

e l p a s o w a t e r u t i l i t i e s



2006 Drinking Water Report

La versión en español de éste folleto se encuentra adentro.



EL PASO **WATER** UTILITIES
PUBLIC **SERVICE** BOARD

www.epwu.org

Dear Customer:

This report describes the source and quality of El Paso's drinking water and El Paso Water Utilities' efforts to ensure the high quality of our water supply. We test our water for potentially harmful substances and put it through an intensive purification process before it is delivered to the community.

The U.S. Environmental Protection Agency requires all utilities to prepare and distribute this report on your water on an annual basis. It is part of the provisions of the Safe Drinking Water Act. The information is also submitted to the Texas Commission On Environmental Quality, the state agency that monitors our compliance with the regulatory standards and testing requirements necessary to assure safe drinking water.

El Paso's drinking water has no water quality violations and our water meets or exceeds all applicable standards for drinking water as established by the U.S. Environmental Protection Agency and the Texas Commission On Environmental Quality.

There is a tremendous amount of information pertaining to the availability and quality of water in El Paso. The most important information, which is summarized in this report, will help you evaluate the overall quality of your water and answer questions that might be important to you when making health decisions for your family.

We have a number of projects underway to insure continued good quality water for the future. By far the most important water project for the region is our desalination plant which will begin producing water this summer. At a capacity of 27.5 million gallons per day, it will be the largest inland desalination plant in the world and the largest desalination plant in the U.S. The plant will provide water to east and northeast El Paso and Fort Bliss. The dedication ceremony is set for Wednesday, August 8th at 11:00 a.m. There will also be an Open House from 2:00 to 7:00 p.m. I hope you will attend.

Sincerely,
Edmund G. Archuleta, P.E., General Manager

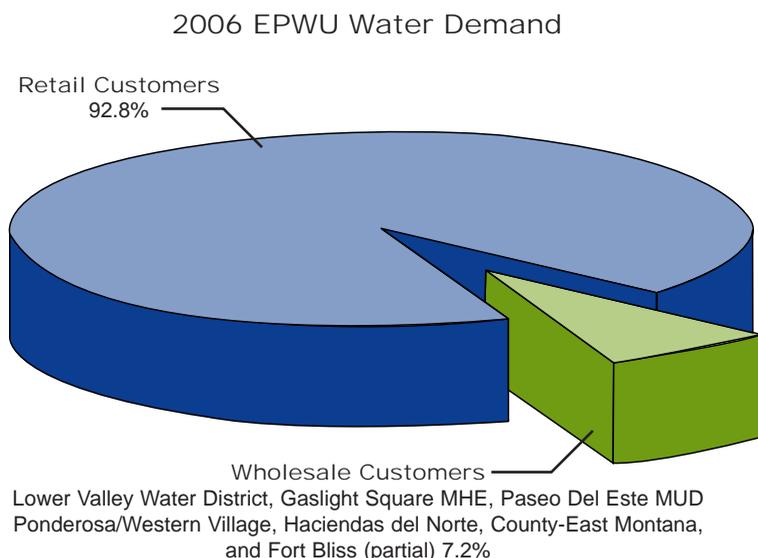
How Are We Rated?

El Paso Water Utilities is a member of the Partnership for Safe Water, and our water receives a "Superior" rating from the Texas Commission On Environmental Quality.

Our Standard and Poors and Fitch Ratings' "AA" ratings are symbols of our sound financial management, and the Government Finance Officers Association continues to recognize our excellent financial reporting and distinguished budget presentation.

Who Drinks Our Water?

El Paso Water Utilities serves customers inside and outside the city limits. We provide retail water service to customers in the City of El Paso, Westway, Canutillo, and Homestead. We also provide wholesale service to several communities in El Paso County.



Source Water Assessment

A source water assessment was conducted for El Paso Water Utilities in 2003 by the Texas Commission on Environmental Quality. Due to the complicated nature of El Paso's groundwater supplies, some susceptibilities exist, but the depth of the groundwater is a mitigating factor. Since the surface water supply comes from upstream states and since a variety of agricultural and municipal dischargers use the Rio Grande, the surface water supply is uniquely susceptible. However, El Paso's surface water treatment plants are designed to minimize the effects of those susceptibilities. A copy of the Source Water Assessment document is available for public review by calling 594-5595.

