

Yuima Municipal Water District

2006 Consumer Confidence Report

Dated: May 29, 2007

We test the quality of your drinking water for many constituents as required by State and Federal regulations. This report shows the results of our monitoring for the period of January 1 – December 31, 2006.

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

Since 1990, all water utilities in the State of California have been required to distribute to all customers an annual Consumer Confidence Report that provides information regarding the quality of water they served. In 1996, Congress amended the Safe Drinking Water Act and added a similar requirement for a brief annual water quality report.

This report, the *2006 Consumer Confidence Report* (CCR) is more specific and detailed in content. The State of California, Department of Health Services (DHS), in order to implement state and national policy, oversees the issuance of this report. Yuima is a community water system providing the public water supply that serves much of the community of Pauma Valley. The following report provides information to Yuima's customers regarding test results available through December 31, 2006.

To receive more information about your water, to ask questions, or to receive additional copies of this report, please call Yuima's General Manager, Linden A. Burzell at (760) 742-3704. Written questions should be addressed to the General Manager at P.O. Box 177, Pauma Valley, CA 92061.

Board of Directors Meetings

Regular meetings of the Board of Directors are held monthly on the fourth Monday at 2:00 pm at the District office at 34928 Valley Center Road, Pauma Valley. Each monthly agenda has a scheduled time for public comments and is available on the District website.

Board of Directors

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This report explains:

- ✦ ***Where your water comes from***
- ✦ ***How water quality is evaluated***
- ✦ ***Regulations that protect your health***
- ✦ ***How your drinking water measures up against State and Federal drinking water standards for safety, appearance, taste and odor, and***
- ✦ ***Where to go if you have questions***

Where your water comes from: Yuima relies on two main sources: local groundwater and imported surface water. The water quality issues that affect groundwater and imported surface water are somewhat different.

The ***local groundwater*** is pumped from deep underground wells located throughout Pauma Valley. This underground aquifer is known as the Pauma Groundwater Basin. Yuima disinfects its well water to insure that it is free from bacteria that are found naturally in the environment.

The District is not required to do any further treatment, as those agencies must do that use surface water. Surface water by definition is water from lakes and streams usually impounded in open reservoirs where the water is subject to the pollutants in the watershed of its origin.

The ***imported water*** is purchased by Yuima from the San Diego County Water Authority, which in turn purchases the majority of its imported water from Metropolitan Water District of Southern California (Metropolitan). Metropolitan imports water into Southern California from two sources: a 242 mile long aqueduct that brings water from the Colorado River's Lake Havasu, and a 444 mile-long aqueduct that carries water from the Sacramento-San Joaquin River Delta. Water from these sources travels to the Metropolitan system through pressurized large diameter pipes, open aqueduct canals and open reservoirs. The supply is then treated at the Robert F. Skinner Filtration Plant located in western Riverside County.

These imported surface water sources are potentially vulnerable to contamination. Metropolitan has determined that the Colorado River supplies are most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater.

State Project water supplies are considered most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of Metropolitan's assessment of these vulnerabilities can be obtained by contacting Metropolitan by phone at (213) 217-6850.

How Water Quality is Evaluated: Water quality is evaluated by performing periodic laboratory analyses on water samples to determine the physical characteristics of the water and the presence or absence of chemical and biological contaminants. 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, which can be naturally occurring or result from urban storm water 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 storm water runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, agricultural operations, urban storm water runoff and septic systems.
- *Radioactive contaminants*, which can be naturally occurring or present as a result of contamination from mining and/or other activities.

Additional Information on Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of trace amounts of contaminants does not necessarily indicate that the 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).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those undergoing chemotherapy, organ transplant recipients, and those with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk. These people should seek advice about drinking water from their health care providers.

