

# 2012

# JCWSA

WATER & SEWERAGE AUTHORITY

# WATER

## QUALITY REPORT

Water System ID GA 1570117 **YEAR IN REVIEW**

(JCWSA) is pleased to present a summary of the quality of water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers. This report details where your water comes from, what it contains, and the risks our water testing and treatment are designed to prevent.

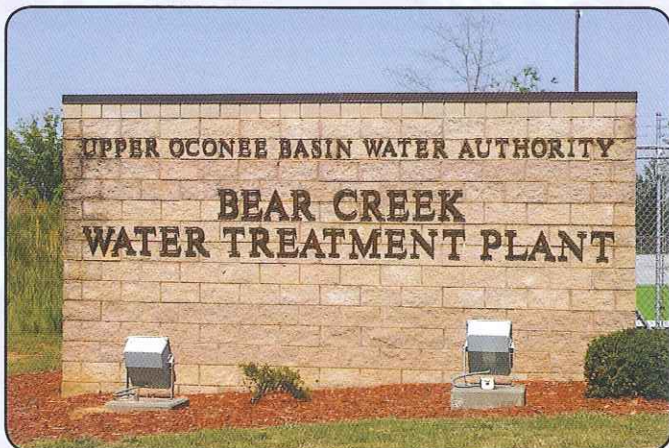


**The Jackson County Water and Sewerage Authority is committed to providing you with the safest and most reliable water supply.**

Informed consumers are our best allies in maintaining safe drinking water. We encourage public interest and participation in our community's decisions affecting drinking water. You can learn more about your water system when the Jackson County Water and Sewerage Authority Board meets on the second Thursday of each month at 6:00 p.m. at the Jackson County Water Authority main office.

## Water Source

During 2011, the JCWSA obtained its water supply from the 505-acre Bear Creek Reservoir managed by the Upper Oconee Basin Water Authority and treated at the



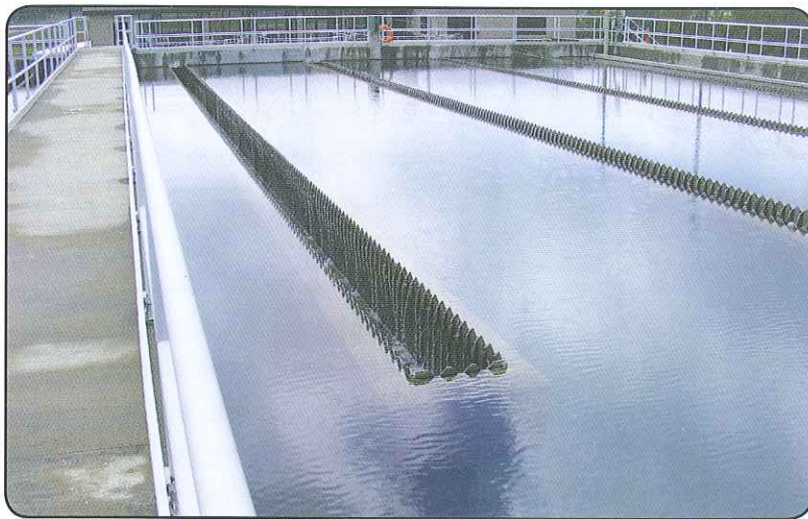
To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems.



Bear Creek Water Treatment Facility. The Bear Creek Reservoir is located at the extreme south tip of Jackson County. Source Water Assessment (SWAP) identifying potential pollution sources which pose a risk to Bear Creek's water sources was conducted in July 2002 by Brown & Caldwell. A copy of this report is available at Bear Creek Water Treatment Facility for review. In addition, Jackson County received a small portion of water from the City of Commerce Water Treatment Plant which obtains its water from Grove River Reservoir located in the City of Commerce. A SWAP was conducted for the City of Commerce in May 2003 by Stevenson & Palmer. A copy of this report is available at City of Commerce Water Treatment Plant for review.

