

## Sheep Creek Water Company

P.O. Box 291820 4200 Sunnyslope Rd Phelan, CA 92329

PWS ID #: 36-10-109

Dear Shareholders & Customers,

Sheep Creek Water Company is once again proud to present our Annual Water Quality Report. This report covers all testing performed between January 1, 2012 and December 31, 2012. You will find information regarding drinking water quality, the source of your water and other information in compliance with state and federal standards.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions our staff is always available to assist you. After all, well informed customers are our best allies.

Your interest in the company is overseen by a five member Board of Directors. The Board of Directors currently meet on the first Thursday of the month, at 6:30 pm. The meetings are held at the Company office at 4200 Sunnyslope Rd. Shareholders and customers are encouraged to attend. Please call our office for changes in the meeting schedule. (760) 868-3755

### Noticia Importante

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

### BOARD OF DIRECTORS

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### Where Does My Water Come From?

Sheep Creek Water Company customers are fortunate due to the fact that we continue to receive our drinking water from a unique source of water. The Company's primary source of water is our gravity flow tunnel located just north of Wrightwood. Construction on the tunnel began in 1910 and was completed in 1912. The Tunnel has been in operation for 100 years and is currently producing 345 GPM. The Company's remaining source of water comes from five wells located in the Sheep Creek Wash south of Desert Front Rd. With our system being gravity flow this eliminates the need for booster stations and keeps our electricity cost low. The Company also has a 12" emergency connection with the Phelan Pinon Hills Community Services District. We produced 305 million gallons of water in 2012. Our max day of production was August 26th, we produced 1.78 million gallons during a 24 hour time period. The company has a total of 7 storage reservoirs with a combined storage capacity of 6.1 million gallons. With this storage we are capable of maintaining positive pressure through out the system during high demands and power outages. There are a total of 42 pressure reducing stations in 8 pressure zones supplying an average of 1161 active services.

### The Sources of Drinking Water

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 discharge, oil and gas production, mining or farming.

*Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban storm runoff and residential uses.

*Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial process and petroleum production, and can also come from gas stations, urban stormwater runoff, agriculture 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, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by the Water Company. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health. 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 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).

### Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk for infection. These people should seek advice about drinking water from their health care providers. The USEPA/CDC guidelines on appropriate means to lesson the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or [www.epa.gov/safewater/hotline/](http://www.epa.gov/safewater/hotline/).

### Lead and Drinking Water

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. We are 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 at (800) 426-4791 or [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

### Nitrate in Drinking Water

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 a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability for the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from you health care provider.

As you can see, Sheep Creek has no violations for nitrates. The Company will continue to do quarterly monitoring and do our best to stay within the CDPH and USEPA regulations.

### Questions

This report has been compiled by your General Manager, Chris Cummings. For more information about this report, or for questions relating to your drinking water, please call our office at (760) 868-3755.

### Water Treatment Process

Chlorine is added to the water as a precaution against any bacteria that may be present. We monitor daily the amount of chlorine in the water, adding the lowest quantity necessary to protect the safety of your water, without compromising taste.

## Sampling Results

During the past year, weekly water samples were collected in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES						
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Arsenic ug/L	2008	10	0.004	ND	ND-ND	Erosion of natural deposits; runoff from orchards; glass and electronics production waste
Haloacetic Acids ug/L	2012	60	NA	ND	ND-ND	By-product of drinking water disinfection
Nitrate [as NO <sub>3</sub> ] mg/L	2012	45	45	18	17-20	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite (as N) ug/L	2010	10000	NA	4180	4000-4600	Same as Nitrate
Perchlorate ug/L	2010	6	6	ND	ND-ND	Inorganic chemical used in rocket propellant, fireworks, explosives, flares, matches and a variety of industries.
TTHMs [Total Trihalomethanes] ug/L	2012	80	NA	ND	ND-ND	By-product of drinking water chlorination

