WHAT THE STATE WANTS YOU TO KNOW

California's Department of Public Health requires all public water systems to include the following information in their yearly consumer confidence reports.

About drinking water
The sources of drinking water—both tap and bottled—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.

The following contaminants may be present in source water before it is treated.

Microbial contaminants such as viruses and bacteria from sewage treatment plants, septic systems, livestock operations, and wildlife.
Inorganic contaminants such as salts and metals that occur naturally or stem from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.
Pesticides and herbicides from sources such as agriculture, urban stormwater runoff, and residential uses.
Organic chemical contaminants such as synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production or that come from gas stations, urban stormwater runoff, agricultural applications, and septic systems.
Radioactive contaminants that occur naturally or are the result of oil and gas production and mining.

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency 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 must provide the same protection for public health.

NOTE: 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. Contact the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 for more about contaminants and potential health effects.

We urge visitors to area lakes and rivers to help stop the spread of invasive quagga and zebra mussels. These small creatures have wreaked havoc east of the Mississippi and are now found in many states in the west, including California. To learn more about what you can do, visit the EID website at www.eid.org.

Chlorine Gas Conversions Continue at EID Water Treatment Plants—Capital Improvements for Public Safety and Reliability

Completed Reservoir 1 hypochlorite storage building

In 2011, upgrades were made to the Reservoir 1 Water Treatment Plant changing the way the plant disinfects its water by converting from the use of chlorine gas to that of a much safer liquid sodium hypochlorite. "This upgrade will bring Reservoir 1 Water Treatment Plant into compliance with Article 80 Hazardous Materials Regulations of the Uniform Fire Code, while eliminating potential for employee and public exposure to accidental releases of chlorine gas," said Bob Rice, EID senior civil engineer.

> This upgrade will eliminate the potential for employee and public exposure to accidental releases of chlorine gas.

Chlorine gas used to be the cheapest disinfectant until the U.S. Department of Homeland Security became concerned about transportation risks. There are also annual costs associated with the usage of chlorine gas, such as safety equipment, training, and updating of safety manuals. Additional safety requirements to upgrade the chlorine control building and bring it into compliance would have cost $500,000. This conversion will also save on future training and equipment costs. Total project costs were just under $1 million.

EID upgraded the El Dorado Hills Water Treatment Plant's chlorine treatment process in the fall of 2010. Reservoir A Water Treatment Plant is scheduled to be converted in the fall of 2013.

Annual Water Quality Report

Water testing performed in 2011

Your water meets or exceeds health standards

2011 water testing results show that your water meets or exceeds health standards.

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

El Dorado Irrigation District
2890 Mosquito Road
Placerville, CA 95667
www.eid.org

PRSRT STD
U.S. POSTAGE
PAID
Permit #580
Fair Oaks, CA
95628

2011 WATER QUALITY RESULTS... ...MEET OR EXCEED HEALTH STANDARDS

Where your water comes from. EID has rights to approximately 75,000 acre-feet of water from various sources in the Sierra Nevada foothills. (An acre-foot equals one acre of land covered by a foot of water; there are 325,851 gallons in an acre-foot.) Jenkinson Lake, at the center of Sly Park Recreation Area, provides nearly one half of our water supply. Forebay Reservoir in Pollock Pines delivers water under a pre-1914 water right from the high-alpine streams and lakes that are part of our Project 184 hydropower system. We have a water contract with the Bureau of Reclamation at Folsom Lake, which Reclamation operates as part of the state's Central Valley Water Project. And we hold ditch water rights (Weber, Slab, and Hangtown creeks), water rights at Weber Reservoir, and a water right under Permit 21112 for Project 184 water—all of which is delivered from Folsom Lake.

Information about potential sources of pollution. The California Department of Public Health (CDPH) requires water providers to conduct a source water assessment to help protect the quality of water supplies. The assessment describes where a water system's drinking water comes from, the types of polluting activities that may threaten the quality of the source water, and an evaluation of the water's vulnerability to the threats.

