2013 Drinking Water Consumer Confidence Report - AMENDED

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

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



General Manager's Message

Every community water system is required by law to provide its customers with a water quality report also known as a Consumer Confidence Report (CCR) by July 1 of each year. This report lists the regulated constituents sampled for in our water, as well as some unregulated constituents, and the level at which they were most recently detected in our waters.

EGWD prides itself on providing reliable, high quality drinking water, and an exceptional level of customer care. Information regarding Sacramento County Water Agency's water quality is also provided in this report because a portion of the EGWD's service area receives water purchased under a wholesale contract. Please refer to the map on the next page to determine which agency produces your water.

Throughout the year, hundreds of samples are taken by staff and analyzed by a certified and independent laboratory. The results from these tests are then directly submitted to the State of California Department of Public Health (Department).

It is a privilege to serve you as Elk Grove's hometown water supplier. If you have any questions about this report, you may call me at (916) 695-3556.

-Mark Madison

Capital Improvement Program

Providing high quality and reliable drinking water to our customers is EGWD's number one concern. To ensure this, EGWD has a Capital Improvement Program (CIP) that repairs and replaces aging infrastructure, and constructs new projects. Every year, EGWD updates its CIP with projects that support EGWD's operations. A recently completed CIP project was the Wells Destruction project. This project destroyed seven old, inactive water wells per State and County requirements. Proper destruction of old, inactive water wells is important to protect against potential contamination of the groundwater basin. Another important CIP project that is underway is the Hampton Water Treatment Plant Refurbishment project. This project reactivates the Hampton Water Treatment Plant and will provide an additional 1,000 gallons per minute of water source capacity to our system.

EGWD publishes the annual CIP document at the end of every June. The CIP document can be downloaded from EGWD's Web site at www.egwd.org by selecting "Construction" and then "Capital Improvement Program." We invite you to log on and check it out!

Backflow/Cross-Connection Control Program

This past year, EGWD initiated measures to improve its Backflow/Cross Connection Program. This program is intended to further protect the EGWD water system from contamination that could occur from cross-connections between a consumer's private plumbing system and the public potable water supply. This program is required under State law and has affected many customers who have been required to install backflow prevention assemblies.

The EGWD appreciates the cooperation of those participating customers and we acknowledge your desire to maintain the drinking water system safe for all who use it. Thank you!

The Sources of Your Water

Water for the EGWD system is supplied by two water providers, EGWD and Sacramento County Water Agency (SCWA), as follows:

Service Area 1 - Local groundwater from EGWD

Service Area 2 – Local groundwater from SCWA, with periodic surface water from SCWA



Some wells in both Service Area 1 and 2 are treated to remove iron and manganese. These treatment facilities also remove amounts of other similar constituents, such as arsenic and barium. Some of the data presented in this report reflects the well water before treatment, so the water that you are provided may have lower levels of some of the reported constituents after treatment.

Source water assessments have been conducted for all the water sources to enable EGWD and SCWA to understand the activities that have the greatest potential for contaminating the drinking water supplies.

The EGWD groundwater sources were assessed in 2002, 2005, and 2009. The SCWA groundwater sources were assessed between 2002 and 2009 and the surface water source was evaluated in 2009. These assessments were conducted in accordance with Department guidelines and copies of the complete assessments are available for review at the respective agency offices.

EGWD and SCWA conducted assessments of their local groundwater wells. There have been no detects of contaminants in the wells that are associated with any activities, but the wells are considered most vulnerable to; gas stations, boat services, chemical/petroleum pipelines and storage, dry cleaners, electronic manufacturing, fleet/truck/bus terminal, grazing, historic waste dumps/landfills, leaking underground storage tanks, other animal operations, pesticides/fertilizer/petroleum storage transfer areas, photo processing, plastics/synthetics producers, research laboratory, agricultural/irrigation wells, oil/gas wells, wood preserving/treating, and sewer collection systems.

SCWA conducted the evaluation of the Sacramento River surface water source. It was found to be most vulnerable to potential contamination from recreation activities, including both body and non-body contact, illegal activities and dumping, stormwater runoff, industrial permitted discharges, and leaking underground storage tanks. The source water is treated using conventional filtration and disinfection that is designed to remove many contaminants.

Service Area 2 is provided treated water from SCWA which is fluoridated. In 2013 fluoride was at non-optimal levels. The optimal fluoride level and control range for the system is based on an annual average of maximum daily air temperatures. In accordance with Title 22, Section 64433.2 of the Department regulations, the optimal fluoride level is 0.8 mg/L and the fluoride control range is from 0.7 mg/L - 1.3 mg/L. Information about fluoridation, oral health, and current issues is available from http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.