Note to wholesale customers: Water consumers in the Lower Valley Water District, Paseo Del Este MUD, Ponderosa/Western Village, and Gaslight Square MHE receive water from the EPWU distribution system. As such, their water quality is the same as described in this report. Fort Bliss, County-East Montana and Haciendas del Norte water consumers may receive some or all of their water from the EPWU distribution system, but may receive water from other sources that may not be represented in this report. Please contact your water retailer for further information.

For More Information

El Paso Water Utilities is governed by the Public Service Board, which is responsible for the management and control of the water and wastewater system and the expenditure and application of its revenues. The Board meets at 8:00 a.m. on the 2nd and 4th Wednesday of each month at El Paso Water Utilities' main office, 1154 Hawkins Boulevard. The meetings are open to the public. Please call 594-5600 to confirm the meeting date and time.

Questions about public participation and policy decisions can be directed to our Public Affairs Department at 594-5692.

Other useful numbers are:

Water Quality Laboratory 594-5733

Safe Drinking Water Hotline 1-800-426-4791

Visit our web site: www.epwu.org

Notice: This Water Quality Report is being provided in addition to other notices that may be required by law.

How Safe Is Your Water?

What's in Our Water?

All drinking water contains some naturally-occurring contaminants. The sources of 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 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 live-stock 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, urban storm water 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 (United States Environmental Protection Agency) prescribes regulations which limit the amount of certain contami-

nants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water. 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. In fact, a few of the naturally occurring substances may have nutritional values at low levels.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Required Additional Health Information

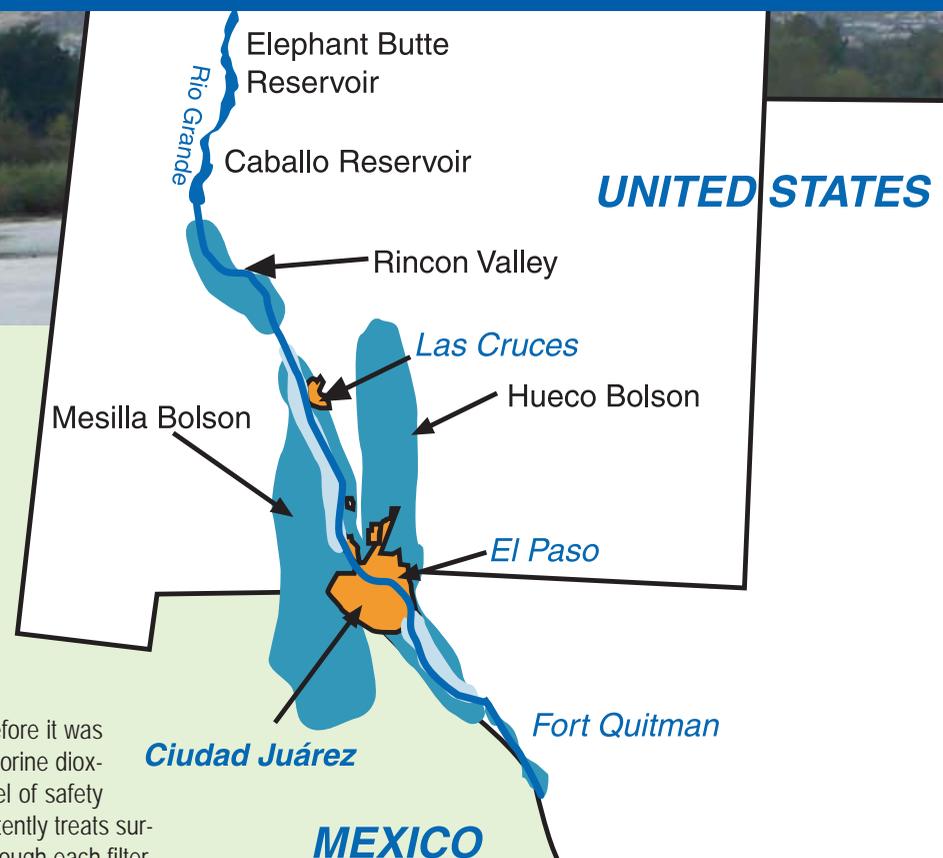
You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly or immuno-compromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants, those who are undergoing treatment with steroids, and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (1-800-426-4791).

