Timber Lakes Water
Special Service District

190 North Main\PO BOX 579
Heber City, Utah 84032
435-654-0125
435-654-4925

2010
Annual Drinking Water Quality \ Report
Timber Lakes Water SSD

This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve and protect our water resources. We are committed to ensuring the quality of your water. Our water sources are springs. They are Lone Pine 1, 2, 3,4,5,6, Cove East and West, and Look Out Mountain. Lone Pine 3, 4, 5, and 6 were turned into the system in 2010.

Timber Lakes Water SSD has a Drinking Water Source Protection Plan that is available for your review. It contains information about source protection zones, potential contamination sources and management strategies to protect our drinking water. It has been determined that we have a low susceptible level to potential sources of contamination, such as septic tanks, roads, homes etc. If you have any questions regarding source protection, contact our office to review our source protection plan. Our sources are in remote locations, and there are no known potential contamination sources in the protection zones, so we consider our source to have a low susceptibility to potential contamination events.

In 2010, connections to the water distribution system exceeded 800. When connections are properly installed and maintained, the concerns for cross contamination between the customers' home and the water system are minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water.

The State of Utah requires that Cross Connections be prevented in all culinary water systems. A cross connection is created when any pipe, hose tank or other feature is connected to the water system that provides a pathway for water or materials to be pulled back into the water system. Such conditions could exist during normal operations, during a fire emergency, or during pipeline repair. Under these conditions, water and or chemicals originating on your private property are thus allowed to mingle into the main water supply system if not properly protected. This not only compromises the water

quality but can also affect the health of all users tied to the system. However, if a cross connection occurs at your home or cabin, it will most likely affect you and your family first.

What can you do? Do not make connection at your home or cabin without discussing the intent and design with TLWSSD personnel. Cross Connections can be created by even simple means including an unprotected garden hose lying in the puddle next to the driveway, or an unprotected lawn sprinkler system that pulls in fertilized or sprayed chemicals. Remember that within Timber Lakes, outside watering is not allowed due to the nature of our water rights, which is sufficient for indoor use only. If you'd like to learn more about helping to protect the quality of our water, call us for further information.

We are pleased to report that our drinking water meets Federal and State requirements. If you have any questions about this report please contact Jody Defa at 435-654-0125 or John Schiess with Horrocks Engineering at 801-763-5100. We want our valued customers to be informed about their water utility. If you want to learn more, our monthly meetings are held on the third Tuesday of each month at 6:00 P.M. at the Wasatch County building at 25 North Main in Heber City, Utah.

Timber Lakes Water routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2010**.** All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

ND/Low - High - For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - (mandatory language) a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - (mandatory language) The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - 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.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a 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.

Date- Because of required sampling time frames i.e. yearly, 3 years, 4 years and 6 years, sampling dates "May" seem out of date.

Waivers (W) - Because some chemicals are not used or stored in areas around drinking water sources, some water systems have been given waivers that exempt them from having to take certain chemical samples; these waivers are also tied to Drinking Water Source Protection Plans.

Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
Microbiological Contaminants							
1. Total Coliform Bacteria	N	0	N/A	0	Presence of coliform bacteria in 5% of monthly samples	2010	Naturally present in the environment
2. Fecal coliform and *E.coli*	N	0	N/A	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive	2010	Human and animal fecal waste
3.a. Turbidity for Ground Water	N	0	NTU	N/A	5	2008	Soil runoff
Radioactive Contaminants							
Alpha emitters	N	1.9	pCi/1	0	15	2010	Erosion of natural deposits
Radium 228	N	1.1	pCi/1	0	5	2010	Erosion of natural deposits
Inorganic Contaminants							
7. Antimony							
8. Arsenic	N	ND	Ppb	0	10	2008	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
10. Barium	N	ND-107	Ppb	2000	2000	2008	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
11. Beryllium	N	ND	Ppb	4	4	2008	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
12. Cadmium	N	ND	Ppb	5	5	2008	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints

