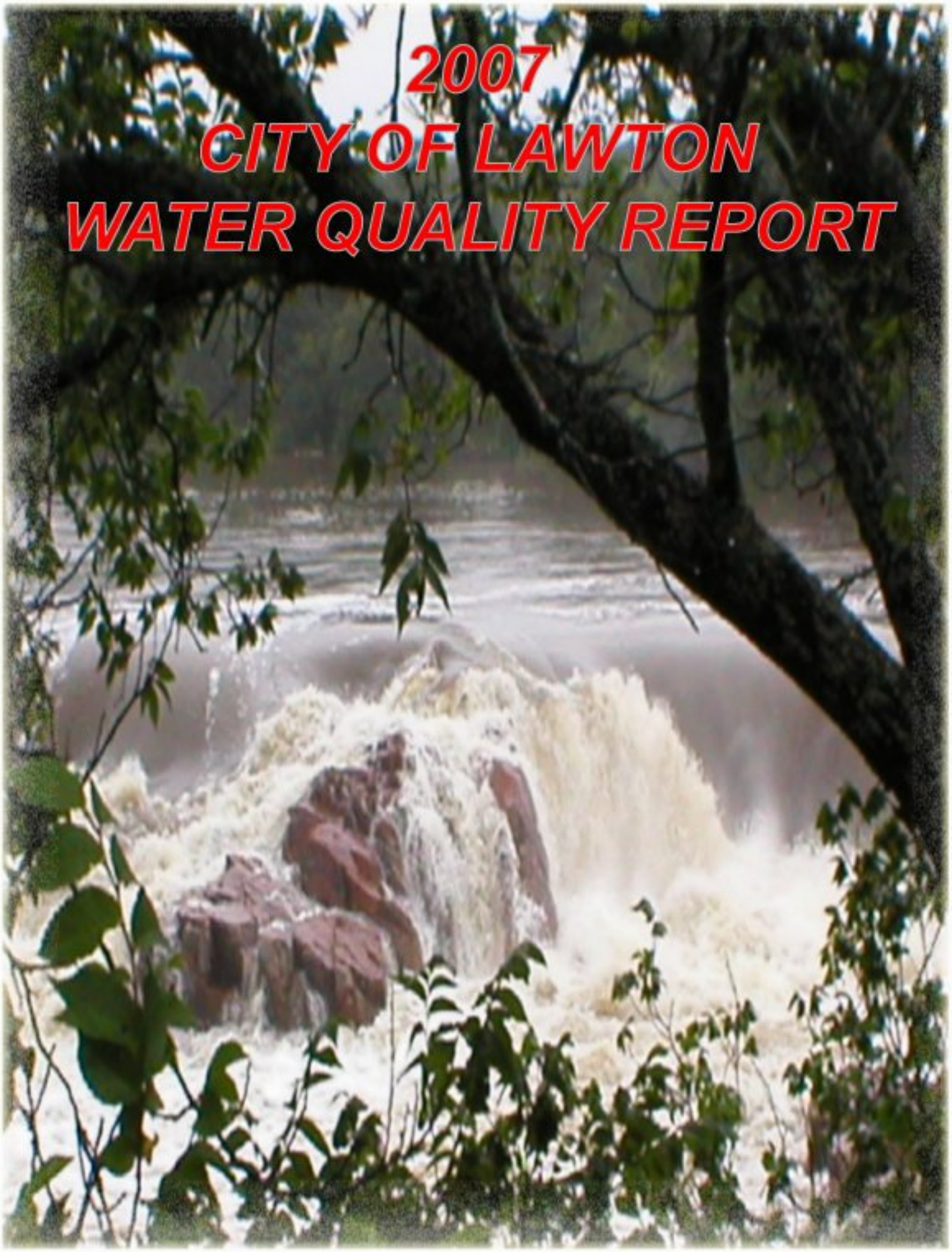
2007
CITY OF LAWTON
WATER QUALITY REPORT



CITY OF LAWTON 2007 WATER QUALITY REPORT

Este informe contiene informacion muy importante. Traduscalo o hable con un amigo quien to enttienda bien.

LAWTON DRINKING WATER MEETS OR EXCEEDS ALL STANDARDS:

The Lawton Water Treatment Plant provided safe water, free of bacteria and other contaminants. The drinking water delivered to area residents and businesses is safe and exceeds all federal requirements. The water is tested at the source and throughout the treatment process and distribution system. City operators continuously monitor the quality of the water at the treatment plant, looking for substances that might be unsafe to public health. To ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants that result from animal or human activity, as well as pesticides and herbicides. During 2007 the City of Lawton analyzed approximately 2,400 samples through out the distribution system.