Where Our Water Comes From

The water we supply to our customers comes from three sources—one surface water source and two groundwater sources. The surface water source is the Rio Grande. The groundwater sources are the Mesilla Bolson and the Hueco Bolson aquifers.

Although some customers receive water from only one source, most customers receive water from two sources, depending on the time of year. While water from the Rio Grande is highly treated before delivery to our customers, our high quality groundwater needs only to be chlorinated prior to delivery.

El Paso Water Utilities began filtering our drinking water in 1943, 47 years before it was federally mandated, and is a pioneer in such processes as ozonation and chlorine dioxide. Our treatment plants are designed and operated to treat water to a level of safety far exceeding that required by EPA regulation. El Paso Water Utilities consistently treats surface water to 0.1 NTUs measured immediately after the water has passed through each filter. This is significantly better than the 0.3 NTUs required by EPA regulation.



Frequently ASKED Questions

What causes the musty taste and odor I sometimes find in my water?

Sometimes microscopic plants called algae multiply rapidly in the New Mexico reservoirs during the hot summer months. This causes a distinctly different taste and odor to develop in El Paso's water derived from the Rio Grande. This problem is normally very short lived. Activated carbon is used at the water treatment plants to adsorb these algae-related tastes and odors. Even if the musty smell and taste are apparent, the water is safe to drink.

Does El Paso have hard water? Should I install a water softener?

Water hardness is defined by the amount of calcium and magnesium present. When the levels are comparatively low, water is described as soft. When the levels are comparatively high, water is described as hard. Water in El Paso is described as moderately hard to hard. Harder water does not lather as easily and does not form as many suds when using soap or detergent. However, there is increasing evidence that the presence of calcium and magnesium found in hard water is desirable for good cardio-vascular health. We do not recommend the installation of water softeners for drinking water.

Is fluoride added to El Paso's water?

Fluoride is a substance which is known to retard the formation of cavities in teeth. In some communities, fluoride is added to drinking water. The American Dental Association recommends a concentration of 1 part per million. However, fluoride occurs naturally in El Paso's water at the optimal level. Bottled water usually does not contain fluoride and, therefore, is not recommended for children. Because too much fluoride can be detrimental, the maximum level set by EPA standards is 4 parts per million.

What is the arsenic situation in El Paso?

The EPA Maximum Contaminant Level for arsenic in drinking water changed from 50 parts per billion (ppb) to 10 ppb, effective January 23, 2006. El Paso Water Utilities completed the construction of \$76 million in arsenic treatment facilities six weeks ahead of the mandated regulation.

A 30 million-gallon-per-day treatment plant removes arsenic from Mesilla Bolson groundwater. Smaller facilities in the northeast and eastern areas of El Paso remove arsenic from water in the Hueco Bolson. Eleven wells, located south of the Interstate, were not being used because the water quality no longer met drinking water standards. These wells are equipped with reverse osmosis systems that remove arsenic and minerals from water. El Paso's arsenic treatment program is the largest in the country.

Is lithium present in El Paso's water? Does it have an effect on people's moods?

A small amount of lithium occurs naturally in El Paso's water. The amount is considerably less than a medical dosage. Lithium is sometimes used by doctors to treat mental disorders. To get the same amount of lithium as in one standard capsule, you would have to drink about 600 glasses of water.

Would a home water purification device make my water safer?

If you are an El Paso Water Utilities customer, these devices are not necessary to make your water safe. Your water is safe as it comes from the tap. If not properly maintained, these devices may actually cause problems with your water, including uncontrolled growth of disease-causing bacteria. Home treatment devices are not tested or regulated by the state or federal government. Some, however, are tested by independent laboratories.

