L	500	78 - 80	78.0
"	Color	Units	15	<5	<5
"	Corrosivity		non-corrosive		***
"	Foaming Agents (MBAS)	ug/L	500	ND	ND
"	Iron	ug/L	300	ND	ND
"	Manganese	ug/L	50	ND	ND
"	Odor	Units	3	<1	<1
"	pH	Units	6.5 - 8.5 ****	6.4 - 7.2	6.8
"	Silver	ug/L	100	ND	ND
"	Sulfate	mg/L	500	60.8 - 61.7	62.2
"	Specific Conductance	umhos	1600	560 - 585	570
"	Total Dissolved Solids	mg/L	1000	301 - 306	304
"	Turbidity	Units	5	0.01 - 0.20	0.04
"	Zinc	mg/L	5.0	0.91 - 0.96	0.93

ADDITIONAL CONSTITUENTS ANALYZED

Type of Sample(s)	Parameter	Units	MCL	DLR	AL	Results range	Results average
Source Water	Total Alkalinity (as CaCO3)	mg/L	no standard			62.6 - 87.6	75.4
Plant Effluent	Total Alkalinity (as CaCO3)	mg/L	no standard			54.0 - 69.0	61.5
"	Bicarbonate Alkalinity(HCO3)	mg/L	no standard			65.9 - 84.2	75.6
"	Carbonate Alkalinity	mg/L	no standard			ND	ND
"	Hydroxide Alkalinity	mg/L	no standard			ND	ND
"	Calcium	mg/L	no standard			21.0 - 30.7	25.8
"	Magnesium	mg/L	no standard			11.1 - 14.3	12.7
"	Potassium	mg/L	no standard			3.38 - 3.58	3.48
"	Sodium	mg/L	no standard			62.3 - 128	95.2
"	Total Hardness (as CaCO3)	mg/L	no standard			110 - 119	115
Source Water	Nitrate (as NO3)	mg/L	45	2.0		ND - 3.90	2.9

STATE REGULATED CONTAMINANTS with no MCLs ("Unregulated Contaminants")

Type of Sample(s)	Parameter	Units	MCL	DLR	AL	Results range	Results average
Source Water	Trichloropropane (1,2,3-TCP)	ug/L		0.5	0.005	ND	ND

DEFINITIONS and FOOTNOTES:

Source Water is the California Aqueduct.

Units: mg/L = milligrams per liter, parts per million (ppm)
ug/L = micrograms per liter, parts per billion (ppb)
ng/L = nanograms per liter, parts per trillion (ppt)
pg/L = picograms per liter, parts per quadrillion (ppq)
umhos = micromhos, a measure of specific conductance
MFL = million fibers per liter
pCi/L = pico Curies per liter
< = less than
> = greater than
ND = none detected above the DLR
NTU = nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

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

DLR: Detection Limit for purposes of Reporting.

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.

MRDLG: Maximum Residual Disinfectant Level Goal. 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 US Environmental Protection Agency.

PHG Public Health Goal: 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: Primary MCLs, specific treatment techniques adopted in lieu of primary MCLs, and monitoring and reporting requirements for MCLs that are specified in regulations.
Secondary Standards: Aesthetic standards established by the State of California, Department of Health Services.
AL: Action Level. There is no MCL set, if this level is exceeded, action is required by the State of Califronia, DHS.
This average is a system-wide value, please see the attached summary for site specific averages.
** Total Trihalomethanes and Haloacetic Acids(5) MCLs an annual running average of distribution system samples.
The State of California Total Trihalomethanes MCL is 100 *ug*/L, the EPA MCL is 80 *ug*/L
The State of California has not adopted a MCL for Haloacetic Acids, the EPA MCL is 60 *ug*/L
*** A corrosion inhibitor is added to the treated water before entry into the distribution system

All analyses are performed by the ELAP certified laboratories: AVEK Water Agency orTruesdail Laboratory.

2003 ANNUAL WATER QUALITY REPORT
ANTELOPE VALLEY-EAST KERN WATER AGENCY

LOS ANGELES COUNTY SYSTEM

The Antelope Valley-East Kern Water Agency provides treated surface water as a source of drinking water.

Treatment technique: Conventional

EPA Turbidity Performance Standards: Turbidity of the filtered water must:

1. Be less than or equal to 0.30 NTU in 95% of measurements in a month.
2. Not exceed 1 NTU at any time.

Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1: 100%

Highest single turbidity measurement during the year: 0.20 NTU

Percentage of samples < 0.30 NTU: 100%

The number of violations of any surface water treatment requirements: NONE

Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtraion performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

MICROBIOLOGICAL - PRIMARY DRINKING WATER STANDARD

Type of Sample(s)	Parameter	Sampling Frequency	MCL	No. of Months in Violation	System Results range	System Results average
Distribution & Effluent	Coliform Bacteria	104 - 134 samples/mo.	5% positive samples/mo.	none	0 - 0.78 %	0.06 %

INORGANIC CHEMICALS - PRIMARY DRINKING WATER STANDARDS

Type of Sample(s)	Parameter	Units	MCL	DLR	PHG or (MCLG)	System Results range	System Results average#
Plant Effluent	Aluminum	mg/L	1	0.05	0.6	ND - 0.058	ND
"	Antimony	*ug*/L	6	6	20	ND	ND
"	Arsenic	*ug*/L	50	2	none	ND	ND
Source Water	Asbestos	MFL	7	2	(7)	ND	ND
Plant Effluent	Barium	mg/L	1	0.1	(2)	ND	ND
"	Beryllium	*ug*/L	4	1	(4)	ND	ND
"	Cadmium	*ug*/L	5	1	0.07	ND	ND
"	Chromium	*ug*/L	50	10	(100)	ND	ND
"	Copper	mg/L	AL=1.3	0.05	0.17	ND	ND
"	Cyanide	*ug*/L	200	100	150	ND	ND
"	Fluoride	mg/L	2	0.1	1	ND - 0.22	0.11
"	Lead	*ug*/L	AL = 15	5	2	ND	ND
"	Mercury	*ug*/L	2	1	1.2	ND	ND
"	Nickel	*ug*/L	100	10	12	ND - 11	ND
"	Nitrate (as NO3)	mg/L	45	2.0	45	2.97 - 7.75	5.38
"	Nitrite (as N)	mg/L	1	0.4	1	ND	ND
"	Selenium	*ug*/L	50	5	(50)	ND - 7.07	3.54
"	Thallium	*ug*/L	2	1	0.1	ND	ND

This average is a system-wide value, please see the attached summary for site specific averages.

DISINFECTION RESIDUAL, PRECURSORS, and BYPRODUCTS

Type of Sample(s)	Parameter	Units	MCL/MRDL	DLR	MRDLG	Results range	Results average
Distribution	Chlorine (as total Cl2)	mg/L	4.0		4	ND - 1.60	0.64
Treated Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.50		1.6 - 2.8	2.1
Distribution	Total Trihalomethanes	*ug*/L	80**	0.5	none	0.038-0.059	0.052 #
Distribution	Total Haloacetic Acids (5)	*ug*/L	60**	2		0.008-0.018	0.014 #

** Total Trihalomethanes and Haloacetic Acids MCLs are an annual running average of distribution system samples.

The State of California Total Trihalomethanes MCL is 100 *ug*/L, the EPA MCL is 80 *ug*/L

The State of California has not adopted a Total Haloacetic Acids MCL, the EPA MCL is 60 *ug*/L

This average is a system-wide value, please see the attached summaries for site specific averages.

SYNTHETIC ORGANIC CHEMICALS - including Pesticides and Herbicides

Type of Sample(s)	Parameter	Units	MCL	DLR	PHG or (MCLG)	Results range	Results average
Source Water	Diquat	ug/L	20	4	15	ND	ND
"	Endothall	ug/L	100	45	580	ND	ND
"	2,3,7,8-TCDD (Dioxin)	pg/L	30	5	(0)	ND	ND

VOLATILE ORGANIC CONTAMINANTS

Type of Sample(s)	Parameter	Units	MCL	DLR	PHG or (MCLG)	Results range	Results average
Source Water	Benzene	ug/L	1	0.5	0.15		ND
"	Carbon tetrachloride	ng/L	500	500	100		ND
"	1,2-Dichlorobenzene	ug/L	600	0.5	600		ND
"	1,4-Dichlorobenzene	ug/L	5	0.5	6		ND
"	1,1-Dichloroethane	ug/L	5	0.5	3		ND
"	1,2-Dichloroethane	ng/L	500	500	400		ND
"	1,1-Dichloroethene	ug/L	6	0.5	10		ND
"	cis-1,2-Dichloroethene	ug/L	6	0.5	(70)		ND
"	trans-1,2-Dichloroethene	ug/L	10	0.5	(100)		ND
"	Dichloromethane	ug/L	5	0.5	4		ND
"	1,2-Dichloropropane	ug/L	5	0.5	0.5		ND
"	1,3-Dichloropropene	ng/L	300	500	200		ND
"	Ethyl Benzene	ug/L	700	0.5	300		ND
"	Methyl tert-Butyl Ether (MTBE)	ug/L	13	3.00	13		ND
"	Monochlorobenzene	ug/L	70	0.5			ND
"	Styrene	ug/L	100	0.5	(100)		ND
"	1,1,2,2-Tetrachloroethane	ug/L	1	0.5	0.1		ND
"	Tetrachloroethene (PCE)	ug/L	5	0.5	0.06		ND
"	1,2,4-Trichlorobenzene	ug/L	5	0.5	5		ND
"	1,1,1-Trichlorethane	ug/L	200	0.5	(200)		ND
"	1,1,2-Trichloroethane	ug/L	5	0.5	(3)		ND
"	Trichloroethene (TCE)	ug/L	5	0.5	0.8		ND
"	Toluene	ug/L	150	0.5	150		ND
"	Trichlorofluromethane	ug/L	150	5	700		ND
"	Trichlorotrifluoromethane	mg/L	1.2	0.01	4		ND
"	Vinyl chloride	ng/L	500	500	50		ND
"	Xylenes (total)	mg/L	1.750	0.0005	1.800		ND

SECONDARY DRINKING WATER STANDARDS

Type of Sample(s)	Parameter	Units	MCL	Results range	Results average#
Plant Effluent	Aluminum	ug/L	200	ND - 0.058	ND
"	Chloride	mg/L	500	71.6 - 104	85.4
"	Color	Units	15	<5	<5
"	Corrosivity		non-corrosive		***
"	Foaming Agents (MBAS)	ug/L	500	ND	ND
"	Iron	ug/L	300	ND	ND
"	Manganese	ug/L	50	ND	ND
"	Odor	Units	3	<1	<1
"	pH	Units	6.5 - 8.5 ****	6.2 - 7.6	6.9
"	Silver	ug/L	100	ND	ND
"	Sulfate	mg/L	500	37.7 - 63.4	55.2
"	Specific Conductance	umhos	1600	298 - 583	435
"	Total Dissolved Solids	mg/L	1000	287 - 311	300
"	Turbidity	Units	5	0.01 - 0.20	0.04
"	Zinc	mg/L	5.0	0.08 - 0.60	0.413

This average is a system-wide value, please see the attached summary for site specific averages.

