

**Pleasantimes Mutual Water Company, Inc.**

P.O. Box 2109  
Bethel Island, CA 94511-2109  
(925) 684-9660

**2018 Consumer Confidence Report**

**June, 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 1/1/2018 - 12/31/2018 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: Well Water

Name & location of source(s): 4311 Windsweep Road, 4467 Windsweep Road, & 4420 Willow Road

Drinking Water Source Assessment information: None

Time and place of regularly scheduled board meetings for public participation:

**Annual Meeting: Sunday August 25, 2019 at 1:00PM, BIMID Hall, 3085 Stone Rd., Bethel Island**

For more information, contact: John Gennrich Phone: ( 925 ) 684-9660

**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 (U.S. EPA).

**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:** Permission from the State Water Resources Control Board (State Board) 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 system.

**Level 2 Assessment:** A Level 2 Assessment is a very detail study of the water system to identify potential problems and determine (if possible) why 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 (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, 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 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*, 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 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, 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 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. Any violation of an AL, MCL, MRDL, or TT is Asterisked. Additional information is provided later in this report.

<b>TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA</b>					
<b>Microbiological Contaminants</b> (complete if bacteria detected)	<b>Highest No. of Detections</b>	<b>No. of months in violation</b>	<b>MCL</b>	<b>MCLG</b>	<b>Typical Source of Bacteria</b>
Total Coliform Bacteria (state Total Coliform Rule)	(In a mo.) 0	0	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year) 0	0	A routine sample and a repeat sample are total coliform positive and one of these is also fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste
<i>E. coli</i> (federal revised Total Coliform Rule)	(In the year) 0		(a)	0	Human and animal fecal waste
(a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .					

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

<b>Lead and Copper</b> (complete if lead or copper detected in the last sample set)	<b>No. of samples collected</b>	<b>90<sup>th</sup> percentile level detected</b>	<b>No. sites exceeding AL</b>	<b>AL</b>	<b>PHG</b>	<b>Typical Source of Contaminant</b>
Lead (ppb)	10	0.006	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10	0.1085	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

<b>Chemical or Constituent</b> (and reporting units)	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Sodium (ppm)	5/6/19	270	250-290	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	5/6/19	160	140-190	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

**TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

<b>Chemical or Constituent</b> (and reporting units)	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>MCL [MRDL]</b>	<b>PHG (MCLG) [MRDLG]</b>	<b>Typical Source of Contaminant</b>
Gross Alpha	5/21/12 5/6/19	1.87	2.63, 2.98 ND	15 pCi/L	N/A	Erosion of natural deposits
Arsenic	5/6/19	3.7	ND-6.0	10 ppb	N/A	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium	5/6/19	140	120-160	1000 ppb	1	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium	5/6/19	ND	ND	50 ppb	100	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Copper (at wells)	5/6/19	ND	ND	1.3 ppm	0.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (at wells)	5/6/19	ND	ND	15 ppb	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufactures; erosion of natural deposits

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

<b>Chemical or Constituent</b> (and reporting units)	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
<i>Manganese*</i>	5/6/19	150	130-170	50 ppb	N/A	Leaching from natural deposits
Chloride	5/6/19	287	230-380	500 ppm	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate	5/6/19	143	100-170	500 ppm	N/A	Runoff/leaching from natural deposits; industrial wastes
Specific Conductance	5/6/19	1467	1400-1600	1600 umhos/cm	N/A	Substances that form ions when in water; seawater influence

*\*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 U.S. EPA'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. Pleasantimes Mutual Water Company, Inc. 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. **[OPTIONAL:** If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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**

**MANGANESE** – Manganese is typically considered a nuisance adding to the taste and odor of our water, but generally not causing health problems. However some health researchers fear high manganese exposure can affect the central nervous system. The manganese at our three wells tests higher than the current secondary standard (tested @ 150 ppb average, secondary standard @ 50 ppb). Since we have an old license to operate and we will not be expanding our service area, we asked for and received an exemption from lowering our manganese level. Any member having an operating water softener should be removing manganese.

## Summary Information for Federal Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

### Level 1 and Level 2 Assessment Requirements not Due to an E. Coli MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indication the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past fiscal year, we had no failing Monthly Coliform Tests.

### Level 2 Assessment Requirement Due to an E. Coli MCL Violation

During the past fiscal year, we had no failing Monthly E. Coli Tests.

### Special Notes

**BACKFLOW PREVENTION** – California State Law under Title 17 requires a backflow prevention device to be installed in any location where our water supply can be contaminated from unclean water. Title 17 requires us to install a backflow preventer where any cross connection exists like where dead end fire sprinkler piping is connected to our water. If your dock pump is cross connected with your household system (PMWC water) you must remove the cross-connection. Backflow preventers are in our future at an installed cost approaching \$1,000 each.

**WATER FILTERS** – The nature of water systems is at times they contain some sand and other small particles. The Board recommends each member install a water filter where the water enters the residence. In addition, some members have installed an activated carbon filter if they feel the water has an odor.

**WATER MAINS** – We basically have 2-inch water mains throughout the system. To improve the water pressure on Riverview, we replaced the 2-inch water main with a 4-inch across the front of Sugar Barge's levee parking lot. To improve the water pressure at the beginning of Windsweep, we replaced the 2-inch water main with a 6-inch from the 4311 Windsweep Well to just past the driveway leading to Emerald Point Marina.

