# 2014 Water Quality Consumer Confidence Report Del Oro Water Company – River Island Territory 1 Public Water System Number 54-00665

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, 2014 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.

Water for the Del Oro Water Co., River Island District, Territory 1 is produced from wells. Specifically, Wells No.: 2, 5, 11, 12, 14, 21, 23, 30, 31, 32, 33 and 34.

Wells No. 2, 5, 11, 12, 14 are considered most vulnerable to the following activities associated with contaminants detected in the water supply: Nitrates from runoff; leaching from fertilizer use; leaching from septic tanks; sewage; and erosion of natural deposits.

These sources are considered most vulnerable to the following activities not associated with any detected contaminants:

1. Low density [ <1/acre ] septic systems: Wells No. 2, 11, 12, 14, 21, 23, 30, 31, 32, 33 and 34

3. Wastewater Treatment Plants: Wells No. 2, 11, 12 and 14

5. Sewer Collection Systems: Wells 5, 21, 23, 30, 31, 32, 33 and 34

7. Airports – Maintenance/Fueling Areas: Wells No. 21 and 23

2. Agricultural Drainage: Wells No. 5, 33 and 34

4. Recreational Area – Surface Water Source: Well No. 5

6. Wells – Agriculture/Irrigation: Wells No. 5, 30, 31 and 32

For additional information, contact Community Relations at P.O. Drawer 5172, Chico, CA 95927 1-877-335-6764

### 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. MRDLG's are set by the U.S. Environmental Protection Agency.

MFL: Million fibers per liter

**NTU:** Nephelometric Turbidity Units

**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.

**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)

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

ppq: Parts per quadrillion, or picograms per liter

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, agriculture livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban storm water 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 storm water 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 (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 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.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA – 2014 – Monthly

Microbiological Contaminants	Highest Number of Detections	Number of months in violation	MCL	MCLG (MPN/mL)	Typical Source of Bacteria
Total Coliform Bacteria	1	0	More than 1 sample in a month with a detection		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 – September 28, 2011

Lead and Copper	Number of samples collected	90 <sup>th</sup> percentile level detected	Number of sites exceeding AL	AL	MCLG	Typical Source of Contaminant
Lead (ppm)*	20	0.010	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)*	20	0.41	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		Range of Detection	S		PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2013	31 – 42	36.6	None	None	Generally found in ground and surface water
Hardness (ppm)	2013	225 – 337	281	None	None	Generally found in ground and surface water

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

Chemical or Constituent (and reporting units)	Sample Date	Range of Detection	Average Level Detected	MCL	Typical Source of Contaminant
Nitrate (ppm) **	2014 ND – 42.62 26.76 45		Fertilizer, natural deposits, septic systems		
Arsenic (ug/L)	2013	4.7 - 6.0	5.35	10	Natural deposits, run off from orchards
Fluoride (mg/L)	2013	ND – 0.1	<0.10	2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer & aluminum factories
Hexavalent Chromium (ppb)	11/7/14	ND	10	0.02	Naturally Occurring
Uranium (pCi/L) ***	2014	4.92 – 60.0	25.1	20.0	Erosion of natural deposits
Gross Alpha (pCi/L)	2014	1.23 – 39.8	18.15	15	Erosion of natural deposits

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

Chemical or Constituent (and reporting units)	Sample Date	Range of Detection	Average Level Detected	MCL	Typical Source of Contaminant
Chloride (ppm)	2013	33.6 – 39.8	36.7	600	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (umhos)	2013	701 – 703	702	2200	Substances that form ions when in water; seawater influence
Total Dissolved Solids (ppm)	2013	462	462	1000	Runoff/Leaching from natural deposits
Sulfate (ppm)	2013	24.9 – 34.9	29.9	500	Runoff/Leaching from natural deposits; industrial waste.

TABLE 6 – DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, & DISINFECTION BYPRODUCT PRECURSORS

Chemical or Constituent (and reporting units)	Sample Date	Highest Level Detected	MCL	Typical Source of Contaminant
TTHMs (Total Trihalomethanes) (ppb) HAA5 (Haloacetic Acids (ppb)	2014 2014	ND ND	80 60	Byproduct of drinking water chlorination
Chlorine Residual (ppm)	2014	0.57	40	Byproduct of drinking water chlorination

<sup>\*</sup>We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the 2014 calendar year we did not monitor or test for Lead and Copper monitoring in the distribution system and therefore cannot be sure of the quality of the drinking water during that time. In 2014 Del Oro Water Co., River Island District, Territory 1 (DOWCRI-T1) did not complete the required testing for Lead and Copper. 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. DOWCRI-T1 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 45 ppm 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 serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. \* Del Oro Water Co., River Island District, Territory 1 has Compliance order No. 03-12-080-031 issued by State Water Resources Board – Division of Drinking Water for Nitrate violations in our Well 1 and Well 2, testing is done monthly and customers have been notified quarterly when levels of Nitrate exceed the MCL of 45 ppm. Well No. 2 has not been in use for public consumption since January 2010, and Well No. 1 has been in compliance since May 2013. Del Oro Water Co. continues to monitor the nitrate levels monthly and should a violation occur again, the customers will be notified. For more information you can go to <a href="https://www.ephtracking.cdc.gov">www.ephtracking.cdc.gov</a>.

\*\*\* Persons drinking water with Uranium at levels above the Maximum Contaminant Level of 20 pCi/L over many years may develop kidney problems or have an increased risk of getting cancer. Most ingested uranium is eliminated from the body. However, a small amount is absorbed and carried through the bloodstream. As reported by the Centers for Disease Control and Prevention "Uranium and Your Health", <u>Bathing and showering with water that contains uranium is not a health concern</u>. Quarterly testing and notification to the customer has been implemented. \*\*Wells No. 2 and No. 5 – Notification of Uranium Violation is mailed to Del Oro Water Company customers each quarter the Wells are out of compliance. Current notification was mailed to the customers on January 28, 2015. For more information you can go to <u>ephtracking.cdc.gov.</u>

# WHAT STEPS ARE BEING TAKEN TO REDUCE OR ELIMINATE THE NITRATE AND URANIUM PROBLEMS?

Pleasant Valley Canal Surface Water Treatment Plant – Several of the groundwater wells within the River Island Territories 1 and 2 service areas have either elevated or levels of nitrate and radiological contaminants that exceed drinking water standards, as defined under the State Water Resources Board – Division of Drinking Water drinking water standards.

Del Oro is addressing the groundwater contamination issue by the proposed installation of a Surface Water Treatment Facility that will utilize surface water from the Tule River conveyed through the Pleasant Valley Canal. The surface water treatment facility will include: a canal diversion structure; raw water conveyance mainlines; chemical treatment systems; storage tank and booster systems; and a modular, package-type, contact adsorption clarification-filtration plant. A treated water mainline will also be constructed to convey water to both Territory 1 and 2 water distribution systems.

The Treatment Plant plans and specifications presented to the State Water Resources Board – Division of Drinking Water, for their review continue in the approval process with no firm date set for the low interest financing or commencement of the project. Regulatory review by both the California Public Utilities Commission and the State Water Resources Board – Division of Drinking Water will follow with an anticipated review and approval date of 2016. Accordingly, it is anticipated construction of the new water treatment plant will commence and continue through the 2016 and 2017 calendar years.

# 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 at 1-800-426-4791.

While your drinking water meets the current 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 cost 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 other circulatory problems.

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.

RI T1 Notice Delivered By: May 27, 2015