ADDITIONAL CONSTITUENTS ANALYZED

Type of Sample(s)	Parameter	Units	MCL	DLR	AL	Results range	Results average
Source Water	Total Alkalinity (as CaCO3)	mg/L	no standard			62.4 - 85.6	75.7
Plant Effluent	Total Alkalinity (as CaCO3)	mg/L	no standard			56 - 68	62.3
"	Bicarbonate Alkalinity(HCO3)	mg/L	no standard			68.3 - 83.0	76
"	Carbonate Alkalinity	mg/L	no standard			ND	ND
"	Hydroxide Alkalinity	mg/L	no standard			ND	ND

"	Calcium	mg/L	no standard		20.6 - 30.2	25.7
"	Magnesium	mg/L	no standard		9.19 - 15.0	12.2
"	Potassium	mg/L	no standard		58.2 - 144	96.1
"	Sodium	mg/L	no standard		2.68 - 3.99	3.39
"	Total Hardness (as CaCO3)	mg/L	no standard		102 - 117	110
Source Water	Nitrate (as NO3)	mg/L	45	2.0	ND - 3.90	1.95

STATE REGULATED CONTAMINANTS with no MCLs ("Unregulated Contaminants")

Type of Sample(s)	Parameter	Units	MCL	DLR	AL	Results range	Results average
Source Water	Trichloropropane (1,2,3-TCP)	ug/L		0.5	0.005	ND	ND

DEFINITIONS and FOOTNOTES:

Source Water is the California Aqueduct.

Units: mg/L = milligrams per liter, parts per million (ppm)
ug/L = micrograms per liter, parts per billion (ppb)
ng/L = nanograms per liter, parts per trillion (ppt)
pg/L = picograms per liter, parts per quadrillion (ppq)
umhos = micromhos, a measure of specific conductance
MFL = million fibers per liter
pCi/L = pico Curies per liter
< = less than
> = greater than
ND = none detected above the DLR
NTU = nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

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

DLR: Detection Limit for purposes of Reporting.

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.

MRDLG: Maximum Residual Disinfectant Level Goal. 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 US Environmental Protection Agency.

PHG Public Health Goal: 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: Primary MCLs, specific treatment techniques adopted in lieu of primary MCLs, and monitoring and reporting requirements for MCLs that are specified in regulations.

Secondary Standards: Aesthetic standards established by the State of California, Department of Health Services.

AL: Action Level. There is no MCL set, if this level is exceeded, action is required by the State of Califronia, DHS.

This average is a system-wide value, please see the attached summary for site specific averages.

** Total Trihalomethanes and Haloacetic Acids(5) MCLs an annual running average of distribution system samples.
The State of California Total Trihalomethanes MCL is 100 ug/L, the EPA MCL is 80 ug/L
The State of California has not adopted a MCL for Haloacetic Acids, the EPA MCL is 60 ug/L

*** A corrosion inhibitor is added to the treated water before entry into the distribution system

All analyses are performed by the ELAP certified laboratories: AVEK Water Agency orTruesdail Laboratory.

Appendix E

District No. 40's BMPs Activity Reports

Water Supply & Reuse

Reporting Unit:
Los Angeles County Waterworks District 40 - Antelope Valley

Year:
2004

Report Not Filed

Accounts & Water Use

Reporting Unit Name:	Submitted to	Year:
Los Angeles County Waterworks District 40 - Antelope Valley	CUWCC **03/07/2005**	**2004**

A. Service Area Population Information:

1. Total service area population 143780

B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)
1. Single-Family	43356	37329	0	0
2. Multi-Family	1006	4395	0	0
3. Commercial	1408	3966	0	0
4. Industrial	36	135	0	0
5. Institutional	204	3581	0	0
6. Dedicated Irrigation	603	2839	0	0
7. Recycled Water	0	0	0	0
8. Other	521	2020	0	0
9. Unaccounted	NA	0	NA	0
Total	47134	54265	0	0
	Metered		**Unmetered**	

Reported as of 10/1

BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:	BMP Form Status:	Year:
Los Angeles County Waterworks District 40 - Antelope Valley	**100% Complete**	**2004**

A. Implementation

1. Based on your signed MOU date, 04/11/1996, your Agency STRATEGY DUE DATE is:	04/11/1998
2. Has your agency developed and implemented a targeting/ marketing strategy for SINGLE-FAMILY residential water use surveys?	no
a. If YES, when was it implemented?	
3. Has your agency developed and implemented a targeting/ marketing strategy for MULTI-FAMILY residential water use surveys?	no
a. If YES, when was it implemented?	

B. Water Survey Data

Survey Counts:	Single Family Accounts	Multi-Family Units
1. Number of surveys offered:	0	0
2. Number of surveys completed:	0	0
Indoor Survey:		
3. Check for leaks, including toilets, faucets and meter checks	no	no
4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary	no	no
5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as neccesary; replace leaking toilet flapper, as necessary	no	no
Outdoor Survey:		
6. Check irrigation system and timers	no	no
7. Review or develop customer irrigation schedule	no	no
8. Measure landscaped area (Recommended but not required for surveys)	no	no
9. Measure total irrigable area (Recommended but not required for surveys)	no	no
10. Which measurement method is typically used (Recommended but not required for surveys)		None
11. Were customers provided with information packets that included evaluation results and water savings recommendations?	no	no
12. Have the number of surveys offered and completed, survey results, and survey costs been tracked?	no	no
a. If yes, in what form are surveys tracked?		None
b. Describe how your agency tracks this information.		

n/a

C. Water Survey Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	100000

2. Actual Expenditures 0

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Reported as of 10/1

BMP 02: Residential Plumbing Retrofit

Reporting Unit:
Los Angeles County Waterworks District 40 - Antelope Valley

BMP Form Status: **100% Complete**

Year: **2004**

A. Implementation

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? no

   a. If YES, list local jurisdictions in your service area and code or ordinance in each:

2. Has your agency satisfied the 75% saturation requirement for single-family housing units? no

3. Estimated percent of single-family households with low-flow showerheads: %

4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? no

5. Estimated percent of multi-family households with low-flow showerheads: %

6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? no

   a. If YES, when did your agency begin implementing this strategy?

   b. Describe your targeting/ marketing strategy.

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed:	0	0
3. Number of toilet-displacement devices distributed:	0	0
4. Number of toilet flappers distributed:	0	0
5. Number of faucet aerators distributed:	0	0

6. Does your agency track the distribution and cost of low-flow devices? no

   a. If YES, in what format are low-flow devices tracked?

   b. If yes, describe your tracking and distribution system :

C. Low-Flow Device Distribution Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

   a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

   The County passed Ordinance No. 91 - 0097U to require all new buildings to use Ultra Low Flow Toilets (ULFT) and urinals.

E. Comments

Reported as of 10/1

BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit:
Los Angeles County Waterworks District 40 - Antelope Valley

BMP Form Status: **100% Complete**

Year: **2004**

A. Implementation

1. Has your agency completed a pre-screening system audit for this reporting year?	yes
2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:	
a. Determine metered sales (AF)	54265
b. Determine other system verifiable uses (AF)	0
c. Determine total supply into the system (AF)	57588
d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required.	0.94
3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production?	yes
4. Did your agency complete a full-scale audit during this report year?	No
5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit?	yes
6. Does your agency operate a system leak detection program?	yes

a. If yes, describe the leak detection program:

Los Angeles County Waterworks Districts has hires an as needed consultant to conduct leak detection throughout the year for various districts. Leaks are reported by field personnel and meter-read employees. Also, as street improvement projects are submitted for review, old deteriorated water mains are replaced. Our field personnel also report high leak incidents, which are replaced when reported. The Districts maintain leak records.

B. Survey Data

1. Total number of miles of distribution system line.	752
2. Number of miles of distribution system line surveyed.	3

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	2000	2000
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Reported as of 10/1

BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:
Los Angeles County Waterworks District 40 - Antelope Valley

BMP Form Status:
100% Complete

Year:
2004

A. Implementation

1. Does your agency require meters for all new connections and bill by volume-of-use? — yes

2. Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use? — no

   a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed?

   b. Describe the program:

3. Number of previously unmetered accounts fitted with meters during report year. — 0

B. Feasibility Study

1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? — no

   a. If YES, when was the feasibility study conducted? (mm/dd/yy)

   b. Describe the feasibility study:

2. Number of CII accounts with mixed-use meters.

3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period. — 0

C. Meter Retrofit Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? — yes

   a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

   All existing connections are metered and are billed by volume with he exception of four key stations

E. Comments

For item B.2., information on the number of CII accounts with mixed-use meters is not available.

Reported as of 10/1

BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:	BMP Form Status:	Year:
Los Angeles County Waterworks District 40 - Antelope Valley	**100% Complete**	**2004**

A. Water Use Budgets

1. Number of Dedicated Irrigation Meter Accounts:	603
2. Number of Dedicated Irrigation Meter Accounts with Water Budgets:	0
3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF):	0
4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF):	0
5. Does your agency provide water use notices to accounts with budgets each billing cycle?	no

B. Landscape Surveys

1. Has your agency developed a marketing / targeting strategy for landscape surveys?	no
a. If YES, when did your agency begin implementing this strategy?	
b. Description of marketing / targeting strategy:	
2. Number of Surveys Offered.	0
3. Number of Surveys Completed.	0
4. Indicate which of the following Landscape Elements are part of your survey:	
a. Irrigation System Check	no
b. Distribution Uniformity Analysis	no
c. Review / Develop Irrigation Schedules	no
d. Measure Landscape Area	no
e. Measure Total Irrigable Area	no
f. Provide Customer Report / Information	no
5. Do you track survey offers and results?	no
6. Does your agency provide follow-up surveys for previously completed surveys?	no
a. If YES, describe below:	

C. Other BMP 5 Actions

1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets?	no
2. Number of CII mixed-use accounts with landscape budgets.	0
3. Do you offer landscape irrigation training?	no
4. Does your agency offer financial incentives to improve landscape water use efficiency?	no

Type of Financial Incentive:	Budget (Dollars/ Year)	Number Awarded to Customers	Total Amount Awarded
a. Rebates	0	0	0
b. Loans	0	0	0

c. Grants	0	0	0

5. Do you provide landscape water use efficiency information to new customers and customers changing services?	No
a. If YES, describe below:	
6. Do you have irrigated landscaping at your facilities?	no
a. If yes, is it water-efficient?	no
b. If yes, does it have dedicated irrigation metering?	no
7. Do you provide customer notices at the start of the irrigation season?	no
8. Do you provide customer notices at the end of the irrigation season?	no

D. Landscape Conservation Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

E. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	No
a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."	

F. Comments

Reported as of 10/1

BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit:
Los Angeles County Waterworks District 40 - Antelope Valley

BMP Form Status: **100% Complete**

Year: **2004**

A. Implementation

1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers?	no
a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.	
2. Does your agency offer rebates for high-efficiency washers?	no
3. What is the level of the rebate?	0
4. Number of rebates awarded.	0

B. Rebate Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	no
a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."	

D. Comments

Reported as of 10/1

BMP 07: Public Information Programs

Reporting Unit:
Los Angeles County Waterworks District 40 - Antelope Valley

BMP Form Status: **100% Complete**

Year: **2004**

A. Implementation

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? yes

a. If YES, describe the program and how it's organized.

Three full-time staff dedicated to water conservation practices-newsletter, bill inserts, Web site, radio PSA's, outreach materials at public counter and at public events, planning BMP program for next year

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	yes	104
b. Public Service Announcement	yes	104
c. Bill Inserts / Newsletters / Brochures	yes	2
d. Bill showing water usage in comparison to previous year's usage	Yes	
e. Demonstration Gardens	no	
f. Special Events, Media Events	yes	3
g. Speaker's Bureau	no	
h. Program to coordinate with other government agencies, industry and public interest groups and media	no	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	4475	4475
2. Actual Expenditures	4475	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Reported as of 10/1

BMP 08: School Education Programs

Reporting Unit:
Los Angeles County Waterworks District 40 - Antelope Valley

BMP Form Status:
100% Complete

Year:
2004

A. Implementation

1.Has your agency implemented a school information program to promote water conservation? Yes

2. Please provide information on your school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	no	5	1421	0
Grades 4th-6th	no	6	1421	0
Grades 7th-8th	no	0	0	0
High School	no	0	0	0

3. Did your Agency's materials meet state education framework requirements? Yes

4. When did your Agency begin implementing this program? 1/1/2000

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

This program is conducted by the Los Angeles County Department of Public works and covers more topics than just water conservation. It's focus is protecting the environment.

