

FOREST LAKES METROPOLITAN DISTRICT

1999 Annual Drinking Water Quality Report

July 2000

This is an annual report on the quality of water delivered to you by the Forest Lakes Metro District from January 1 to December 31, 1999. It meets the Federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports" and contains information on the source of our water which is from wells that draw groundwater from the Pine River alluvium, its constituents and usual sources of contaminants. If you have any questions about this report or concerning your water utility, please contact the Forest Lakes Metropolitan District at (970) 884-2925.

We are proud to report that the water provided by the Forest Lakes Metropolitan District meets or exceeds established state and federal water quality standards.

We encourage public interest in the community's decisions affecting your drinking water. If you want to learn more, please call the above contact about the utility or attend any of our regularly scheduled public meetings held on the second Tuesday of each month, 7:00 p.m. at the Forest Lakes Community Center, 998 Alpine Forest Dr., in Forest Lakes.

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. Further information on this subject can be obtained by calling the EPA Safe Drinking Water Hotline at 800-426-4791 or at www.epa.gov/safewater on the Internet.

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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which provides the same protection for public health. In this 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:

- AL** = Action Level – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- MCL** = Maximum Contaminant Level - The "Maximum Allowed" 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.
- MCLG** = Maximum Contaminant Level Goal - The "Goal" 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.
- NA** = Not Applicable
- ND** = Non-Detects - laboratory analysis indicates that the constituent is not present
- ppm** = Parts per million or Milligrams per liter (mg/l)
- ppb** = Parts per billion or Micrograms per liter (ug/l)
- pCi/l** = Picouries per liter

Contaminants that may be present in source water include:

- **Microbial** contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic** contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water 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 storm water runoff and residential uses.
- **Organic** chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff and septic systems.
- **Radioactive** contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

The following table shows the results of our water quality analyses. All regulated contaminants that were detected in the water, even in minute traces, are listed here. The table contains the name of each substance, test date, unit of measurement, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the amount detected, the usual sources of such contamination and if the level detected is in violation.

Contaminant	Test Date	Unit	MCL	MCLG	Detected Level	Major Sources	Violation
Radioactive Contaminants –							
Beta/Photon emitters	4/12/99	pCi/l	50	0	<8	Decay of natural and man-made deposits	NO
Alpha emitters	4/12/99	pCi/l	15	0	<3	Erosion of natural deposits	NO
Inorganic Contaminants –							
Antimony	4/15/97	ppb	6	6	<1.0	Discharge from petroleum refineries; fire retardant; ceramics; electronics; solder	NO
Arsenic	4/15/97	ppb	50	NA	<1.0	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	NO
Barium	4/15/97	ppm	2	2	0.080	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	NO
Beryllium	4/15/97	ppb	4	4	<1.0	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries	NO
Cadmium	4/15/97	ppb	5	5	<0.25	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints	NO
Chromium	4/15/97	ppb	100	100	<10.0	Discharge from steel and pulp mills; erosion of natural deposits	NO
Copper – None of the homes sampled exceeded the AL.	1/1-12/31/97	ppm	AL= 1.3	1.3	.75	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.	NO
Fluoride	4/15/97	ppm	4	4	0.15	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	NO
Lead - None of the homes sampled exceeded the AL.	1/1-12/31/97	ppb	AL= 15	0	3	Corrosion of household plumbing systems; Erosion of natural deposits.	NO
Mercury [inorganic]	4/15/97	ppb	2	2	<0.2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.	NO
Nitrate/Nitrite as Nitrogen	4/12/99	ppm	10	10	0.37	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	NO
Nitrite	7/14/97	ppm	1	1	<0.024H	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	NO
Selenium	4/15/97	ppb	50	50	<1.0	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines	NO
Thallium	4/15/97	ppb	2	0.5	<1.0	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories	NO

The State permits monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently and/or the system is not considered vulnerable to this type of contamination. Some of our data, though representative, is more than one year old.

Microbiological Contaminants

We are required to add a disinfectant to the water to protect you against microbial contaminants. Monthly samples for total coliform bacteria were absent and therefore additional testing for fecal coliform and E.coli were not required.

Arsenic

EPA is reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations. Arsenic levels above 25 ppb warrant public concern.

Nitrate

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.

