

**Shady Lake Water Association**  
**2011 WATER QUALITY**  
**CONSUMER CONFIDENCE REPORT**

This report shows our water quality and what it means. For additional information concerning your drinking water, contact Michael C Raymond at (530) 292-3638.

Annual board meetings are open to all association members. Water for Shady Lake W.A. comes from a well near the intersection of Shady Creek Drive and Twi-Lite.

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.**

**Definitions of Terms**

In this report 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:

**Maximum Contaminant Level** - 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** - The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are established by the federal Environmental Protection Agency (USEPA).

**Public Health Goal or PHG** – The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

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

**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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

**Treatment Technique** – A required process intended to reduce the level of a contaminant in drinking water.

**Water Testing Results**

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. The term "contaminant," as used below refers to any substance in water, other than pure water itself, that is regulated and monitored for health or aesthetic reasons.

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.
- 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. Shady Lake Water Association 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 the 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>.

In order to ensure that tap water is safe to drink, the USEPA and the State Department of Public Health

(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.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose 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.

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 and/or the Safe Drinking Water Hotline.

**Detected Contaminants In Our Water**

Shady Lake Water Association routinely monitors for contaminants in our drinking water according to Federal and State laws. The following paragraphs and tables show the results of our most recent testing. Please note that not all testing is required annually, so in some cases our results are more than one year old.

**Microbiological Water Quality**

Testing for bacteriological contaminants in the distribution system is required by State regulations. This testing is done regularly to verify that the water system is free from coliform bacteria. The minimum number of tests required per month for our water system is one. The highest number of samples found to contain coliform in any one month was four (November).

**Violation Information**

Routine tests in November found small amounts of coliform bacteria in our water. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. Coliforms were found in more samples than allowed, and this was a warning of potential problems. The water system was disinfected and subsequent samples were found to be free of coliform, all other tests for the year were coliform-free.

## Chemicals Detected In Our Water

The following table gives a list of all regulated chemicals that were detected in our water during the most recent samplings.

Chemical Detected	Year Tested	Level Detected	MCL	PHG (or MCLG)	Origin
Chloride	2010	8.6 ppm	500	500	Naturally occurring; seawater influence
Total Dissolved Solids	2007	181 ppm	1000	N/A	Run-off/leaching from natural deposits
Specific Conductivity	2010	267 $\mu$ mhos/cm	1600	N/A	Substances that form ions in water; seawater influence
Nitrate as N	2011	1.59 ppm	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Hardness	2007	118 ppm	N/A	N/A	Erosion of natural deposits
Odor	2007	2 TON	3	3	Naturally-occurring organic materials
Turbidity	2010	0.30 NTU	5	5	Soil runoff
Sulfate	2010	2.0 ppm	500	500	Runoff/leaching from natural deposits; industrial wastes
Barium	2010	65.6	100	100	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Zinc	2010	216 ppb	5000	5000	Runoff and leaching from natural deposits; industrial wastes

N/A = not applicable

The following have also been analyzed, but were not detected in the water: Aluminum, antimony, arsenic, beryllium, cadmium, chromium, iron, manganese, mercury, nickel, perchlorate, selenium, silver, thallium, nitrite, fluoride, color, odor, gross alpha radioactivity, volatile organic chemicals (solvents and petroleum products), MTBE, perchlorate, sodium, and foaming agents. Although there is no MCL for sodium in public drinking water, we are providing sodium test results (non-detected) for persons who might be on a low sodium diet. The American Heart Association recommends that persons on such a diet should use drinking water containing no more than 20 ppm of sodium. Likewise, hardness results (calcium + magnesium) are provided for informational purposes only, as there is no MCL.

## Lead & Copper Testing Results

Lead & copper testing of water from individual taps in the distribution system is required by State regulations. The table below summarizes the most recent monitoring for these constituents. If the 90<sup>th</sup> percentile result does not exceed the action level for either lead or copper, the water system is in compliance.

	Year Tested	No. of Samples Collected	No. of Samples Required	90 <sup>th</sup> Percentile Result (ppb)	No. Samples Above Action Level	Action Level (ppb)
Lead	2011	5	5	4	0	15
Copper	2011	1	5	462	0	1300

Lead in drinking water may be the result of erosion of natural deposits, or due to discharge from refineries and factories. However, it most commonly enters the water due to internal corrosion of water plumbing systems. Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure. Simply running the water for a couple of minutes after it has been unused for several hours and before using it for drinking or cooking is a good common-sense measure for minimizing lead and copper intake.