Reported as of 10/1

BMP 09: Conservation Programs for CII Accounts

Reporting Unit: **Los Angeles County Waterworks District 40 - Antelope Valley**

BMP Form Status: **100% Complete**

Year: **2004**

A. Implementation

1. Has your agency identified and ranked COMMERCIAL customers according to use?	Yes
2. Has your agency identified and ranked INDUSTRIAL customers according to use?	Yes
3. Has your agency identified and ranked INSTITUTIONAL customers according to use?	Yes

Option A: CII Water Use Survey and Customer Incentives Program

4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? **no**

CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a. Number of New Surveys Offered	0	0	0
b. Number of New Surveys Completed	0	0	0
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0

CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e. Site Visit	no	no	no
f. Evaluation of all water-using apparatus and processes	no	no	no
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no

Agency CII Customer Incentives	Budget ($/Year)	No. Awarded to Customers	Total $ Amount Awarded
h. Rebates	0	0	0
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option?	no
6. Does your agency document and maintain records on how savings were realized and the method of calculation for	no

estimated savings?

7. Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991.

8. Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991.

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	0	23300
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Implementation begins next year

Reported as of 10/1

BMP 09a: CII ULFT Water Savings

Reporting Unit:
Los Angeles County Waterworks District 40 - Antelope Valley

BMP Form Status: **100% Complete**

Year: **2004**

1. Did your agency implement a CII ULFT replacement program in the reporting year? If No, please explain why on Line B. 10. — No

A. Targeting and Marketing

1. What basis does your agency use to target customers for participation in this program? Check all that apply.

   a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

2. How does your agency advertise this program? Check all that apply.

   a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

B. Implementation

1. Does your agency keep and maintain customer participant information? (Read the Help information for a complete list of all the information for this BMP.) — no

2. Would your agency be willing to share this information if the CUWCC did a study to evaluate the program on behalf of your agency? — No

3. What is the total number of customer accounts participating in the program during the last year ?

CII Subsector	Number of Toilets Replaced			
4.	Standard Gravity Tank	Air Assisted	Valve Floor Mount	Valve Wall Mount
a. Offices	0	0	0	0
b. Retail / Wholesale	0	0	0	0
c. Hotels	0	0	0	0
d. Health	0	0	0	0
e. Industrial	0	0	0	0
f. Schools: K to 12	0	0	0	0
g. Eating	0	0	0	0
h. Govern-ment	0	0	0	0
i. Churches	0	0	0	0
j. Other	0	0	0	0

5. Program design.

6. Does your agency use outside services to implement this program? — No

a. If yes, check all that apply.

7. Participant tracking and follow-up.

8. Based on your program experience, please rank on a scale of 1 to 5, with 1 being the least frequent cause and 5 being the most frequent cause, the following reasons why customers refused to participate in the program.

a. Disruption to business

b. Inadequate payback

c. Inadequate ULFT performance

d. Lack of funding

e. American's with Disabilities Act

f. Permitting

g. Other. Please describe in B. 9.

9. Please describe general program acceptance/resistance by customers, obstacles to implementation, and other isues affecting program implementation or effectiveness.

10. Please provide a general assessment of the program for this reporting year. Did your program achieve its objectives? Were your targeting and marketing approaches effective? Were program costs in line with expectations and budgeting?

No program was implemented this year.

C. Conservation Program Expenditures for CII ULFT

1. CII ULFT Program: Annual Budget & Expenditure Data

	Budgeted	Actual Expenditure
a. Labor	0	0
b. Materials	0	0
c. Marketing & Advertising	0	0
d. Administration & Overhead	0	0
e. Outside Services	0	0
f. Total	0	0

2. CII ULFT Program: Annual Cost Sharing

a. Wholesale agency contribution	0
b. State agency contribution	0
c. Federal agency contribution	0
d. Other contribution	0
e. Total	0

D. Comments

No CII ULFT planned at this time.

Reported as of 10/1

BMP 11: Conservation Pricing

Reporting Unit:	BMP Form Status:	Year:
Los Angeles County Waterworks District 40 - Antelope Valley	**100% Complete**	**2004**

A. Implementation

Rate Structure Data Volumetric Rates for Water Service by Customer Class

1. Residential	
a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$10072000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$7488000
2. Commercial	
a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$946500
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$579430
3. Industrial	
a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$28000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$20955
4. Institutional / Government	
a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$1069000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$238000
5. Irrigation	
a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$738300
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$290600
6. Other	
a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	$
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	$

B. Conservation Pricing Program Expenditures

	This Year	Next Year

1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

The district charges its customers a monthly service charge and a uniform volumetric charge.

D. Comments

Reported as of 10/1

BMP 12: Conservation Coordinator

Reporting Unit:
Los Angeles County Waterworks District 40 - Antelope Valley

BMP Form Status: **100% Complete**

Year: **2004**

A. Implementation

1. Does your Agency have a conservation coordinator?	yes
2. Is this a full-time position?	Yes
3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program ?	
4. Partner agency's name:	
5. If your agency supplies the conservation coordinator:	
a. What percent is this conservation coordinator's position?	20%
b. Coordinator's Name	David Rydman
c. Coordinator's Title	Associate Civil Engineer
d. Coordinator's Experience and Number of Years	4 years
e. Date Coordinator's position was created (mm/dd/yyyy)	05/01/1998
6. Number of conservation staff, including Conservation Coordinator.	3

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	16000	16000
2. Actual Expenditures	16000	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	no
a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."	

D. Comments

Reported as of 10/1

BMP 13: Water Waste Prohibition

Reporting Unit:
Los Angeles County Waterworks District 40 - Antelope Valley

BMP Form Status: **100% Complete**

Year: **2004**

A. Requirements for Documenting BMP Implementation

1. Is a water waste prohibition ordinance in effect in your service area? — no

   a. If YES, describe the ordinance:

2. Is a copy of the most current ordinance(s) on file with CUWCC? — no

   a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

   a. Gutter flooding — no

   b. Single-pass cooling systems for new connections — no

   c. Non-recirculating systems in all new conveyor or car wash systems — no

   d. Non-recirculating systems in all new commercial laundry systems — no

   e. Non-recirculating systems in all new decorative fountains — no

   f. Other, please name
   No Water Wasting Ordinance — yes

2. Describe measures that prohibit water uses listed above:

   On March 21, 1991, the County Board of Supervisors adopted Ordinance No. 91-0046U that called for "No Water Wasting" in only unincorporated areas of the County. They include the following measures: * Washing down paved surfaces is prohibited unless required for health or safety * Landscape watering is prohibited between 10:00 a.m. and 5:00 p.m. * Excessive landscape watering that results in runoff into adjoining streets, parking lots or alleys is prohibited * Plumbing leaks must be repaired as soon as practical * Washing of vehicles is prohibited excepted at a commercial carwash or with a hand-held bucket or hose equipped with an automatic shutoff nozzle * Serving drinking water at public eating places is prohibited unless requested by customers * Water used in decorative fountains must flow through a recycling system Failure to comply with these measures could have resulted in fines up to $500. However, this Ordinance was active from March 1991 to January 1993. Currently, there is no water wasting ordinance in effect in the District. Two cities within our service have a similar ordinance implemented the same year.

Water Softeners:

3. Indicate which of the following measures your agency has supported in developing state law:

   a. Allow the sale of more efficient, demand-initiated regenerating DIR models. — no

   b. Develop minimum appliance efficiency standards that:

      i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used. — no

      ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced. — no

   c. Allow local agencies, including municipalities and special

districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply.	no
4. Does your agency include water softener checks in home water audit programs?	no
5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models?	no

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

See Section B.2.

E. Comments

Reported as of 10/1

BMP 14: Residential ULFT Replacement Programs

Reporting Unit:
Los Angeles County Waterworks District 40 - Antelope Valley

BMP Form Status: **100% Complete**

Year: **2004**

A. Implementation

	Single-Family Accounts	Multi-Family Units
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no

Number of Toilets Replaced by Agency Program During Report Year

Replacement Method	SF Accounts	MF Units
2. Rebate	0	0
3. Direct Install	0	0
4. CBO Distribution	0	0
5. Other	0	0
Total	**0**	**0**

6. Describe your agency's ULFT program for single-family residences.

7. Describe your agency's ULFT program for multi-family residences.

8. Is a toilet retrofit on resale ordinance in effect for your service area? no

9. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

B. Residential ULFT Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	7000
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

   a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Reported as of 10/1

Appendix F

RCSD/QHWD "No Waste" Ordiance

Appendix F-1

RCSD "No Waste" Ordinance

APPENDIX C

RCSD's WATER SHORTAGE INFORMATION

No-Waste Ordinance

Resolution to Declare a Water Shortage Emergency

Moratorium on New Connections During a Declared Water Shortage

Water Shortage Rationing Allocation Method

ORDINANCE NO. 2001-01

(NO WASTE ORDINANCE)

ORDINANCE OF THE BOARD OF DIRECTORS OF THE ROSAMOND COMMUNITY SERVICES DISTRICT AMENDING ORDINANCE NO. 92-6 ENTITLED "AN ORDINANCE ESTABLISHING RULES AND REGULATIONS FOR THE UTILITY SYSTEM OF ROSAMOND COMMUNITY SERVICES DISTRICT BEING THE WATER SYSTEM AND SEWER SYSTEM THEREOF; PRESCRIBING RATES AND CHARGES FOR WATER SERVICE AND SEWER SERVICE; AMENDING, ADJUSTING AND RESTATING SUCH RATES AND CHARGES THERETOFORE FIXED FOR SUCH SERVICE; REPEALING ALL ORDINANCES IN CONFLICT HEREWITH AND MAKING CERTAIN FINDINGS AND DETERMINATIONS IN CONNECTION THEREWITH"

WHEREAS, the Board of Directors of the Rosamond Community Services District ("Board" and "District", respectively) in accordance with the Community Services District Law, Sections 61,000 and following of the Government Code of California has duly adopted its Ordinance No. 92-6, entitled "An Ordinance establishing rules and regulations for the utility system of the Rosamond Community Services District being the water system and sewer system thereof, prescribing rates and charges for the water service and sewer service; amending, adjusting and restating such rules and regulations theretofore fixed for such service, repealing all ordinances in conflict herewith; and making certain findings and determinations in connection therewith" hereby amends its Ordinance 92-6 by amending Title IX, Article 31 as follows:

Section 1. RULES AND REGULATIONS ON WATER USE.

It is hereby resolved by the Board of Directors that in order to conserve the District's water supply for the greatest public benefit and to reduce the quantity of water used by the District's customers, that wasteful use of water should be eliminated. Customers of the District shall observe the following regulations and restrictions on water use.

a. No customer shall waste water. As used herein, the term "waste" means:

(1) Use of potable water to irrigate in such a manner as to result in runoff for more than five (5) minutes.

(2) Use of potable water to wash sidewalks, walkways, driveways, parking lots, open ground or other hard surfaced areas except where necessary for public health or safety.

(3) Allowing potable water to escape from breaks within the customer's plumbing system for more than twenty-four (24) hours after the customer is notified or discovers the break;

(4) Washing cars, boats, trailers, aircraft or other vehicles by hose without a shutoff nozzle and bucket except to was such vehicles at commercial or fleet vehicle washing facilities using water recycling equipment.

