2018 Water Quality Report

Del Oro Water Company – Magalia District
Public Water System Number 0410009

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

Del Oro Water Company
is firmly committed to producing and delivering a safe,
dependable supply of quality water in an efficient, cost effective manner,
with service that exceeds the expectations of our customers.

Getting to know Del Oro Water Company (DOWC).....

DOWC was established in 1963 to meet the water needs of the Paradise Pines area in Magalia, California. Since then, the company has expanded throughout California, and currently provides service to over 20,000 customers in ten counties: Shasta, Humboldt, Tehama, Butte, Glenn, Colusa, Tuolumne, Fresno, Tulare and Kern. DOWC is a Class B water utility under the direction of the California Public Utilities Commission (CPUC).

Although, on November 8, 2018, Del Oro was significantly affected by the CAMP Fire in Butte County. The catastrophic event affected four of our districts destroying 38% of Paradise Pines, 89% of Magalia, 50% of Lime Saddle, and 34% of Buzztail Districts reducing our total state-wide customer by 26%. Despite of the losing significant portion of our customers' homes and business, DEL ORO IS COMMITTED TO STAYING 100% OPERATIONAL and efficient.

DOWC works diligently upgrading and improving each of its nineteen districts. Because of their diverse geology, each district requires unique water quality testing (hundreds of water quality tests each year) and maintenance. DOWC completes CPUC-approved projects to replace and maintain over 700,000 feet of distribution piping; 96 pumps, booster pumps, and wells; and 32 storage tanks with over 8 million gallons of storage capacity. Five of DOWC's districts utilize surface water (springs, lakes, rivers or canals) to provide drinking water to their customers.

DOWC is proud to offer its customers excellent service provided by fourteen field service technicians including seven that are certified treatment plant operators and eight certified distribution operators. DOWC field technicians work earnestly to maintain the individual water systems as the costs to provide water service continues to increase, not just for DOWC customers, but throughout the United States.

DOWC tests the drinking water quality for all constituents as required by the State Water Resources Control Board – Division of Drinking Water (SWRCB-DDW) and the United States Environmental Protection Agency – Federal Regulations (EPA). This report shows the results of our most current monitoring for the period of ***January 1 - December 31, 2018*** including results which are current but were taken in previous years.

DOWC is proud to assure its customers that all drinking water in its 19 districts is under SWRCB-DDW's established Maximum Contaminant Levels (MCL). DOWC is in compliance with all health and safety regulations mandated by SWRCB-DDW and EPA

DOWC tests for both "Regulated and Unregulated" contaminants. This consumer confidence report provides results for only contaminants which were detected in your districts system. Tests with "ND" results will not be listed on this report.

Water for Del Oro Water Company, Magalia District (DOWCMG) originates from two wells: Loomis and Indian Wells, the remaining water is well water supplied by Del Oro Water Co., Paradise Pines District. However, after the CAMP Fire November 8, 2018, Magalia District water was supplied by Del Oro Water Co., Paradise Pines District due to booster pump damage.

A Source Water Assessment was completed in December 2016, and found that sources are considered most vulnerable to the following activities not associated with any detected contaminants: Septic Systems, High Density; Transportation Corridors; Above Ground Storage Tanks and Water Supply Wells. A copy of the complete assessment may be viewed by calling the District office at 1-877-335-6764.

If DOWCMG District has information (public meetings, rate increase, water quality issues, drought information, or district improvements) of which you should be notified, your billing will contain a message indicating the information or directing you to DOWC's website: www.delorowater.com. For additional information concerning your drinking water, you can contact Community Relations at P.O. Drawer 5172, Chico, CA 95927, 1-530-717-2500.

Continuing Drought Information.....

State of California Executive Order B-40-17 lifts the drought emergency in all California counties except a few counties in the southern half of California. However, please keep in mind that Californians should always use water wisely. Water conservation tips apply to all areas of California throughout the year.

- Limit watering outside to three (3) days per week. Set up a schedule so you remember what days are your "watering" days
- Look for and fix leaks in your home or business and on your property
- Never use water to clean driveways and sidewalks
- Use water restricting devices in your home
- Always use a nozzle on your hose to control water usage

Concerns about Lead in your drinking water.....

Del Oro Water Company would like to inform its customers about the safety of lead and copper testing. While DOWC ***does not*** use lead pipes in the distribution lines that serve its customers, older homes may have been built using lead pipes or lead connectors. In California, lead in drinking water comes primarily from materials and components used for in-home plumbing (for example, lead solder used to join copper plumbing, brass and other lead-containing fixtures). Therefore, the established Lead and Copper Rule established is critical to the water quality monitoring program.