Sometimes my water seems cloudy. Is the cloudy water safe?

Water that appears milky is usually the result of harmless air bubbles trapped in the water. After a glass of this water sits for a few minutes, the water will become clear as the air bubbles

float to the top. Although the air trapped in the water does not affect the safety of the water, please report this problem to El Paso Water Utilities at 594-5733.

Is the chlorine used to disinfect water dangerous?

El Paso uses chlorine to disinfect our drinking water. Chlorine has been used in municipal water in the United States since 1908 and it is the most effective way to ensure that water stays disinfected as it travels through water delivery systems. Chlorine prevents water-borne epidemics such as cholera, typhoid, and hepatitis. The maximum amount of chlorine in El Paso's water is usually 2 parts per million (ppm). Chlorine in this quantity poses no adverse health risks.

There has been publicity that chlorine in drinking water causes cancer. That is not correct. Chlorine does not cause cancer; however, chlorine may react with organic matter to form substances which can cause cancer if they are present in sufficient quantities. The groundwater used in El Paso is naturally free of most organic matter that will react with chlorine to form cancer-causing substances, and water drawn from the Rio Grande is highly treated before chlorination to minimize the concentration of compounds which can react with chlorine. The maximum level of these cancer-causing substances is regulated by the EPA.

What causes water to sometimes appear discolored or rusty?

Rusting in galvanized pipes in plumbing systems is the typical cause of discolored water. In some cases, rusty or dirty water may come from the distribution system as a result of a

main break or fire hydrant use. Iron causes the discoloration, but it is not a health risk. Usually, rusty water will clear after running for a few minutes. Although rusty or dirty water does not create a health risk, we do not recommend that you drink water that is not clear. If the water does not clear after running or if clothing is stained in the wash, please call El Paso Water Utilities for assistance at 594-5733.

What happened to the cold water?

The temperature of drinking water in El Paso can vary depending on the time of year and the location where the measurement is taken. The outside temperature affects the water temperature as it flows through our water system and through your plumbing.



Other Monitoring Performed

In 2003, El Paso's water was tested for 12 unregulated contaminants as part of the Unregulated Contaminant Monitoring Rule (UCMR). About 2,800 large systems, such as El Paso Water Utilities, participated in the monitoring nationwide. The U.S. Environmental Protection Agency will use the data to estimate national occurrence. None of the 12 unregulated contaminants were detected in El Paso's water supply. The 12 unregulated contaminants monitored as part of the UCMR were.

2,4-dinitrotoluene

2,6-dinitrotoluene

Acetochlor

DCPA mono-acid degradate

DCPA di-acid degradate

4,4'-DDE

EPTC

Moninate

MTBE

Nitrobenzene

Perchlorate

Terbacil

Although EPWU monitors your water for more than 200 regulated and nonregulated parameters, some parameters, such as magnesium and calcium are routinely detected, but are not required to be reported in this document. You may request a list of these types of parameters by calling 594-5595. Many other contaminants, such as pesticides, herbicides, volatile and synthetic organic chemicals, metals and inorganics are routinely monitored and have not been detected in El Paso's water supply.

The Real Skinny on a Heavy Subject: Lead in Drinking Water

Contrary to what you may hear in other cities, drinking water is not a significant problem in El Paso. Lead is not found in the source waters used to provide potable water to El Paso, nor is lead used for service lines, pipe and tubing.

Lead levels in El Paso's drinking water are generally very low, with the highest levels coming from the first-draw tap water after several hours of stagnation in home plumbing.

Lead in drinking water in El Paso is always associated with the corrosion of household plumbing fixtures and solder. Prior to 1988, lead solder and plumbing fixtures containing lead were commonly used.

Lead is a serious health concern. Exposure to lead can cause damage to the brain, red blood cells and kidneys. Lead exposure is especially harmful to pregnant women and young children because it can interfere with mental and neurological development. Most exposure to lead is from lead-based paint and from lead in soil caused by atmospheric deposition such as from the use of leaded gasoline.