What's In Your Water?

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.

Contaminants that may be present in the 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 that 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 that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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 (Department) 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 (1-800-426-4791).

A Note for Sensitive Populations

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/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).

Important Information about Radon

Radon is a radioactive gas that you cannot see, taste or smell. It is found throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will, in most cases, be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call the California Radon Program (1-800-745-7236), the EPA Safe Drinking Water Act Hotline (1-800-426-4791), or call the National Safety Council Radon Hotline at (1-800-SOS-RADON).

General Information on Arsenic

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs 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 concentrations and is linked to other health effects such as skin damage and circulatory problems.

General Information on Lead

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. EGWD is responsible for providing high quality drinking water, but 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 http://www.epa.gov/safewater/lead.

EGWD test distribution system samples every three years for lead and over ninety-five percent of samples are non-detectable and therefore not reported in the data table.

Cryptosporidium in Surface Water

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. SCWA periodically provides treated surface water to Service Area 2 and their monitoring indicates the low-level presence of these organisms in the source water, the Sacramento River. The water is treated to remove at least 99 percent. Current test methods do not allow SCWA to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Key to Abbreviations

PPB parts per billion or micrograms per liter (µg/L)

PPM parts per million or milligrams per liter (mg/L)

pCi/L picocuries per liter

NTU nephelometric turbidity units

μS/CM microsiemens per centimeter

TON threshold odor number

N/A not applicable

ND not detected

NR not required

Water Quality Definitions

Maximum Contaminant Level (MCL) — 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.

Public Health Goal (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 Environmental Protection Agency.

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 are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL) — 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.

Maximum Residual Disinfectant Level Goal (MRDLG) — 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.

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

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

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

Notification Level (NL) — Health-based advisory level set by the Department for constituents with no MCL. This is not an enforceable standard, although requirements and recommendations may apply if detected above this level.

Contact Us

Learn more about the EGWD by going to www.egwd.org or by attending any of our public monthly meetings. Our Board of Directors meets on the 4th Wednesday of the month. Call the water district office at (916) 685-3556 for exact times and locations.

Contact Person:

Mark Madison, General Manager (916) 685 – 3556 mmadison@egwd.org www.egwd.org

2013 Table of Detected Constituents

DETECTED PRIMARY DRINKING WATER CONSTITUENTS regulated to protect your health

CONSTITUENT	LINUTC	PHG or (MCLG) or	(MCLG) or	MCL or		WD Serv (Ground	ice Area 1 water)		Service Are Groundwa		EGWD Ser	vice Area 2 Water)	(SCWA Surface	MAJOR
CONSTITUENT	UNITS	[MRDLG]	[MRDL]	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	SOURCES	
Aluminum	РРМ	0.6	1	ND	ND	2006, 2011, 2012	ND	ND	2005-2013	ND	ND	2005-2013	Erosion of natural deposits; residue from surface water treatment processes	
Arsenic	PPB	0.004	10	ND - 7.4	3.1	2008, 2013	ND - 5.8	ND	2005 -2013	ND	ND	2005 -2013	Erosion of natural deposits; runoff from orchards	
Barium	PPM	2	1	ND - 0.14	0.1	2006, 2011, 2012	ND - 0.71	ND	2005 - 2013	ND	ND	2005 - 2013	Erosion of natural deposits; wastes from metal refineries	
Chromium	PPB	(100)	50	ND	ND	2006, 2011, 2012	ND - 21	ND	2005 - 2013	ND	ND	2005 - 2013	Erosion of natural deposits; discharge from pulp mills and chrome plating	
Fluoride	PPM	1	2.0	ND - 0.15	0.1	2006, 2011, 2012	ND - 0.44	0.1	2013	ND	ND	2012	Erosion of natural deposits; water additive that promotes strong teeth	

CONSTITUENT	LIMITO	PHG or (MCLG) or	MCL or		/D Servi Ground	ce Area 1 water)	EGWD	Service Are Groundwat		EGWD Ser	rvice Area 2 Wate	2 (SCWA Surface r)	MAJOR
CONSTITUENT	UNITS	[MRDLG]	[MRDL]	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	SOURCES
Nitrate (as nitrate)	PPM	45	45	ND - 20	8.8	2007, 2013	ND - 14	2.5	2005 - 2013	ND	ND	2005 - 2013	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate	PPB	6	6	ND	ND	2011	ND	ND	2005-2013	ND	ND	2005-2013	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmenta I contaminatio n from historic aerospace or other industrial operations that used or use, store or dispose of perchlorate and its salts.

