Rio Linda/Elverta Community Water District

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# Rio Linda/Elverta Community Water District 2011 Consumer Confidence Report

2010 Water Quality Information

Este informe contiene informacion muy impotante sobre su agua beber.

Traduzcalo o hable con alguien que lo entienda bien.

## Dear Rio Linda/Elverta Community Water District Customer:

Water quality is an important issue with us. Providing water that meets state and federal drinking water standards is our number one priority. The District provides water quality information each year to customers in conformance with these state and federal regulations. The Districts water supply is obtained from nine wells located throughout the community. The District is required to test weekly for coliform bacteria in the distribution system and annually at the production wells. An assessment of the Districts drinking water sources was completed in December 2004 and can be obtained at the District office. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply; high and low density septic systems. In addition, the sources are considered most vulnerable to these activities; Illegal activities/ unauthorized dumping, sewer collection systems, wells/agriculture/irrigation, dry cleaners, airports/maintenance/fueling, fleet/ truck/bus terminals, plastic/synthetics producers, automobile/repair shops, electrical/electronic manufacturing, chemical/ petroleum processing/storage, and automobile/gas stations.

## Microbiological Quality of Water.

Monitoring for bacteriological constituents in the distribution system is required of all water systems. If you have consumers such as renters or workers who do not get water bills, we can send you additional copies upon request to make this report available to those who use water at your facility. If you have any questions about this report, contact the District office during regular business hours (7:00 am – 4:00 pm Monday thru Friday) at (916) 991-1000. The District has test sample sites in various locations in the system approved by the California Department of Public Health. Of the 208 required test samples taken last year, 0 were found to contain coliform bacteria.

Monthly Board meetings are held the third Monday of every month.

Misrobiological	No. of	Months in	-					
Microbiological Contaminants	Detections	violation	MCL	MCLG	Typical Source of Contaminants			
Total Coliform Bacteria	Detections this year: 0	0	No more than 1 positive	0	Naturally present in the environment  Human and animal fecal waste			
Fecal Coliform and E. Coli	Detections This year: 0	0	monthly sample	0				
DETECTED PRIMARY STANDARDS								
PARAMETER	UNITS	PHG (MCLG)	MCL	DLR	AVERAGE	RANGE	Typical Source of Contaminants	
*Barium (2008)	PPB	2	1	100	56	ND - 140	Erosion of natural deposits	
*Fluoride (2008)	PPM	1	2	0.1	0.27	.1940	Erosion of natural deposits	
*Arsenic (2008)	PPB	0.004	10	2	5.88	3.3 - 9.6 Erosion of natural deposits		
*Chromium (2008)	PPB	(100)	50	10	6	ND - 15	Erosion of natural deposits	
*Radium 228 (2007)	pCi/L	0.019	5	1	0.39	<1 - 1.46	Erosion of natural deposits	
Nitrate (as NO3) (2010)	PPM	45	45	2	5.3	3.1 - 11	Leaching from fertilizer use; leaching from septic tanks / sewage; erosion of natural deposits	

Arsenic above 5 ppb up to 10 ppb: While your drinking water meets the current federal and state standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high consentrations and is linked to other health effects such as skin damage and circulatory problems.

DETECTED SECONDARY STANDARDS									
PARAMETER	UNITS	PHG (MCLG)	MCL	DLR	AVERAGE	RANGE	Typical Source of Contaminants		
*Total Dissolved Solids	PPM	No Standard	1000	N/A	214.4	180 - 250	Runoff/leaching from natural deposits		
*Sulfate	PPM	No Standard	500	0.5	5.09	71 - 91	Runoff/leaching from natural deposits; industrial wastes		
*Iron	PPB	No Standard	300	100	30	ND - 270	Leaching from natural deposits; industrial wastes		
*Sodium	PPM	No Standard	N/A	N/A	23.1	18 - 30	Naturally occurring organic materials		
	DETECTED UNREGULATED STANDARDS								
PARAMETER	PARAMETER UNITS PHG (MCLG)		MCL	DLR	AVERAGE	RANGE	Typical Source of Contaminants		
*Hardness	PPM	No Standard	N/A	N/A	92.67	58 - 130	Naturally occurring organic materials		
*Chromium Hexavalent (2007)	PPB	No Standard	N/A	1	3.3	3.3	Erosion of natural deposits		

LEAD AND COPPER ACTION LEVELS								
CHEMICAL ACTION LEVEL (Mg/L) SOURCE WATER (Mg/L) AT THE TAP 90 <sup>TH</sup> PERCENTILE (mg.								
*Copper (2008)	1.3	ND	0.13					
*Lead (2008)	15	ND	0.0025					

<sup>\*</sup> Data reported is from most current samples for these constituents'. Some contaminants are not required to be monitored for each year because the concentration of these contaminants does not change frequently. Some of our data reported, though representative is more than one year old. In addition to these constituents the District tested for many other organic and inorganic chemicals, none of which were detected in the water.