## National Primary Drinking Water Regulation Compliance

If you have any questions please call the Jackson County Water and Sewerage Authority at (706) 367-1741; or you may contact Stacy Jenkins at (706) 367-1741 ext. 223. Water Quality Data for community water systems throughout the United States is available at [www.waterdata.com](http://www.waterdata.com). A copy of this Water Quality Report will be mailed to each individual customer and additional copies will be available at the Jackson County Water Authority main office at 117 MLK Avenue in Jefferson. A copy is also posted on the JCWSA website, [www.jcwsa.com](http://www.jcwsa.com).



### Bear Creek and the City of Commerce Water Treatment Plants

INORGANIC CONTAMINANTS		DATE	UNITS	MRDL	MRDLG	DETECTED (HIGHEST)	RANGE	MAJOR SOURCES	VIOLATION?
Chlorine Residual	Bear Creek WTF	Daily	mg/l	4	4	1.8	1.2-3.1	Water Disinfectant	NO
	City of Commerce	Daily	mg/l	4	4	1.8	0.24-1.91		
INORGANIC CONTAMINANTS		DATE	UNITS	MCL	MCLG	DETECTED (HIGHEST)	RANGE	MAJOR SOURCES	VIOLATION?
Fluoride	Bear Creek WTF	Daily	ppm	4	4	0.84	.77-.89	Water additive for teeth	NO
	City of Commerce	Daily	ppm	4	4	0.98	.80-1.20		
Nitrate/Nitrite	Bear Creek WTF	Quarterly	ppm	10	10	0.22	.21-.25	Runoff	NO
TTHMs	Bear Creek WTF	Quarterly	ppb	80	0	58	50-62	By product of drinking water Cl <sub>2</sub>	NO
	City of Commerce	Quarterly	ppb	80	0	49	23-89		
HAA5g	Bear Creek WTF	Quarterly	ppb	60	0	38	35-41	By product of drinking water Cl <sub>2</sub>	NO
	City of Commerce	Quarterly	ppb	60	0	37	30-47		
Total Organic Carbon	Bear Creek WTF	Monthly	ppm	T13	0	1.3	1.2-1.4	Natural organics in water	NO
	City of Commerce	Monthly	ppm	T13	0	1.53	1.0-2.2		
MICROBIOLOGICAL		DATE	UNITS	MCL	MCLG	VALUE	RANGE	MAJOR SOURCES	VIOLATION?
Turbidity	Bear Creek WTF	Cont.	NTU	95% samples < 0.3	n/a	0.04	.03-.05	Soil runoff	NO
	City of Commerce	Cont.	NTU	95% samples < 0.3	n/a	0.29	n/a		
Total Coliforms	Bear Creek WTF	Cont.	p/a	No more than 5% of monthly samples	0	0	0	Naturally present in environment	NO
	City of Commerce	Cont.	p/a	No more than 5% of monthly samples	0	0	0		

### Jackson County Distribution System

LEAD & COPPER RESULTS		DATE	UNITS	AL	MCLG	DETECTED	# ABOVE AL	MAJOR SOURCES	VIOLATION?
Lead <sup>1</sup>	Jackson Cty	2011	ppb	15	0	n/a	0	Corrosion of household plumbing systems	NO
Copper <sup>1</sup>	Jackson Cty	2011	ppb	1300	0	n/a	0	Corrosion of household plumbing systems	NO
INORGANIC CONTAMINANTS		DATE	UNITS	MRDL	MRDLG	DETECTED (HIGHEST)	RANGE	MAJOR SOURCES	VIOLATION?
Chlorine Residual	Jackson Cty	monthly	mg/l	4	4	1.7	.20-4.0	Water Disinfectant	NO
INORGANIC CONTAMINANTS		DATE	UNITS	MCL	MCLG	DETECTED (HIGHEST)	RANGE	MAJOR SOURCES	VIOLATION?
TTHMs	Jackson Cty	quarterly	ppb	80	0	58	50-62	By product of drinking water chlorination	NO
HAA5g	Jackson Cty	quarterly	ppb	60	0	38	35-41	By product of drinking water chlorination	NO
MICROBIOLOGICAL		DATE	UNITS	MCL	MCLG	VALUE	RANGE	MAJOR SOURCES	VIOLATION?
Total Coliforms	Jackson Cty	monthly	p/a	No more than 5% of monthly samples	2	0	0	Naturally present in environment	NO