(5) Use of potable water to clean, fill or maintain decorative fountains, lakes or ponds unless such item is re-circulating.

b. The following restrictions are effective during a declared Water-Shortage Emergency.

(1) No restaurant, hotel, café, cafeteria or other public place where food is sold, served or offered for sale, shall serve drinking water to any customer unless expressly requested.

(2) Use of potable water for construction, compaction, dust control, street or parking lot sweeping or building washdown where non-potable water is sufficient.

(3) Use of potable water for sewer system maintenance or fire protection training without prior approval by the General Manager.

(4) Use of potable water for any purpose in excess of the amounts allocated or each class of service.

c. Other restrictions may be necessary during a declared Water Shortage Emergency to safeguard the adequacy of the water supply for domestic, sanitation, fire protection and environmental requirements.

Section 2. Enforcement.

Any customer violating the regulations and restrictions on water use set forth in this Article shall receive a written warning for the first such violation. Upon a second violation, the customer shall receive a written warning and the district may cause a flow-restrictor to be installed in the service. If a flow-restrictor is placed, the cost of installation and removal shall be paid by the violator. Any willful violation occurring subsequent to the issuance of the second written warning shall constitute a misdemeanor and may be referred to the County District Attorney's Office for prosecution. Under a declared Water Shortage Emergency, the District may also disconnect the water service. If water service is disconnected, it shall be restored only upon payment of the turn-on charge fixed by the Board of Directors.

Section 3. Penalty for violations.

Except as provided in the enforcement section for the first and second violation, any person, firm, partnership, association, corporation or political entity violating or causing or permitting the violation of any of the provisions of this section or providing false information to the district in response to district's requests for information needed by the district to calculate consumer water allotments shall be guilty of a misdemeanor punishable by imprisonment in the county jail for not more that thirty (30) days or by a fine not exceeding one thousand ($1,000) dollars or both. Each separate day or portion thereof in which any violation occurs or continues without a good faith effort by the responsible party to correct the violation shall constitute a separate offense and upon conviction thereof, shall be separately punishable.

Section 4. Appeals

Variances from the requirements of this Section may be granted by the Board of Directors only after denial of a variance request by the General Manager. Appeals of variance request denials shall be made in writing to the secretary of the Board at least two (2) weeks prior to the meeting at which they will be heard. Upon granting any appeal, the Board of Directors may impose any conditions it determines to be just and proper. Variances granted by the Board shall be prepared in writing, then furnished to the applicant. The Board of Directors may require it to be recorded at the applicant's expense.

Section 5. Remedies/Cumulative

The remedies available to the district to enforce this ordinance are in addition to any other remedies available under the District's code or any state statutes or regulations and do not replace or supplant any other remedy, but are cumulative.

Section 6. That this Ordinance shall be published once in the Rosamond News, a newspaper of general circulation in the District.

Section 7. That the effective date of the Ordinance shall be thirty (30) days from the date of adoption by the Board of Directors.

PASSED AND ADOPTED THIS 22nd day of November 2000.

_____
Tommy L. Loomis, President

ATTEST

_____
Sharon L. Welker, Secretary/Treasurer

Resolution To Declare A Water Shortage Emergency

ROSAMOND COMMUNITY SERVICES DISTRICT
KERN COUNTY, CALIFORNIA
Date

The Board of Directors of the Rosamond Community Services District ("RCSD") does hereby resolve as follows:

PURSUANT to California Water Code Section 350 et seq., the Board of Directors has conducted duly noticed public hearings to establish the criteria under which a water shortage emergency may be declared.

WHEREAS, the Board of Directors finds, determines and declares as follows:

(a) The District is the water purveyor for the property owners and inhabitants of Rosamond;
(b) The demand for water service is not expected to lessen.
(c When the combined total amount of water supply available to the District from all sources falls at or below the Stage II triggering levels described in the 2000 Urban Water Management Plan, the District will declare a water shortage emergency. The water supply would not be adequate to meet the ordinary demands and requirements of water consumers without depleting the District's water supply to the extent that there may be insufficient water for human consumption, sanitation, fire protections, and environmental requirements. This condition is likely to exist until precipitation and inflow dramatically increases or until water system damage resulting from a disaster are repaired and normal water service is restored.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Rosamond Community Services
District hereby directs the District's General Manager to find, determine, declare and conclude that a water Shortage emergency condition exists that threatens the adequacy of water supply, until the District's water Supply is deemed adequate. After the declaration of a water shortage emergency, the Board of Directors is
Directed to determine the appropriate Rationing Stage and implement the District's Water Shortage Emergency Response.

FUTHERMORE, the Board of Directors shall periodically conduct proceedings to determine additional restrictions and regulations which may be necessary to safeguard the adequacy of the water supply for domestic, sanitation, fire protection and environmental requirements.

ADOPTED this ____ day of _____, 2000.

_____
President, Board of Directors

ATTEST

_____
Secretary/Treasurer of the Board of Directors

Moratorium On New Connections During A Water Shortage

ROSAMOND COMMUNITY SERVICES DISTRICT
ROSAMOND, CALIFORNIA
Dale

The Board of Directors of the Rosamond Community Services District does hereby resolve as follows:
The Operations Code of Rosamond Community Services District is hereby amended to read as follows:

XX-1 MORATORIUM ON SERVICE COMMITMENTS AND CONNECTIONS

1 When the District declares a water shortage emergency, the following regulations shall become effective immediately and shall continue in full force and effect to prohibit the following while it remains in full force and effect:
   a. The District shall not issue oral or written commitments to provide new or expanded water service, including will-serve letters.
   b. The District shall not sell meters for water service connections, despite the prior issuance of will-serve letters or other oral or written service commitments, unless building permits have been issued.
   c. The District shall not provide new or expanded water service connections, despite the prior issuance of will-serve letters or other oral or written service commitments and meters, unless building permits have been issued.
   d. The District shall not provide water for use on any new plantings installed after the declaration of a Water Shortage Emergency.
   e. The District shall not annex territory located outside the District's service boundary.

2. The following uses are exempt from the moratorium and upon application to the District shall receive necessary water service commitments and connections to receive water from the District:
   a. Uses, including but not limited to, commercial, industrial, single and multifamily residential, for which a building permit has been issued by the County on or before the declaration of a Water Shortage Emergency.
   b. Uses, including but not limited to, commercial, industrial, single and multifamily residential, for which a retail meter had been purchased from the District before the declaration of a Water Shortage Emergency, as evidenced by a written receipt and for which a building permit has been issued and remains in full force and effect.
   c. Publicly owned and operated facilities, including but not limited to schools, fire stations, police stations, and hospitals and other facilities as necessary to protect the public health, safety and welfare.

Appendix F-2

QHWD "No Waste" Ordinance

APPENDIX C

QHWD's WATER SHORTAGE INFORMATION

No-Waste Policy

Resolution to Declare a Water Shortage Emergency

Moratorium on New Connections During a Declared Water Shortage

Water Shortage Rationing Allocation Method (TO BE ADDED)

No Waste Policy

QUARTZ HILL WATER DISTRICT
LOS COUNTY, CALIFORNIA
Date

The Board of Directors of the Quartz Hill Water District has adopted the following Policy No. xxxxx, Waste to be prevented:

XXXXXXX Waste to be prevented. Consumers shall prevent all waste of water and for the purposed of this chapter the word "waste" shall be defined as:

A. Where water is uable to be absorbed within the limits of the cultivated area upon which it is being used;
B. Where water is allowed to gather, from any cause whatsoever, into a pool where it serves no useful purpose; but may act as a harbor or breeding place for mosquitoes;
C. Where water is allowed to run into a gutter or upon land which has no need for it at the time. (Ord. 1046 para.1 (Exh. A(part)), 2000.

Resolution To Declare A Water Shortage Emergency

QUARTZ HILL WATER DISTRICT
LOS ANGELES COUNTY, CALIFORNIA
Date

The District Board of Directors of the Quartz Hill Water District does hereby resolve as follows:

PURSUANT to California Water Code Section 350 et seq., the Board of Directors has conducted duly noticed public hearings to establish the criteria under which a water shortage emergency may be declared.

WHEREAS, the Board of Directors finds, determines and declares as follows:

(a) The District is the water purveyor for the property owners and inhabitants of QHWD;

(b) The demand for water service is not expected to lessen.

(c) When the combined total amount of water supply available to the District from all sources falls at or below the Stage II triggering levels described in the 2002 Urban Water Management Plan, the Board of Directors will declare a water shortage emergency. The water supply would not be adequate to meet the ordinary demands and requirements of water consumers without depleting the District's water supply to the extent that there may be insufficient water for human consumption, sanitation, fire protection, and environmental requirements. This condition is likely to exist until precipitation and inflow dramatically increases or until water system damage resulting from a disaster are repaired and normal water service is restored.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Quartz Hill Water District hereby directs the General Manager to find, determine, declare and conclude that a water shortage emergency condition exists that threatens the adequacy of water supply, until the District's water supply is deemed adequate. After the declaration of a water shortage emergency, the General Manager is directed to determine the appropriate Rationing Stage and implement the District's Water Shortage Emergency Response.

FURTHERMORE, the Board of Directors shall periodically conduct proceedings to determine additional restrictions and regulations which may be necessary to safeguard the adequacy of the water supply for domestic, sanitation, fire protection, and environmental requirements.

Moratorium On New Connections During A Water Supply Reduction

QUARTZ HILL WATER DISTRICT
LOS ANGELES COUNTY, CALIFORNIA
Date

The Board of Directors of the Quartz Hill Water District does hereby resolve as follows:
The Municipal Code of the Quartz Hill Water District is hereby amended to read as follows:

XX-1 MORATORIUM ON SERVICE COMMITMENTS AND CONNECTIONS

1 When the District declares a water shortage emergency, the following regulations shall become effective immediately and shall continue in full force and effect to prohibit the following while it remains in full force and effect:
   a. The District shall not issue oral or written commitments to provide new or expanded water service, including will-serve letters.
   b. The District shall not sell meters for water service connections, despite the prior issuance of will-serve letters or other oral or written service commitments, unless building permits have been issued.
   c. The District shall not provide new or expanded water service connections, despite the prior issuance of will-serve letters or other oral or written service commitments and meters, unless building permits have been issued.
   d. The District shall not provide water for use on any new plantings installed after the declaration of a Water Shortage Emergency.
   e. The District shall not annex territory located outside the District's service boundary.

2. The following uses are exempt from the moratorium and upon application to the District shall receive necessary water service commitments and connections to receive water from the District:
   a. Uses, including but not limited to, commercial, industrial, single and multifamily residential, for which a building permit has been issued by the District on or before the declaration of a Water Shortage Emergency.
   b. Uses, including but not limited to, commercial, industrial, single and multifamily residential, for which a retail meter had been purchased from the District before the declaration of a Water Shortage Emergency, as evidenced by a written receipt and for which a building permit has been issued and remains in full force and effect.
   c. Publicly owned and operated facilities, including but not limited to schools, fire stations, police stations, and hospitals and other facilities as necessary to protect the public health, safety and welfare.

Appendix G-1

District No. 40 Water Shortage Contingency Plan

Water WATER

EXHIBIT "E"

ORDINANCE NO. 91-0046U

An urgency ordinance amending Title 11, Chapter 11.38 of the Los Angeles County Code relating to Water and Sewers to add Part 4, Water Conservation.

The Board of Supervisors of the County of Los Angeles ordains as follows:

Section 1. Title 11, Chapter 11.38 of the County Code is amended by adding Part 4, to read:

Part 4. Water Conservation Requirements For The Unincorporated Los Angeles County Area.

