



Annual
WATER
QUALITY
REPORT

Reporting Year 2012



Presented By _____
East Rio Hondo
Water Supply Corporation

PWS ID#: TX0310096/TX0310031/0310152

Este reporte incluye informacion importante sobre el agua para tomar.
Para asistencia en espanol, favor de llamar al telefono (956) 748-3633.

There When You Need Us

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2012. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

Source Water Assessment

The Texas Commission on Environmental Quality (TCEQ) has completed an assessment of your source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility rating and previous sample data. Any detection of these contaminants will be found in this consumer confidence report. For more information on source water assessments and protection efforts, contact the TCEQ Region 15 office at (956) 425-6010.

Important 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 immunocompromised 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 at (800) 426-4791.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact our business office. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply is responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We normally meet the second Monday of each month beginning at 6 p.m. at the East Rio Hondo Water Supply Corporation (ERHWSC) Main Office, 206 Industrial Parkway, Rio Hondo, Texas.

Where Does My Water Come From?

Depending on where you live in the East Rio Hondo Water Supply Corporation's (ERHWSC) service area, you receive processed Rio Grande River water from one of three treatment facilities. For 30 years, ERHWSC has operated the 3.2 million gallon per day (MGD) Nelson Road Treatment Plant (NRTP) south of FM 1561. In March of 2009, we put into production our new 8.0 MGD Martha Ann Simpson Treatment Plant (MASTP). Water is pumped from the Rio Grande River and transferred to both plants by Cameron County Irrigation District Number Two (CCID2). These two plants can deliver water to all locations in our service area, depending upon system demands. Members of the Arroyo City area receive water produced from the 0.6 MGD Arroyo City Water Treatment Plant located west of Arroyo City off FM 2925 or from ERHWSC through an interconnect pipeline located on FM 1847. The Arroyo City plant is also supplied water by CCID2. Members of the west of Combes and North Harlingen areas may receive water from NRTP, MASTP, desalinated brackish groundwater from North Cameron Regional Water Supply Corporation, or Harlingen WaterWorks System (HWWS) via an interconnect pipeline with ERHWSC. Analyses for all four water sources are included in this report. Rio Grande water for the Rio Grande Valley is stored in both Amistad and Falcon reservoirs. These reservoirs fluctuate in level, depending on inflows from other states and from Mexico. Water quality varies depending on the area of the Rio Grande watershed from which the inflow originates.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing teeth or shaving.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from a slow toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Amanda Ramos at (956) 748-3633.

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES													
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	East Rio Hondo Water Supply Corporation				Harlingen WaterWorks System		Arroyo City Water Treatment Plant		North Cameron Regional Water Supply Corporation		VIOLATION	TYPICAL SOURCE
		MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Antimony (ppb)	2012	6	6	0.549	NA	NA	NA	0.529 ¹	NA ¹	NA	NA	No	Discharge from petroleum refineries; Fire retardants; Ceramics; Electronics; Solder
Arsenic (ppb)	2012	10	0	1.23	NA	NA	NA	2.06 ¹	NA ¹	4.57 ¹	NA ¹	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2012	2	2	0.138	NA	NA	NA	0.125 ¹	NA ¹	0.00212 ¹	NA ¹	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters ² (pCi/L)	2006	50	0	NA	NA	NA	NA	8.6	NA	NA	NA	No	Decay of natural and man-made deposits
Chloramines (ppm)	2012	[4]	[4]	3.21	0.5–4.8	NA	NA	2.71	0.5–5.8	1.87	0.81–2.90	No	Water additive used to control microbes
Chlorine (ppm)	2012	[4]	[4]	2.71	0.3–4.6	NA	NA	0.94	0.3–3.4	1.74	0.45–2.5	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	2012	[800]	[800]	10	ND–180	NA	NA	NA	NA	NA	NA	No	Water additive used to control microbes
Chlorite (ppm)	2012	1	0.8	0.54	0.05–0.88	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection
Chromium (ppb)	2012	100	100	1.44	NA	NA	NA	1.9 ¹	NA ¹	0.281 ¹	NA ¹	No	Discharge from steel and pulp mills; Erosion of natural deposits
Combined Radium (pCi/L)	2011	5	0	NA	NA	NA	NA	NA	NA	1	NA	No	Erosion of natural deposits
Ethylbenzene (ppb)	2012	700	700	NA	NA	1.38	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2012	4	4	0.34	NA	0.45	NA	0.58 ¹	NA ¹	0.15 ¹	NA ¹	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 1 (ppb)	2012	60	NA	23.5	NA	NA	NA	34	NA	NA	NA	No	By-product of drinking water disinfection
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2012	60	NA	19.2	ND–30.5	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2012	10	10	0.19	NA	NA	NA	2.82 ¹	NA ¹	0.07 ¹	NA ¹	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Pentachlorophenol (ppb)	2012	1	0	NA	NA	0.14	NA	NA	NA	NA	NA	No	Discharge from wood preserving factories
Selenium (ppb)	2012	50	50	1.28	NA	NA	NA	7.31 ¹	NA ¹	1.67 ¹	NA ¹	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
TTHMs [Total Trihalomethanes]–Stage 1 (ppb)	2012	80	NA	35.9	NA	NA	NA	53.4	NA	NA	NA	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2012	80	NA	33.6	ND–51.5	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection
Thallium (ppb)	2012	2	0.5	0.153	0.021–0.413	NA	NA	0.195 ¹	NA ¹	NA	NA	No	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Total Coliform Bacteria (# positive samples)	2012	More than 1 positive monthly sample	0	0	NA	NA	NA	0	NA	NA	NA	No	Naturally present in the environment
Total Organic Carbon (ppm)	2012	TT	NA	1.34	1.34–2.39	NA	NA	NA	NA	NA	NA	No	Naturally present in the environment
Turbidity ³ (NTU)	2012	TT	NA	0.28	0.04–0.28	0.3	ND–0.3	NA	NA	NA	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2012	TT	NA	100	NA	100	NA	NA	NA	NA	NA	No	Soil runoff
Xylenes (ppm)	2012	10	10	NA	NA	0.00995	NA	NA	NA	NA	NA	No	Discharge from petroleum factories; Discharge from chemical factories

