**Consumer Confidence Report**
**Certification Form**

Water System Name: Forest Lakes

Water System Number: 4410016

The water system named above hereby certifies that its Consumer Confidence Report was distributed on June 28, 2013 to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the California Department of Public Health.

Certified by: Name: Howard Meyer

Signature: Howard Meyer

Title: Operations Manager

Phone Number: (831) 335-5774 Date: June 28, 2013

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To summarize report delivery used and good-faith efforts taken, please complete the below by checking all items that apply and fill-in where appropriate:

☒ CCR was distributed by mail or other direct delivery methods. Specify other direct delivery methods used: _____

☒ "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:

- ☒ Posting the CCR on the Internet at forestlakesfelton.com
- ☐ Mailing the CCR to postal patrons within the service area (attach zip codes used)
- ☐ Advertising the availability of the CCR in news media (attach copy of press release)
- ☐ Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)
- ☒ Posted the CCR on Water Company outdoor bulletin board, 910 Fern Ave., Felton, CA
- ☐ Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools
- ☐ Delivery to community organizations (attach a list of organizations)
- ☐ Other (attach a list of other methods used)

☐ *For systems serving at least 100,000 persons*: Posted CCR on a publicly-accessible internet site at the following address: www._____

☐ *For investor-owned utilities*: Delivered the CCR to the California Public Utilities Commission

# 2012 Water Quality Consumer Confidence Report

Water System Name: **Forest Lakes Mutual Water Company** Report Date: June 25, 2013

*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, 2012 and may include earlier monitoring data.*

**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:** Your drinking water comes from groundwater wells drawing from water in fractured-rock zones recharged by rainfall percolating into soils beneath and in the vicinity of the Forest Lakes tract.

**Name & location of source(s):** Groundwater, from eight wells (1A, 1D, 3A, 3B, 4A, 5A, 8C, & 8F) located within the Forest Lakes tract and two wells (10A & 10D) outside the tract, is pumped to tanks and distribution system.

**Drinking Water Source Assessment information..** On file with California Department of Public Health (831) 655-6939

**Time and place of regularly scheduled board meetings for public participation:** Regular Board meetings are held at 7:00 p.m. on the second Tuesday of every month at 910 Fern Avenue in Felton, California.

**For more information, contact:** Howard Meyer, Operations Manager Phone: ( 831 ) 335-5774

## 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 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.

**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.

**Variances and Exemptions**: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ND**: not detectable at testing limit

**NA**: not applicable

**ppm**: parts per million or milligrams per liter (mg/L)

**ppb**: parts per billion or micrograms per liter (µg/L)

**ppt**: parts per trillion or nanograms per liter (ng/L)

**ppq**: parts per quadrillion or picogram per liter (pg/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 by-products 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 California 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 provide the same protection for public health.

**Tables 1, 2, 3, 4, 5, 6, and 7 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 | Highest No. of Detections | No. of months in violation | MCL | MCLG | Typical Source of Bacteria |
|---|---|---|---|---|---|
| Total Coliform | (In a mo.) 4 | 1* | More than 1 sample in a month with a detection | 0 | Coliforms are bacteria naturally present in the environment and used as an indicator that other, potentially-harmful, bacteria may be present. |

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

| Lead and Copper | No. of samples collected | 90th percentile level detected | No. sites exceeding AL | AL | PHG | Typical Source of Contaminant |
|---|---|---|---|---|---|---|
| Lead (ppb) | 20 | <5.0 | 1* | 15 | 0.2 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 20 | 0.38 | 0 | 1.3 | 0.3 | 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) | 2012 | 105 | 100-110 | none | none | Salt present in the water and is generally naturally occurring |
| Hardness (ppm) | 2012 | 40 | 14-65 | none | none | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring |

**Any violation of an MCL or AL is asterisked. 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 |
|---|---|---|---|---|---|---|
| Arsenic (ppb) | 2012 | 6.3 | <2.0-21* | 10 | 0.004 | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes |
| Fluoride (ppm) | 2012 | 0.39 | <0.20-0.63 | 2.0 | 1 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate (ppm) | 2012 | 1.8 | <1.0-1.8 | 45 | 45 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| Gross Alpha Particle (pCi/L) | 2012 | 1.65 | 1.65 | 15 | 0 | Erosion of natural deposits |
| Radium-228 (pCi/L) | 2012 | 0.054 | 0.000-0.0291 | 15 | 0 | Erosion of natural deposits |