Updated assessments of EID's drinking water sources were completed in October 2006 and October 2008. Our source water is considered most vulnerable to recreation, residential sewer, septic system, and urban runoff activities, which are associated with constituents detected in the water supply. Our source water is also considered most vulnerable to illegal activities, dumping, fertilizer, pesticide and herbicide application, forest activities, and wildfires, although constituents associated with these activities were not detected. Copies of the assessments are available at CDPH, Sacramento District Office, 1616 Capitol Avenue, Sacramento, CA 95899. To view them, contact Richard Hinrichs, CDPH Region 1 Regional Engineer, at 530-224-4867, or Dana Strahan, EID Drinking Water Division Operations Manager, at 530-642-4060.

Testing the water. To help ensure that safe water is delivered to our customers, EID's water-quality monitoring program includes taking samples of raw and treated water throughout the year from many locations in the District's service area. Analyses cover more than 100 different constituents. Analysis of the water is performed at state-certified commercial labs. The state of California allows us to monitor for some contaminants less than once a year because the concentrations of the contaminants do not change frequently. Some of our data, although representative, may be more than a year old. The table below lists all constituents that were detected in 2011 under our monitoring and testing program. The information shows that EID meets or exceeds all state and federal drinking water standards. When available, the data reported reflects the treated water supply.

2011 RESULTS CHART

			El Dorado Main Water System		Outingdale Water System		Strawberry Water System			
General Properties	**Units**	**MCL (SMCL) [PHG]**	**Range**	**Average**	**Range**	**Average**	**Range**	**Average**	**Most Recent Sampling Date**	**Typical source of contaminant**
Alkalinity	mg/L	–	12–40	20	19–30	24	7.1–30	21	2011	
Bicarbonate	mg/L	–	14–27	21	27	27	8.7	8.7	2011	
Bromide	mg/L	–	ND–0.06	0.01	—	—	—	—	2011	
Calcium	mg/L	–	2.1–6.8	4.1	4.3–7.2	5.5	2.0–7.2	4.8	2011	
Chloride	mg/L	(500)	2.1–7.6	4.2	1.8	1.8	2.9	2.9	2011	Runoff/leaching from natural deposits; seawater influence
Color	Units	(15)	ND	ND	ND	ND	3	3	2011	Naturally-occuring organic materials
Corrosivity	Aggressive Index	Non–corrosive	9.2–11.0	10.0	10.0	10.0	8.9	8.9	2011	
Hardness	mg/L	–	7–20	14	18	18	5.6	5.6	2011	
Hardness (grains per gallon)	gpg	–	0.41–1.18	0.82	1.05	1.05	0.33	0.33	2011	
Magnesium	mg/L	–	0.5–2.6	1.1	1.2	1.2	0.15	0.15	2011	
N-nitroso-dimethylamine (NDMA)	µg/L	–	ND–0.003	ND	—	—	—	—	2010	
Odor	TON	(3)	ND	ND	ND	ND	1	1	2011	
Orthophosphate	mg/L	–	ND–0.58	0.16	ND	ND	ND	ND	2011	Naturally-occuring organic materials
pH	Units	–	7.3–8.4	7.8	7.7–8.1	7.9	7.2–8.1	7.8	2011	
Silica	mg/L	–	8.9–11.0	9.6	—	—	—	—	2011	
Sodium	mg/L	–	2.2–5.9	4.2	3.8	3.8	2.6	2.6	2011	
Specific Conductance	umho/cm	(1600)	28–70	54	42–59	50	24–53	43	2011	Substances that form ions when in water
Sulfate	mg/L	(500)	ND–2.2	0.8	0.57	0.57	ND	ND	2011	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	mg/L	(1000)	14–71	47	44	44	15	15	2011	Runoff/leaching from natural deposits
Inorganics										
Aluminum	mg/L	1 (0.20) [0.6]	ND	ND	ND	ND	ND	ND	2011	Erosion of natural deposits; residue from some surface water treatment processes
Zinc	mg/L	5.0	ND–0.15	0.07	ND	ND	ND	ND	2011	Runoff/leaching from natural deposits; industrial waste
Microbiological		**PHG (MCLG)**	**MCL (MRDL)**	**Highest Monthly Level Found**	**MCL (MRDL)**	**Highest Monthly Level Found**	**MCL (MRDL)**	**Highest Monthly Level Found**		
Total Coliform Bacteria	% of Samples	(0)	No more than 5% postive monthly sample	0.0%	No more than 1 postive monthly sample	0.0%	No more than 1 postive monthly sample	0.0%	2011	Naturally present in environment
Disinfection Byproducts Precursors		**Action Level**	**Range**	**Lowest Running Annual Average**	**Range**	**Lowest Running Annual Average**	**Range**	**Lowest Running Annual Average**		
Total Organic Carbon	mg/L	TT=Removal	0.60–1.18	n/a	—	n/a	—	n/a	2011	Various natural and manmade sources
Total Organic Carbon Removal Ratio	%	TT=<1.0	na	**0.81***	—	n/a	—	n/a	2011	Various natural and manmade sources
Disinfection Byproducts		**MCL (MRDL)**	**Range**	**Highest Running Annual Average**	**Range**	**Highest Running Annual Average**	**Range**	**Highest Running Annual Average**		
Chlorine	mg/L	(4.0)	0.62–0.82	0.91	0.62–0.82	0.91	0.40–1.04	0.86	2011	Drinking water disinfectant added for treatment
Total Haloacetic Acids	µg/L	60	24–84	49	32	32	28–58	47	2011	Byproduct of drinking water disinfection
Total Trihalomethanes	µg/L	80	28–85	54	50	50	26–87	59	2011	Byproduct of drinking water disinfection
Lead and Copper (Samples collected at customer's tap)		**Action Level (PHG)**	**90th Percentile**	**No. of sites sampled/ No. exceeding action level**	**90th Percentile**	**No. of sites sampled/ No. exceeding action level**	**90th Percentile**	**No. of sites sampled/ No. exceeding action level**		
Lead	µg/L	15 (0.2)	3.5	55/1	ND	10/0	ND	6/0	2011	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper	mg/L	1.3 (0.3)	0.18	55/0	0.087	10/0	0.21	6/0	2011	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