The City of Lawton is committed to providing residents with a safe and reliable supply of high-quality drinking water. This annual "**CONSUMER CONFIDENCE REPORT**" required by the Safe Drinking Water Act (SDWA), tells you where your water comes from, how the treated water quality compares to the required quality standards, and other things you should know about drinking water.

DO I NEEDTO TAKE SPECIAL PRECAUTIONS?

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. EPA/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 Water Dinking Hotline (800-426-4791).

WHERE DOES MY WATER COME FROM?

The water for the City of Lawton comes entirely from surface sources. The primary water supply is Lake Lawtonka. Lake Lawtonka has a watershed that covers approximately 92 square miles. Lake Ellsworth and Lake Waurika are the city's secondary water supplies. The watershed for Lake Ellsworth covers approximately 249 square miles, while the watershed for Lake Waurika covers approximately 562 square miles.

SOURCE WATER ASSESSMENT AND ITS AVAILABILITY:

The City of Lawton continues to work on its source water protection program. This is an ongoing effort to identify sources of possible pollution. As these sources are identified, we will work to eliminate this pollution or to minimize its effect on the water supply. ODEQ has rated our water sheds, Lake Lawtonka and Lake Ellsworth, susceptibility rating as MODERATE. Your help is needed for this program to succeed. For more information, please visit: *www.epa.gov/owow/watershed*. To report sources of pollution on Lake Lawtonka or Lake Ellsworth reservoirs or their watersheds, or any questions about this report concerning your water utility, please contact the water treatment plant at 580-529-2703. We want our valued customers to be informed about their water utility. The City of Lawton Water Authority meetings are scheduled on an as-needed basis. Council and Water Authority meetings are posted in advance on the City of Lawton website: *www.cityof.lawton.ok.us*. The City Clerks office maintains a list of the meetings.

WHY ARE THERE CONTAMINANTS IN MY 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap 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. Microbial contaminants, such as viruses and bacteria, 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 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; and 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water sysems.

MONITORING AND REPORTING OF COMPLIANCE DATA VIOLATIONS:

Our water system did not receive any treated water quality violations this year.

HOW CAN YOU HELP CONSERVE CITY OF LAWTON WATER?

By conserving water you will pay lower water bills for your homes and businesses. This will provide greater energy savings at home and at the office. This will have a positive impact on the environment of our community.

OUTDOOR

Landscaping- look into smart "xeriscape" landscaping. Use 2-4 inches of mulch to retain moisture in the soil. Don't water your lawn during the hottest time of the day. Check sprinkler position, don't water the street, sidewalks, or driveway, they will never grow a thing. Water on odd/even days to reduce peak demand.

Pools, Spas- repair any leaks. An inch a day leak can be very wasteful. Get a pool cover to reduce loss of water by evaporation.

Outdoor cleaning- Clean without water. Clean sidewalks and driveway with a broom, not a hose. Collect rainwater for reuse.

Car Wash-be wat r- wise when you wash. When washing at home, use a shut-off nozzle.

INDOOR

Faucets- repair any leaks.Turn faucets off firmly. Check and replace any worn-out fixtures, washers, o-rings, and home connections.

Toilets- save water by flushing less. Don't use the toilet as a wastepaper basket. Replace an old toilet with a water efficient model. Use a toilet dam to displace water in the tank. Don't obstruct float. Replace the toilet flapper with a more efficient one.

Sinks- don't let the water run. When brushing your teeth or shaving, turn the water off.

Bathtub- use less bath water. Fill less than a full tub. Better yet, you'll save water by taking a short shower instead.

Washing Machines- be a conservative washer. Run the washing machine only when it's fully loaded.

Dishwasher- reduce amount of dishwashing. Run the dishwasher only when it's fully loaded.

Garbage Disposal- use another method. Avoid using them. Disposals require lots of water to operate properly.

OUTDOOR CONSERVATION TIPS

Plant in the Spring or Fall, when watering requirements are lower.

Avoid sprinklers that spray a fine mist, which increases evaporation.

Be sure to use a spring- loaded nozzle shutoff on your hose. Hoses without a cutoff can waste five gallons or more of water per minute when running.

Reduce weeds in your garden and you will reduce the competition for water.

Water shrubs and gardens using a slow trickle around the roots. A slow soaking encourages deep roots, prevents water loss and reduces leaf burn and mildew.