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

ABBREVIATIONS USED IN THIS REPORT

- **PDWS = "Primary Drinking Water Standards"** Limits establishing the maximum permissible amount of specific contaminants that are known to have potentially adverse effects on health.
- **SDWS = "Secondary Drinking Water Standards"** Limits established by regulation that set the maximum amount of specific contaminants that affect the taste, odor, or appearance of the drinking water.
- **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.
- **MCLG = "Maximum Contaminant Level Goal"** The level of a contaminant level in drinking water below which there is no known or expected risk to health. PHGs are set by the U.S. Environmental Protection Agency.
- **MCL = "Maximum Contaminant Level"** 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.
- **RAL = "Regulatory Action Level"** The concentration of a contaminant which, when exceeded, triggers treatment or another requirement that a water system must follow.
- **N/A = not applicable.**
- **NC = Not collected.**
- **ND = not detectable at testing limit.**
- **NTU = Nephelometric Turbidity Units**, a measure of the suspended material in water.
- **ppb = parts per billion.**
- **µg/l = micrograms per liter.**
- **Ppm = parts per million or milligrams per liter.**
- **pCi/l = picocuries per liter** (a measure of radiation).
- **CFU/100 ml = colony forming units per 100 milliliters.**
- **µmho/cm = micromhos per centimeter**; a measure of electrical conductivity.
- **TT = "Treatment Technique"** A required process intended to reduce the level of a contaminant in drinking water.

Additional Notes

Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and a bluish color to the skin.

Nitrate in drinking water at levels above 10 ppm is a health risk to infants of less than six months of age. High nitrate levels in drinking water can cause Blue Baby Syndrome. Nitrate levels may rise quickly for short period of time because of rainfall or agricultural activity. If you are caring for an infant, you should seek advice from your health care provider.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, USEPA and the California Department of Health Services (“DHS”) have issued 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 must provide the same protection for public health. A *Source Water Assessment* was conducted for Yuima Municipal Water District

system in April, 2004, and updated in 2006.

No contaminants have been detected in the District’s water that are normally associated with sources to which the system is considered most vulnerable, namely irrigated agriculture, greenhouse operation, golf courses and other activities involving the storage and application of fertilizers, pesticides and herbicides.

Discussion of Vulnerability – There have been no contaminants detected in the local water supply, however the supply is still considered vulnerable to activities carried out near the drinking water sources. The most significant identified sources of possible contamination are fertilizer and pesticide use on the citrus and avocado groves in the area surrounding District wells. All drinking water sources in Yuima Municipal Water District are secured from vandalism by locked entrance gates and fencing with barbed wire.

Improvement District A has two open reservoirs, one which is scheduled to be replaced with an enclosed steel tank in FY 2007-08 and the other to be replaced at a later date. These reservoirs represent less than 10% of the District’s total storage capacity. When originally built, the reservoirs met the health standards then in effect; however, today’s standards are more stringent and government guidelines require new reservoirs to be covered. The finished water leaving these two reservoirs are monitored twice daily for additional security.

SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER *						
Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb) Yuima IDA	5 5	ND .005	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) Yuima IDA	5 5	.215 .34	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	1-12/06	64.04	36.8 to 75.6	none	none	Generally found in ground & surface water
Hardness (ppm) Yuima	1-12/06	299.6	164 to 385	none	none	Generally found in ground & surface water

Note: Any violation of an MCL or AL is marked with an asterisk. Additional information regarding the violation is provided below.

* Testing for lead and copper, which should have been completed for both Yuima and IDA by September 30, 2005, was not completed until December, 2005, resulting in a technical violation. When completed, all tests showed that concentrations of both lead and copper were well below the Action Levels.