Section 11.38.620 Hose Watering Prohibition. No person shall hose water or wash down any sidewalks, walkways, driveways, parking areas or other paved surfaces, except as is required for the benefit of public health and safety. Willful violation hereof shall be an infraction punishable by a fine of $100.00 for the first infraction and $500.00 each for subsequent infractions.

Section 11.38.630 Watering of Lawns and Landscaping.

a). No person shall water or cause to be watered any lawn or landscaping between the hours of 10:00 a.m. and 5:00 p.m.

b). No person shall water or cause to be watered any lawn or landscaping more than once a day.

c). No person shall water or cause to be watered any lawn or landscaping to such an extent that runoff into adjoining streets, parking lots or alleys occurs due to incorrectly directed or maintained sprinklers or excessive watering.

d). It shall be the duty of all persons to inspect all hoses, faucets and sprinkling systems for leaks and to cause all leaks to be repaired as soon as is reasonably practicable.

e). Willful violation hereof shall be an infraction punishable by a fine of $100.00 for the first infraction and $500.00 each for subsequent infractions.

Section 11.38.640 Indoor Plumbing and Fixtures.

a). It shall be the duty of all persons to inspect all accessible indoor plumbing and faucets for leaks and to cause all leaks to be repaired as soon as is reasonably practicable.

b). Willful violation hereof shall be an infraction punishable by a fine of $500.00.

Section 11.38.650 Washing Vehicles.

No motor vehicle, boat, trailer or other type of mobile equipment may be washed, except at a commercial car wash or with reclaimed water, unless such vehicle is washed by using a hand-held bucket or a water-hose equipped with an automatic shutoff nozzle. No person shall leave a water hose running while washing a vehicle or at any other time. Willful violation hereof shall be an infraction punishable by a fine of $100.00 for the first infraction and $500.00 each for subsequent infractions.

Section 11.38.660 Public Eating Places.

No restaurant, hotel, cafeteria, cafe or other public place where food is sold or served shall serve drinking water to any customer unless specifically requested to

do so by such customer. Willful violation hereof shall be an infraction punishable by a fine of $100.00 for the first infraction and $500.00 each for subsequent infractions.

Section 11.38.670 Decorative Fountains.
No person shall use water to clean, fill or maintain levels in decorative fountains, ponds, lakes, or other similar aesthetic structures unless such water flows through a recycling system. Willful violation hereof shall be an infraction punishable by a fine of $100.00 for the first infraction and $500.00 each for subsequent infractions.

Section 2. This ordinance shall terminate on January 1, 1993, unless renewed or terminated earlier by ordinance.

Section 3. Due to the severity of the drought in the State of California, there is an immediate need to prohibit the wasting of water in the Los Angeles County unincorporated area to better utilize the available water supplies. This ordinance is urgently needed for the preservation of the public health, safety and general welfare and shall take effect immediately.

Section 4. This ordinance shall be published in Metropolitan News Enterprise a newspaper printed and published in the County of Los Angeles.

Michael D. Antonovich
Chairman

ATTEST:

Executive Officer
Board of Supervisors
of the County of Los Angeles

I hereby certify that at its meeting of March 21, 1991, the foregoing ordinance was adopted by the Board of Supervisors of said County of Los Angeles by the following vote, to wit:

Ayes:	Noes:
Supervisors Gloria Molina	Supervisors None
Edmund D. Edelman	
Deane Dana	
Michael D. Antonovich	

Executive Officer
Board of Supervisors
of the County of Los Angeles

Effective Date: March 21, 1991

Operative Date: _____

I hereby certify that pursuant to Section 25103 of the Government Code, delivery of this document has been made.
LARRY J. MONTEILH
Executive Officer
Clerk of the Board of Supervisors
By _____ DEPUTY

APPROVED AS TO FORM:
DE WITT W. CLINTON
County Counsel
By
GERALD F. CRUMP
Chief Assistant County Counsel

ORDINANCE NO. 91-0075M

An Ordinance amending the Rules and Regulations of the Los Angeles County Waterworks Districts relating to the implementation of a water conservation plan, by adding Part 5 - Phased Water Conservation Plan.

The Board of Supervisors, as the Board of Directors of the Los Angeles County Waterworks Districts, ordain as follows:

Section 1. The Rules and Regulations of the Los Angeles County Waterworks Districts are amended by adding Part 5, to read:

PART 5 - PHASED WATER CONSERVATION PLAN

RULE

5-A-1 STATEMENT OF POLICY AND DECLARATION OF PURPOSE

Because of the water supply conditions prevailing in any or all of the County Waterworks Districts and/or in the area from which any or all of the Districts obtain all or a portion of their supply, the general welfare requires that the water resources available to any or all of the Districts be put to the maximum beneficial use to the extent to which they are capable, and that the unreasonable use, or unreasonable method of use of water be discouraged and that the conservation of such water be practiced with a view to the reasonable and beneficial use thereof in the interest of the people of any or all of the Districts and for the public welfare. The purpose of this Phased Water Conservation Plan is to minimize the effect of a shortage of water supplies on the customers of any or all of the Districts during a water shortage emergency.

5-B-1 AUTHORIZATION TO IMPLEMENT WATER CONSERVATION

5-B-1a The Board of Directors of the Waterworks Districts may implement the applicable provisions of this conservation plan, following the public hearing required by Rule 5-B-1b, upon its determination that such implementation is necessary to protect the public welfare and safety.

5-B-1b The Board of Directors of the Waterworks Districts shall hold a public hearing for the purpose of determining whether a shortage exists in any or all of the Districts and which measures provided by this ordinance should be implemented. Notice of the time and place of the public hearing shall be published not less than ten (10) days before the hearing in a newspaper of general circulation within the affected District or Districts.

PART 5 - PHASED WATER CONSERVATION PLAN (Continued)

5-B-1c The Board of Directors shall issue its determination of shortage and corrective measures by resolution published in a daily newspaper of general circulation within the affected District or Districts. Conservation surcharges assessed per Rule 5-0-1 shall become effective no sooner than the first full billing period commencing on or after the date of such publication.

RULE
5-C-1 GENERAL PROHIBITION

No customer of the District or Districts shall make, cause, use, or permit the use of water from the District or Districts in a manner contrary to any provision of this ordinance.

5-D-1 PHASE I SHORTAGE

5-D-1a A Phase I Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a ten percent (10%) shortage in its water supplies.

5-D-1b A customer with a meter size of one and one-half (1½) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of ninety percent (90%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-D-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of ninety percent (90%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

5-E-1 PHASE II SHORTAGE

5-E-1a A Phase II Shortage shall be declared whenever the Board of Directors determinies that it is likely that the District suffer a shortage of between ten percent (10%) and fifteen percent (15%) in its water supplies.

5-E-1b A customer with a meter size of one and one-half (1½) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of eighty-five percent (85%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-E-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of eight-five percent (85%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-O-1.

5-F-1 PHASE III SHORTAGE

5-F-1a A Phase III Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between fifteen percent (15%) and twenty percent (20%) in its water supplies.

5-F-1b A customer with a meter size of one and one-half (1½) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of eighty percent (80%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-O-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-F-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of eighty percent (80%) of the base quantity. All water used in excess of the target quantity shall be subject to a surcharge per Rule 5-O-1.

5-F-1d New meters to provide construction water service shall not be issued.

5-F-1e Water service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-G-1 PHASE IV SHORTAGE

5-G-1a A Phase IV Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between twenty percent (20%) and twenty-five percent (25%) in its water supplies.

PART 5 - PHASED WATER CONSERVATION PLAN (Continued)

5-G-1b A customer with a meter size of one and one-half (1½) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy-five percent (75%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-O-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-G-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy-five percent (75%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-O-1.

5-G-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be limited to not more than every other day and shall be prohibited between the hours of 10:00 a.m. and 5:00 p.m.

5-G-1e New meters to provide construction water service shall not be issued.

5-G-1f Water service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-H-1 PHASE V SHORTAGE

5-H-1a A Phase V Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between twenty-five (25%) and thirty percent (30%) in its water supplies.

5-H-1b A customer with a meter size of one and one-half (1½) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy percent (70%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-O-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-H-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of (1) inch or

less shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy percent (70%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-O-1.

5-H-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be limited to not more than every other day and shall be prohibited between the hours of 10:00 a.m. and 5:00 p.m.

5-H-1e New meters to provide construction water service shall not be issued.

5-H-1f Water service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-I-1 PHASE VI SHORTAGE

5-I-1a A Phase VI Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between thirty (30%) and thirty-five percent (35%) in its water supplies.

5-I-1b A customer with a meter size of one and one-half (1½) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty-five percent (65%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-O-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-I-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty-five percent (65%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-O-1.

5-I-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be limited to not more than every third day and shall be prohibited between the hours of 10:00 a.m. and 5:00 p.m.

5-I-1e New meters to provide construction water service shall not be issued.

PART 5 - PHASED WATER CONSERVATION PLAN (Continued)

5-I-1f Water service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-J-1 PHASE VII SHORTAGE

5-J-1a A Phase VII Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between thirty-five (35%) and forty percent (40%) in its water supplies.

5-J-1b A customer with a meter size of one and one-half (1½) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty percent (60%) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-O-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-J-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty percent (60%) of the base quantity. All water used in excess of the target quantity shall be subject to a surcharge per Rule 5-O-1.

5-J-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be prohibited, except that trees and shrubs may be watered at any time by bucket.

5-J-1e All meters to provide construction water shall be removed.

5-J-1f Water service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-J-1g No new permanent meters shall be installed.

5-M-1c In determining whether to grant relief, and the nature of any relief, the Director of Public Works shall take into consideration all relevant factors including, but not limited to:

1. Whether any additional reduction in water consumption will result in unemployment;
2. Whether additional members have been added to the household;
3. Whether any additional landscaped property has been added to the property since the corresponding billing period of the base year;
4. Changes in vacancy factors in multi-family housing;
5. Increased number of employees in commercial, industrial, and governmental offices;
6. Increased production requiring increased process water;
7. Water uses during new construction;
8. Adjustments to water use caused by emergency health or safety hazards;
9. First filling of a permit-constructed swimming pool; and
10. Water use necessary for reasons related to family illness or health.
11. Whether the basic period for billing should be adjusted due to the unique circumstances of the type of facility, such as a boat, which results in irregular, intermittent periods of consumption.

5-M-1d In order to be considered, an application for relief must be filed with the District within twenty (20) days from the date the provision from which relief is sought becomes applicable to the applicant. No relief shall be granted unless the customer shows that he or she has achieved the maximum practical reduction in water consumption other than in the specific areas in which relief is being sought. No relief shall be granted to any customer who, when requested by the Director of Public Works or designee, fails to provide any information necessary for resolution of the customer's application for relief. The decision shall be issued within twenty (20) days and provided to the customer.

5-N-1 NOTIFICATION OF CUSTOMERS

5-N-1a Each customer will be notified on his or her bill as to what the target quantity and the base quantity will be for the applicable billing period.

PART 5 - PHASED WATER CONSERVATION PLAN (Continued)

5-O-1 CONSERVATION SURCHARGES

5-O-1a Water use in excess of target quantities specified in Rules 5-D-1b, 5-D-1c, 5-E-1b, 5-E-1c, 5-F-1b, 5-F-1c, 5-G-1b, 5-G-1c, 5-H-1b, 5-H-1c, 5-I-1b, 5-I-1c, 5-J-1b, 5-J-1c, 5-K-1b, 5-K-1c, 5-L-1b and 5-L-1c shall be subject to the following conservation surcharges:

1. A conservation surcharge of $3.00 per 100 cubic feet shall be assessed for water usage in excess of the target quantity but less than the base quantity set in these Rules for the applicable billing cycle. This conservation surcharge shall be in addition to the normal established water rate.