Even though El Paso's water does not contain lead, in order to prevent or reduce the possibility of lead leaching from household plumbing, we use a phosphate-based corrosion inhibitor. The water treatment plants that treat Rio Grande water add a blend of calcium phosphate and sodi-

um hexametaphosphate to control the leaching of lead from plumbing fixtures and solder. The chemical makeup of area groundwater does not result in the leaching of lead; therefore, it does not require the addition of phosphates.

Based on the low levels of lead detected in El Paso, the monitoring requirement was reduced from annually to triennially by the Texas Commission on Environmental Quality. El Paso conducted lead surveys in 1991, 1994, 1997, 2000, 2003 and 2006. In 2006, the 90th percentile lead concentration was found to be 0.0035 mg/L, well below the EPA-mandated Action Level of 0.015 mg/L.

DRINKING WATER ANALYSIS

Substance (Units)	Highest level in any sampling point	Range of detected levels	MCL	MCLG	Possible source
Turbidity Turbidity (NTU)	0.29 ⁽¹⁾	0 to 0.29	Treatment Technique	0	Soil runoff
Inorganics Arsenic (ppb) Fluoride (ppm) Nitrate as Nitrogen (ppm)	7.8 0.7 4.4	2.0 to 7.8 0.7 to 0.7 0 to 4.4	10 4 10	N/A 4 10	Erosion of natural deposits Erosion of natural deposits Runoff from fertilizer use
Lead and Copper Copper (ppm) Lead (ppb)	0.67 ⁽²⁾ 3.5 ⁽²⁾	0.01 to 0.98 0.3 to 4.4	Action Level = 1.3 Action Level = 15	1.3 0.0	Corrosion of household plumbing systems Corrosion of household plumbing systems
Coliform Bacteria Total Coliform Bacteria	0.4%	0 to 0.4%	5	0	Naturally present in the environment
Disinfection Residual Chlorine (ppm) Chlorine Dioxide (ppb)	2.4 100	0.2 to 2.4 0 to 100	4 ⁽⁵⁾ 800	4 ⁽⁶⁾ 800	Disinfectant used to control microbes Disinfectant used to control microbes
Disinfection Byproducts Total Trihalomethanes (ppb) Total Haloacetic Acids (ppb) Bromate (ppb) Chlorite (ppm)	54.4 ⁽³⁾ 22.3 ⁽³⁾ 7.8 0.98	0 to 131 0 to 55 0 to 7.8 0 to 0.98	80 60 10 1	N/A N/A 0 0.8	By-product of drinking water disinfection By-product of drinking water disinfection By-product of drinking water disinfection By-product of drinking water disinfection
Unregulated Contaminants ⁽⁴⁾ Chloroform (ppb) Bromoform (ppb) Bromodichloromethane (ppb) Dibromochloromethane (ppb)	16.0 11.4 28.7 33.7	0 to 16.0 0 to 11.4 0 to 28.7 0 to 33.7	N/A N/A N/A N/A	N/A N/A N/A N/A	By-product of drinking water disinfection By-product of drinking water disinfection By-product of drinking water disinfection By-product of drinking water disinfection

⁽¹⁾The lowest monthly percentage of samples meeting limits was 100%

⁽²⁾Lead and copper concentration shown are at the 90th percentile level at the customer's tap first draw sample

⁽³⁾Highest quarterly average

⁽⁴⁾Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

⁽⁵⁾Maximum Residual Disinfectant Level is the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

⁽⁶⁾Maximum Residual Disinfectant Level Goal the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Health Effects Language

Turbidity (NTU) - Turbidity has no health effects. However, turbidity is monitored because it can interfere with disinfection and provide a medium for microbial growth.

Arsenic - While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Definitions

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

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to maximum contaminant level goals as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

N/A - not applicable

Nephelometric Turbidity Unit (NTU) - A measure of turbidity (*cloudiness*).

Parts per Billion (ppb) - or micrograms per liter. An example of one part per billion is one packet of artificial sweetener sprinkled into an Olympic-sized swimming pool full of water.

Parts per Million (ppm) - or milligrams per liter. An example of one part per million is one packet of artificial sweetener sprinkled into 250 gallons of water.

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



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& Kay Bailey Hutchison
Desalination Plant

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