Lead

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to 1) have your water tested 2) flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Volatile and Synthetic Organic (VOC and SOC) Contaminants including Pesticides and Herbicides

The Forest Lakes Metro District sampled for VOCs and SOCs including pesticides and herbicides on July 14, 1998, there was non-detects on the following chemicals: **VOCs** = Benzene, Carbon tetrachloride, Chlorobenzene (Mono), o-Dichlorobenzene, p-Dichlorobenzene, 1,2 - Dichloroethane, 1,1 - Dichloroethylene, cis-1,2-ichloroethylene, trans - 1,2 - Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Styrene, Tetrachloroethylene, 1,2,4 - Trichlorobenzene, 1,1,1 - Trichloroethane, 1,1,2 - Trichloroethane, Trichloroethylene, Xylenes. **SOCs** = 2,4-D., 2,4,5-TP (Silvex), Acrylamide, Alachlor, Atrazine, Benzo(a)pyrene (PAH), Carbofuran, Chlordane, Dalapon, Di (2-ethylhexyl) adipate, Di (2-ethylhexyl) phthalate, Dibromochloropropane, Dinoseb, Diquat, Dioxin [3,7,8-TCDD], Endothall, Endrin, Epichlorohydrin, Ethylene dibromide, Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclo-pentadiene, Lindane, Methoxychlor, Oxamyl [Vydate], PCBs [Polychlorinated biphenyls], Pentachlorophenol, Picloram, Simazine, Toxaphene.

Unregulated Contaminants

The District voluntarily participated in the Colorado radon water survey in 1998, which reported a radon level in our water of 1135 pCi/l (picocuries per liter). Radon is currently not regulated but regulations are being developed that will be based on a risk assessment completed by the National Academy of Sciences and on cost to benefit considerations. According to AWWA, a system with radon levels more than 4000 pCi/l will provide the most significant benefits to public health from treatment. Radon is a radioactive gas that you cannot see, taste or smell. Radon can move up through the ground and into a home through cracks and holes in the foundation and is found throughout the U.S. Radon can also be found in indoor air when released from tap water while showering, washing dishes and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. If you are concerned about radon in your home, test the air in your home, which is inexpensive and easy. There are simple ways to fix a radon problem if found in the home that are not too costly such as ventilation. For additional information, call the EPA Radon Hotline 800-SOS-RADON.

Testing of other unregulated contaminants on April 15, 1997 produced the following results: Nickel<0.020 ppm, Sodium=1.9 ppm, Sulfate=6 ppm.

Additional Information

Some people may be more vulnerable to contaminants in drinking water than the general public. 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 of infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants are available from the Safe drinking Water Hotline at 1-800-426-4791.

NO Violations

The Forest Lakes Metro District is proud to report that the District experienced NO VIOLATIONS of either an MCL, Treatment Technique or Monitoring and Reporting requirement further reducing your potential for an adverse health effect from the drinking water.

FLMD Current Water System Statistics*

Miles of water mains = 18
Number of service taps = 446
Number of fire hydrants = 113
Number of groundwater wells = 2
Number of pumps = 6
Number of storage tanks = 4
Total storage capacity in gallons = 500,000
Estimated population served = 1,030
Average gallons delivered per day = 71,369
Average gallons delivered per day per tap = 160
Average gallons delivered per day per person = 70
Most gallons delivered in one day (7/14/97) = 165,504
Average gallons delivered per month = 2,170,750
Average gallons delivered per month per tap = 4,867
Average gallons delivered per month per person = 2,108
Most gallons delivered in one month (7/97) = 4,212,212
Average gallons delivered per year = 26,049,660
(79.93 acre feet)
Average gallons delivered per year per person = 25,291
Most gallons delivered in one year (1998) = 35,923,142
(110.23 acre feet)
Vertical lift of water from wells to top tank = 1,168 feet
Average water electric bill per month = \$2,100.00

*The District continues to build the planned Forest Lakes water system which is being financed with plant investment/tap and impact fees. Designed water facilities and systems still required: 4.5 miles of pipe, 2 tanks, 2 wells, 4 booster stations, 2 pressure reducing stations. Water service is now to approximately 80% of the lots, excluding Unit 3.

Questions and Comments

Please call or write the Forest Lakes Metro District, P.O. Box 440, Bayfield, CO 81122, (970)884-2925.

Pará los que hablan español

El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien.