2. A conservation surcharge of $6.00 per 100 cubic feet shall be assessed for water usage in excess of the base quantity set in these Rules for the applicable billing cycle. This conservation surcharge shall be in addition to the normal established water rate.

5-O-1b Violation by any customer of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d and 5-L-1d shall be penalized as follows:

1. First violation. The Director of Public Works or designee shall issue a written notice of the fact of a first violation to the customer.

2. Second violation. For a second violation during any one water shortage emergency, the Director of Public works or designee shall issue a written notice of the fact of a second violation to the customer.

3. Third and subsequent violations. For a third and each subsequent violation during any one water shortage emergency, the Director of Public Works or designee may install a flow-restricting device on the service of the customer at the premises at which the violation occurred for a period of not less than forty-eight (48) hours. The Director of Public Works shall charge the customer the reasonable costs incurred for installing and for removing the flow-restricting devices and for restoration of normal service. The charge shall be paid before normal service can be restored.

5-O-1c All monies collected by a District pursuant to this ordinance shall be deposited in that District's General Fund as reimbursement for the District's costs and expenses of administering this conservation plan.

5-O-1d The District shall give notice to customer of water conservation surcharges or of water usage violations as follows:

1. Notice of water conservation surcharges or of first and second violations of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d and 5-L-1d shall be given to the customer in person or by regular mail.

1. Notice of water conservation surcharges or of first and second violations of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d and 5-L-1d shall be given to the customer in person or by regular mail.

   B. If the customer is absent from or unavailable at the premises at which the violation occurred, by leaving a copy with some person of suitable age and discretion at the premises and sending a copy through the regular mail to the address at which the customer is normally billed; or

   C. If a person of suitable age or discretion cannot be found, then by affixing a copy in a conspicuous place at the premises at which the violation occurred and also sending a copy through the regular mail to the address at which the customer is normally billed.

5-O-1e The notice of a violation of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d and 5-L-1d shall contain a description of the facts of the violation, a statement of the possible penalties for each violation and a statement informing the customer of his right to a hearing on the merits of the violation pursuant to Rule 5-P-1.

5-O-1f Nothing in these regulations shall prohibit any customer from either installing sub-meters or from pro-rating and collecting from the ultimate users any conservation surcharges assessed when the customer's master meter measures consumption of water for multiple tenancy facilities. However, unless the sub-meters are subsequently billed directly by the District, the customer responsible for the master meter shall continue to be responsible directly to the District for all payments including conservation surcharges.

5-P-1 HEARING REGARDING VIOLATIONS

5-P-1a Any customer receiving notice of a third or subsequent violations of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d or 5-L-1d shall have a right to a hearing by the Director of Public Works or his designee within fifteen (15) days of a mailing or other delivery of the notice of violation.

5-P-1b The customer's written request for a hearing must be received within ten (10) days of the issuance of the notice of violation. This request shall stay installation of a flow-restricting device on the customer's premises and the assessment of any surcharge until the Director of Public Works or designee renders his or her decision. The decision shall be issued within ten (10) days of the hearing, a copy of which shall be provided to the customer.

5-P-1c The decision of the Director of Public Works shall be final except for judicial review.

PART 5 - PHASED WATER CONSERVATION PLAN (Continued)

5-Q-1 ADDITIONAL WATER SHORTAGE MEASURES

The Board of Directors may order implementation of water conservation measures in addition to those set forth in Rules 5-D-1, 5-E-1, 5-F-1, 5-G-1, 5-H-1, 5-I-1, 5-J-1, 5-K-1 and 5-L-1. Such additional water conservation measures shall be implemented in the manner provided in Rule 5-B-1.

5-R-1 PUBLIC HEALTH AND SAFETY NOT TO BE AFFECTED

Nothing in this ordinance shall be construed to require the District to curtail the supply of water to any customer when such water is required by that customer to maintain an adequate level of public health and safety.

5-S-1 SEVERABILITY

If any part of this ordinance or the application thereof to any person or circumstances is for any reason held invalid or unconstitutional by a decision of any court of competent jurisdiction, the validity of the remainder of the ordinance or the application of such provision to other persons or circumstances shall not be affected. The board of Directors of the District or Districts declares that it would have adopted this ordinance and all provisions hereof irrespective of the fact that any one or more of the provisions be declared in valid or unconstitutional.

Section 2. This ordinance shall be published in

Metropolitan News Enterprise

a newspaper printed and published in the County of Los Angeles.

Michael D. Antonovich

Chairman

ATTEST:

Executive Officer
Board of Supervisors
of the County of Los Angeles

I hereby certify that at its meeting of May 23, 1991, the foregoing ordinance was adopted by the Board of Supervisors of said County of Los Angeles by the following vote, to wit:

Ayes:	Noes:
Supervisors Edmund D. Edelman	Supervisors
Deane Dana	
Michael D. Antonovich	

Executive Officer
Board of Supervisors
of the County of Los Angeles

Effective Date: May 23, 1991

Operative Date: xxxxxxxxxxxxxxxxxxxxxx

APPROVED AS TO FORM:

DE WITT W. CLINTON
County Counsel

By
GERALD F. CRUMP
Chief Assistant County Counsel

Appendix G-2

RCSD Water Shortage Contingency Plan (Excerpt from 2000 UWMP)

Table 13
ULFT Retrofit Program

Year	# of ULFT Retrofits
2000	240e
2001	240e
2002	240e
2003	240e
2004	240e
2005	240e
2006	240e
2007	240e
2008	240e
2009	240e
2010	240e
e = estimate	
Estimated 3000 toilets @ 80% = 2400 toilets/10 years = 240 toilets/year	

METHODS TO EVALUATE EFFECTIVENESS: The District will calculate annual ULFT replacement program water savings to confirm the savings are within 10% of calculated retrofit-on-resale water savings, using the CUWCC MOU Exhibit 6 methodology and water savings estimates. Exhibit 6 has become an industry standard for evaluation of ULFT replacement programs.

CONSERVATION SAVINGS: Projected total annual water savings from toilet retrofits at full implementation has yet to be determined.

BUDGET: Proposed annual budget: $33,900.00, for materials, rebates, and administrative costs.

Water Shortage Contingency Plan

Preparation for Catastrophic Water Supply Interruption

Law

> 10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:
>
> 10632 (c) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

Water Shortage Emergency Response

RCSD is discussing plans that contain procedures for the distribution of potable water in a disaster; these procedures will be consistent with guidelines prepared by the California State Office of Emergency Services.

RCSD is considering the feasibility of : (1) the purchase of water purification equipment; (2) purchase of standby generators and auxillary pumps; and (3) construction of emergency water conveyance and supply storage facilities.

Specific water-critical customers (such as hospitals, nursing facilities, schools, and a few individual customers with medical conditions dependent on continuous water availability) have been identified. Likely potable water distribution sites have been identified. Standby procurement documents procedures are being considered for emergency bulk purchase of bottled water. All existing water supply storage, treatment, and distribution, and wastewater treatment facilities are currently inspected monthly.

The District recognizes the importance of the DMMs in reducing water demand and would continue to implement the programs. Also, the District would increase media attention to the water supply situation during a shortage and would step up public water education programs, encourage property owners to apply for a landscape and interior water use survey and continue to advertise the importance of customers to install ULF plumbing fixtures.

During declared shortages, or when a shortage declaration appears imminent, the RCSD General Manager will activate a District water shortage response team. The team includes: water, fire, sewer, street lighting, public affairs, parks and recreation. During a declared water shortage, the District will accept applications for new building permits but will not issue permits until the shortage declaration is rescinded. An appeal process will be established.

Supplemental Water Supplies

To offset future potential water shortages due to drought or disaster, the District is considering the following supplemental water supplies.

Desalination

RCSD has no reason for considering desalination of its source water at the present time.

Water Transfers

See the Transfer or Exchange Opportunities section.

Long Term Additional Water Supply Options

To meet future long-term water demand beyond 2020, the District will be considering drilling additional wells and importing water from outside sources.

The following table summarizes the actions the water agency will take during a water supply catastrophe.

Table 14-7
Preparation Actions for a Catastrophe

Examples of Actions	Check if Discussed
Determine what constitutes a proclamation of a water shortage.	✓
Stretch existing water storage.	✓
Obtain additional water supplies.	✓
Develop alternative water supplies.	✓
Determine where the funding will come from.	✓
Contact and coordinate with other agencies.	✓
Create an Emergency Response Team/Coordinator.	✓
Create a catastrophe preparedness plan.	✓
Put employees/contractors on-call.	✓
Develop methods to communicate with the public.	✓
Develop methods to prepare for water quality interruptions.	✓

Water Shortage Contingency Ordinance/Resolution

Law

> 10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:
>
> 10632 (h) A draft water shortage contingency resolution or ordinance.

RCSD Water Shortage Response

As mentioned earlier, the District adopted a "No-Waste" Ordinance in 2000, and has developed a Resolution to Declare a Water Shortage Emergency. The District will adopt a policy to implement a Moratorium on New Connections during declared water shortages see Appendix C.

Stages of Action

Law

> 10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:
>
> 10632 (a) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply and an outline of specific water supply conditions which are applicable to each stage.

Rationing Stages and Reduction Goals

The District has developed a four stage rationing plan (see Table 16) to invoke during declared water shortages. The rationing plan includes voluntary and mandatory rationing, depending on the causes, severity, and anticipated duration of the water supply shortage.

Table 15
Water Rationing Stages and Reduction Goals

Shortage Condition	Stage	Customer Reduction Goal	Type of Rationing Program
Up to 15%	I	15%	Voluntary
15 – 25%	II	25%	Mandatory
25 - 35%	III	35%	Mandatory
35 - 50%	IV	50% or >	Mandatory

Priority by Use

Priorities for use of available potable water during shortages were based on input from RCSD's operations personnel, staff statistical analysts, citizen groups, and legal requirements set forth in the California Water Code, Sections 350-358. Water allocations are established for all customers according to the following ranking system:

- Minimum health and safety allocations for interior residential needs (includes single family, multi-family, hospitals and convalescent facilities, retirement and mobile home communities, and student housing, and fire fighting and public safety)
- Commercial, industrial, institutional/governmental operations (where water is used for manufacturing and for minimum health and safety allocations for employees and visitors), to maintain jobs and economic base of the community (not for landscape uses)
- Existing landscaping
- New customers, proposed projects without permits when shortage declared.

Note: It is not expected that any potable water supply reductions would result in recycled water shortages. However, this may change in the future, as more customers use recycled water.

Health and Safety Requirements

Based on commonly accepted estimates of interior residential water use in the United States, Table 17 indicates per capita health and safety water requirements. In Stage I shortages, customers may adjust either interior or outdoor water use (or both), in order to meet the voluntary water reduction goal.

However, under Stage II, Stage III and Stage IV mandatory rationing programs, the District has established a health and safety allotment of 68 gallons per capita-day (gpcd). This translates to 33 hundred cubic feet (HCF) per person per year. Based on previous studies, that amount of water insufficient for essential interior water with no habit or plumbing fixture change. If customers wish to change water use habits or plumbing fixtures, 68 gpcd is sufficient to provide for limited non-essential (i.e. outdoor) uses.

Stage IV mandatory rationing, which is likely to be declared only as the result of a prolonged water shortage or as a result of a disaster, would require that customers make changes in their interior water use habits (for instance, not flushing toilets unless "necessary" or taking less frequent showers).