Check for leaks in pipes, hoses, faucets, couplings and lawn sprinkler systems.

Consider using native or drought tolerant plants in your landscaping.

Keep the grass two to three inches long to enhance root development with minimal watering.

Collect rain in a barrel and use it to water your garden.

Use a broom, not the hose to clean the driveway and sidewalks around your home.

Use landscape mulch to cover and cool the soil to minimize weed growth, slow erosion and slow evaporation losses.

Wash your car with soap and water from a bucket and always use a shut off nozzle with your hose.

Sprinkle the lawn, not the driveway.

WHAT CAN I DO TO PROTECT OUR SOURCE OF DRINKING WATER?

Reduce the polluted run-off of septic tanks by having them serviced. Reduce the polluted run-off of herbicides pesticides, fertilizers and etc. by not over applying or applying when raining. Dispose of trash in the trash container- not the lake. Fix all oil leaks on watercraft. If you see anyone dumping trash or pollutants in the lake please call the water treatment plant at 580-529-2703.

WATER INFORMATION

Total Water Treated: 6,335,375,000

Daily Average Treated: 17,357,192

Max Daily Flow: August 13, 2007- 26,295,000

Water Pumped from Lake Ellsworth: 2,408,000,000

Water Pumped from Lake Waurika: 3,047,943

Total Rainfall at Plant: 54.22"

Average Temperature: Atmospheric: 63f Water: 62f

Ph Range: 7.8-8.9 s.u.

Total alkalinity: 115mg/L

Total Hardness: 147mg/L or 8.4 grains per gallon

Turbidity: .08 ntu

Fluoride: .93 mg/L

FOR MORE INFORMATION

The City of Lawton Water Authority meetings are scheduled on an as needed basis. Council meetings are the 2nd and 4th Tuesday of every month. Meetings start at 6pm in council chambers, located in City Hall. All council and water authority meetings are posted in advance on the City of Lawton website: *www.cityof.lawton.ok.us.*

CITY OF LAWTON PHONE NUMBERS

Revenue Services	(580) 581-3308
City Clerk Office	(580) 581-3307
Mayor and City Manager	(580) 581-3301
Water and Sewer line problems	(580) 581-3422
Water Treatment Plant	(580) 529-2703

The City of Lawton Water Treatment Plant routinely monitors for constituents in your drinking water according to federal and state laws. This table shows the results of our monitoring for the period of January 1, 2007 through December 31, 2007. Some of the data may be more than 1 year old because the state allows us to monitor for some contaminants less often than once per year.

2007 Water Quality Data Table

DISINFECTANT BY-PRODUCTS	UNIT	MCLG or MRDL	MCL, TT, or MRDL	YOUR WATER	RANGE	VIOLATION	SAMPLE DATE	TYPICAL SOURCE
BROMATE	ppb	0	10	<5	0-<5	NO	2007	BY PRODUCT OF DRINKING WATER DISINFECTION
HALOACETIC ACIDS (HAA_5)	ppb	NA	60	<11.19	<6-18.00	NO	2007	BY PRODUCT OF DRINKING WATER DISINFECTION
TOTAL TRIHALOMETHANE	ppb	NA	80	18.85	13-22.30	NO	2007	BY PRODUCT OF DRINKING WATER DISINFECTION
TOTAL ORGANIC CARBON	% REMOVAL	NA	TT	1.43	NONE	NO	2007	NATURALLY PRESENT IN THE ENVIRONMENT
CHLORAMINES	MG/L	4	4	2.00	1.00-3.50	NO	2007	WATER ADDITIVE USED TO CONTROL MICROBES

MICROBIOLOGICAL CONTAMINANTS	UNITS	MCLG or MRDL	MCL, TT, or MRDL	YOUR WATER	RANGE	VIOLATION	SAMPLE DATE	TYPICAL SOURCE
TOTAL COLIFORMS	% POSITIVE SAMPLE/MTH	0	0	<1% POSITIVE	NA	NO	2007	NATURALLY PRESENT IN THE ENVIRONMENT
TURBIDITY*	NTU	NA	NA	.25	NA	NO	2007	SOIL RUNOFF
FECAL STREPTOCOCCI	PER/100ML	NA	TT	<1	NONE	NO	2007	GROWTH IN THE DISTRIBUTION SYSTEM
HPC	CFU/ML	NA	TT	<1.25	<1-2	NO	2007	GROWTH IN THE DISTRIBUTION SYSTEM

**100% of the samples were below the TT valve of .3 NTU. a value less than 95% constitutes a TT violation. The highest single measurement was .25 NTU. Any measurement in excess of 1 NTU is a violation unless otherwise approved by the state.*