#### Abbreviations and Definitions

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

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

ppm - Parts per million or Milligrams per Liter

ppb - Parts per billion or Micrograms per Liter

pCi/L - Pico curies per Liter (a measure of radioactivity in water)

mg/L - Milligram per Liter, same as parts per million

µg/L − Micrograms per Liter, same as parts per billion

MFL - Million fibers per Liter (a measure of asbestos fibers longer than 10 micrometers)

NTU: Nephelometric Turbidity Unit - Measure of the clarity of water

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

MCL: Maximum Contaminant Level – The highest level of a contaminant that is allowed in drinking water in accordance with state and federal regulations

MCLG: Maximum Contaminant Level Goal – The level of a contaminant in drinking water below which there is no known or expected risk to health. These goals are established by the Federal Environmental Protection Agency

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

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. MRDLG's are set by the U.S. Environmental Protection Agency.

DLR: Detection limit for Reporting purposes; set by DHS.

**Primary Drinking Water Standards** – These standards define surface water treatment requirements, and the monitoring and reporting requirements for constituents required by regulations. State and federal regulators establish the Maximum Contaminant Level (MCL) for constituents that affect health

PHG: Public Health Goal – The level of a contaminant in drinking water below which there is no known or expected risk to health. These goals are established by the California Environmental Protection Agency

TON: Threshold Odor Number

N/A: Not Applicable

At the Tap 90<sup>th</sup> Percentile – Not Representative of source water, representative of testing on a select group of homes using Department of Health Services guidelines. These tests determine whether household plumbing have affected the Water Quality.

<: Less than

•: An accurate measurable average could not be determined with the current test data.

The source of drinking water provided by the District is derived solely from wells (ground water). As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil/gas production, mining, or farming;
- Pesticides and herbicides, that 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, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems;
- Radioactive contaminants, that can be naturally occurring, or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that 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 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 at 1-800-426-4791, or visit their website at www.epa.gov/safewater.

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 systems disorder, 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 risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791, or visit their website at www.epa.gov/safewater.

The Rio Linda/Elverta Community Water District staff can be reached at 916-991-1000 to discuss any questions you may have on this report.

The Rio Linda/Elverta Community Water District purchased water from Sacramento Suburban Water District and supplied the purchased water to customers in the distribution system in 2008. In accordance with regulations the following water quality data was provided by Sacramento Suburban Water District for the purchased water. This water quality report includes the upper MCL range for the reported constituents.