Our current Water Main Master Plan is to increase the water pressure at the ends of our system by constructing parallel water mains starting from our existing wells and heading toward the ends of our existing water mains. We have already been doing this as described above. Any new water main additions need to be sized with the idea someday they will be a part of a fire hydrant system.

**WATER PRESSURE** - A three story home needs about 30+ psi of water pressure at the street to insure there is enough water pressure for a third story shower or a fire sprinkler demand (if they are installed). On a hot holiday, our well sites are currently pumping about 15 gallons per minute. A 2-inch water main moving 15 gallons per minute is losing about 0.2 psi as the water passes by a lot. The water pressure starting at a well site is currently about 60 psi. Our goal is to have about 50 psi throughout the system.

It should be noted the new homes recently built were required to install fire sprinkler systems. For design purposes, a fire sprinkler system, when activated, will require about 30 gallons per minute. On a hot day this fire sprinkler demand is added to the member demand, requiring a well site to produce at least 45 gallons per minute. There is a limit as to how high we can raise a well site water pressure and how much water we can move down a 2-inch water main. We are at that limit. During a fire emergency, member demand will increase because members will want to protect their property from flying embers. The water pressure could then fall below the needed 30+ psi. **Therefore any member, who has a fire sprinkler system, should install a booster pump** to insure the needed fire sprinkler system design pressure can be met.

**FIRE PROTECTION** – During the past year, a fire started at a house on Taylor Road and then spread to the houses on each side. Three homes were lost. We saw something similar happen at 4080 and 4090 Windsweep a few years ago. We should be aware of the danger a structure fire presents.

Basically fighting a fire has two major steps. First the fire department has to get to the fire (now typically 20 minutes), and second get water to fight the fire. Hopefully the new Summer Lakes fire station will open soon and the response time will be lower. Now upon arriving, they typically set up a swimming pool in the street and have tanker trucks haul water to it from the nearest fire hydrant. A few years back, we installed Dry Hydrants (pipes down into the Delta on the water side levee face) to help with fighting a fire. Above we discussed increasing the size of our water mains so we can deliver more water at a higher pressure to each member particularly during a fire event. With a larger water main we could have a fire hydrant within 250 feet of each property. This larger water main and fire hydrant system is estimated the cost about \$5,000 per member or over one million dollars. We would hope the combination of the new fire station and fire hydrants would lower our fire insurance cost, which could potentially offset part of monthly fire dues.

**Conclusion:** *The cost of a new water main would increase our fire dues by \$20 per month, assuming no Grants.*

**DIABLO WATER DISTRICT & STATE GRANTS** – When the water main was installed along Bethel Island Road to Bethel Island it was sized to serve the entire Island. As part of this water main extension, a reservoir is planned to be built on Windsweep in the Delta Coves project to act as a backup during an emergency. We hope to use this system.

The Diablo Water District's buy-in cost is about \$12,000 per member plus the cost to upgrade our water system to their standards. The State has various Grant Programs to help low income communities (like ours) make improvements to their water systems. Santiago Island Village on Gateway has been approved for such a grant. We are working with Diablo Water District to see if we also can get a grant using the Santiago Island Village as an example.

**Conclusion:** *Without a Grant, the \$12,000 cost per member probably puts joining Diablo out of our financial reach.*

If we switched to Diablo Water District's water, we would receive higher quality water as shown below. We currently do not meet the State Standard for Manganese although we have a temporary waiver. Members tell us about our water's odor caused by our high Manganese and Sulfate. Diablo's water has less of both. Members have found the installation of water softeners can reduce this odor. Diablo's water will cost the typical member about \$15 more per month. In past discussions, we have learned the cost of the needed salt and water treatment system maintenance could pay for the higher cost of Diablo's water. The discharge of water softener brine water into the sewer is not acceptable to Ironhouse Sanitary District and we could be forced to stop if they enforce their Ordinance. A brine discharge ban would force a change in the type of water softener used. A monthly increase water softener operational cost would be expected.

Chemical	Pleasantimes' Wells			Diablo Water District	EBMUD (Soft Water)	CA Limit (MCL)
	4311 Windsweep	4467 Windsweep	4420 Willow			
Manganese	130	150	170	39	<20	50
Sulfate	160	170	100	72	1	500
Sodium	260	260	290	60	6	--
Alkalinity	230	220	200	92	33	--
Calcium	30	32	40	25	6	--
Magnesium	17	15	21	14	1	--
Hardness	150	140	190	127	21	--
Total Dissolved Solids	860	840	980	293	50	1000
Specific Conductance	1400	1400	1600	528	66	1600

At the State's Drinking Water Watch web site (<https://sdwis.waterboards.ca.gov/PDWW/index.jsp>), enter the Water System name (Pleasantimes for us) to see the complete water Monitoring Results partially shown above.

**Conclusion:** *The cost of operating a water softener probably would pay for the increase cost of buying Diablo's Water.*

**BOARD OF DIRECTORS ELECTION** – At the Annual Meeting, the current Directors are up for re-election to serve another year. The current Board is:

John Gennrich, President; John Meyersieck, Vice-President; Charles Mitchell, Treasurer; Ty Silva, Director; Arjan Bok, Director