		El Dorado Main Water System			Outingdale Water System			Strawberry Water System				
	Units	**MCL**	**Maximum Value**	**Lowest Monthly % samples meeting requirements**	**MCL**	**Maximum Value**	**Lowest Monthly % samples meeting requirements**	**MCL**	**Maximum Value**	**Lowest Monthly % samples meeting requirements**		**Typical source of contaminant**
Turbidity	NTU	TT=95% of samples ≤0.3 NTU	0.69	99.4%	TT=95% of samples ≤0.3 NTU	0.19	100%	TT=95% of samples ≤0.1 NTU	0.10	100%	2011	Soil runoff

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 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.

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. EID 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, test 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.

Questions?

For more information from EID about this report, contact Dana Strahan, Water Division Operations Manager, at 530-642-4060.

For information from the California Department of Public Health, contact Richard Hinrichs, CDPH Region 1 Regional Engineer, at 530-224-4867. **Safe Drinking Water Hotline**: 1-800-426-4791

Editing: Mary Lynn Carlton and Jesse Saich
Design: Jesse Saich

The following definitions help explain information in the table.

Maximum contaminant level (MCL): The highest level of a contaminant allowed in drinking water. Primary MCLs are set as close to the PHG or MCLGs as is economically and technologically feasible. Secondary MCLs (SMCL) are set to protect the odor, taste, and appearance of drinking water.

Maximum contaminant level goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to health. The U.S. Environmental Protection Agency (EPA) sets these levels.

Maximum residual disinfectant level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of 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.

Public health goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. The California Environmental Protection Agency sets PHGs.

Regulatory action level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements for water systems.

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

* *Summary Information For Operating Under an Extension*

In July 2010 the quarterly Total Organic Carbon (TOC) monitoring results indicated one EID water treatment plant did not reduce TOC as much as required by drinking water regulations. In September 2010 the California Department of Public Health (CDPH) granted an extension until July 2011 for this requirement to demonstrate this treatment technique infraction was due to an analytical testing error and not a failure of our water treatment process. Since August 2010 EID has demonstrated, through monthly sampling, the required percent reduction for TOC. As a result, EID Reservoir 1 Water Treatment Plant is no longer operating under the September 2010 TOC extension, which ended in August 2011. If you have any questions or concerns about this extension please contact Richard Hinrichs, CDPH Region 1 Regional Engineer, at 530-224-4867 or Dana Strahan, EID Drinking Water Division Operations Manager, at 530-642-4060.

Key:

NA=not applicable
ND=not detected
NR=not reportable
NTU=nephelometric turbidity unit (measure of clarity)
mg/L=milligrams/liter
µg/L=micrograms/liter
umho/cm = micromhos per centimeter