# Sacramento Suburban Water District Water Quality Data for 2010

DETECTED PRIMARY DRINKING WATER C					TUENTS	regulated	to protect your health
MOV					TH SERVIC		
CONCERTENT	TIMITEC	MCL	(MCLG)	DANCE	AVERAGE	SAMPLE	MA JOB SOURCES
Arsenic CONSTITUENT	UNITS PPB	[MRDL] 10	or 0.004	ND - 4.1		2010	MAJOR SOURCES Erosion of natural deposits
Barium	PPB	1000	200	ND - 180		2010	Erosion of natural deposits  Erosion of natural deposits
Chromium (total)	PPB	50	(100)	ND - 13	ND	2010	Erosion of natural deposits
Fluoride	PPM	2	1	ND - 0.31	0.2	2010	Erosion of natural deposits
Nitrate (as NO3)	PPM	45	45	1.8 - 30.0	10.5	2010	Leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Tetrachloroethylene (PCE)	PPB	5	0.06	ND - 1.2	ND	2010	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Trichlorothethylene (TCE)	PPB	5	0.8	ND - 1.7	ND	2010	Discharge from metal degreasing sites and other factories
Uranium	pCi/L	20	0.43	ND - 2.68			Erosion of natural deposits
Radium 226	pCi/L	5 (combined	0.05	ND - 1.1	ND	2005 - 2007	
Radium 228	pCi/L	Ra -226 and - 228)	0.019	ND - 1.07	ND	2005 - 2007	Erosion of natural deposits
DETECTED SI	ECONDARY	Y DRINKING	WATER	CONST	TITUENT	S regulate	d for aesthetic qualities
				NORTH SERVICE AREA			
			PHG OR			SAMPLE	
CONSTITUENT	UNITS	MCL	(MCLG)	RANGE	AVERAGE	DATE	MAJOR SOURCES
Chloride	PPM	500	NONE	8.0 - 65	32	2010	Runoff/leaching from natural deposits
Color	UNITS	15	NONE	ND - 5	ND	2010	Naturally - occurring organic materials
Iron	PPB	300	NONE	ND - 420	20	2010	Leaching from natural deposits
Manganese	PPB	50	NONE	ND - 63	5	2010	Naturally - occurring organic materials
Odor	TON	3	NONE	ND - 1	ND	2010	Naturally occuring organic materials
Specific Conductance	μmhos	1600	NONE	200 - 600	223	2010	Substances that form ions when in water
Sulfate	PPM	500	NONE	2.3 - 22.0	7.9	2010	Runoff/leaching from natural; deposits; industrial wastes
Total Dissolved Solids	PPM	1000	NONE	170 - 430	254	2010	Runoff/leaching from natural deposits
Turbidity	NTU	5	NONE	ND - 0.78		2010	Soil runoff and leaching
DH	ETECTED U	INREGULAT	TED DRIN				JENTS {A}
			DVVG OD	NORT	TH SERVIC		
CONSTITUTION TO TIME		MCL	PHG OR (MCLG)	DANCE	AVERAGE	SAMPLE DATE	MAJOR SOURCES
CONSTITUENT Calcium	UNITS PPM	NO STANDARD	NONE	14 - 54	23	2010	Erosion of natural deposits
Chloroform { <b>B</b> }	PPB	NO STANDARD	(70)	ND - 0.52		2004 - 2008	D 1 C 1 1
Dichlorodifluoromethane	PPB	NL=1000	NONE	ND - 24	ND	2004 - 2009	Used in electrical insulation, as a propellant and refrigerant, pesticide
Hardness	PPM	NO STANDARD	NONE	75 - 240	112	2010	Hardness is the sum of polyvalent cations present in the water, generally naturally occurring magnesium and calcium.
Magnesium	PPM	NO STANDARD	NONE	8.9 - 26.0	13.6	2010	Erosion of natural deposits
C . 1'	DDM (	NO CELANDARD	MONIE	0 = =1	25	2010	NY . 44

<sup>{</sup>A} Unregulated contaminant monitoring helps determine where certain contaminants occur and whether they need to be regulated.

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2010 Naturally-occuring salt in water

NO STANDARD NONE 9.5 - 51

PPM

Sodium

 $<sup>\{</sup>B\}\,$  This is source / wellhead concentration prior to treatment.