Table 16
Per Capita Health and Safety Water Quantity Calculations

	Non-Conserving Fixtures		Habit Changes 1		Conserving Fixtures 2	
Toilets	5 flushes x 5.5 gpf	27.5	3 flushes x 5.5 gpf	16.5	5 flushes x 1.6 gpf	8.0
Shower	5 min x 4.0 gpm	20.0	4 min x 3.0 gpm	12.0	5 min x 2.0	10.0
Washer	12.5 gpcd	12.5	11.5 gpcd	11.5	11.5 gpcd	11.5
Kitchen	4 gpcd	4.0	4 gpcd	4.0	4 gpcd	4.0
other	4 gpcd	4.0	4 gpcd	4.0	4 gpcd	4.0
Total (gpcd)		68.0		48.0		37.5
HCF per capita per year		33.0		23.0		18.0

1 Reduced shower use results from shorter and reduced flow. Reduced washer use results from fuller loads.
2 Fixtures include ULF 1.6 gpf toilets, 2.0 gpm showerheads and efficient clothes washers.

Water Shortage Stages and Triggering Mechanisms

As the water purveyor, RCSD must provide the minimum health and safety water needs of the community at all times. The water shortage response is designed to provide a minimum of 50% of normal supply during a severe or extended water shortage. The rationing program triggering levels shown below were established to ensure that this goal is met.

Rationing stages may be triggered by a shortage in one water source or a combination of sources. Although an actual shortage may occur at any time during the year, a shortage (if one occurs) is usually forecasted by the AVEK on or about April 1 each year. If it appears that it may be a dry year, the District advises all of its customers in April or May so that they can minimize potential financial impacts.

The District's potable water sources are groundwater, and imported surface water. Rationing stages may be triggered by a supply shortage or by contamination in one source or a combination of sources. Because shortages overlap Stages, triggers automatically implement the more restrictive Stage. Specific criteria for triggering the City's rationing stages are shown in Table 17.

Table 17
Water Shortage Stages and Triggering Mechanisms

Percent Reduction of Supply	Stage I Up to 15%	Stage II 15 - 25%	Stage III 25 - 35%	Stage IV 35 - 50% >
		Water Supply Condition		
Current Supply	Total supply is 85 – 90% of "normal." And Below "normal" year is declared. Or	Total supply is 75 – 85% of "normal." Or Below "normal" year is declared Or	Total supply is 65 – 75% of "normal." Or Fourth consecutive below "normal" year is declared. Or	Total supply is less than 65% of "normal." Or Fifth consecutive below "normal" year is declared. Or
Future Supply	Projected supply insufficient to provide 80% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 75% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 65% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 50% of "normal" deliveries for the next two years. Or
Groundwater	No excess groundwater pumping undertaken. Or	First year of excess groundwater pumping taken, must be "replaced" within four years. Or	Second year of excess groundwater pumping taken, must be "replaced" within four years. Or	No excess groundwater pumping available. Or Reduced groundwater pumping due to replenishment of previously pumped groundwater. Or
Water Quality	Contamination of 10% of water supply (exceeds primary drinking water standards)	Contamination of 20% of water supply (exceeds primary drinking water standards)	Contamination of 30% of water supply (exceeds primary drinking water standards)	Or
Disaster Loss				Disaster Loss

Water Allotment Methods

The District plans to establish the following allocation method for each customer type. See Appendix C for sample water shortage rationing allocation method.

Single Family	Hybrid of Per-capita and Percentage Reduction
Multifamily	Hybrid of Per-capita and Percentage Reduction
Commercial	Percentage Reduction
Industrial	Percentage Reduction
Gvt/Institutional	Percentage Reduction
Agricultural-Permanent	Percentage Reduction - vary by efficiency
Agricultural-Annual	Percentage Reduction - vary by efficiency
Recreational	Percentage Reduction - vary by efficiency
New Customers	Per-capita (no allocation for new landscaping during a declared water shortage.)

Based on current and projected customer demand, Appendix C indicates the water allocated to each customer type by priority and rationing stage during a declared water shortage.

Individual customer allotments are based on a five-year period. This gives the District a more accurate view of the usual water needs of each customer and provides additional flexibility in determining allotments and reviewing appeals. However, no allotment may be greater than the amount used in the most recent year of the five-year base period.

The General Manager's staff shall classify each customer and calculate each customer's allotment according to the Sample Water Rationing Allocation Method. The allotment shall reflect seasonal patterns. Each customer shall be notified of their classification and allotment by mail before the effective date of the Water Shortage Emergency. New customers will be notified at the time the application for service is made. In a disaster, prior notice of allotment may not be possible; notice will be provided by other means. Any customer may appeal the General Manager's classification on the basis of use or the allotment on the basis of incorrect calculation.

Prohibitions, Consumption Reduction Methods and Penalties

Law

> 10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:
>
> 10632 (d) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.
> 10632 (e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.
> 10632 (f) Penalties or charges for excessive use, where applicable.

Mandatory Prohibitions on Water Wasting

The RCSD "No Waste" Ordinance (see Appendix C) includes prohibitions on various wasteful water uses such as lawn watering during mid-day hours, washing sidewalks and driveways with potable water, and allowing plumbing leaks to go uncorrected more than 24 hours after customer notification.

The following table is a list of consumption reduction methods that could be implemented at the various water shortage stages. The BOD has not decided which, if any of these measures shall be incorporated into the Ordinance at a future date.

Table 18: Consumption Reduction Methods

Examples of Consumption Reduction Methods	Stage When Method Takes Effect
Demand reduction program	All stages
Reduce pressure in water lines	
Flow restriction	IV
Restrict building permits	II, III, IV
Restrict for only priority uses	
Use prohibitions	All stages
Water shortage pricing	All stages
Per capita allotment by customer type	IV
Plumbing fixture replacement	
Voluntary rationing	I
Mandatory rationing	II, III, IV
Incentives to reduce water consumption	
Education Program	All Stages
Percentage reduction by customer type	II, III, IV
Other	
Other	

See Appendix C, the "No Waste" Ordinance and Moratorium on New Connections - which details the reduction methods - regarding Table 18.

Excessive Use Penalties

The BOD has decided upon the penalties as stated in the "No Waste" Ordinance. See Appendix C.

Revenue and Expenditure Impacts and Measures to Overcome Impacts

Law

> 10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:
>
> 10632 (g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier...

> 10632 (g) [An analysis of the impacts of each of the] proposed measures to overcome those [revenue and expenditure] impacts, such as the development of reserves and rate adjustments.

RCSD has begun the process of evaluating rate changes based on projected wastewater handling expenses, water equipment expenses and projected expenses for additional purchased surface water. See Appendix D for the District's efforts to establish an Emergency Fund and a Rate Stabilization Fund.

Reduction Measuring Mechanism

Law

> 10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:
>
> 10632 (i) A mechanism for determining actual reductions in water use pursuant to the
> urban water shortage contingency analysis.

Mechanism to Determine Reductions in Water Use

Under normal water supply conditions, potable water production figures are recorded daily. Totals are reported weekly to the Water Treatment Facility Supervisor. Totals are reported monthly to the General Manager and incorporated into the water supply report.

During a Stage I or Stage II water shortage, daily production figures are reported to the General Manager. The General Manager compares the weekly production to the target weekly production to verify that the reduction goal is being met. Weekly reports are forwarded to the Chairman of the Board of Directors (BOD) and the Water Shortage Response Team. Monthly reports are sent to the BOD as well. If reduction goals are not met, the Manager will notify the BOD so that corrective action can be taken.

During a Stage III or Stage IV water shortage, the procedure listed above will be followed, with the addition of a daily production report to the General Manager.

During emergency shortages, production figures are reported to the Field Supervisor hourly and to the General Manager and the Water Shortage Response Team daily. Daily reports will also be provided to the BOD and the Kern County Office of Emergency Services.

Appendix G-3

QHWD Water Shortage Contingency Plan (Excerpt from 2000 UWMP)

IMPLEMENTATION SCHEDULE: The District will continue to implement this DMM until the District's goal is met: at least 80% of all non-conserving and low-flush model toilets in the District will be replaced with ultra-low flush models.

Table 13
ULFT Retrofit Program

Year	# of ULFT Retrofits
2002	0
2003	10e
2004	20e
2005	20e
2006	20e
2007	20e
2008	20e
2009	20e
2010	20e
2011	20e
2012	20e
e = estimate	

METHODS TO EVALUATE EFFECTIVENESS: The District will calculate annual ULFT replacement program water savings to confirm the savings are within 10% of calculated retrofit-on-resale water savings, using the CUWCC MOU Exhibit 6 methodology and water savings estimates. Exhibit 6 has become an industry standard for evaluation of ULFT replacement programs.

CONSERVATION SAVINGS: Projected total annual water savings from toilet retrofits at full implementation are 0.5 AFY per year.

BUDGET: Proposed annual budget: $130,000, for materials, rebates, and administrative costs.

Agricultural Water Conservation Programs

The District has no agricultural water accounts, although it interacts with area agricultural business for information exchange.

The District may consider becoming a signatory to the Memorandum of Understanding Regarding Efficient Water Management Practices by Agricultural Water Suppliers in California in 2 to 3 years.

Water Shortage Contingency Plan

Preparation for Catastrophic Water Supply Interruption

Law

10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:

10632 (c) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

Water Shortage Emergency Response

In 2001, in accordance with the requirements of Assembly Bill 11X, the District water, fire, and emergency services departments developed a comprehensive water shortage contingency plan, which was incorporated into the District's Emergency Response Plan in early 2002. The District's plan is consistent with provisions in the County's Emergency Response Plan. Both plans contain procedures for the distribution of potable water in a disaster; these procedures are consistent with guidelines prepared by the California State Office of Emergency Services.

The District plan recommended the following: (1) the purchase of water purification equipment; (2) purchase of standby generators and auxiliary pumps; and (3) development of emergency water conveyance and supply storage facilities. Steps (1) and (2) have been or are currently being implemented. Step (3) is in the study and design phases.

In addition, specific water-critical customers (such as hospitals, nursing facilities, schools, and a few individual customers with medical conditions dependent on continuous water availability) have been identified. Likely potable water distribution sites have been identified.

Be assured that the District recognizes the importance of the DMMs in reducing water demand and would continue to implement the programs. Also, the District would increase media attention to the water supply situation during a shortage and would step up public water education programs, encourage property owners to apply for a landscape and interior water use survey and continue to advertise the importance of customers to install ULF plumbing fixtures.

During declared shortages, or when a shortage declaration appears imminent, the District General Manager, who serves as the temporary chair, activates a District water shortage response team. The Chairman of the Board of Directors assumes the responsible director's role when he/she has arrived at the operational control center. The team includes: Board of Directors, General Manager, Operations Foreman, Clerical Staff Director. During a declared water shortage, the District will accept applications for new building permits but will not issue permits until the shortage declaration is rescinded. An appeal process has been established.

Supplemental Water Supplies

To offset future potential water shortages due to drought or disaster, the District is considering the following supplemental water supplies.

Water Transfers

See the Transfer or Exchange Opportunities section.

Long Term Additional Water Supply Options

To meet future long-term water demand beyond 2020, the District has purchased land for additional wells.

The following table summarizes the actions the water district will take during a water supply catastrophe.

Table 14 Preparation Actions for a Catastrophe	
Examples of Actions	**Check if Discussed**
Determine what constitutes a proclamation of a water shortage.	✓
Stretch existing water storage.	✓
Obtain additional water supplies.	✓
Develop alternative water supplies.	✓
Determine where the funding will come from.	✓
Contact and coordinate with other agencies.	✓
Create an Emergency Response Team/Coordinator.	✓
Create a catastrophe preparedness plan.	✓
Put employees/contractors on-call.	✓
Develop methods to communicate with the public.	✓
Develop methods to prepare for water quality interruptions.	✓

Water Shortage Contingency Ordinance/Resolution

Law

> 10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:
>
> 10632 (h) A draft water shortage contingency resolution or ordinance.

