

2006 Consumer Confidence Report

Water System Name: **Redwood Valley County Water District**

Report Date: June 2007

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, 2006.

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: Surface Water

The following tables summarize the test results only for those contaminants that were actually detected. Every year the District samples for many contaminants in different classes including metals, micro biological, pesticides, herbicides, industrial chemicals, and fuel by-products in the source water. These tests are performed at an independent state approved water quality laboratory and the results are sent directly to the California Department of Health Services. Most contaminants are not present in our source water. If any contaminants are found in the source water, we optimize our treatment process to remove them and test the treatment plant effluent to make sure we have successfully eliminated them. We send bacteriological samples weekly to another state approved laboratory to ensure that there is no biological contamination after leaving the treatment plant. We also perform hundreds of water quality tests at our in house laboratory for process control. Results from all of these tests are available at the District office.

Please be assured that the water produced by Redwood Valley County Water District meets all state and federal drinking water standards. If you do not see a contaminant listed in the following tables, it does not mean we did not test for it. It means we tested for it but did not detect it.

Your water comes from Lake Mendocino. The District has an intake structure and pump station on the west side of the lake at Winery Point. From there the water is pumped to our storage reservoir near the treatment plant and office. A separate pipeline delivers raw lake water to the District's treatment plant where it is treated to meet all state and federal drinking water standards. Following treatment, disinfectant is added to protect you against microbial contaminants. Untreated water is supplied to the District's agricultural customers through another pipeline.

Drinking Water Source Assessment. An assessment of our source water was completed in September 2006. It is available for review at the District Office during normal working hours, 8:00 am - 5:00 pm, Monday - Friday. The Upper Eel River and Upper East Fork Russian River water sheds contain numerous septic tanks, a small wastewater treatment plant, and fuel and agricultural chemical storage tanks. Lake Mendocino is vulnerable to contamination from these sources. The District will continue to vigilantly monitor its source water for any possible contamination and treat the water appropriately.

The Board of Directors meets on the third Thursday of every month at 7:00 pm in the District Office located at 2370 Webb Ranch Road, Redwood Valley, CA. 95470. The District welcomes public involvement at these meetings.

Please visit our website at <http://rvcwd.org/>

For more information, contact: Bill Koehler, General Manager

Phone: (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 level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

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.

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.

Variations and Exemptions: Department 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 (ug/L)

ppt: parts per trillion or nanograms per liter (ng/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 byproducts 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 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 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 (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
None detected	0	0	1	0	Naturally present in the environment.

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION 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 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb) Collected 9/8/04	23	ND	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) Collected 9/8/04	23	0.45*	0	1.3	0.17	Internal corrosion of household 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	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	3/15/06	4.8	n/a	none	none	Generally found in ground & surface water
Hardness (ppm)	3/15/06	67	n/a	none	none	Generally found in ground & surface water

*Any violation of an MCL or AL is marked with an asterisk. 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
Trihalomethanes (ppb) 2006	Quarterly RAA	48.1*	12-29	80	n/a	Byproduct of drinking water chlorination.
Haloacetic acids (ppb) 2006	Quarterly RAA	21.3	11-30	60	n/a	Byproduct of drinking water chlorination.
Total organic carbon (ppm) 2006	monthly	2	0-3	TT	n/a	Various manmade and natural sources

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
Chloride (ppm)	3/15/06	2.9	n/a	500	n/a	Runoff/leaching from natural deposits; seawater influence.
Color (units) 2006	monthly	1	0-5	15	n/a	Naturally occurring organic matter.
Iron (ppm)	3/15/06	*720*	n/a	300	n/a	Leaching from natural deposits.
Odor (threshold) 2006	monthly	1	0- *4*	3	n/a	Naturally occurring organic matter.
Specific conductance (us/cm)	3/15/06	130	n/a	1600	n/a	Substances that form ions in water.
Sulfate (ppm)	3/15/06	6	n/a	500	n/a	Runoff/leaching from natural deposits.
Total dissolved solids (ppm)	3/15/06	87	n/a	1000	n/a	Runoff/leaching from natural deposits.

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Notification Level	Health Effects Language
Boron (ppb)	3/15/06	120	1000	The babies of some pregnant women who drink water containing Boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.
Vanadium (ppb)	3/15/06	4	50	The babies of some pregnant women who drink water containing Vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

*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).

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

Iron is a secondary contaminant with no associated health risks. Iron in this report was measured in the source water prior to treatment. The treatment process at Redwood Valley is very effective at removing iron and it is assumed that the iron has been removed to below secondary standards. Redwood Valley will begin monitoring iron in treated water quarterly in 2007.

Odor is also a secondary contaminant with no associated health risks. Odor is caused either by naturally occurring organic matter or chlorine. One monthly sample taken in September 2006 slightly exceeded the secondary MCL with an odor of chlorine.

Total trihalomethane, (TTHM) a byproduct of chlorination, was found at a value higher than the MCL in a single sample taken in August 2005. This sample result is reflected in the running annual average calculated for the first quarter of 2006. As a result of this detection in 2005, the District has adjusted its treatment process and current values for TTHM for 2006 are in the range of 12-29 ppm.

Lead and **copper** are sampled every three years in representative houses in the District. The presence of lead and copper reflect the corrosiveness of the water as it impacts the pipes and plumbing fixtures in individual houses. The last samples were taken in 2004 and reflected that although the copper levels were well below the mandatory action levels, they were slightly above the public health goals. As a result of this testing, the District began treating for corrosive conditions. New samples will be taken this July and those results will be reflected in the 2007 Consumer Confidence Report.

For Systems Providing Surface Water as a Source Of Drinking Water:

(Refer to page 1, "Type of water source in use" to see if your source of water is surface water or groundwater)

TABLE 7 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
<i>Treatment Technique</i> ^(a) (Type of approved filtration technology used)	
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	<u>Turbidity of the filtered water must:</u> 1 – Be less than or equal to <u>0.30</u> NTU in 95% of measurements in a month. 2 – Not exceed <u>1</u> NTU for more than eight consecutive hours. 3 – Not exceed <u>2</u> NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	0.12 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.