## Sacramento Suburban Water District - North Service Area

**Detected Drinking Water Constituents** 

CONSTITUENT	UNITS MCL [MRDL]		PHG OR (MCLG) OR [MRDLG]	RANGE	AVERAGE	SAMPLE DATE
Aluminum	PPM	Primary - 1.0	0.6	ND - 0.58	ND	2006 - 2007
Aluminum	PPM	Secondary - 0.200	0.6	ND - 0.58 {A}	ND	2006 - 2007
Arsenic	PPB	10	0.004	ND - 3.90	ND	2006 - 2007
Barium	PPM	1	2	ND - 0.12	ND	2004 - 2009
Boron	PPB	NL=1000	NONE	ND - 430	ND	2001 - 2004
Bromodichloromethane {B}	PPB	NO STANDARD	(0)	ND - 0.84	ND	2004 - 2008
Chloride	PPM	500	NONE	4.5 - 60.0	31	2004 - 2007
Chloroform {B}	PPB	NO STANDARD	(70)	ND - 6.2	ND	2004 - 2008
Chromium	PPB	50	(100)	ND - 14	ND	2006 - 2007
Color	UNITS	15	NONE	ND - 10	ND	2004 - 2007
Copper	PPM	1	0.17	ND	ND	2004 - 2007
Dichlorodifluoromethane	PPB	NL=1000	NONE	ND - 1.3	ND	2004 - 2009
Fluoride	PPM	2	1	ND - 0.36	ND	2006 - 2007
Foaming Agents [MBAS]	PPB	500	NONE	ND - 0.90	0.03	2004 - 2007
Gross Alpha particle activity	pCi/L	15	(0)	ND	ND	2005 - 2008
Hexavalent Chromium	PPB	50	NONE	ND - 17.0	5.6	2001 - 2004
Iron	PPM	0.3	NONE	ND - 2.2 {C}	0.14	2004 - 2009
Manganese	PPM	0.05	NONE	ND - 1.0 {C}	0.04	2004 - 2009
Nitrate (as NO3)	PPM	45	45	ND - 29.0	9.9	2009
N-Nitrosodimethylamine (NDMA)	PPB	NO STANDARD	0.003	ND - 35 {D}	ND	2008 - 2009
N-Nitroso-di-n-butylamine (NDBA)	PPB	NO STANDARD	NONE	ND - 0.015	ND	2008 - 2009
Odor	UNITS	3	NONE	ND - 1	1	2006 - 2007
Radium 226	pCi/L	5 (combined Ra -226 and	0.05	ND - 1.1	ND	2005 - 2007
Radium 228	pCi/L	-228)	0.019	ND - 1.07	ND	2005 - 2007
Selenium	PPB	50	(50)	ND	ND	2004 - 2007
Specific Conductance	uS/cm	1,600	NONE	180 - 640	354	2008
Sulfate	PPM	500	NONE	2.0 - 25.0	7.5	2004 - 2007
Tetrachloroethylene (PCE)	PPB	5	0.06	ND - 1.4	ND	2007 - 2009
Total Dissolved Solids	PPM	1,000	NONE	150 - 340	241	2004 - 2007
Trichlorothethylene (TCE)	PPB	5	0.8	ND - 4.3	ND	2007 - 2009
Tritium	pCi/L	20000	400	ND	ND	2006
Turbidity	NTU	5	NONE	ND - 1.40	0.18	2005 - 2007
Uranium	pCi/L	20	0.43	ND - 2.68	ND	2005 - 2007
Vanadium	PPB	NL=50	NONE	ND - 26.0	8.7	2001 - 2004
Zinc	PPM	5	NONE	ND	ND	2006 - 2007

 $<sup>\{</sup>A\}$  Compliance with the aluminum standard is based on a primary and a lower secondary standard. The primary MCL for aluminum is  $1000 \mu g/l$ , this is at a level that is associated with short-term health effects with prolonged consumption. A secondary MCL of  $200 \mu g/l$  is established to protect you against unpleasant aesthetic effects, such as color, taste and odor. Exceeding the secondary MCL does not pose a health risk. Test results from one well in the North Service Area indicate levels that exceed the secondary MCL for aluminum. However, this well is used primarily to meet fire flow requirements and is not a major source of the drinking water.

<sup>{</sup>B} This is source/wellhead concentration prior to treatment.

<sup>{</sup>C} Iron and manganese standards have been established as secondary MCLs at 300 and 50 µg/l, respectively. These secondary MCLs were set to address unpleasant aesthetic effects, such as color, taste, odor, staining of plumbing fixtures and clothing, and not associated with health affects. In 2009, three of the District's wells in the North Service Area detected iron and manganese over the secondary standards. The well with the highest levels was immediately removed from service upon notification and is undergoing further investigation to determine its use in the furure. The other two wells are not major sources of drinking water and are primarily used to supplement water to meet fire flow requirements.

<sup>{</sup>D} IN-Nitrosodimethylamine (NDMA) in drinking water has been historically associated with groundwater contamination from liquid rocket fuels such as in eastern Sacramento County. Subsequent investigations by California Department of Public Health (CDPH) suggests detections at very low levels (<0.01 μg/L) may be related to the disinfection processes under certain circumstances. One of the District's wells in the North Service Area detected NDMA in early 2009, at 14 parts per trillion (PPT), which is above the CDPH established Notification Level of 10 PPT (or nanograms/liter). NDMA and other nitrosamines are among the chemicals known to the State to cause cancer pursuant to California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) and are identified as possible human carcinogens by the Environmental Protection Agency. Even though CDPH regulations allow for the well's continued use at the detected concentration, the District immediately took the well out of service upon confirmation of the detection.