## 2018 Consumer Confidence Report

Water System Name: Manzanita Hills Water Association Report Date: 6/27/19

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 beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use:	Well 01, Well 03 (standby)						
Name & location of source(s):							
Drinking Water Source Assessinformation:	sment	Completed in late 2010					
Time and place of regularly sc	heduled board	meetings for public participation:	Annually				
For more information, contact	Kip Webb	Phone	: (831) 728-4392				

#### 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.

Primary Drinking Water Standards (PDWS): MCLs 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.

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)

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 (USEPA).

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.

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

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
  stormwater runoff, 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 Department of Health Services (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 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 Department requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 -	SAMPLING RES	SULTS SH	OWING TH	E DETEC	TION 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		Male	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.)	0	More than 1 sample in a month with a detection		0	Naturally present in the environment
Fecal Coliform or E. coli	(In the year)	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E.		0	Human and animal fecal waste
TABLE 2	- SAMPLING RI	SULTS S	HOWING T	HE DET	ECTION (	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	90# percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant
Lead (ppb) 9/28/17	5	< 0.005	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.

Copper (ppm) 9/28/17	5	0.005	0	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.
	TABLE 3 - SA	MPLING R	ESULTS FO	OR SODI	UM AND	HARDNESS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	Well 1, 12/14 Well 3, 1/11	42 33.7	42 33.7	none	none	Generally found in ground and surface water
Hardness (ppm)	Well 1, 12/14	89	86.9	none	none	Generally found in ground and surface water
12/18/14	Well 3, 1/11	73	73			

<sup>\*</sup>Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the next page.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Well 1	7/30/18	ND	ND	10	10, (N/A)	fertilizer use, leaching from
Nitrate, as N (ppm)	10/31/18	.8	.8			septic tanks, sewage.
	12/27/18	.3	.3			
Well 3 Nitrate, as N (ppm)	12/27/18	0.3	0.3	10	10, (N/A)	Runoff and leaching from fertilizer use, leaching from septic tanks, sewage.
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Chromium 6 (hexavalent) ppb	2/23/17	7.9	7.9	10	N/A, (N/A)	Erosion of natural deposits.
Flouride (ppm) Well1 Well 3	12/31/15 1/26/11	0.2 0.2	0.2	2	1, (N/A)	Erosion of natural deposits; wate additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Well 1 Gross Alpha (pCi/L)	12/18/14	.491	.491	15	N/A, (0)	Erosion of natural deposits.
Well 3 Gross Alpha (pCi/L)	12/18/14	ND	ND	15	N/A, (0)	Erosion of natural deposits.
Well 1 Radium 228 (pCi/L)	4/10/09	0.32	0.32	5	N/A, (0)	Erosion of natural deposits.
Well 3	1/11/09	0.011	0.011	5	N/A, (0)	Erosion of natural deposits.
Radium 228 (pCi/L)						

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Total Dissolved Solids				1000	N/A,	Runoff/Leaching from natural deposits.
(TDS), ppm, Well 1	12/18/14	250	250	1000	N/A	
Well 3	1/26/11	192	192			
Chloride, ppm, Well 1	12/18/14	62	62	500	N/A,	Runoff/Leaching from natural deposits; Seawater influence.
Well 3	1/26/11	40.0	40.0	500	N/A	·
Sulfate, ppm, Well 1	12/18/14	8.4	8.4	500	N/A,	Runoff/Leaching from natural deposits: Industrial wastes.
Well 3	1/26/11	3.5	3.5	500	N/A	'

#### TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Action Level	Health Effects Language

<sup>\*</sup>Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided below.

### Additional General Information On Drinking Water

All 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).

# Summary Information for Contaminants Exceeding an MCL or AL, or a Violation of any Treatment or Monitoring and Reporting Requirements

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

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES

Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
0		0	(0)	Human and animal fecal waste
0	-	TT	n/a	Human and animal fecal waste
0		TT	n/a	Human and animal fecal waste
	Detections 0 0	Detections Dates  0	Detections Dates [MRDL]  0 0 TT	No. of Detections

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

SPECIAL NO	TICE OF FECAL INDI	CATOR-POSITIVE	GROUND WATER SOUR	CE SAMPLE
N/A				
SPE	CIAL NOTICE FOR U	NCORRECTED SIG	GNIFICANT DEFICIENCI	ES
N/A	=	· · · · · · · · · · · · · · · · · · ·		
				· · · · · · · · · · · · · · · · · · ·
	ZMOX AM	TON OF CROUND	WATER TE	
	VIULAI	ION OF GROUND		TT - 141 13 65 - 4
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
0				