

2018 Consumer Confidence Report

Water System Name: EL RIO VILLA (CA 5700615) Report Date: June 1, 2019

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2018.

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

Type of water source(s) in use: Two (2) Ground water wells

Name & location of source(s): East Well, behind 11 Fredericks Drive, Winters, CA (Backup Source and PM operation)

West Well 2, behind 62 Shams Way, Winters, CA (Primary Source)

NOTE: West Well 2 is operational and is in initial testing phase (increased sampling requirements of 4 quarters)

Drinking Water Source Assessment information: See summaries dated Dec. 2002 by Yolo County Environmental Health.

Time and place of regularly scheduled board meetings for public participation: 1st Tuesday of each month

For more information, contact: Fred Ichtertz, Facilities Manager Phone: (530) 669-2240

TERMS USED IN THIS REPORT:

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.

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 (USEPA).

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 Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

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 which a water system must follow.

Variations and Exemptions: Division permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E.coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

Primary Drinking Water Standards (PDWS):

MCLs or MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS):

MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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 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*, 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 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*, 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, USEPA and the State Water Resources Control Board, Division of Drinking Water (Division) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Division regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Division allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ug/L) 05/19/16	5	ND	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (mg/L) 05/19/16	5	0.090	0	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Highest Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (mg/L)	08/15/18 11/14/18	38	31 – 38	none	none	Generally found in ground & surface water
Hardness (mg/L)	08/15/18 11/14/18	270	240 – 270	none	none	Generally found in ground & surface water

**Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.*

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Highest Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
mg/L Arsenic	08/15/18 11/14/18	3.9	ND – 3.9	0.010	0	Erosion of natural deposits, runoff from orchards, runoff from glass & electronics production wastes.
mg/L Nitrate (as N)	07/19-18 08/15/18 11/14/18	5.9	4.1 – 5.9	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
mg/L Fluoride	07/05/17 08/15/18 11/14/18	.11	ND - 0.11	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
mg/L Chromium	08/15/18 11/14/18	0.027	0.023 – 0.027	0.050	0.025	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
mg/L Barium	08/15/18 11/14/18	0.14	0.12- 0.14	1	NA	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits.
mg/L Total Trihalomethanes (TTHMs)	09/25/18	0.011	0.0029 - 0.011	0.080	NA	By-Product of drinking water chlorination.
mg/L Haloacetic acids (HAA5)	09/25/18	.0028	ND - .0028	0.060	N/A	By-Product of drinking water chlorination.

mg/L Chlorine	Continuous	1.39	0.61 – 1.39	4.0	4.0	Water additive used to control microbes.
pCi/L Gross Alpha	08/15/18 11/14/18	0.90	ND – 0.90	15	0	Erosion of natural deposits.
pCi/L Radium Ra-228	08/15/18 11/14/18	ND	ND - ND	5	0.019	Erosion of natural deposits.

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Highest Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
mg/L Chloride	08/15/18 11/14/18	33	33 - 33	500	NA	Runoff/leaching from natural deposits; seawater influence.
mg/L Iron	08/15/18 11/14/18	0.22	ND – 0.22	0.300		Leaching from natural deposits; industrial wastes
pH Units pH	08/15/18 11/14/18	7.85	7.71 – 7.85			
mg/L TDS	08/15/18 11/14/18	390	390 - 390	1000	NA	Runoff/leaching from natural deposits.
mg/L Sulfate	08/15/18 11/14/18	35	34 - 35	500	NA	Runoff/leaching from natural deposits; industrial wastes.
umho/cm Specific Conductance	08/15/18 11/14/18	680	660 - 680	1600	NA	Substances that form ions when in water; seawater influence.
NTU (Units) Turbidity	08/15/18 11/14/18	0.43	0.19 – 0.43	5.0	NA	Soil Runoff

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Highest Level Detected	Notification Level	Health Effects Language
mg/L Boron	08/15/18 11/14/18	0.39	1.0	The babies of some pregnant women who drink water containing Boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.
mg/L Vanadium	08/15/18 11/14/18	0.0044	0.05	The babies of some pregnant women who drink water containing Vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

**Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

Additional General Information on Drinking 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. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).*
- *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).*
- *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 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 contaminant 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 State Water Resources Control Board, Division of Drinking Water (Division) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Division regulations also establish limits for contaminants in bottled water that provide the same protection for public health.*
- *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. The Yolo County Housing Authority El Rio Villa Public Water System 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>.

- *Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.*
- *Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.*
- *Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.*

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

The El Rio Villa Water System received a monitoring violation (Citation No. 01_87_18C_049) in January 2019 for failure to test for 1,2,3-Trichloropropane (1,2,3-TCP) in the 3rd Quarter sampling period (July 1 to September 30, 2018). The El Rio Villa Water System was required to sample each quarter of 2018 for 1,2,3-TCP. The sampling was completed in a timely manner as required; however, the Certified Laboratory failed to analyze the constituent and the error was not noticed until after the hold time for the constituent had already expired. The El Rio Villa Water System will sample for 1,2,3-TCP in the 3rd Quarter of 2019 to make up for the missed 3rd Quarter 2018 result. The results of the 1st, 2nd and 4th Quarter for 1,2,3-TCP were ND so it is expected there are no health effects resulting from the missed analysis.

ng/L 1,2,3-Trichloropropane	2018	3 rd Quarter Sampling not analyzed by laboratory.	ND – Missed Analysis	5.0	0.7	Some people who drink water containing 1,2,3-trichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
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Source Water Protection and Water Conservation Tips for Consumers

Source Water Protection Tips for Consumers

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water". Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Water Conservation Tips for Consumers

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers – a 5 minutes shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.