CONSTITUENT	UNITS	PHG or (MCLG) or	MCL or		/D Servi Ground	ce Area 1 water)	EGWD	Service Are Groundwa		EGWD Se	rvice Area 2 Wate	2 (SCWA Surface r)	MAJOR
CONSTITUENT	UNITS	[MRDLG]	[MRDL]	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	SOURCES
Gross Alpha	pCi/L	(0)	15	ND	ND	2008, 2011, 2012	ND - 6.1	ND	2005 - 2013	ND	ND	2005 - 2013	Erosion of natural deposits
Radium 226	pCi/L	(0)	5	ND	ND	2008, 2012	ND - 2.42	ND	2005 - 2013	ND	ND	2005 - 2013	Erosion of natural deposits
Radium 228	pCi/L	(0)	5	ND	ND	2008, 2012	ND - 3.18	ND	2005 - 2013	ND	ND	2005 - 2013	Erosion of natural deposits
Uranium	pCi/L	0.43	20	ND	ND	2008, 2010, 2012	ND - 6.7	ND	2005 - 2013	ND	ND	2005 - 2013	Erosion of natural deposits
Control of Disinfection By-Product Precursors (TOC) (treated water) (a)	PPM	N/A	TT = 2	NR	N/A	N/A	NR	N/A	N/A	0.67 - 1.5	1.06	2013	Various natural and manmade sources
Turbidity (a)	NTU	N/A	TT = 1 NTU	NR		N/A	N	R	N/A	0.2	12	2013	Soil runoff
	% Samples	N/A	TT = ≤0.3 NTU	NR		N/A	N	IR	N/A	10	0	2013	30111011

Distribution System Data for EGWD (Including both Service Area 1 and Service Area 2)

CONSTITUENT	UNITS	PHG or (MCLG) or [MRDLG]	MCL or [MRDL]	RANGE	AVERAGE	YEAR SAMPLED	MAJOR SOURCES
Chlorine Residual	PPM	[4]	[4]	0.65 - 1.59	0.98	2013	Drinking water disinfectant added for treatment
Total Trihalomethanes	PPB	N/A	80	ND - 22	6.3	2013	By-product of drinking water disinfection
Haloacetic Acids	PPB	N/A	60	ND - 23	5.8	2013	By-product of drinking water disinfection
	UNITS	PHG OR (MCLG)	MCL	HIGHEST MONTHLY RESULT	# MONTHS WITH POSITIVE SAMPLE	YEAR SAMPLED	MAJOR SOURCES
Total Coliform Bacteria	% Sample s	(0)	>5% monthly samples positive	0	0	2013	Naturally present in the environment
	UNITS	PHG OR (MCLG)	AL	90th PERCENTILE	# SAMPLED/ # EXCEED AL	YEAR SAMPLED	MAJOR SOURCES
Copper	РРМ	0.3	1.3	0.29	32/0	2013	Internal corrosion of household plumbing systems; erosion of natural deposits

DETECTED SECONDARY DRINKING WATER CONSTITUENTS regulated for aesthetic qualities

CONSTITUENT	UNITS	PHG or	MCL		WD Serv (Ground	ice Area 1 water)		Service Are Groundwa	a 2 (SCWA ter)	EGWD Ser	vice Area 2 Water)	(SCWA Surface	MAJOR
CONSTITUENT	UNITS	(MCLG)	IVICL	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	SOURCES
Aluminum	PPB	600	200	ND	ND	2006. 2011, 2012	ND	ND	2005-2013	ND	ND	2005-2013	Erosion of natural deposits; residue from surface water treatment processes
Iron	PPB	N/A	300	ND	ND	2008, 2013	ND - 160	ND	2005 -2013	ND	ND	2005 -2013	Leaching from natural deposits; industrial wastes
Manganese	PPB	N/A	50	ND	ND	2008, 2013	ND - 110 (b)	ND	2005 - 2013	ND	ND	2005 - 2013	Leaching from natural deposits
Zinc	PPM	N/A	5	ND	ND	2006, 2011, 2012	ND - 0.07	ND	2005 - 2013	ND	ND	2005 - 2013	Runoff/leach ing from natural deposits; industrial wastes
Total Dissolved Solids	PPM	N/A	1,000	160 - 310	239. 5	2006, 2011, 2012	150 - 940	208	2005 - 2013	88 - 110	99	2005 - 2013	Runoff/leach ing from natural deposits
Specific Conductance	μS/CM	N/A	1,600	200 - 490	343	2006, 2011, 2012	180 - 1,600	284	2005 - 2013	160	160	2005 - 2013	Substances that form ions when in water
Sulfate	PPM	N/A	500	ND - 11	6.1	2006, 2011, 2012	ND - 11	2	2005 - 2013	5.2 - 6.3	5.8	2005 - 2013	Runoff/leach ing from natural deposits; industrial wastes