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	ACTION LEVEL (AL)	MCLG	AMOUNT DETECTED (90TH%TILE)	ABOVE AL/TOTAL SITES	TYPICAL SOURCE
Copper (mg/L) 10 sites	2012	1.3 mg/l	ND-.29	ND	0/10	Internal corrosion of household plumbing systems; erosion of natural deposits
Lead (ug/L) 10 sites	2012	15 ug/L	ND-5.2	ND	0/10	

## SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Methyl tert-Butyl Ether [MTBE] (ppb)	2012	13	13	ND	ND-ND	Leaking from under-ground gasoline storage tanks; discharge from petroleum
Chloride (mg/L)	2010	500	None	26	25-28	Runoff/leaching of natural deposits; seawater influence
Fluoride (mg/L)	2010	2		0.34	.32-.36	Erosion of natural deposits
Sulfate (mg/L)	2010	500	None	180	140-200	Natural deposits; Industrial waste
Total Dissolved Solids [TDS] (mg/L)	2010	1000	None	672	640-690	Runoff /leaching from natural deposits

## MINERAL

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG)	RANGE DETECTED
Alkalinity (mg/L)	2010	None	None	340-360
Bicarbonate (mg/L)	2010	None	None	410-440
Calcium (mg/L)	2010	None	None	140-160
Magnesium (mg/L)	2010	None	None	38-47
Potassium (mg/L)	2010	None	None	6.3-6.9
Sodium (mg/L)	2010	None	None	16-19
Total Hardness (mg/L)	2010	None	None	500-560 31-32 grains

## PHYSICAL

PH	2012	None	None	7.5-7.9
Odor (TON)	2010	3	None	1
Turbidity (NTU)	2010	5	0.1	ND-.4 Soil runoff

## RADIOLOGICAL

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	AMOUNT DETECTED	TYPICAL SOURCE
Gross Alpha	2011	15	ND	Erosion of natural deposits

## MICROBIOLOGICAL

SUBSTANCE (UNIT OF MEASURE)	SAMPLES TAKEN	SAMPLES POSITIVE	MCL	TYPICAL SOURCE
Total Coliform Bacteria (% positive)	105	0	>5.0% positive	Naturally present in the environment

Sheep Creek Water Company is compliance with all CDPH sample requirements.

## Definitions

**AL (Action Level):** No MCL for lead.

**MCL (Maximum Contaminant Level):** 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 (SMCLs) are set to protect the odor, taste and appearance of drinking water.

**MCLG (Maximum Contaminant Level Goal):** 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. EPA.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of 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.

**Milligrams per Liter (mg/L):** The same as ppm or parts per million. This is equivalent to one inch in 16 miles.

**Micrograms per Liter (ug/L):** The same as ppb or parts per billion. This is equivalent to one inch in 16,000 miles.

**NTU (Nephelometric Turbidity Unit):** Unit for expressing cloudiness (turbidity) of a sample as measured by a turbidimeter.

**ND (Not Detected):** Indicates the substance was not found by laboratory analysis.

**PDWS (Primary Drinking Water Standard):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**PH std Units:** Range from 1 (acid) to 14 (basic). Neutral PH is 7.0.

**PHG (Public Health Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by California EPA.

**ppb (parts per billion):** one part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** one part substance per million parts water (or milligrams per liter).

**TON (Threshold Odor Number):** Units for rating amount of odor in a water sample.

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

## Source Water Assessment

A Source Water Assessment was conducted for all of our sources in March 2001 and a SWA was conducted for Well 2A in May 2012. A copy of the plan is available to view at the Sheep Creek Water Company Office or at the CDPH San Bernardino District office 464 West 4th St Suite 437. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source of water. It also includes an inventory of potential sources of contamination within the delineated area, and a determination of the water supply's susceptibility to contamination by the identified potential sources.

## Information on the Internet

The U.S. EPA Office of Water ([www.epa.gov/watrhme](http://www.epa.gov/watrhme)) and the Centers for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health.

“WHEN THE WELL'S DRY, WE KNOW THE WORTH OF WATER” ~Benjamin Franklin