CITY OF BISHOP

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2005 Annual Water Quality Report

Welcome to our 17th Annual Water Quality Report. This report is intended to inform you about the quality of water we deliver to you. For over 100 years the goal of Bishop Public Works has been to provide you with a high-quality, safe, affordable, and dependable supply of water.

City of Bishop water comes from three wells in the Bishop area:

*Well 4 is the primary source of water for the City. It is located approximately 2 miles west of Bishop on West Line Street. This well produced about 452 million gallons of water in 2005.

*Well 2 is the second source of water for the City. It is located near Sierra Street within the City limits. This well produced about 87 million gallons of water in 2005. This well runs when Well 4 can't keep up with high demand, such as during the summer months.

*Well 1 has been a standby well and is located behind the Bishop Police Department. It produced no water in 2005. We are currently working on this well and hope to get it into production during 2006.

In the fall of 2005, major improvements were done to Well 2. These improvements included changes to the well controls that are expected to dramatically increase the well's efficiency.

During the summer of 2006 the City is performing a major rehabilitation of Well 1. This well has problems with its controls and has fluoride content barely over the limit the State sets. We hope that at the conclusion of this project to have reduced the fluoride levels to below the State limit and be able to put the well back in to production.

Once again this year we would like to stress the importance of water conservation. From 2004 to 2005 the residents of Bishop lowered their average daily consumption to about 400 gallons per person per day – a reduction of about 30 gallons per person per day. This reduction is a great start but our water consumption is still way above the national average of 125 gallons per day per person. Perhaps the greatest consequence of this high water use is the affect the high cost to pump the water out of the ground has on water rates. The heaviest water usage months again were during the summer when we water our lawns and gardens. For this reason, simple good irrigation practices could drastically reduce water consumption City-wide. Remember that watering your lawn every third day instead of every day saves water and is healthier for your grass.

We can better control the costs of water delivery and protect our wells by conserving water. If you have any questions on how you can better conserve water or anything in the following report please contact the City of Bishop Public Works Department at 760-873-8458

Water Is A Valuable Resource – Use It Wisely!

The following are a list of contaminants the City monitors and are provided for your information.

2005 Consumer Confidence Report

Water System Name: **City of Bishop** Report Date: June 8, 2006

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, 2005

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: Groundwater

Name & location of source(s): Two wells, (#2, #4

Drinking Water Source Assessment information: A source water assessment for these sources was Completed in May 2003 by Inyo County Environmental Health, and these sources are considered most vulnerable to the following activities NOT associated with any detected contaminants: historic gas stations, sewer collection systems, and animal activities.

Time and place of regularly scheduled board meetings for public participation: The second Tuesday every other month, at 301 West Line Street, Bishop, CA 93514

For more information, contact Deston Dishion *Phone:* (760) 873-8458

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.

NA: not applicable

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)

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.

Regulatory Notification Level (NL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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 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**
Total Coliform Bacteria	(In a mo.) 0	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	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

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**	**90th percentile level detected**	**No. Sites exceeding NL**	**NL**	**MCLG**	**Typical Source of Contaminant**
Lead (ppb) 9/23/03	20	ND	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm) 9/23/03	20	0.150	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	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	12/6/04	8.5	5.9-11	none	none	Generally found in ground and surface water
Hardness (ppm)	12/6/04	54	41-67	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	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Gross Alpha (pCi/L)	Quarterly 2002	1.5	ND-3.2	15	(0)	Erosion of Natural Deposits
Arsenic (ppb)	12/6/04	4.9	2.1-7.8	50	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Flouride (ppb)	12/6/04	0.41	0.24-0.59	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	12/6/04	2.6	2.5-2.8	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors Federal Rule, currently being implemented in California per USEPA						
TTHMs [Total Trihalomethanes] (ppb)	Quarterly 2004	0.27	ND-0.54	80	NA	Byproduct of drinking water chlorination
Chlorine (ppm)	Quarterly 2005	0.08	0.03-0.14	[MRDL= 4.0 (as Cl_2)]	[MRDLG = 4.0 (as Cl_2)]	Drinking water disinfectant added for treatment

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
Total Dissolved Solids [TDS] (ppm)	12/6/04	74	50-98	1,000	NA	Runoff/leaching from natural deposits
Specific Conductance (micromhos)	12/6/04	134	98-170	1,600	NA	Substances that form ions when in water; seawater influence
Chloride (ppm)	12/6/04	6.1	5.7-6.6	500	NA	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	12/6/04	12	11-13	500	NA	Runoff/leaching from natural deposits' industrial wastes

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Notification Level	Health Effects Language
Vanadium (ppb)	12/6/04	4.6	50	The babies of some pregnant women who drink water containing vanadium in excess of the action level may havean increased risk of developmental effects, based on studies in laboratory animals