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	18% Imported Colorado State Project			Major Sources in Drinking Water
				Range Average	Combined Sources Yuima/IDA		
PRIMARY STANDARDS--Mandatory Health-Related Standards							
CLARITY							
Turbidity	NTU %	0.3 95	NA	Highest Range Average	0.09 100%	0.11 100%	Soil runoff
ORGANIC CHEMICALS - none to report							
Semi-Volatile Organic Compounds - none to report							
Volatile Organic Compounds - none to report							
Trichlorofluoromethane (Freon-11)	ppb	150	700	Range Average	0-28.8 1.92	ND ND	Industrial factory discharges; degreasing solvent; propellant
INORGANIC CHEMICALS							
Antimony	ppb	6	20	Range Average	ND-.5 .03	ND ND	Petroleum refinery discharges; fire retardants; solder; electronics
Barium	ppb	1000	2000	Range Average	ND-129 31.73	ND ND	Oil and metal refineries discharges; natural deposits erosion
Chromium	ppb	50	(100)	Range Average	ND-3.5 .70	ND ND	Discharge from steel and pulp mills; natural deposits erosion
Copper	ppm	AL=1.3	0.17	Range Average	ND-2.5 .32	ND ND	Internal corrosion of household pipes; natural deposits erosion
Fluoride (naturally-occurring)	ppm	2.0	1	Range Average	ND-0.54 .21	0.16-0.23 0.20	Erosion of natural deposits; water additives for tooth health
Lead	ppb	AL=15	2	Range Average	ND-1.3 .09	ND ND	House pipes internal corrosion; erosion of natural deposits
Nitrate (as NO3)	ppm	45	45	Range Average	ND-44.65 21.41	ND-0.45 ND	Runoff and leaching from fertilizer use; sewage; natural erosion
RADIOLOGICALS							
Gross Alpha Particle Activity	pCi/L	15	(0)	Range Average	.73-3.48 2.02	ND ND	Erosion of natural deposits
DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCTS PRECURSORS							
Total Trihalomethanes (TTHM)	ppb	80	NA	Range Average	.05-.07 .06	41-69 53	By-product of drinking water chlorination
Haloacetic Acids (five) (HAA5)	ppb	60	NA	Range Average	-.02-.05 .03	20-29 25	By-product of drinking water chlorination
Total Chlorine Residual	ppm	[4.0]	[4.0]	Highest RAA	.71 to 1.95 1.53	1.4-2.8 2.4	Drinking water disinfectant added for treatment
DBP Precursors Control (TOC)	ppm	TT	NA	Range Average	TT TT	TT TT	Various natural and man-made sources
SECONDARY STANDARDS--Aesthetic Standards							
Chloride	ppm	500	NA	Range Average	53-164 82	68-95 78	Runoff/leaching from natural deposits; seawater influence
Color	Units	15	NA	Range Average	ND-4 1	1-2 2	Naturally occurring organic materials
Copper	ppm	1.0	0.17	Range Average	ND-2.2 .32	ND ND	Internal corrosion of household pipes; natural deposits erosion; wood preservatives leaching
Iron	ppb	300	NA	Range Average	ND-4.77 .51	ND ND	Leaching from natural deposits; industrial wastes
Manganese	ppb	50	500	Range Average	ND-24.2 2.19	ND ND	Leaching from natural deposits
Odor Threshold	TON	3	NA	Range Average	ND-12 1	2 2	Naturally occurring organic materials
Specific Conductance	µS/cm	1600	NA	Range Average	627-1600 886	650-880 748	Substances that form ions in water; seawater influence
Sulfate	ppm	500	NA	Range Average	87-403 180	118-184 154	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	ppm	1000	NA	Range Average	440-772 510	381-518 438	Runoff/leaching from natural deposits; seawater influence
Turbidity	NTU	5	NA	Range Average	ND-2.67 .60	0.05-0.08 0.06	Soil runoff
Zinc	ppm	5.0	NA	Range Average	ND-1.6 .11	ND ND	Runoff/leaching from natural deposits; industrial wastes
UNREGULATED CHEMICALS REQUIRING MONITORING							
Perchlorate	ppb	NA	6	Range Average	ND-5.8 1.7	ND ND	Industrial waste discharge
Vanadium	ppb	NA	NL = 50	Range Average	ND-17 4.7	ND ND	Naturally-occurring; industrial waste discharge
ADDITIONAL PARAMETERS							
FEDERAL REGULATED CONTAMINANTS WITH NO MCLs (s)							
List 1 - Assessment Monitoring							
Perchlorate	ppb	NA	NA	Range Average	ND-5.8 1.7	ND-4.6 ND	Industrial waste discharge
List 2 - Screening Survey							
NONE TO REPORT							

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