2015 Consumer Confidence Report

Water System Name: **Millview, Calpella & Redwood Valley County Water District** Report Date: 7/1/2016

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, 2015 and may include earlier monitoring data.

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: Blend of surface water and well water

Name & general location of source(s): Russian River and Millview Well 6

Drinking Water Source Assessment information: Drinking water assessment report completed June 2011

Time and place of regularly scheduled board meetings for public participation:
Millview CWD: 3rd Tuesday of each month at District Office 151 Laws Ave. Ukiah 6pm
Calpella CWD: 2nd Monday of each month at Calpella Elementary 6pm
Redwood Valley CWD: 3rd Thursday at District Office 2370 Webb Ranch Rd. 6pm

For more information, contact: District office Phone: Millview (707) 462-7229
Calpella (707) 462-2666
Redwood Valley (707) 485-0679

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 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 Standards (PDWS): MCLs and 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.

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.

Variances and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

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

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

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

ppq: parts per quadrillion or picogram per liter (pg/L)

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

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, which 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, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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, the USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 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 State Board 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 (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	2	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

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

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)							
Millview	9/2015	20	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Calpella	9/2015	5	ND	0	15	0.2	
Redwood Valley	9/2015	20	ND	0	15	0.2	
Copper (ppm)							
Millview	9/2015	20	1.20	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Calpella	9/2015	5	ND	0	1.3	0.17	
Redwood Valley	9/2015	20	0.19	0	1.3	0.17	

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	3/11/2015 6/10/2015	11.3	6.8 – 20.0	none	none	Salt present in the water and is generally naturally occurring

Hardness (ppm)	3/11/2015 6/10/2015	105.6	83 – 142	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

**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	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum (ppm)	3/11/2015 6/10/2015	.150	.130 - .170	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes.
Antimony (ppb)	3/11/2015 6/10/2015	<6	<6	6	20	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	3/11/2015 6/10/2015	<2	<2	10	.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Asbestos (MFL)	6/4/2014 3/11/15	ND	ND	7	7	Internal corrosion of asbestos cement water mains; erosion of natural deposits
Barium (ppm)	3/11/2015 6/10/2015	<0.10	<0.10	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Beryllium (ppb)	3/11/2015 6/10/2015	<1	<1	4	1	Discharge from metal refineries, coal-burning factories, and electrical, aerospace, and defense industries
Cadmium (ppb)	3/11/2015 6/10/2015	<1	<1	5	0.04	Internal corrosion of galvanized popes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints
Chromium (ppb)	3/11/2015 6/10/2015	<10	<10	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (ppm)	3/11/2015 6/10/2015	0.12	0.14 - 0.10	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Hexavalent Chromium (ppb)	11/13/ 2015	<1.0	<1.0	10	0.2	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis refractory production, and textile manufacturing facilities; erosion of natural deposits
Mercury (inorganic) (ppb)	3/11/2015 6/10/2015	<1.0	<1.0	2	1.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland
Nickel (ppb)	3/11/2015 6/10/2015	<10	<10	100	12	Erosion of natural deposits; discharge from metal factories
Nitrate (as nitrate, NO3) (ppm)	3/11/2015 6/10/2015	4.0	<2 – 5.4	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite (as nitrogen, N) (ppm)	11/13/ 2015	<0.20	<0.20	1	1	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

Perchlorate (ppb)	8/4/2015	<4	<4	6	6	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 result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.
Selenium (ppb)	3/11/2015 6/10/2015	<5.0	<5.0	50	30	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Thallium (ppb)	3/11/2015 6/10/2015	<1.0	<1.0	2.0	0.1	Leaching from, ore-processing sites; discharge from electronics, glass, and drug factories

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

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	3/11/2015 6/10/2015	150	130 - 170	200		Erosion of natural deposits; residual from some surface water treatment processes
Color (Units)	3/11/2015 6/10/2015	11	<5 - 17	15		Naturally-occurring organic materials
Foaming agents (MBAS) (ppb)	3/11/2015 6/10/2015	<50	<50	500		Municipal and industrial waste discharges
Iron (ppb)	3/11/2015 6/10/2015	145	<100 - 190	300		Leaching from natural deposits; Industrial wastes
Manganese (ppb)	3/11/2015 6/10/2015	103*	20 - 100	50		Leaching from natural deposits
Methyl-tert-butyl ether (MTBE) (ppb)	6/11/2012	<0.50	<0.50	50		Leaking underground storage tanks; discharge from petroleum and chemical factories
Odor-threshold (Units)	3/11/2015 6/10/2015	4.3*	<1 – 7.1	3		Naturally-occurring organic materials
Silver (ppb)	3/11/2015 6/10/2015	<7	0 -10	100		Industrial discharges
Thiobencarb (ppb)	6/4/2014	<1	<1	1		Runoff/leaching from rice herbicide
Turbidity (Units)	3/11/2015 6/10/2015	0.68	0 – 1.70	5		Soil runoff
Zinc(ppm) Millview Redwood Valley	 3/11/2015 6/10/2015 1/9/2015 6/29/2015 10/13/2015	 <0.033 <0.033 0.41 0.14 0.22	 0 - <0.050 0.14 - .41	 5 5		Runoff/leaching from natural deposits; industrial wastes
Total dissolved solids (TDS) (ppm)	3/11/2015 6/10/2015	143	110 - 200	1000		Runoff/leaching from natural deposits

Specific Conductance (uS/cm)	3/11/2015 8/4/2015	237	170 - 360	1600		Substances that form ions when in water; seawater influence
Chloride (ppm)	6/4/2014	4.8	3.4 – 6.4	500		Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	3/11/2015 6/10/2015	9.43	7.6 – 12.0	500		Runoff/leaching from natural deposits; industrial wastes

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language

**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 the 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).

Lead-Specific Language for Community Water Systems: 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. [Millview County Water District] 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.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT

Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
Manganese	**Levels well below mcl after filtration (20 ppb)**	**ongoing**	**Filtration**	

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL-INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	**Total No. of Detections**	**Sample Dates**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
E. coli	(In the year)		0	(0)	Human and animal fecal waste
Enterococci	(In the year)		TT	n/a	Human and animal fecal waste
Coliphage	(In the year)		TT	n/a	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE

SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES

VIOLATION OF GROUND WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique [a] (Type of approved filtration technology used)	
Turbidity Performance Standards [b] (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to __.3___ NTU in 95% of measurements in a month. 2 – Not exceed _1.0____ NTU for more than eight consecutive hours. 3 – Not exceed __5.0__NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	98.1
Highest single turbidity measurement during the year	.405 ntu
Number of violations of any surface water treatment requirements	0

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

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

* *Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.*

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**

Summary Information for Operating Under a Variance or Exemption