RADIOACTIVE CONTAMINANTS	UNITS	MCL	MCLG	YOUR WATER	RANGE	VIOLATION	SAMPLE DATE	TYPICAL SOURCE
ALPHA EMITTERS	pCi/L	15	0	.83	0-2	NO	2006	EROSION OF NATURAL DEPOSITS
BETA/PHOTON EMITTERS	millirems/yr	4	0	1.81	0-1.81	NO	2006	EROSION OF NATURAL DEPOSITS

INORGANIC CONTAMINANTS	UNITS	MCLG	MCL	YOUR WATER	RANGE	VIOLATION	SAMPLE DATE	TYPICAL SOURCE
BARIUM	ppm	2	2	.11	NONE	NO	10/18/06	DISCHARGE OF DRILLING WASTE, DISCHARGE FROM METAL REFINERIES; EROSION OF NATURAL DEPOSITS.
FLUORIDE	ppm	4	4	1.36	.09-1.36	NO	9/05/07	EROSION OF NATURAL DEPOSITS; WATER ADDITIVES WHICH PROMOTES STRONG TEETH. DISCHARGE FROM FERTILIZER AND ALUMINUM FACTORIES.
SODIUM	ppm			50	NONE	NO	8/23/06	EROSION OF NATURAL DEPOSITS.
ARSENIC	ppb	0	10	2	NONE	NO	10/09/07	EROSION OF NATURAL DEPOSITS; RUNOFF FROM ORCHARDS; RUNOFF FROM GLASS AND ELECTRONICS PRODUCTION WASTE.
BERYLLIUM	ppb	4	4	ND	NONE	NO	10/18/06	DISCHARGE FROM METAL REFINERIES AND COAL-BURNING FACTORIES; DISCHARGE FROM ELETRICAL, AEROSPACE, AND DEFENSE INDUSTRIES.
MERCURY (INORGANIC)	ppb	2	2	< .10	NONE	NO	10/31/05	EROSION OF NATURAL DEPOSITS; DISCHARGE FROM REFINERIES AND FACTORIES; RUNOFF FROM LANDFILLS AND CROPLAND.
NITRATE-NITRITE	ppm	10	10	.146	NONE	NO	11/14/07	RUNOFF FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS, SEWAGE; EROSION OF NATURAL DEPOSITS.
SELENIUM	ppm	50	50	ND	NONE	NO	10/31/05	DISCHARGE FROM PETROLEUM AND METAL REFINERIES; EROSION OF NATURAL DEPOSITS; DISCHARGE FROM MINES.

INORGANIC ACTION LEVEL	UNITS	MCLG	ACTION LEVEL (AL)	YOUR WATER	SAMPLE DATE	# SAMPLES EXCEEDING ACTION LEVEL	VIOLATION	TYPICAL SOURCE
COPPER	ppm	1.3	1.3	.0688	2006	0	NO	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS.
LEAD	ppb	0	15	2.01	2006	0	NO	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS.

HELPFUL DEFINITIONS

NTU: Nepthelometric Turbidity Unit. Turbidity is the measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration.
MCLG: Maximum Containment Level Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allows for a margin of safety.
MCL: Maximum Containment Level. 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.
MRDL: Maximum Residual Disinfectant Level. The highest level of a contaminant that is allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.
NA: Not applicable.
ND: Not detected.
NR: Not required, but recommended
PPM: Parts per million, or milligrams per liter (mg/L).
PPB: Parts per billion, or micrograms per liter (ug/L).
TT: Treatment technique- A required process intended to reduce the level of a contaminant in drinking water.
AL: Action Level- The concentration of a containment, which if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG: Maximum Residual Disinfection Level Goal. 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.
MNR: Monitored not regulated.
MPL: State assigned Maximum Permissible Level.
HPC: Hetertrophic Plate Count
CFU/ML: Colony Forming Units/ML
%Positive samples/month: Percent of samples taken monthly that were positive.

Source Water Testing

On April 11, 2007 the City of Lawton WTP Started sampling Lake Lawtonka for Cryptosporidium and E. Coli. This sampling will continue for 2 years. All test results are reported to EPA.

All Cryptosporidium samples, that were tested, showed 0 Oosyts. Highest E. Coli reading that has been detected is 37.7 MPN/100mL.

Other source water testing has included Perchlorate, which tested BPQL, on October 24, 2006.

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Water Supply Reservoir

May 2007
Rainstorms

Water Supply Reservoir