

Where Does Your Water Come From?

The LUS water source is the Chicot Aquifer, a large, natural underground “lake” in southwest Louisiana. It is a stable, plentiful, and protected fresh water supply. LUS worked with the Louisiana Department of Environmental Quality’s Office of Groundwater several years ago to put together our Wellhead Protection Program. In that program, community volunteers helped us to identify potential sources of contamination within a one-mile radius of our public supply water wells. You can get information about that program by contacting LUS.

Once water reaches the plants, it is cleaned through a three-stage process that includes (1) softening, (2) filtering and (3) disinfecting before it reaches your tap.



Frequently Asked Questions about the Chicot Aquifer

1 Where is the Chicot Aquifer?

The Chicot Aquifer is located under all or parts of 15 parishes in southwestern Louisiana and parts of east Texas.

2 Who uses the aquifer?

The aquifer is the source of drinking water for virtually every person living in southwest Louisiana. It also serves as the primary water supply for most commercial, industrial, institutional and agricultural uses.

3 How much water is used daily?

1995 data from the United States Geological Survey (USGS) indicate that more than 550 million gallons of water are withdrawn from the aquifer on an average day.

4 What are the categories of use by percentage?

Preliminary information* on Chicot Aquifer flows for 2000 indicate the following withdrawals, reported in millions of gallons per day:

Rice Irrigation	537	65.5%
Public Supply	89	10.9%
Aquaculture	87	10.6%
Industry	72	8.8%
Other**	20	2.4%
Power Generation	13	1.6%
Total	818	99.8%

* Preliminary data provided by the United States Geological Survey
** “Other” includes rural domestic, livestock, and general irrigation.

Water Conservation Tips

- Water your lawn only when it needs it – according to horticultural professionals, one inch per week is sufficient.
- Water your lawn between the hours of midnight and 2 p.m.
- Inside your home, check for leaks in faucets and toilets.
- Outside your home, check for leaks in pipes, hoses, faucets and couplings.
- Take shorter showers or a bath instead.
- Only run full loads of laundry and dishes.
- Install water-saving shower heads or flow restrictors.
- Use a broom, not a hose, to clean driveways and sidewalks.
- Do not let the faucet run while you prepare foods – for example, cleaning fruits or vegetables.



Pure Quality

Water Quality Report



Water Quality Report



Definitions

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 allow for a margin of safety.

Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG's as feasible using the best available treatment technology.

Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

parts per million

equivalent to one inch in 15.78 miles
equivalent to one second in 11.57 days

parts per billion

equivalent to one inch in 15,783 miles
equivalent to one second in 31.7 years

picocuries per liter

a measure of radioactivity.

LUS has provided safe, clean drinking water for more than 100 years. In fact ***we have never had a single violation of drinking water regulations*** and have always strived to plan and execute the leading strategies and technologies to bring our customers quality drinking water.

Water provided through LUS for Lafayette has been named "best tasting" in the state three times in the last five years including 2001. LUS goes beyond simply complying with regulations. We take extra steps to ensure that water delivered to you is safe, good tasting, clean and meets our higher standards.

In response to concerns about MTBE (a gasoline additive that can leak into and contaminate an underground water supply) LUS monitored MTBE for 12 months in 2000. The additive was not detected in any samples, however, LUS will continue to monitor regularly.

Recently completed projects at our two water plants will assure a plentiful supply of water and offer greater water service reliability to our customers. Also, as part of the water system, LUS has constructed new water towers designed to stabilize water pressure at the city's two industrial parks and surrounding areas.

The following Water Quality Report is a mandate of the Environmental Protection Agency, in compliance with the 1996 amended Safe Drinking Water Act, which requires all community water systems to deliver a brief annual water quality report. This report includes required language that is not suggestive of a problem for LUS customers. We believe this is a great tool for educating and communicating with our customers. As you read through this report, if you need additional information, or would like something clarified, please call Don Broussard, P.E., your Water Operations Manager, at (337) 291-5901.

Also, the Lafayette Public Utilities Authority, the group of elected officials who oversee all of LUS operations, meets at 4:30 PM on the first and third Tuesday of every month at the City-Parish Administration Building located at 705 W. University Avenue.

Water Quality Results (Testing conducted in 2000 except where noted)

Monitored At Customer's Tap

Substance	Major Source in Drinking Water	EPA Designated Action Level (requires treatment) at 90th Percentile	LUS results at 90th Percentile Testing
Lead*	Corrosion of household plumbing	15 parts per billion	1.0 parts per billion or less**
Copper*	Corrosion of household plumbing	1.3 parts per million	0.1 parts per million or less**

Monitored In the Water Distribution System

Substance	Major Source in Drinking Water	Maximum Contaminant Level	Maximum Contaminant Level Goal	LUS Average	LUS Range
Total Organic Halides* (TOX)	By-Product of drinking water chlorination	Not regulated	—	Less than detection limit	Not Detected to .86 micrograms of chlorine per liter
Total Chlorine Residual* (TCR)	Disinfectant	Not regulated	—	1.09 parts per million	.07 parts per million to 1.39 parts per million
Total Trihalomethanes (TTHM)	By-Product of drinking water chlorination	100 parts per billion	n/a	9.96 parts per billion	1.1 to 22 parts per billion
Haloacetic Acids* (HAA5)	By-Product of drinking water chlorination	Not regulated	—	1.11 parts per billion	Not detected to 5.7 parts per billion
Haloacetonitriles* (HAN)	By-Product of drinking water chlorination	Not regulated	—	1.21 parts per billion	Not detected to 2.4 parts per billion

Monitored Before Any Treatment

Substance	Major Source in Drinking Water	EPA Designated Contaminant Level	EPA Designated Maximum Contaminant Level Goal	LUS Average	LUS Range Minimum to Maximum
Fluoride	Erosion of natural deposits	4.0 parts per million	4.0 parts per million	0.221 parts per million	0.2 to 0.3 parts per million
Cadmium*	Erosion of natural deposits, corrosion of galvanized pipes	5.0 parts per billion	5.0 parts per billion	Less than detection limit	Not detected to 3 parts per billion
Gross Alpha Activity	Decay of natural or man-made deposits	15 picocuries per liter	0	2.20 picocuries per liter	Not detected to 3 picocuries per liter
Gross Beta Activity	Decay of natural or man-made deposits	50 picocuries per liter	0	2.85 picocuries per liter	Not detected to 3 picocuries per liter
Arsenic*	Erosion of natural deposits	50 parts per billion	n/a	Less than detection limit	Not detected to 20 parts per billion
Chromium*	Erosion of natural deposits	100 parts per billion	100 parts per billion	Less than detection limit	Not detected to 10 parts per billion
Mercury	Erosion of natural deposits	2 parts per billion	2 parts per billion	Less than detection limit	Not detected to 1 part per billion

* The Louisiana Department of Health and Hospitals or federal regulations allow us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently. Some of our data, though representative, are more than one year old.

** No individual sample exceeded the Action Level.

What Are Contaminants Anyway?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels through the ground, it dissolves naturally-occurring minerals. In some cases water can pick up substances resulting from the presence of animals or human activity, as well as radioactive materials. Contaminants that may be present in water before any treatment 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 or gas production, mining, or farming.
- **Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.



Looking Ahead

LUS is excited about this opportunity to reach our customers and is always staying abreast of new technologies to better serve you. We urge you to call if you have any questions concerning water quality at (337) 291-5901.