DOWC is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. If your home's plumbing contains lead piping or pipe fittings, lead solder, or brass fixtures that may contain lead, 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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. ***Lead and Copper Tap Monitoring*** by DOWC is conducted at designated customers' homes and is an important part of a water utility's monitoring schedule.

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 1-800-426-4791 or at http://www.epa.gov/safewater/lead .

In January 2017, the State of California issued new guidelines on lead testing in schools. DOWC is committed to supporting its school districts' efforts to protect students by ensuring that the drinking water at the school sites meets lead requirements. DOWC has completed lead testing in schools (K through 12) that have requested lead testing within the DOWC service areas. DOWC has performed lead testing at Ridgeview High School with the following results: (the State has a "Maximum Contaminant Level" regulation of 15 parts per billion (ppb))

Name of School	No. of Samples Collected	Range of Detection (ppb)
Ridgeview High School	2 samples collected	None Detected – 0.52

Explanation of 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. 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 disinfectant added for water treatment 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 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.

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.
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

pCi/L: Picocuries per liter - a measure of radiation

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

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

µS/cm: microsiemens per centimeter (measure of specific conductance)

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

ppq: Parts per quadrillion, or picograms per liter

NTU: Nephelometric Turbidity Units

MFL: Million fibers per liter

TON: Threshold odor number

All sources of drinking water (both tap water and bottled water) come 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. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminates. 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 at 1-800-426-4791.

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, agriculture 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, 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, EPA and the (SWRCB-DDW) 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people, such as those with Cancer undergoing chemotherapy, those who have undergone organ transplants, and those with HIV/AIDS or other immune system disorders; some elderly people; and infants can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water. EPA and Centers for Disease Control and Prevention (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.

Tables 1, 2, 3, 4 and 6 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 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.

Results followed by an * indicate a detected level over the MCL, MRDL, or TT and will have a footnote ([1]). Additional information regarding any violations (if applicable) will be provided later in this report.

TABLE 1 – Sampling Results Showing the Detection of Coliform Bacteria – Monthly 2018

Microbiological Contaminants (and reporting units)	**Highest No. of Detections**	**No. of Months in Violation**	**MCL**	**In Compliance?**	**Typical Source of Bacteria**
Total Coliform Bacteria (State Total Coliform Rule)	0	0	1 positive monthly sample	Yes	Naturally present in the environment
Fecal Coliform or *E. Coli* (State Total Coliform Rule)	0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or *E. coli* positive	Yes	Human and animal fecal waste
E. Coli (Federal Revised Total Coliform Rule)	0	0	Routine & repeat samples are total coliform-positive & either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*	Yes	Human and animal fecal waste

TABLE 2 – Sampling Results Showing the Detection of Lead and Copper – Sample Date: 6/27/2017

Lead and Copper (and reporting units)	**Number of Samples Collected**	**90th Percentile Level Detected**	**No. sites exceeding AL**	**AL**	**MCLG**	**In Compliance?**	**Typical Source of Contaminant**
Lead (ppm)	10	0.00438	0	0.015	0.2	Yes	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppb) [(1)]	10	2,150	3	1,300	300.0	No	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 – Sodium and Hardness

Chemical of Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**In Compliance?**	**Typical Source of Contaminant**
Sodium (ppm)	12/18/2017	4.30	4.2 – 4.4	None	Yes	Salt present in the water and is generally naturally occurring
Hardness (ppm)	12/18/2017	116.5	87 – 146	None	Yes	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

[(1)] Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

TABLE 4 – Detection of Contaminants with a ***PRIMARY*** Drinking Water Standard						
Chemical of Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**In Compliance?**	**Typical Source of Contaminant**
Antimony (ppb)	7/18/2017	ND	ND – ND	6	Yes	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	7/18/2017	ND	ND – ND	10	Yes	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppb)	7/18/2017	5.34	4.77 – 5.90	1,000	Yes	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Beryllium (ppb)	7/18/2017	ND	ND – ND	4	Yes	Discharge from metal refineries, coal-burning factories, and electrical, aerospace, and defense industries
Cadmium (ppb)	7/18/2017	ND	ND – ND	5	Yes	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories; and metal refineries; runoff from waste batteries & paints
Chromium (total) (ppb)	7/18/2017	1.22	1.04 – 1.39	50	Yes	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (ppm)	7/18/2017	ND	ND – ND	2	Yes	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Hexavalent Chromium (ppb)	12/4/2014	ND	ND – ND	*	Yes	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.
Mercury (ppb)	7/18/2017	ND	ND – ND	2	Yes	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland
Nickel (ppm)	7/18/2017	8.45	3.43 – 13.47	100	Yes	Erosion of natural deposits; discharge from metal factories
Nitrate (ppm)	3/6/2018	1.785	1.33 – 2.24	10	Yes	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite (ppm)	7/18/2017	ND	ND – ND	1	Yes	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

* There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.