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	East Rio Hondo Water Supply Corporation			Arroyo City Water Treatment Plant			VIOLATION	TYPICAL SOURCE
		AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES		
Copper (ppm)	2010	1.3	1.3	0.088	0/30	0.083 ⁴	0/10 ⁴	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2010	15	0	0.98	0/30	2.0 ⁴	0/10 ⁴	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	East Rio Hondo Water Supply Corporation				Arroyo City Water Treatment Plant		North Cameron Regional Water Supply Corporation		VIOLATION	TYPICAL SOURCE
		SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Aluminum (ppb)	2012	200	NA	78.5	ND-78.5	127 ¹	NA ¹	2.04 ¹	NA ¹	No	Erosion of natural deposits; Residual from some surface water treatment processes
Chloride (ppm)	2012	300	NA	227	205-252	238 ¹	NA ¹	267 ¹	NA ¹	No	Runoff/leaching from natural deposits
Iron (ppb)	2012	300	NA	81.9	ND-81.9	NA	NA	NA	NA	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2012	50	NA	11.8	1.2-25.6	10.2 ¹	NA ¹	6.15 ¹	NA ¹	No	Leaching from natural deposits
pH (Units)	2012	6.5-8.5	NA	8.0	7.8-8.3	7.2 ¹	NA ¹	8.5 ¹	NA ¹	No	Naturally occurring
Silver (ppb)	2012	100	NA	0.029	ND-0.0029	NA	NA	NA	NA	No	Industrial discharges
Sulfate (ppm)	2012	300	NA	254 ⁵	128-395 ⁵	257 ¹	NA ¹	142 ¹	NA ¹	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids [TDS] (ppm)	2012	1,000	NA	822	663-1,030	773 ¹	NA ¹	647 ¹	NA ¹	No	Runoff/leaching from natural deposits
Zinc (ppm)	2012	5	NA	0.00798	0.00387-0.0134	0.005 ¹	NA ¹	0.0149 ¹	NA ¹	No	Runoff/leaching from natural deposits; Industrial wastes

UNREGULATED AND OTHER SUBSTANCES ⁶

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	East Rio Hondo Water Supply Corporation		Arroyo City Water Treatment Plant		North Cameron Regional Water Supply Corporation		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Bromodichloromethane (ppb)	2012	7.93	ND-12.1	11.5	NA	NA	NA	By-product of drinking water disinfection
Bromoform (ppb)	2012	9.6	ND-14.9	19.1	NA	NA	NA	By-product of drinking water disinfection
Chloroform (ppb)	2012	3.6	ND-5.6	4.4	NA	NA	NA	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2012	10.9	ND-16.4	18.4	NA	NA	NA	By-product of drinking water disinfection
Hardness (ppm)	2012	310	226-394	284 ¹	NA ¹	117 ¹	NA ¹	Natural occurring soluble mineral salts
Nickel (ppb)	2012	3.13	NA	0.32 ¹	NA ¹	0.313 ¹	NA ¹	NA
Sodium (ppm)	2012	178	166-190	136 ¹	136-136 ¹	189 ¹	NA ¹	Runoff/leaching from natural deposits
Total Alkalinity (ppm)	2012	98	82-114	63 ¹	NA ¹	64 ¹	NA ¹	Naturally occurring soluble mineral salts

¹ Sampled in 2011.

² The MCL for beta particles is 4 mrem/year. The U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

³ Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

⁴ Sampled in 2009.

⁵ Sulfate was detected at a level exceeding the established State Secondary MCL (SMCL), which was set to protect against unpleasant aesthetic effects such as color, taste, odor, and staining of plumbing fixtures (for example, tubs or sinks) or clothing during laundering. There are no adverse health effects expected with this exceedance.

⁶ Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of monitoring unregulated contaminants is to assist the EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Definitions

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

MCL (Maximum Contaminant Level):

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal):

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.

MRDL (Maximum Residual Disinfectant

Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (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.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units):

Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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