13. Chromium	N	ND	Ppb	100	100	2008	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper a. 90% results b. # of sites that exceed the **AL**	N	a.179 b.0	Ppb	1300	AL=1300	2009	Corrosion of household plumbing systems; erosion of natural deposits
15. Cyanide	N	ND	Ppb	200	200	2008	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
16. Fluoride	N	58-68	Ppb	4000	4000	2008	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead a. 90% results b. # of sites that exceed the **AL**	N	a. 3.33 b.0	Ppb	0	AL=15	2009	Corrosion of household plumbing systems, erosion of natural deposits
18. Mercury (inorganic)	N	ND	Ppb	2	2	2008	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
19. Nitrate (as Nitrogen)	N	400-500	Ppb	10000	10000	2010	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
20. Nitrite (as Nitrogen)	N	W	Ppb	10000	10000	2006	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
21. Selenium	N	ND	Ppb	50	50	2008	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
22. Sodium	N	4-5	Ppm	None set by EPA	None set by EPA	2008	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
23. Sulfate	N	4-5	Ppm	500*	500	2008	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
24. Thallium	N	ND	Ppb	1	2	2008	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
25. TDS (Total Dissolved Solids	N	122-152	Ppm	2000**	2000**	2008	Erosion of natural deposits

*If the sulfate level of a public water system is greater than 500 ppm, the supplier must satisfactorily demonstrate that: a) no better water is available, and b) the water shall not be available for human consumption from commercial establishments. In no case shall water having a level above 1000 ppm be used. **If TDS is greater than 1000 ppm the supplier shall demonstrate to the Utah Drinking Water Board that no better water is available. The Board shall not allow the use of an inferior source of water if a better source is available.							
Volatile Organic Contaminants							
26. Benzene	N	ND	Ppb	0	5	2010	Discharge from factories; leaching from gas storage tanks and landfills
27. Carbon tetrachloride	N	ND	Ppb	0	5	2010	Discharge from chemical plants and other industrial activities
28. Chlorobenzene	N	ND	Ppb	100	100	2010	Discharge from chemical and agricultural chemical factories
29. o-Dichlorobenzene	N	ND	Ppb	600	600	2010	Discharge from industrial chemical factories
30. p-Dichlorobenzene	N	ND	Ppb	75	75	2010	Discharge from industrial chemical factories
31. 1,2 - Dichloromethane	N	ND	Ppb	0	5	2010	Discharge from industrial chemical factories
32. 1,1 - Dichloroethylene	N	ND	Ppb	7	7	2010	Discharge from industrial chemical factories
33. cis-1,2-ichloroethylene	N	ND	Ppb	70	70	2010	Discharge from industrial chemical factories
34. trans - 1,2 - Dichloroethylene	N	ND	Ppb	100	100	2010	Discharge from industrial chemical factories
35. Dichloromethane	N	ND	Ppb	0	5	2010	Discharge from pharmaceutical and chemical factories
36. 1,2-Dichloropropane	N	ND	Ppb	0	5	2010	Discharge from industrial chemical factories
37. Ethyl benzene	N	ND	Ppb	700	700	2010	Discharge from petroleum refineries
38. Styrene	N	ND	Ppb	100	100	2010	Discharge from rubber and plastic factories; leaching from landfills

39. Tetrachloroethylene	N	ND	Ppb	0	5	2010	Discharge from factories and dry cleaners.
40. 1,2,4 - Trichlorobenzene	N	ND	Ppb	70	70	2010	Discharge from textile-finishing factories
41. 1,1,1 - Trichloroethane	N	ND	Ppb	200	200	2010	Discharge from metal degreasing sites and other factories
42. 1,1,2 -Trichloroethane	N	ND	Ppb	3	5	2010	Discharge from industrial chemical factories
43. Trichloroethylene	N	ND	Ppb	0	5	2010	Discharge from metal degreasing sites and other factories
44. TTHM [Total trihalomethanes]	N	21	Ppb	0	80	2008	By-product of drinking water disinfection
45. Toluene	N	ND	Ppb	1000	1000	2010	Discharge from petroleum factories
46. Vinyl Chloride	N	ND	Ppb	0	2	2010	Leaching from PVC piping; discharge from plastics factories
47. Xylenes	N	ND	Ppb	10000	10000	2010	Discharge from petroleum factories; discharge from chemical factories
Haloacetic Acids	N	38	Ppb	0	60	2008	By-product of drinking water disinfection
Chlorine	N	400	Ppb	4000	4000	2009	Water additive used to control microbes

In addition to the sampling outlined above, we have also sampled for (31 Synthetic Organic Contaminants, Radiological Contaminants and 1 Unregulated Contaminant including Pesticides). These additional chemicals were not detected.

All Sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents can be microbes, organic or inorganic chemicals or radioactive materials. All drinking water including bottled water, may reasonably expect 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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 for their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791).

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. Timberlakes Water 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.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.