## Terms to know when reading the Water Test Result

#### AL (Action Level)

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

#### MCLG (Maximum Contaminant Level Goal)

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.

#### MCL (Maximum Contaminant 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 disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

#### MRDLG (Maximum Residual Disinfectant 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 contamination.

#### ND (non-detected)

No measurable level of a substance or contaminant detected.

#### Ppm (parts per million)

The equivalent of eight ounces (1 cup, in 62.5 million gallons of water.

#### Ppb (parts per billion)

The equivalent of eight ounces (1 cup, in 62.5 billion gallons of water.

#### TT (Treatment Technique)

A required process intended to reduce the level of a contaminant in drinking water.

#### Turbidity

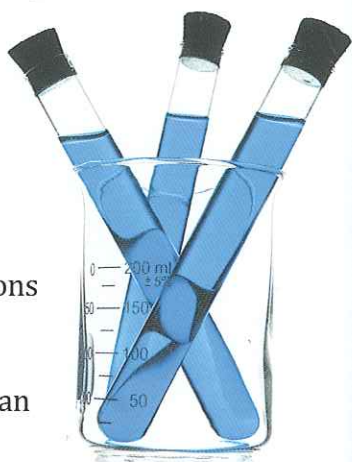
A measure of the cloudiness of water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system. NTU is a measurement of the clarity of the water.

## Important Information from the EPA



All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. The presence of contaminants does not necessarily indicate that water poses a health risk. **More information about contaminants and potential health effects can be obtained by calling the EPA'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 individuals, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Guidelines from the Environmental Protection Agency and the Centers for Disease Control and Prevention 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).



## Required Additional Health Information

FDA regulations establish limits for contaminants in bottled 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 water poses a health risk. The sources of drinking water (both tap water and bottled water) include rivers, lake, 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 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:

- (A) **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or results from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- (D) **Organic chemical contaminants**, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- (E) **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 which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than is 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/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.



### Water Quality Table Footnotes

- 1 ppb of lead reported as the 90th percentile of samples taken
- 2 ppb of copper reported as the 90th percentile of samples taken
- 3 Compliance for TOC is met with a treatment technique. No violations occurred in 2011.
- 4 Turbidity is a measure of the cloudiness in water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.



## Jackson County Water & Sewerage Authority

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Jefferson, GA 30549

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## Why are there Contaminants in Drinking Water?

Drinking water sources include streams, lakes, rivers, reservoirs, and wells, which are subject to potential "contamination" by a wide variety of substances that occur naturally or are man-made. As water travels over the surface of the land or through the ground, it dissolves natural minerals, and in some cases radioactive material and can pick up substances resulting from human activity or the presence of animals.

### Contaminants that could be present in source water before it is treated:

1. **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
2. **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
3. **Pesticides and herbicides**, which may come from a variety of sources,

such as agriculture, urban storm water runoff, and septic systems.

4. **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stationers, urban stormwater runoff, and septic systems.
5. **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production or defense 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 systems. Food and Drug Administration regulations establish limits for contaminants in bottled water.*

## What about lead in drinking water?

Testing shows that the amount of lead in our drinking water is well below the EPA allowed levels (see Water Test Results).

It is important to know that lead in drinking water is primarily from materials and components associated with water service lines and home plumbing. Lead in elevated levels can cause serious health problems, especially for pregnant women and young children. JCWSA is responsible for providing high quality drinking water, but cannot control the variety of materials used in residential plumbing.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds up 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 from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).