Quartz Hill Water District Water Shortage Response

As mentioned earlier, the District adopted a "No-Waste" Ordinance in 1997, and based on rationing experience, the District has developed a Resolution to Declare a Water Shortage Emergency. The District adopted a policy in 1998 to implement a Moratorium on New Connections during declared water shortages see Appendix C.

Stages of Action

Law

> 10632. The plan shall provide an urban water shortage contingency analysis, which includes each of the following elements which are within the authority of the urban water supplier:
>
> 10632 (a) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply and an outline of specific water supply conditions which are applicable to each stage.

Rationing Stages and Reduction Goals

The District has developed a four stage rationing plan (see Table 15) to invoke during declared water shortages. The rationing plan includes voluntary and mandatory rationing, depending on the causes, severity, and anticipated duration of the water supply shortage.

Table 15
Water Rationing Stages and Reduction Goals

Shortage Condition	Stage	Customer Reduction Goal	Type of Rationing Program
Up to 15%	I	15%	Voluntary
15 – 25%	II	25%	Mandatory
25 - 35%	III	35%	Mandatory
35 - 50%	IV	50% or >	Mandatory

Priority by Use

Priorities for use of available potable water during shortages were based on input from the District Emergency Response Team, citizen groups, and legal requirements set forth in the California Water Code, Sections 350-358. Water allocations are established for all customers according to the following ranking system:

- Minimum health and safety allocations for interior residential needs (includes single family, multi-family, hospitals and convalescent facilities, retirement and mobile home communities, and student housing, and fire fighting and public safety)
- Commercial, industrial, institutional/governmental operations (where water is used for manufacturing and for minimum health and safety allocations for employees and visitors), to maintain jobs and economic base of the community (not for landscape uses)
- Permanent agriculture (orchards, vineyards, and other commercial agriculture which would require at least five years to return to production).
- Annual agriculture (floriculture, strawberries, other truck crops)
- Existing landscaping
- New customers, proposed projects without permits when shortage declared.

Health and Safety Requirements

Based on commonly accepted estimates of interior residential water use in the United States, Table 18 indicates per capita health and safety water requirements. In Stage I shortages, customers may adjust either interior or outdoor water use (or both), in order to meet the voluntary water reduction goal.

However, under Stage II, Stage III and Stage IV mandatory rationing programs, the District has established a health and safety allotment of 68 gpcd (which translates to 33 HCF per person per year), because that amount of water is sufficient for essential interior water with no habit or plumbing fixture changes. If customers wish to change water use habits or plumbing fixtures, 68 gpcd is sufficient to provide for limited non-essential (i.e. outdoor) uses.

Stage IV mandatory rationing, which is likely to be declared only as the result of a prolonged water shortage or as a result of a disaster, would require that customers make changes in their interior water use habits (for instance, not flushing toilets unless "necessary" or taking less frequent showers).

Table 16
Per Capita Health and Safety Water Quantity Calculations

	Non-Conserving Fixtures		Habit Changes 1		Conserving Fixtures 2	
Toilets	5 flushes x 5.5 gpf	27.5	3 flushes x 5.5 gpf	16.5	5 flushes x 1.6 gpf	8.0
Shower	5 min x 4.0 gpm	20.0	4 min x 3.0 gpm	12.0	5 min x 2.0	10.0
Washer	12.5 gpcd	12.5	11.5 gpcd	11.5	11.5 gpcd	11.5
Kitchen	4 gpcd	4.0	4 gpcd	4.0	4 gpcd	4.0
other	4 gpcd	4.0	4 gpcd	4.0	4 gpcd	4.0
Total (gpcd)		68.0		48.0		37.5
HCF per capita per year		33.0		23.0		18.0

1 Reduced shower use results from shorter and reduced flow. Reduced washer use results from fuller loads.
2 Fixtures include ULF 1.6 gpf toilets. 2.0 gpm showerheads and efficient clothes washers.

Water Shortage Stages and Triggering Mechanisms

As the water purveyor, the Quartz Hill Water District must provide the minimum health and safety water needs of the community at all times. The water shortage response is designed to provide a minimum of 50% of normal supply during a severe or extended water shortage. The rationing program triggering levels shown below were established to ensure that this goal is met.

Rationing stages may be triggered by a shortage in one water source or a combination of sources. Although an actual shortage may occur at any time during the year, a shortage (if one occurs) is usually forecasted by the Water Department on or about April 1 each year. If it appears that it may be a dry year, the District contacts its agricultural customers in March, so that they can minimize potential financial impacts.

The District's potable water sources are groundwater and imported surface. Rationing stages may be triggered by a supply shortage or by contamination in one source or a combination of sources. Because shortages overlap Stages, triggers automatically implement the more restrictive Stage. Specific criteria for triggering the District's rationing stages are shown in Table 19.

Table 17
Water Shortage Stages and Triggering Mechanisms

Percent Reduction of Supply	Stage I Up to 15%	Stage II 15 - 25%	Stage III 25 - 35%	Stage IV 35 - 50% >
Water Supply Condition				
Current Supply	Total supply is 85 – 90% of "normal." And Below "normal" year is declared. Or	Total supply is 75 – 85% of "normal." Or Below "normal" year is declared Or	Total supply is 65 – 75% of "normal." Or Fourth consecutive below "normal" year is declared. Or	Total supply is less than 65% of "normal." Or Fifth consecutive below "normal" year is declared. Or
Future Supply	Projected supply insufficient to provide 80% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 75% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 65% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 50% of "normal" deliveries for the next two years. Or
Groundwater	No excess groundwater pumping undertaken. Or	First year of excess groundwater pumping taken, must be "replaced" within four years. Or	Second year of excess groundwater pumping taken, must be "replaced" within four years. Or	No excess groundwater pumping available. Or Reduced groundwater pumping due to replenishment of previously pumped groundwater. Or
Water Quality	Contamination of 10% of water supply (exceeds primary drinking water standards)	Contamination of 20% of water supply (exceeds primary drinking water standards)	Contamination of 30% of water supply (exceeds primary drinking water standards)	Or
Disaster Loss				Disaster Loss

Water Allotment Methods

The District has established the following allocation method for each customer type. See Appendix C for sample water shortage rationing allocation method.

Single Family	Hybrid of Per-capita and Percentage Reduction
Multifamily	Hybrid of Per-capita and Percentage Reduction
Commercial	Percentage Reduction
Industrial	Percentage Reduction
Gov'ment/Institutional	Percentage Reduction
Agricultural-Permanent	Percentage Reduction - vary by efficiency
Agricultural-Annual	Percentage Reduction - vary by efficiency
Recreational	Percentage Reduction - vary by efficiency
New Customers	Per-capita (no allocation for new landscaping during a declared water shortage.)

Based on current and projected customer demand, Appendix C indicates the water allocated to each customer type by priority and rationing stage during a declared water shortage.

Individual customer allotments are based on a five-year period. This gives the District a more accurate view of the usual water needs of each customer and provides additional flexibility in determining allotments and reviewing appeals. However, no allotment may be greater than the amount used in the most recent year of the five-year base period.

The Water Department Manager shall classify each customer and calculate each customer's allotment according to the Sample Water Rationing Allocation Method. The allotment shall reflect seasonal patterns. Each customer shall be notified of their classification and allotment by mail before the effective date of the Water Shortage Emergency. New customers will be notified at the time the application for service is made. In a disaster, prior notice of allotment may not be possible; notice will be provided by other means. Any customer may appeal the Water Department Manager's classification on the basis of use or the allotment on the basis of incorrect calculation.

Prohibitions, Consumption Reduction Methods and Penalties

Law

> 10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:
>
> 10632 (d) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.
> 10632 (e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.
> 10632 (f) Penalties or charges for excessive use, where applicable.

Mandatory Prohibitions on Water Wasting

The QHWD "No Waste" Ordinance (see Appendix C) includes prohibitions on various wasteful water uses such as lawn watering during mid-day hours, washing sidewalks and driveways with potable water, and allowing plumbing leaks to go uncorrected more than 24 hours after customer notification

Table 18 Consumption Reduction Methods	
Examples of Consumption Reduction Methods	**Stage When Method Takes Effect**
Demand reduction program	All stages
Reduce pressure in water lines	
Flow restriction	IV
Restrict building permits	II, III, IV
Restrict for only priority uses	
Use prohibitions	All stages
Water shortage pricing	All stages
Per capita allotment by customer type	IV
Plumbing fixture replacement	
Voluntary rationing	I
Mandatory rationing	II, III, IV
Incentives to reduce water consumption	
Education Program	All Stages
Percentage reduction by customer type	II, III, IV
Other	
Other	

See Appendix C, the "No Waste" Ordinance and Moratorium on New Connections - which details the reduction methods - regarding Table 18.

Excessive Use Penalties

Any customer violating the regulations and restrictions on water use set forth in the "No Waste" Ordinance shall receive a written warning for the first such violation. Upon a second violation, the customer shall receive a written warning and the district may cause a flow-restrictor to be installed in the service. If a flow-restrictor is placed, the violator shall pay the cost of the installation and removal. Any willful violation occurring subsequent to the issuance of the second written warning shall constitute a misdemeanor and may be referred to the Los Angeles County District Attorney's office for prosecution pursuant. If water service is disconnected, it shall be restored only upon payment of the turn-on charge fixed by the Board of Directors.

Revenue and Expenditure Impacts and Measures to Overcome Impacts

Law

> 10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:
>
> 10632 (g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier...
>
> 10632 (g) [An analysis of the impacts of each of the] proposed measures to overcome those [revenue and expenditure] impacts, such as the development of reserves and rate adjustments.

All surplus revenues that the District collects are currently used to fund the Rate Stabilization Fund. conservation, recycling, and other capital improvements. The District estimated projected ranges of water sales by shortage stage to best understand the impact each level of shortage will have on projected revenues and expenditures by each shortage stage.

This analysis is undertaken first with no additional water purchases and no rate increases and then with a 25% rate increase at Stage II; 50% at Stage III, and a 100% increase at Stage IV. To cover increased expenses and decreased sales, rate increases would need to be "severe".

See Appendix D for the District's efforts to establish an Emergency Fund and a Rate Stabilization Fund.

Reduction Measuring Mechanism

Law

> 10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:
>
> 10632 (i) A mechanism for determining actual reductions in water use pursuant to the
> urban water shortage contingency analysis.

Mechanism to Determine Reductions in Water Use

Under normal water supply conditions, potable water production figures are recorded daily. Totals are reported weekly to the General Manager. Totals are reported monthly to the Board of Directors and incorporated into the water supply report.

During a Stage I or Stage II water shortage, daily production figures are reported to the Operations Supervisor. The Operations Supervisor compares the weekly production to the target weekly production to verify that the reduction goal is being met. Weekly reports are forwarded to the General Manager and the Water Shortage Response Team. Monthly reports are sent to the Board of Directors. If reduction goals are not met, the Manager will notify the Board of Directors so that corrective action can be taken.

During a Stage III or Stage IV water shortage, the procedure listed above will be followed, with the addition of a daily production report to the General Manager.

During emergency shortages, production figures are reported to the Operations Supervisor hourly and to the General Manager and the Water Shortage Response Team daily. Daily reports will also be provided to the Board of Directors.

LOS ANGELES COUNTY WATERWORKS DISTRICTS
Department of Public Works
P.O. Box 1460
Alhambra, CA 91802-1460