**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) | 2012 | 13 | 12-14 | 500 | n/a | Runoff/leaching from natural deposits; seawater influence |
| Iron (ppb) | 2012 | 3,275* | <50-17,000 | 300 | n/a | Leaching from natural deposits; industrial wastes |
| Manganese (ppb) | 2012 | 240* | <20-750 | 50 | n/a | Leaching from natural deposits |
| Specific Conductance (µmhos/cm) | 2012 | 430 | 370-490 | 1,600 | n/a | Substances that form ions when in water; seawater influence |
| Sulfate (ppm) | 2012 | 34.5 | 23-46 | 500 | n/a | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids (ppm) | 2012 | 300 | 290-310 | 1,000 | n/a | Runoff/leaching from natural deposits |
| Turbidity (NTU) | 2012 | 0.95 | 0.60-1.3 | 5 | n/a | Soil runoff |

**TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS**

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | Notification Level | Health Effects Language |
|---|---|---|---|---|---|
| Boron (ppm) | 2012 | 0.115 | 0.110-0.120 | 1 | |

**TABLE 7 – DETECTION OF DISINFECTION BY-PRODUCT CONTAMINANTS**

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL | PHG (MCLG) | Typical Source of Contaminant |
|---|---|---|---|---|---|---|
| TTHMs (ppb) [Total Trihalomethanes] | 2012 | 7.03 | 2.48-15.6 | 80 | n/a | By-product of drinking water disinfection |
| HAA5 [Haloacetic Acids] | 2012 | 0.82 | <1.00-2.49 | 60 | n/a | By-product of drinking water disinfection |

**Any violation of an MCL or AL 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).

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Lead-Specific Language for Community Water Systems: 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. **Forest Lakes Mutual Water Company** 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 at http://www.epa.gov/safewater/lead or from the Safe Drinking Water Hotline (1-800-426-4791).

### Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

| VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT | | | | |
|---|---|---|---|---|
| **Violation** | **Explanation** | **Duration** | **Actions Taken to Correct the Violation** | **Health Effects Language** |
| Total Coliform | In Well 1D, total coliform sampling, an indicator of potentially harmful bacteria, was positive during one month in 2012. | 1 Month | Detection of total coliform in Well 1D prompted taking this well temporarily offline for chlorine disinfection. The California Department of Public Health (CDPH) oversaw the disinfection and approved returning the well to use. | 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 was a warning of potential problems. |
| Arsenic | Water from Well 8C had natural levels of arsenic up to 21-ppb in 2012, exceeding the 10-ppb MCL. | Ongoing | An Arsenic Blending Plan is in effect to mitigate arsenic levels in water from Well 8C. This water is now mixed in a holding tank with water without arsenic. Only one post-blending sample exceeded the 10-ppb limit last year at 11-ppb. | The US EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. |

| VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT | | | | |
|---|---|---|---|---|
| **Violation** | **Explanation** | **Duration** | **Actions Taken to Correct the Violation** | **Health Effects Language** |
| Iron | Iron levels exceed the secondary MCL of 300-ppb in Wells 3A (480-4,400 ppb), 3B (9,800-17,000 ppb)and 10D (800-15,000 ppb). | Ongoing | Well 3B with the highest iron levels is offline but sampled. Well 10D has a filtration system with effluent samples, after iron filtration treatment, reduced from an average of 4,720-ppb down to an average of 174-ppb. Well 3A filtering is planned for the coming year. | Iron is found in selected wells at levels exceeding the secondary MCL of 300-ug/L. This MCL is set to protect against unpleasant aesthetic effects (e.g., color, taste, and odor) and staining of plumbing fixtures. Iron levels are due to leaching of natural deposits. |
| Lead | 20 houses are tested to evaluate possible lead levels in water from household plumbing. 19 we below detection limits. One house had lead levels at 43-ppb above the 15-ppb Action Level. | 1 Event | 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. | Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. |
| Manganese | Manganese (Mn) levels exceed the secondary MCL of 50-ppb in Wells 3A (44-82 ppb), 3B (440-510 ppb)and 10D (230-750 ppb). | Ongoing | Well 3B is offline but sampled. Well 10D has a filtration system with effluent samples, after Mn filtration treatment, reduced from an average of 458-ppb down to an average of 3-ppb. Well 3A filtering is planned for the coming year. | |