CONSTITUENT	UNITS	PHG or (MCLG)	MCL	EGWD Service Area 1 (Groundwater)			EGWD Service Area 2 (SCWA Groundwater)			EGWD Ser	MAJOR		
				RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	SOURCES
Chloride	PPM	N/A	500	2.4 - 19	10.8	2006, 2011, 2012	2.6 - 370	14.3	2005 - 2013	6.4 - 7	6.7	2005 - 2013	Runoff/leachi ng from natural deposits
Color	Units	N/A	15	ND	ND	2006, 2011, 2012	ND - 10	ND	2005 - 2013	15 - 20	18	2005 - 2013	Naturally- occurring organic materials
Turbidity	NTU	N/A	5	ND - 0.4	0.1	2006, 2011, 2012	ND - 3.6	ND	2005 - 2013	ND - 0.212	0.03	2013	Soil runoff
Odor	TON	N/A	3	ND - 1	ND	2006, 2011, 2012	ND - 3	ND	2005 - 2013	ND - 4	2	2005 - 2013	Naturally- occurring organic materials

DETECTED UNREGULATED DRINKING WATER CONSTITUENTS (c)

CONSTITUENT	UNITS	PHG or (MCLG)	NL	EGWD Service Area 1 (Groundwater)			EGWD Service Area 2 (SCWA Groundwater)			EGWD Service Area 2 (SCWA Surface Water)			MAJOR
CONSTITUENT	UNITS		IVL	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	SOURCES
Hardness	PPM	N/A	NONE	61 - 220	142. 4	2006, 2011, 2012	14 - 380	78	2005 -2013	54 - 64	60	2005 -2013	The sum of polyvalent cations present in the water, generally naturally occurring magnesium and calcium
Bicarbonate Alkalinity	PPM	N/A	NONE	120 - 280	189	2006, 2011, 2012	95 - 260	140	2005 - 2013	60 - 99	80	2005 - 2013	The measuremen t of the ion contributing to the ability to neutralize acids in water

CONSTITUENT	UNITS	PHG or (MCLG)	NL	EGWD Service Area 1 (Groundwater)			EGWD	Service Are Groundwa		EGWD Ser	vice Area 2 Water)	(SCWA Surface	MAJOR
				RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	RANGE	AVG	YEAR SAMPLED	SOURCES
рН	Units	N/A	NONE	8.0-8.2	8.1	2006, 2001, 2012	6.8-8.3	8.1	2005-2013	8.0-8.1	8.1	2005-2013	The measurement of the acidity or alkalinity of water
Sodium	PPM	N/A	NONE	17 - 22	19.4	2006, 2011, 2012	12 - 170	29	2005 - 2013	11	11	2005 - 2013	Naturally occurring salt in the water
Calcium	PPM	N/A	NONE	13 - 40	26.6	2006, 2011, 2012	3.2 - 87	16	2005 - 2013	11 - 13	13	2005 - 2013	Erosion of natural deposits
Magnesium	PPM	N/A	NONE	6.4 - 29	18.6	2006, 2011, 2012	1.5 - 39	9.5	2005 - 2013	6.1 - 7.6	6.9	2005 - 2013	Erosion of natural deposits
Hexavalent Chromium	РРВ	0.02	NONE	ND	ND	2013	ND - 9.6	1.8	2005 - 2013	ND	ND	2005 - 2013	Discharge from pulp mills and chrome plating; erosion of natural deposits
Radon 222	pCi/L	N/A	NONE	311 - 491	401	2011	NA	NA	NA	NA	NA	NA	Erosion of natural deposits

⁽a)--Only surface water sources must comply with PDWS for Control of Disinfection By-Product Precursors and turbidity.

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

⁽b)--SCWA detected manganese in the groundwater above the secondary MCL of 50 ppb two times in 2013; one sample of 58 PPB at Calvine Meadows WTP (WF-01) on July 23, 2013 and one sample of 110 PPB at East Park WTP (WF-03) on September 23, 2013. Water naturally contains small amounts of manganese. Manganese in food or drinking water presents few adverse effects; however, elevated concentrations of manganese in water may stain laundry, produce an undesirable odor and taste, contribute to microbial growth and turbidity, or form a coating inside pipes that can peel off as solid precipitates. SCWA treats the well water to remove manganese at both of these sources.

⁽c)--Unregulated contaminant monitoring helps determine where certain contaminants occur and whether they need to be regulated.