TABLE 4 – Detection of Contaminants with a ***PRIMARY*** Drinking Water Standard – Continued						
Chemical of Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**In Compliance?**	**Typical Source of Contaminant**
Perchlorate (ppb)	9/27/2016	ND	ND – ND	6	Yes	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 a 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)	7/18/2017	ND	ND – ND	50	Yes	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)	7/18/2017	ND	ND – ND	2	Yes	Leaching from ore-processing sites; discharge from electronics, glass and drug factories
TABLE 5 – Detection of Contaminants with a ***SECONDARY*** Drinking Water Standard						
Chemical of Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**In Compliance?**	**Typical Source of Contaminant**
Aluminum (ppb)	12/18/2017	10.2	ND – 20.4	50	Yes	Erosion of natural deposits; residual from some surface water treatment processes
Color (units)	11/24/2015	ND	ND – ND	15	Yes	Naturally-occurring organic materials
Copper (ppb)	12/18/2017	2.57	2.31 – 2.82	1.000	Yes	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Foaming Agents (MBAS) (ppm)	12/18/2017	ND	ND	0.5	Yes	Municipal and industrial waste discharges
Iron (ppb)	12/18/2017	10.05	ND – 20.1	300	Yes	Leaching from natural deposits; industrial wastes
Manganese (ppb)	12/18/2017	1.02	0.74 – 1.29	50	Yes	Leaching from natural deposits
Methyl-*tert*-butyl ether (MTBE) (ppb)	11/24/2015	0.00	0.00 – 0.00	13	Yes	Leaking underground storage tanks; discharge from petroleum and chemical factories
Odor – Threshold (TON)	11/24/2015	1.0	ND – 2.0	3	Yes	Naturally-occurring organic materials
Silver (ppb)	12/18/2017	ND	ND – ND	100	Yes	Industrial discharges
Turbidity (NTU)	11/24/2015	0.58	0.80 – 3.5	5	Yes	Soil Runoff
Zinc (ppb)	11/24/2015	215.5	116 – 315	5,000	Yes	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	12/18/2017	181.5	151 – 212	1,000	Yes	Runoff/leaching from natural deposits
Specific Conductance (µS/cm)	12/18/2017	243	191 – 295	1,600	Yes	Substances that form ions when in water; seawater influence

TABLE 5 – Detection of Contaminants with a ***SECONDARY*** Drinking Water Standard – Continued						
Chemical of Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**In Compliance?**	**Typical Source of Contaminant**
Chloride (ppm)	12/18/2017	3.73	3.47 – 3.99	500	Yes	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	12/18/2017	1.38	1.24 – 1.52	500	Yes	Runoff/leaching from natural deposits; industrial wastes

TABLE 6 – Radioactive Contaminants						
Chemical of Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**In Compliance?**	**Typical Source of Contaminant**
Gross Alpha (pCi/L)	12/18/2017	8.37	8.37	15	Yes	Erosion of natural deposits
Radium 228 (pCi/L)	9/27/2016	7.12	0.31 – 13.92	-	Yes	

TABLE 7 – Disinfection Byproducts, Disinfectant Residuals and Disinfection Byproduct Precursors						
Chemical of Constituent (and reporting units)	**Sample Date**	**Highest Level Detected**	**Range of Detections**	**MCL**	**In Compliance?**	**Typical Source of Contaminant**
TTHM's (Total Trihalomethanes) (ppb)	8/29/2018	25	N/A	80	Yes	Byproduct of drinking water chlorination
HAA5 (Haloacetic Acids) (ppb)	8/29/2018	14	N/A	60	Yes	
Chlorine Residual (ppm)	2018	0.32	0.14 – 0.32	40	Yes	

ADDITIONAL GENERAL INFORMATION ON DRINKING WATER:

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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 at 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 individuals, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The USEPA/Center 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 at 1-800-426-4791. Infants and young children are typically more vulnerable to lead in drinking water than the general populations. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your homes plumbing.

MG Available No Later Than: July 1, 2019